Economic and Financial Law & Policy -Shifting Insights & Values 7

Koen Byttebier

Covid-19 and Capitalism

Success and Failure of the Legal Methods for Dealing with a Pandemic





Economic and Financial Law & Policy – Shifting Insights & Values

Volume 7

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Preface

In late February 2020, my personal period of lockdown due to Covid-19 began.

At the same time disturbed and fascinated by the events that, on a socio-economic level and at lightning speed, unfolded from that moment on, I gradually reached the insight to which large extent these events lent themselves to a deduction from my previous work.¹

On a global scale, Covid-19 proved to be an optimal stress test to test the resilience of countries and their governments, whereby it also quickly became apparent that countries that had in the past surrendered the most to the dictates of economic neoliberalism, were among those the least resilient to cope with Covid-19.

And so, 2020–2021 became a period that simultaneously brought great horror and a thorough exercise of deep research and reflection.

The result can be found in this book, which has been given the simple title "Covid-19 & capitalism."

Other than to say that the material in the book has been tracked until 15 May 2021, I am happy to let the work speak for itself.

Hopefully, wise lessons can be drawn from it to do, preferably, better if, or when, a next pandemic will occur.

I also want to thank all those who have assisted me, through word and deed, in this strange past year during which this book saw the light of day, and who have all been indispensable in helping to bring it about.

First and above all, I want to express my immense gratitude to Armondo Linus Acosta for having inspired the creation of this book, and for everything else.

Next, I want to thank Anne Claeys, ever on my side in all my endeavours, and Michaël Vanslembrouck, always my haven of culture and friendship.

Similarly, I want to thank my parents to whom I own everything, besides my sister, Jenny for making the year of Covid-19 endurable, and for all her help.

¹Cf. Byttebier (2015a, b, 2017, 2018, 2019, 2021).

I also want to thank my colleagues Julie Borgerhoff, Serge Gutwirth, Eduard Snijders, Johny Vanstraelen, Tom Wera, and Kim Van der Borght, for their both mental and practical support.

I also thank the peer reviewers for the courage they have shown in wanting to assess this book, especially given its magnitude. I furthermore thank the publisher Springer, and especially Mrs Brigitte Reschke for the outstanding professional cooperation.

A special word of thanks goes to my doctor, Dr Jan Reniers, for all his care, and for some interesting discussions about viruses and vaccines, as well as to Mukti-Amma Van der Eecken for the moral support.

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Brussels, Belgium May 15, 2021 Koen Byttebier

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Chapter 1 Origin and Causes of Covid-19



1.1 Origin of Covid-19

1.1.1 The Covid-19 Epidemic: A Basic Chronology

It appears that the virus responsible for "Covid-19", short for "coronavirus disease 2019", namely "SARS-CoV-2", short for "severe acute respiratory syndrome coronavirus 2", began infecting people for the first time in December 2019 in Wuhan, a city of about 11 million people located in Hubei province, China.¹

The emergence of SARS-CoV-2 was first observed when cases of unexplained pneumonia were reported in Wuhan. Within the first few weeks of the outbreak in Wuhan, an association was noted between these first cases of Covid-19 and the Wuhan Huanan Seafood Wholesale Market (also known as the "Huanan Market"). Authorities therefore decided to close the market on 1 January 2020 in order to clean

¹Cf. Nelson (2020), who further mentions that, from the outset, infection with Covid-19 was rapid, with widely varying symptoms, ranging from no symptoms to attacks and death, mainly from viral pneumonia. According to Nelson, it was clear from the start "that the elderly were the most prone to severe symptoms and death".

According to a joint WHO-China report of 10 February 2021 (entitled "WHO-convened Global Study of Origins of SARS-CoV-2: China Part"), an explosive outbreak began in Wuhan in early December 2019. Initially, only the most severe cases that had contact with the health system were recognised as official cases. Still according to said report, other milder (and asymptomatic) cases are likely to have occurred at the same time as the recognised cases, but no information is available on these milder cases that could add to the epidemiological picture of the early outbreak. Many of the early cases were associated with the Huanan market, but a similar number of cases were associated with other markets, and some were not associated with any market. Transmission within the wider community in December 2019 could explain the cases not associated with this market, could suggest that the Huanan market was not the initial source of the outbreak. The milder cases that were not identified could, however, provide the link between the Huanan market and the early cases with no apparent link to the market. Still according to the same report, no firm conclusion on the role of the Huanan market could, therefore, be drawn. (Cf. WHO and China (2021), p. 47).

K. Byttebier, *Covid-19 and Capitalism*, Economic and Financial Law & Policy – Shifting Insights & Values 7, https://doi.org/10.1007/978-3-030-92901-5_1

up and disinfect the environment. The market, which sold aquatic and seafood products, as well as farmed wild animal products, was soon suspected to be the epicentre of the outbreak, which also suggested a human-animal interface event. However, retrospective investigations later identified additional cases with onset of illness as early as December 2019, but not all of these early cases were associated with the Huanan market.²

On 9 January 2020, the World Health Organization (WHO) was still in doubt about the roots of what would become the Covid-19 pandemic. Yet the WHO noted from the outset that the wave of pneumonia cases in Wuhan could have been caused by an unknown coronavirus. There were, at that time, fifty-nine known cases of Covid-19, and travel precautions were already at the forefront of experts' minds.³

The Chinese government and the WHO initially downplayed growing concerns that the disease could be easily transmitted between humans. At a press conference in Geneva that took place on 14 January 2020, Maria Van Kerkhove, acting head of the WHO's emerging diseases unit, was quoted by Reuters as saying that there had been "limited human-to-human transmission" in Wuhan.⁴ Another 6 days passed before Zhong Nanshan, a Chinese epidemiologist and government adviser, finally confirmed in an interview with state media on 20 January 2020 that the virus could indeed be transmitted between people.⁵

As the Covid-19 outbreak coincided with the approach of the Lunar New Year, it is suspected that travel between Chinese cities prior to the start of the festival facilitated the transmission of the virus within China. In this way, Covid-19 quickly spread to other cities in Hubei province and then to other parts of China as well. Within a month, the virus that caused Covid-19 had spread to all 34 provinces in China.⁶

On 20 January 2020, three new cases of Covid-19 were reported in Thailand and Japan, prompting the US Centers for Disease Control and Prevention (CDC) to start screening for the virus at JFK, San Francisco and Los Angeles International airports. These airports were chosen because most passengers flying from Wuhan to the United States make use of these airports.⁷ By the next day, Covid-19 had killed four people and infected more than 200 in China, before Dr. Zhong Nanshan finally confirmed that the disease could be transmitted from human to human. However, the WHO was still not convinced of the necessity to declare a public health emergency.⁸

²WHO and China (2021).

³AJMC Staff (2021).

⁴The WHO was quick to clarify Dr. Van Kerkhove's comments, saying it had only implied that human transmission was "possible" and "could" occur. "There was a misunderstanding at the press conference," the WHO told the FT that day. "Preliminary investigations by the authorities have found no clear evidence of human-to-human transmission." (Cf. Mitchell et al. (2020).)

⁵Mitchell et al. (2020).

⁶Hu et al. (2021).

⁷AJMC Staff (2021).

⁸AJMC Staff (2021).

After weeks of surveillance, on 23 January 2020—when the first cases of Covid-19 were reported in the United States (cf. Sect. 2.5.1) and Europe (cf. Sects. 2.3 and 2.4)—Wuhan was quarantined; the city was locked down to contain any further contagion, with curfews and extremely restricting movement for a period that would last another 11 weeks.⁹ By this time, another 13 people had died and 300 were ill. China took the unprecedented step of not only closing Wuhan and its population of 11 million, but also placing a restricted access protocol on Huanggang, 30 miles to the east, where residents could no longer leave without special permission. This meant that up to 18 million people were placed under strict control.¹⁰

The Covid-19 epidemic in China is said to have reached its epidemic peak in February 2020. According to the National Health Commission of China, the total number of cases continued to rise sharply in early February 2020, at an average rate of over 3000 new confirmed cases per day. To control Covid-19, China resorted to unprecedentedly stringent public health measures. As a result of these measures, the daily number of new cases in China would soon begin to decline steadily.¹¹

In February 2020, a joint WHO-China mission on Covid-19 was convened to discuss planning in China and internationally on the next steps in response to the Covid-19 epidemic:¹²

The official death rate in Wuhan was 1147 per 100,000 over the period 1 January to 31 March 2020. Outside Wuhan, the death rate was 675 per 100,000, lower than the expected rate of 715, after lockdowns reduced deaths from other causes, such as ordinary pneumonia or road accidents. Further research suggested that there were around 6000 additional deaths in Wuhan over the period January–March 2020 (compared to the same period in 2019), of which 4573 were caused by pneumonia, most of them related to Covid-19.¹³

In the Western world, events in China could be followed through broadcasts and publications on the news and social media; however, at that time, the West did not take the threat posed by Covid-19 all too seriously. Given the severe containment measures that China used, one should have known better.

⁹Nelson (2020).

¹⁰AJMC Staff (2021).

¹¹Hu et al. (2021). Cf., furthermore, He et al. (2021).

¹²WHO and China (2021), p. 10.

Its main objectives were to: "(1) Better understand the evolution of the Covid-19 epidemic in China and the nature and impact of ongoing containment measures. (2) Share knowledge on Covid-19 response and preparedness measures in countries affected by or at risk of Covid-19 imports. (3) Generate recommendations for adjusting containment and response measures to Covid-19 in China and internationally. (4) Prioritise a programme of collaboration, research and development to address critical gaps in knowledge and in response and preparedness tools and activities."

 $^{^{13}}$ He et al. (2021).

According to the authors, by March 2021, the official number of Covid-19 deaths in mainland China was 4636, of which 83.5%, or 3869 deaths, were in Wuhan. The number of Covid-19 deaths in the United States was then over 500,000. (Cf. He et al. (2021).)

With a global death toll of more than 200 and an exponential jump to more than 9800 cases, on 31 January 2020, the WHO finally declared a "public health emergency", for only the sixth time in its history.¹⁴ On the same day, Joseph Wu—together with his colleagues Kathy and Gabriel Leung—published in "The Lancet" the results of a study he had been conducting since the outbreak of Covid-19 in Wuhan, in which he warned that countries should already start preparing for a possible pandemic:¹⁵

Given that 2019-nCoV is no longer contained within Wuhan, other major Chinese cities are probably sustaining localized outbreaks. Large cities overseas with close transport links to China could also become outbreak epicenters, unless substantial public health interventions at both the population and personal levels are implemented immediately. Independent selfsustaining outbreaks in major cities globally could become inevitable because of substantial exportation of presymptomatic cases and in the absence of large-scale public health interventions. Preparedness plans and mitigation interventions should be readied for quick deployment globally.

From February 2020 on, the highly transmissible Covid-19 virus gradually spread to various other countries, including many European countries and the United States, as well as Asian countries such as Japan, Vietnam and Taiwan.¹⁶ The Covid-19 virus rapidly surpassed SARS (Severe Acute Respiratory Syndrome) and MERS (Middle East Respiratory Syndrome) in terms of the number of people infected and the spatial extent of epidemic areas, posing an extraordinary threat to global public health.¹⁷ Indeed, already by 10 February 2020, the number of deaths caused by Covid-19 in China had surpassed that of the SARS epidemic 17 years earlier, with 908 deaths reported in China in the previous month, compared to ("only") 774 deaths during the SARS crisis.¹⁸

On 25 February 2020, Nancy Messonnier, MD, director of the CDC's National Centre for Immunization and Respiratory Diseases, explained that the Covid-19 outbreak already met two of the three conditions required for qualifying it as a pandemic: (1) a disease-causing death, and (2) sustained person-to-person spread. (3) Global spread was the third criterion, but it was not yet met at the time.¹⁹

On 11 March 2020, the WHO declared Covid-19 a "pandemic".²⁰ In making this declaration, Tedros Adhanom Ghebreyesus, WHO Director-General, told at a briefing in Geneva that the agency was deeply concerned about the alarming levels of "spread and severity" of the Covid-19 epidemic. Mr. Ghebreyesus also expressed his huge concern about the alarming levels of inaction.²¹

¹⁴AJMC Staff (2021).

¹⁵Wu et al. (2020), p. 689.

¹⁶Nelson (2020), AJMC Staff (2021) and Hu et al. (2021).

¹⁷Hu et al. (2021).

¹⁸AJMC Staff (2021).

¹⁹For the text of the declaration, see World Health Organization (2020).

²⁰Nelson (2020).

²¹AJMC Staff (2021).

1.1 Origin of Covid-19

In the words of the WHO Director General:²²

We have therefore made the assessment that COVID-19 can be characterized as a pandemic.

Pandemic is not a word to use lightly or carelessly. It is a word that, if misused, can cause unreasonable fear, or unjustified acceptance that the fight is over, leading to unnecessary suffering and death.

Describing the situation as a pandemic does not change WHO's assessment of the threat posed by this virus. It does not change what WHO is doing, and it does not change what countries should do.

We have never before seen a pandemic sparked by a coronavirus. This is the first pandemic caused by a coronavirus.

And we have never before seen a pandemic that can be controlled, at the same time.

WHO has been in full response mode since we were notified of the first cases.

And we have called every day for countries to take urgent and aggressive action.

We have rung the alarm bell loud and clear.

Since then, both the horror of Covid-19 and the arsenal of measures to contain it have rapidly increased and have even been overtaken by a variety of complex socioeconomic and cultural implications, soon triggering a capitalist crisis that was still ongoing at the time of finishing this book.²³

Already at the beginning of March 2020, the number of Covid-19-related deaths in Europe exceeded those in Asia. From mid-April 2020 onwards, the focus of the pandemic shifted to the United States where, due to the Trump administration's lack of adequate response to the Covid-19 crisis (cf. Sect. 2.5), the number of deaths would since then remain consistently high until 2021—when the US vaccination-campaign started gradually protecting the American people from the Covid-19 virus—although the epidemic shifted from the North East to other parts of the country.²⁴

In May 2020, the 73rd World Health Assembly adopted Resolution WHA73.1 dealing with the response to Covid-19. In this resolution, WHO Member States requested the Director-General:²⁵

to continue work closely with the World Organization for Animal Health (OIE), the Food and Agriculture Organization of the United Nations (FAO) and countries, as part of the One-Health Approach to identify the zoonotic source of the virus and the route of introduction to the human population, including the possible role of intermediate hosts, including through efforts such as scientific and collaborative field missions, which will enable targeted

²²AJMC Staff (2021).

²³Nelson (2020).

²⁴Team FT Visual & Data Journalism (2021); data from 4 March 2021, accessed 6 March 2021. Latin America became the epicentre of the Covid-19 pandemic from summer 2020 onwards, with the region accounting for almost half of the deaths each day in the second half of 2020. A new surge in Europe after autumn 2020 implied that Covid-19 remained a global pandemic throughout 2020. (Cf. Team FT Visual & Data Journalism (2021).)

²⁵World Health Assembly (2020).

interventions and a research agenda to reduce the risk of similar events occurring, as well as to provide guidance on how to prevent infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in animals and humans and prevent the establishment of new zoonotic reservoirs, as well as to reduce further risks of emergence and transmission of zoonotic diseases.

As of 3 June 2020, Covid-19 had already claimed some 380,000 human lives and had infected approximately 6.4 million people in more than 185 countries worldwide.²⁶

Remarkably, it was only by 6 July 2020 that a group consisting of hundreds of scientists from various countries began to ask the WHO "to revise the recommendations on Covid-19 to better reflect its potential for airborne transmission". Previously, WHO itself had kept on stating that "Covid-19 is spread mainly by small droplets from the nose or mouth emitted when an infected person coughs, sneezes or talks".²⁷ Finally, on 9 July 2020, the WHO announced that Covid-19 could be transmitted by air, in response to the letter of the aforementioned group of scientists asking the agency to revise its previous recommendations. In an updated scientific note, the WHO acknowledged that Covid-19 could persist in the air of crowded indoor spaces and pointed out that the virus could also be transmitted by asymptomatic people.²⁸ This view was subsequently confirmed by a study (based on an analysis of mobile phone mobility data in major cities) published in the journal "Nature" on 11 November 2020, which showed that most new Covid-19 cases came from indoor gatherings in places such as bars, restaurants, gyms and grocery shops.²⁹

In July 2020, based on the recommendations of the 73rd World Health Assembly, the WHO sent an advance team to China to agree on a way forward to better understand the origins of the Covid-19 virus.³⁰

On 28 September 2020, according to the New York Times, the number of Covid-19-related deaths worldwide passed the one million mark, "surpassing deaths from HIV, dysentery, malaria, influenza, cholera and measles combined in 2020".³¹

Less than a month later, on 19 October 2020, Data from Johns Hopkins University indicated that Covid-19 cases had surpassed the number of 40 million on a

²⁶Nelson (2020).

²⁷AJMC Staff (2021).

According to Reuters, in an open letter to the WHO which the researchers announced would be published shortly afterwards in a scientific journal, 239 scientists from 32 countries outlined the evidence that small airborne particles could infect people. According to the scientists, "whether carried by large droplets that zoom through the air after a sneeze, or by much smaller exhaled droplets that may glide the length of a room", Covid-19 is airborne and can infect people when inhaled. The WHO itself was not immediately convinced. "Especially in the last couple of months, we have been stating several times that we consider airborne transmission as possible but certainly not supported by solid or even clear evidence," Dr. Benedetta Allegranzi, the WHO's technical officer for infection prevention and control, told The New York Times. (Reuters staff (2020).).

²⁸AJMC Staff (2021).

²⁹AJMC Staff (2021) and Cooney (2020).

³⁰WHO and China (2021), p. 10.

³¹AJMC Staff (2021).

As of March 4, 2021	Total infections	Active infections	Recoveries	Deaths
Germany	2,472,896	117,785	2,283,400	71,711
Turkey	2,734,836	112,801	2,593,264	28,771
Italy	2,976,274	437,421	2,440,218	98,635
Spain	3,136,321	343,770	2,722,304	70,247
France	3,810,316	3,461,485	261,289	87,542
UK	4,194,785	1,065,282	3,005,720	123,783
Russia	4,290,135	332,455	3,869,857	87,823
Brazil	10,722,221	871,229	9,591,590	259,402
India	11,156,923	173,377	10,826,075	157,471
USA	29,456,377	8,921,400	20,003,325	531,652
World	115,820,058	21,728,156	91,519,015	2,572,887

 Table 1.1 Key figures for the most affected countries worldwide on 4 March 2021 [Source: Statista (2021), accessed on 6 March 2021]

global scale. Indeed, in the aftermath of the 2020 summer season, the United States and various European countries then even experienced their highest rate of new cases in months, a situation soon to be known as the "second wave" of the Covid-19 pandemic. By then, more than 1.1 million people had been killed by the Covid-19 virus worldwide, including nearly 220,000 in the United States, the hardest-hit country at the time.³²

As of 3 March 2021, Covid-19 had infected more than 115,773,776 people, with 2,571,296 deaths reported. North and South America were the most affected regions in terms of cases and deaths, but Asia was not far behind, mainly due to outbreaks in India. Meanwhile, according to National Geographic, the global economy had collapsed, while containment and mitigation efforts continued to disrupt all sectors of economic life, such as manufacturing, education, the financial sector, and numerous other sectors (Table 1.1).³³

On 12 April 2021, the WHO reported that the global Covid-19 pandemic continued to grow exponentially, with reports of 4.4 million new cases in the preceding week, the seventh consecutive week of rising numbers, indicating what was being referred to as the "third wave" of the Covid-19 pandemic.³⁴ Covid-19 had by then killed at least 2,937,355 people since its outbreak in China in December 2019. At least 135,952,650 cases of infection had been recorded on a global scale. In its announcement of 12 April 2021, the WHO said its latest global figures represented a 9% increase in infections over the previous week and a 5% increase in deaths. WHO Director-General Tedros Adhanom Ghebreyesus also said that "confusion, complacency and inconsistency in public health measures" were

³²AJMC Staff (2021).

³³National Geographic (2021); data provided on 6 March 2021.

³⁴Beaumont (2021).

prolonging the Covid-19 pandemic, and that it would take still months before the situation was brought under control, and only through concerted action.³⁵

According to The Guardian, on 17 April 2021, a dark milestone was reached in the Covid-19 tragedy when it was revealed that the number of deaths from the disease worldwide had exceeded three million.³⁶ The news was announced by the Welcome Trust's director, Jeremy Farrar, who also warned that the actual number of Covid-19 deaths was likely much higher. More worryingly, the Covid-19 pandemic was reported to continue to grow at an alarming rate, with hundreds of thousands of people still dving every month.³⁷ As of the same date, according to the Covid-19 dashboard managed by Johns Hopkins University, there had already been more than 140 million cases of the disease since the Covid-19 pandemic began in 2020, with the official death toll reaching 3,001,068. The most affected country in absolute numbers was the United States, with more than 31 million cases and over 560,000 deaths.³⁸ India and Brazil had also been badly hit, with the former recording over 14 million cases and 175,000 deaths, while the latter had just under 14 million cases and almost 370,000 deaths. Britain, which was also heavily affected by the disease, recorded more than four million cases and a death toll that at the time stood at more than 127,000.³⁹

In the week leading up to 27 April 2021, there were more than 5.8 million new cases of Covid-19 worldwide, the highest number ever. By the same date, more than three million people had died from Covid-19, with the WHO reporting that infections and hospitalizations among people aged 25–59 were increasing at an alarming rate. According to WHO Director-General Tedros Adhanom Ghebreyesus, it took "nine months to reach 1 million deaths, four months to reach 2 million and three months to reach 3 million".⁴⁰

In April 2021, the biggest increases of the Covid-19 outbreak were seen in South-East Asia, largely in India, and in the Eastern Mediterranean and Western Pacific regions, but the situation was also very bad in Latin America, where it was reported that people who had migrated to Brazil in search for work were fleeing the humanitarian disaster there.⁴¹ Infection rates also remained high in many rich countries, including the United States and large parts of Europe, but in these rich countries the mood was more optimistic: as Covid-19 vaccines were distributed at an increasing extent, many people felt that the worst was behind them.⁴²

However, the Covid-19 endemic in countries such as India and Brazil began to shape the subsequent evolution of the Covid-19 virus, and there was a growing

³⁹McKie (2021).

³⁵Beaumont (2021).

³⁶McKie (2021).

³⁷McKie (2021).

³⁸McKie (2021).

⁴⁰Spinney (2021).

⁴¹Spinney (2021).

⁴²Spinney (2021).

concern that it could lead to the emergence of even more dangerous variants of the Covid-19 virus, which neither borders nor vaccines could guarantee to prevent.⁴³

On Saturday 24 April 2021, at least 1,002,938,540 doses of a Covid-19 vaccine were reported to have been administered in 207 countries and territories all over the world. Nevertheless, the global number of new infections in a single day still reached a record high of 893,000 on 23 April 2021, with India accounting for more than a third of these new infections.⁴⁴ On the same date, Saturday 24 April 2021, Brazil had its deadliest month on account of the Covid-19 virus, with nearly 68,000 deaths reported in April 2021 so far (with still 1 week left in the month).⁴⁵

In April and May 2021, a second horrific wave of Covid-19 hit India, home to nearly one-fifth of the world's population. This second wave was reported to plunge the country into "death, despair and desolation". Scenes of suffering were shown, of people dying for lack of oxygen and medical care, both hardly available while the country was in general enduring shortages of medicines and other commodities, as well as mass cremations and burials, grieving survivors of diseased, overwhelmed health workers and "sheer human helplessness". On 8 May 2021, India recorded about 400,000 reported cases per day (although the actual number may have been eight to ten times higher). Some models even predicted that by mid to late May 2021, the actual numbers could be between 800,000 and 1 million cases per day, and 5–10,000 deaths per day.⁴⁶

On 12 May 2021, India accounted for one-third of the world's reported Covid-19 deaths. Hospital and medical staff, as well as morgues and crematoria were completely overwhelmed, and medication and medical oxygen were in short sup-ply.⁴⁷ Two days earlier, dozens of bodies—some media reports put the number of corpses as high as 100—all believed to be Covid-19 victims, were reported to have washed up on the banks of the sacred Ganges River in northern India, as the Covid-19 pandemic spread through the country's vast rural hinterland, also there overwhelming local health facilities, crematoria and cemeteries alike.⁴⁸

⁴³Spinney (2021).

⁴⁴Guardian Staff and Agencies (2021).

⁴⁵Guardian Staff and Agencies (2021).

⁴⁶Narayan (2021).

⁴⁷Farrer (2021).

⁴⁸Agence France-Presse in New Delhi (2021).

Residents shared their belief that the bodies had been dumped in the river because cremation sites were saturated, or because relatives could not afford to buy wood for the funeral pyres. (Cf. Agence France-Presse in New Delhi (2021).)

1.1.2 Nature of Covid-19

According to Morens et al., until the outbreak of the Covid-10 epidemic, relatively little had been known about coronaviruses. Moreover, research interest in these "cold viruses" was said to be minimal.⁴⁹ Also according to Morens et al., the viral agent of Covid-19, "SARS-CoV-2", was named after the genetically related "SARS-CoV" (more recently distinguished, by some, as "SARS-CoV-1") which had already been reported to have caused a deadly near-pandemic in 2002–2003. However, until 2019, neither SARS-CoV-2 nor its genetic sequences themselves had ever been identified in human or animal viruses.⁵⁰

Morens et al., have defined coronaviruses as RNA viruses that are distributed worldwide in a large but unknown number of animal species.⁵¹

According to these same authors,⁵² 18 years before the Covid-19 epidemic, a previously unknown β -coronavirus, "SARS-CoV" (also known as "SARS-CoV-1"), had suddenly appeared. After its initial appearance in China, SARS-CoV-1 had spread to twenty-nine other countries, causing a near-pandemic while killing 813 of the 8809 people who contracted the infection, before finally being controlled by aggressive public health measures. This "SARS-CoV"-virus has reportedly not been seen since.⁵³

Still according to Morens et al., in 2021, another previously unknown β -coronavirus, called "Middle East respiratory syndrome coronavirus" ("MERS-CoV"), emerged to cause highly lethal human infections. However, this virus, which is closely related to "SARS-CoV", does not transmit efficiently between humans. Cases have, therefore, remained largely limited to the Middle East because its intermediate host, the dromedary camel, is said to be present there in relatively high numbers.⁵⁴

Morens et al., furthermore, made the observation that in 2016, another new coronavirus originating from bats, this time an α -coronavirus, emerged in China to cause a new epizootic in pigs, namely the "porcine acute diarrhoea syndrome coronavirus" ("SADS-CoV").⁵⁵ Finally, at least as of late November 2019, "SARS-CoV-2", commonly referred to as (the) "Covid-19" (virus), was recognised as the third fatal emergence of human disease associated with a bat virus and the fourth mammalian emergence associated with a bat virus in 18 years.⁵⁶

Unlike its predecessors, the Covid-19 virus quickly became a phenomenal success and even managed to cause the worst pandemic in over a century.

⁴⁹Morens et al. (2020).

⁵⁰Morens et al. (2020).

⁵¹Morens et al. (2020).

⁵²Morens et al. (2020).

⁵³Morens et al. (2020).

⁵⁴Morens et al. (2020).

⁵⁵Morens et al. (2020).

⁵⁶Morens et al. (2020).

In addition, the Covid-19 virus would soon begin to mutate,⁵⁷ raising concerns about: (1) a higher degree of contagiousness; (2) the fact that a new variant could be more deadly, or lead to more severe disease, and (3) a greater resistance of the virus to vaccines.

The Sars-CoV-2 virus has mutated from the start. On average, a single Sars-CoV-2 virus accumulates two single-letter mutations per month.⁵⁸ In comparison, the flu virus mutates at about twice that rate. Many of the mutations that occurred early on helped the Sars-CoV-2 virus adapt to humans.⁵⁹ For example, the variant of the virus that was first detected in Wuhan, China, was not the same as the one that reached most parts of the world, the D614G mutation that appeared in Europe in February 2020, to then become the dominant form of the virus worldwide. Another variant, called A222V, spread to Europe and was linked to people's summer holidays in Spain.⁶⁰

On 23 September 2020, a study at Houston Methodist Hospital described a new, more contagious strain of Covid-19 in a large proportion of samples from—at the time—"recent" patients. Investigators reportedly analysed samples from the earliest phase of the Covid-19 pandemic and from a more recent wave of infection, concluding that almost all strains from the most recent phase of the Covid-19 disease had a mutation that allowed the virus to bind and infect more human cells.⁶¹

⁶¹AJMC Staff (2021).

⁵⁷According to Sample, the genetic code of the Covid-19 virus is contained in about 30,000 letters of RNA, a molecule similar to DNA. When the virus infects human cells, the genetic code is copied to create new virus particles. But errors occur in the process and these copying errors become mutations in the new virus. Most mutations have little effect, while some alter the virus and disappear. But sometimes a mutation benefits the virus, for example by allowing it to cling more effectively to human cells or to evade some of the body's immune defences after a previous infection or vaccination (cf. Sample (2021b)).

⁵⁸According to Rybicki et al., in general, virus mutation rates vary between different types of virus, and between viruses and cells. In general, viruses mutate faster than host genomes, and RNA viruses generally mutate faster than DNA viruses. "This is because the replication machinery of RNA viruses generally lacks error-correcting capacity", as do all other cells and most DNA viruses. For example (still according to these same authors), seasonal flu viruses have an error rate of 0.5 nucleotide positions per genome per infected cell. This means that mutations accumulate rapidly as the virus multiplies in a person. "But SARS-CoV-2 and other coronaviruses are an exception to the rule. They mutate at least 4 times more slowly than influenza. Occasionally, a mutation will give the virus a better chance of surviving and reproducing itself and will result in a new population (known as a new lineage). It is noteworthy that there were only 4-10 mutations accumulated for SARS-CoV-2 viruses that infected people in the USA in mid-2020, compared to the original virus found in Wuhan months earlier: Thus, only a small proportion of the 24 possible mutations in this sequence produced a viable mutant." As explained, furthermore, by Rybicki et al., an accumulation of mutations that significantly alter the properties of a viral lineage would be a new variant. The SARS-CoV-2 variants found in the UK, South Africa and Brazil-more correctly called B.1.1.7, B.1.135 and P.1 variants-are examples thereof. All are reported to have significantly higher rates of transmission than the preceding lineages. (Cf. Rybicki et al. (2021).)

⁵⁹Sample (2021b).

⁶⁰Gallagher (2020) and Sample (2021b).

The D614G mutation stabilises the spike proteins that allow the virus to attach to and infect human cells (cf. Sample (2021b)).

New mutations in the virus have kept appearing since then, with scientists starting to focus on those that were likely to make Sars-CoV-2 more problematic. One of the most common mutations has been "N501Y", also known as "Nelly" to geneticists who track new variants. This mutation affects the 501st amino acid of the virus, swapping asparagine for another amino acid called tyrosine. This changes the shape of the spike protein in a way that allows the virus to bind more tightly to human cells. A likely consequence of these characteristics is that less virus is needed to cause an infection, so that the disease spreads more effectively.⁶²

The Nelly mutation was reported to occur in at least three variants that have begun to cause concern worldwide: (1) the rapidly spreading B117 or 501YV1 variant, first spotted in Kent; (2) the B1351 or 501YV2 variant, first discovered in South Africa; and (3) the P1 or 501YV3 variant, first observed in Brazil.⁶³

On 21 December 2020, the United Kingdom announced that a new strain of the Covid-19 virus, B.1.1.7, was spreading in the country. This new strain was first detected in September 2020. By November 2020, around a quarter of new Covid-19 cases in London were reported to be caused by this new variant. This figure rose to almost two-thirds of cases by mid-December 2020. The new variant, soon known as the UK or Kent variant, was reported to be more contagious but did not appear to be more deadly or cause more severe disease.⁶⁴ This variant was reported in the United States in late December 2020.⁶⁵

The South African variant, named B1351 or 501YV2, was first identified in Nelson Mandela Bay, South Africa, in samples from early October 2020. Since then, other cases were detected outside South Africa, including in the United States. The variant was also found in Zambia in late December 2020, by which time it appeared to have become the predominant variant in the latter country.⁶⁶ The South African variant (as this variant was soon called) carries a mutation, called "N501Y", which appears to make it more contagious or easier to spread. Another mutation, called E484K, is thought to help the virus bypass a person's immune system and to affect the effectiveness of Covid-19 vaccines (which was one of the main reasons why South Africa would soon after stop using the Oxford/AstraZeneca

⁶²Sample (2021b).

⁶³Sample (2021b).

⁶⁴AJMC Staff (2021), Roberts (2021) and Gallagher (2020).

According to Rambaut et al., the two earliest sampled genomes belonging to lineage B.1.1.7 were collected on 20 September 2020 in Kent and another on 21 September 2020 in Greater London. Infections of lineage B.1.1.7 continued to be detected in the United Kingdom until early December 2020. The genomes belonging to lineage B.1.1.7 form a monophyletic clade that is well supported by a large number of lineage-defining mutations. As of 15 December 2020, there were 1623 genomes in lineage B.1.1.7. Of these, 519 were sampled from Greater London, 555 from Kent, 545 from other parts of the UK, including Scotland and Wales, and 4 from other countries. (Cf. Rambaut et al. (2020).)

⁶⁵European Centre for Disease Prevention and Control – ECDC (2021) (updated 28 January 2021); Rybicki et al. (2021).

⁶⁶European Centre for Disease Prevention and Control – ECDC (2021) (updated 28 January 2021); Rybicki et al. (2021).

vaccine, a fact which we shall readdress in Chap. 9).⁶⁷ Cases attributed to this variant have since been detected in several other countries outside South Africa. The variant was detected in the United States in late January 2021.⁶⁸

In Japan, still another variant of SARS-CoV-2 (known as "P.1") was first identified in January 2021 in four travellers from Brazil who had been tested during routine screening at Haneda airport near Tokyo, Japan. This variant has no less than seventeen unique mutations, including three in the receptor-binding domain of the spike protein. The P.1 variant is a branch of the B.1.1.28 lineage. This variant, which was quickly dubbed the Brazilian variant (because it has been first detected in travellers from Brazil), was discovered in the United States in late January 2021.⁶⁹

But some of these "variants of concern" also were reported to share other mutations. Both the B1351 and P1 variants carry another leading mutation, K417N, whose impact is not yet clear. One of the most worrying mutations found on the date of finishing this book was "E484K", or "Eeek". This mutation was reported to alter the spike protein, making it more difficult for some antibodies formed by vaccination or previous infection to latch onto the Sars-CoV-2 virus. Scientists were particularly concerned that variants carrying the E484K mutation could still spread in populations that had already been hard hit by the Covid-19 virus or had already been substantially vaccinated, hence the fear that the South African variant could reverse the vaccination programme in the United Kingdom. According to Sample, the number of variants that have started to carry the mutation indicates that it is beneficial to the virus. According to this same author, geneticists have identified the E484K mutation in the South African and Brazilian variants and in other variants found in the United Kingdom, New York, Nigeria and, more recently, Angola. In the United Kingdom, samples of the Kent variant that was widespread in the south-west of the country also evolved into the E484K mutation, as had another variant circulating in Merseyside. Still according to Sample, the same mutations can appear by chance. But when variants around the world are stimulated after acquiring several corresponding mutations (D614G, N501Y and E484K were all found in variants from Kent, South Africa and Brazil), it may mean that "convergent

⁶⁷Roberts (2021). Cf., furthermore, Sample (2021a).

[&]quot;This variant has multiple mutations in the spike protein, including K417N, E484K, N501Y. Unlike the B.1.1.7 line detected in the United Kingdom, this variant does not contain the 69/70 deletion." (Cf. European Centre for Disease Prevention and Control – ECDC (2021) (updated 28 January 2021).)

According to Rybicki et al., the issue of immunity is complex. Natural infections elicit broad cellular and antibody immune responses that target many parts of the virus. But, still according to these authors, most SARS-CoV-2 vaccines stimulate responses that target only the S protein: this has raised concerns that new variants may escape these "narrow" immune responses, for example those created by Covid-19 vaccines (cf. Rybicki et al. (2021)).

 ⁶⁸European Centre for Disease Prevention and Control – ECDC (2021) (updated 28 January 2021).
 ⁶⁹Le Page and Hambly (2021); European Centre for Disease Prevention and Control – ECDC (2021) (updated 28 January 2021).

evolution" is at work. This occurs when a virus present in different parts of the world finds the same way to adapt to evolutionary pressure.⁷⁰

Again according to Sample, between December 2020 and March 2021, a new variant of the Covid-19 virus gained ground in the western state of Maharashtra, India. On 24 March 2021, the Indian Ministry of Health reported that 15-20% of the Covid-19 virus sequenced in the region-it concerned one of the first outbreaks of the second wave in the country-carried two unusual mutations: "E484Q" and "L425R". This figure rose to over 60% in the region by mid-April 2021. The variant has been named "B.1.617".⁷¹ According to Sample, genomic surveillance in the United Kingdom found the Indian variant in samples dating back to February 2021. In mid-April 2021, Public Health England (PHE) said it was aware of 73 cases in England and four in Scotland, but on 19 April 2021, UK Health Secretary Matt Hancock revised this figure upwards to 103. Most of the UK cases were linked to travel from India, but some cases were due to transmission of the virus in people's homes.⁷² Scientists also began to research whether the variant is/was more dangerous than others in circulation, for example by spreading more quickly, causing more severe disease or evading immunity acquired through previous infection or vaccination. They found that of the two main mutations in the Indian variant, L452R may help the virus evade some vaccine-derived antibodies, while E484O has similarities to the E484K mutation that helps make the South African variant at least partially resistant to vaccines. However, it was not expected that the mutations in the Indian variant would render the vaccines completely ineffective, as injections were said to induce broad immune defences. Nor was it known whether the new variant was the cause of the upsurge in cases in India. Genomic sequencing in the United Kingdom showed that the Indian variant increased from 0.2% to 1% of cases over a 2-week period after 20 March 2021, but the majority of these cases were thought to be imports. The concern has been reinforced by Health Canada data, which showed that Covid-19 infected passengers were found on all 27 flights arriving in Canada from Delhi between 4 April 2012 and 14 April 2021.⁷³

On 10 Monday 2021, the WHO (as quoted by Nebehay and Farge) declared that the Covid-19 variant first identified in India in December 2020, was classified as a "variant of global concern", as some preliminary studies had shown that it spread more easily.⁷⁴

On 12 May 2021, Farrer reported that the WHO had announced that the Indian Covid-19 variant had already been found in dozens of countries around the world. The UN health agency added that the Covid-19 variant B.1.617, first discovered in India in October 2020, had since been detected in more than 4500 samples uploaded to an open-access database "from 44 countries in the six WHO regions, with

⁷⁰Sample (2021b).

⁷¹Sample (2021c).

⁷²Sample (2021c).

⁷³Sample (2021c).

⁷⁴Nebehay and Farge (2021).

additional reports of detections in five additional countries". Apart from India, Britain was said to have reported the highest number of cases of Covid-19 caused by the variant.⁷⁵ (Cf. Sect. 2.4.2.3.5.3) As of 14 May 2021, outside of India, the United Kingdom had recorded the highest number of cases of the Indian variant, at 1587 cases. The United States (with 486 cases detected), Singapore (with 156 cases detected) and Germany (with 103 cases detected) were the only other countries to have sequenced more than 100 cases of the B.1.617+ variant. Australia had detected 85 cases of the Indian variant, and Denmark 39.⁷⁶

1.1.3 Plausible Causes of the Covid-19 Outbreak

Especially since the outbreak of the Covid-19 pandemic, it has become public knowledge that bats of a wide variety of genera and species spread around the world are known to be the main reservoir of coronaviruses. According to Morens et al., it has even been revealed that bats are responsible for more than 98% of coronavirus detections.⁷⁷

According to these same authors, investigators have since recent been able to map global hotspots for the potential emergence of infections. These hotspots include southern/southwestern China and neighbouring regions and countries. Still according to these same authors, investigators also identified numerous humananimal interactions that may be risk factors for emergence of viral infections, such as bat tourism, wet markets, wildlife supply chains for human consumption, capitalistic land (and agriculture) management practices and environmental disturbances.⁷⁸ We shall come back to this in Sect. 2.2.2 hereafter. Not surprisingly, both SARS-CoV and SARS-CoV-2 have emerged in China, home to bats of more than 100 species, many of which carry α - and/or β -coronavirus.⁷⁹ According to further research cited by Morens et al., more than 780 partial genetic sequences of coronaviruses have been identified from bats of 41 species infected with α - and 31 species infected with β -coronaviruses. According to the same research, nature is clearly "a cauldron for intense and dangerous coronavirus evolution".⁸⁰

Since then, an even clearer and more disturbing picture of the coronavirus ecosystem has emerged. 81

From this research:⁸²

⁷⁵Farrer (2021).

⁷⁶Thomas and Kirk (2021).

⁷⁷Morens et al. (2020). Cf., furthermore, WHO and China (2021), p. 9.

⁷⁸Morens et al. (2020). Cf., furthermore, Hu et al. (2021).

⁷⁹Morens et al. (2020).

⁸⁰Morens et al. (2020).

⁸¹Morens et al. (2020).

⁸²Morens et al. (2020).

it appears that a contiguous area encompassing parts of south/southwest China, Laos, Myanmar, and Vietnam constitutes a bat coronavirus "hotspot," featuring intense interspecies viral transmission. In such hotspots, a rich diversity of SARS-like viruses is to be found, not only in rhinophid bats, but also in bats of other genera and species to which these viruses have host-switched. The same rhinophid bats are also implicated in the emergence of 'SADS-CoV' in southern China. Many of these SARS-like viruses bind to human angiotensin-converting enzyme-2 (ACE2) receptors and infect human respiratory epithelial cells in vitro, suggesting their pandemic potential.

As phrased by Morens et al., SARS-CoV-2 arose, in essence, as predicted by this research, as a result of a natural event associated with either direct transmission of a coronavirus from bats to humans or indirect transmission to humans via an intermediate host, such as a "Malaysian pangolin" or other mammal.⁸³ As with the coronaviruses that caused SARS and MERS, human-to-human transmission of SARS-CoV-2 was also quickly established, although the latter virus showed much greater infectivity than these other two coronaviruses.⁸⁴ It was according to Morens et al., also quickly established that those infected with SARS-CoV-2 appeared to be most infectious at the time of symptom onset, but were also infectious in the days before symptom onset. It was also shown that infections could be asymptomatic, cause mild illness or result in severe illness and death.⁸⁵

The emergence of this "bat-to-human coronavirus or indirect transmission", although a natural phenomenon, obviously caused by a virus, was however at the same time facilitated by the characteristics of globalised capitalism which helped to provide the societal factors that made this transmission, and especially the Covid-19 pandemic itself, possible.

This will be discussed briefly in the next Sects. 1.2 and 1.3 and then, in more depth, throughout the rest of this book.

⁸³Morens et al. (2020).

It should be noted that, already early in the pandemic, theories about a hypothetical human origin of SARS-CoV-2 were totally discredited by many coronavirus experts. At the time, it was also considered highly unlikely that SARS-CoV-2 had been released by a laboratory by accident, as no laboratory possessed the virus and given the fact that its genetic sequence was not reported to have existed in any sequence database prior to its initial deposit in GenBank. (Cf., furthermore, Hu et al. (2021)).

⁸⁴According to WHO and China, SARS-CoV-2 has a broad tissue tropism, including binding to angiotensin converting enzyme 2 (ACE2) through its spike protein. It is also reported to directly infect the endothelial cells that line blood vessels, which is unusual for a human respiratory virus. Other novel pathological features of the virus are hypercoagulability and excessive multi-organ immune system response and long-term sequelae. (Cf. WHO and China (2021), p. 10.)

⁸⁵Morens et al. (2020).

1.2 How Capitalism (Ab)uses the Earth and Its Resources

There is probably not much need to point out that, since the seventeenth and eighteenth centuries, capitalist forms of economic production have had an enormous effect on the environment, to an ever-increasing extent.⁸⁶

This is a direct result of some of the basic premises of capitalism, such as (1) the myth of economic growth; (2) the idea that production takes place for the sake of production (and thus consumption takes place for the sake of consumption); and (3) the principle of the supremacy of profits, to which all other values in societal life have been progressively sacrificed.⁸⁷ Basic economics textbooks even reflect upon these premises by referring to the Earth and its wealth, alongside people themselves, as the "resources"—or "factors of production"—on which the (capitalist) economy is based.

Thus, in the logic of capitalism,⁸⁸ the Earth on the one hand, and human beings on the other, serve mainly as means to achieve the goals set by the global economy.⁸⁹

If we add to this the fact that there has never been any room for planning within capitalism—given the view that, by relying on (the invisible hand of) the market

⁸⁶Byttebier (2019), p. 106.

⁸⁷It is interesting to note that Karl Marx (1818–1883) was one of the first to criticise these intrinsic features of capitalism. Fromm has argued that, according to Marx, the aim of society should not be the production of things as an end in itself (= the so-called "production for production's sake"). Instead, society should aim to overcome poverty and end unjust levels of inequality, "not to produce and consume as supreme goals in themselves". (Cf. Fromm (2013), p. 31.)

⁸⁸Although the idea that the Earth only serves to satisfy human needs and desires, is certainly dominant within capitalist economies, also before in history man began to shamelessly exploit the Earth. For Harari, the moment in history when things started to go wrong, was essentially the beginning of the (first) agricultural revolution, around 10,000 BC (cf. Harari (2014), p. 372).

This idea is beautifully echoed in the Hindu myth dealing with the sixth avatar of Lord Vishnu, "Parashurama", which begins with a complaint from "Bhūmī-Devī", the goddess of the Earth, about the behaviour of the Kshatriya, the ruling caste who shamelessly exploited and abused her. Thus, Lord Vishnu incarnated in the avatar Parashurama, with the mission to put an end to the exploitation of 'Mother Earth'. This in turn leads to a fierce battle that continues through many generations of Kshatriya, and finally results in the total extinction of the (ancient) ruling caste. (Quoted in Byttebier (2018), p. 223.)

⁸⁹Therefore, over the last three or four centuries, capitalism has been based on the principle that all available resources on Earth (and as soon as possible, even beyond Earth) must be discovered and extracted as efficiently as possible for incorporation into capitalist production and consumption processes. All forests anywhere in the world must be cleared to produce wood for economic production, and new forests should only be planted if, for the same reason, they can be cleared as quickly as possible. Every scientific discovery must, without delay, serve the same capitalist production processes and result in the production of sufficiently "marketable" goods. Almost every living creature on Earth must be studied to discover how it can be reduced to a method of entrepreneurial profit, whether as an exhibit in a zoo (essentially one of the many "beneficial" discoveries of early capitalism), as a pet (also in the case of exotic animals which are totally unsuitable for this role), as a test object or as an ingredient for potential human consumption in the broadest sense of the term. (Cf. already Byttebier (2019), p. 106.)

economy, everything will eventually work out (fine)⁹⁰ (cf. Sect. 2.2.4 that deals with the neoliberal principle of "laissez-faire, laissez-passer"), this has led to a continuous (ab)use—and thus depletion—of all kinds of natural raw materials and energy sources (among which, in some parts of the world, even drinking water),⁹¹ in favour of irrational production processes, aimed at satisfying the even more irrational consumption needs of the fortunate few on earth who can afford them.⁹²

1.3 Further Impact of Globalization

In the context of the contemporary globalised economy and driven by a wide variety of neoliberal economic theories, these disastrous consequences of "pure" or "unbridled" capitalism have, in recent decades, been further accentuated and amplified to extreme proportions.⁹³

E.g., in the period 1989–1991, the neoliberal world order that had emerged in the 1980s under the influence of neoliberal doctrines was reinforced by the collapse of the communist system in Eastern Europe and the Soviet Union.⁹⁴ More precisely, the collapse of the communist system in Eastern Europe and the Soviet Union ended much of the resistance, especially on an economic and political level, to the power of capitalism. Since then, the collapse of the communist economies has even been used as a further argument that there is no alternative to the free market.⁹⁵ As a result, the

⁹⁰Cf., furthermore, Oxfam (2017), p. 6, referring to this problem as one of the "false assumptions" on which the capitalist economic system is based: "False assumption 6: Our planet's resources are unlimited. This is not only a false assumption, but one that could have catastrophic consequences for our planet. Our economic model is based on exploiting our environment and ignoring the limits of what our planet can support. This economic system is one of the main drivers of runaway climate change." (Oxfam (2017), p. 6.)

⁹¹Hartwell (2014).

⁹²According to Herbert Marcuse, (global) capitalism is thus characterised by a total loss of rationality (and thus a loss of its historical roots). Once unleashed, capitalist rationality has made complete irrationality the dominant norm. Initially—in the early days of capitalism—the development of production at a frantic pace, the conquest of nature and the extension of wealth in the accumulation of more and more goods were seen as "rational". However, in the process, capitalism has become an irrational force, because the increase in productivity and consumption, alongside the control of nature and social wealth, has been transformed into destructive powers, destructive not only figuratively (as in the sacrifice of all higher values in the pursuit of money), but also literally: the battle for existence has become fiercer by the hour, both within individual countries and internationally, and the accumulated aggression is discharged in the legitimisation of medieval cruelty (as in exploitation, war, torture and terrorism), and in a scientifically conducted destruction of humanity and nature. (Cf. Marcuse (1968), p. 102.)

⁹³Cf., furthermore, Byttebier (2017), p. 199.

⁹⁴Steger (2013), p. 41; Galbraith (1994), p. 220.

Stiglitz has referred to this globalisation of the world economy as a new means by which the rich and powerful have been allowed to exploit the weak and poor (cf. Stiglitz (2003), p. 205).

⁹⁵For example, Rand (2008), p. 26.

belief in the free market would become ever more fanatical than in previous centuries, leading to the idea that the free market is an absolute condition for a free society and for individual and collective progress. In the 1990s, these influences paved the way for an invisible "globalisation" of the capitalist economic system. This led to a continuous increase in the level of interconnection between countries at a socio-economic level, characterised by an increase in the international traffic of goods, services, capital and labour (thus people).⁹⁶ The so-called principles of "liberalisation" and "deregulation" hereby became the guiding principles of public policy in almost all countries of the world.⁹⁷

Since (economic) neoliberalism managed to make capitalism the dominant economic system on Earth, the polluting effect of economic activities has nowadays even taken on a global dimension (with so-called "new economies" even having made claims in the recent past to be as entitled to pollute the world as the Western countries have done in the past).⁹⁸

As a result, during the past three ages, the protection of the global ecosystem, the only "habitat" of the human species and all other known living creatures, has been increasingly sacrificed to the capitalist principle of profit-making. Similarly, public health has also been sacrificed to the sole interests of business, with the working methods of the pharmaceutical industry as a clear example.⁹⁹ (Cf. Sect. 9.2)

All of these elements helped Covid-19 develop into one of the worst pandemics the world has seen in over a century.¹⁰⁰

We shall return to these topics in the next subsection, and in more detail in Sect. 2.2.

⁹⁸Cf., furthermore, Byttebier (2019), p. 107.

⁹⁶Stiglitz (2006), 4. Cf., furthermore, Chomsky (1999), p. 68 a.f.

⁹⁷Steger (2013), p. 41; Lloyd (2012), p. 370 a.f.; Berend (2006), p. 263 a.f.

According to Steger, as a result of this increasing globalisation, the world economic order has undergone three crucial developments, specifically (cf. Steger (2013), p. 41): "(1) Increasing internationalisation and liberalisation of trade and finance. (2) Growing power of transnational corporations and large (investment) banks. (3) An increasing role for international economic organisations (such as the IMF, World Bank and WTO)."

⁹⁹Wolffers (2011), p. 240 a.f. Cf., furthermore, Harari (2014), p. 368.

¹⁰⁰Indeed, the insatiable human activities responsible for the uncontrolled carbon emissions that are causing climate change are only the tip of the iceberg of the environmental crises resulting from humans increasingly overstepping the Earth's regenerative limits over the past 50 years. (Cf. Nelson (2020).)

1.4 Capitalist Exploitation Methods as an Obvious Recipe for a Pandemic

According to Nelson, it was only a matter of time before the increasingly popular "Anthropocene" was to be renamed "Capitalocene". The latter term refers to the uniqueness of nature as Earth mimicked by the victory of global capital over all other values.¹⁰¹ According to Nelson, all this helps to explain the success of Covid-19.¹⁰²

As explained earlier, Covid-19 is caused by the "Severe Acute Respiratory Syndrome Coronavirus 2" ("SARS-COV-2"), essentially a nucleic acid molecule surrounded by protein. This virus multiplies in the cells of a living host and, as explained earlier (cf. Sect. 1.1.2), was most likely transmitted to humans by another animal vector.¹⁰³ Covid-19 is, more precisely, one of a family of viruses that cause gastrointestinal and respiratory infections in animals such as pigs, bats, dogs, cats, poultry and men. Although it has also been proposed (although unlikely) that SARS-COV-2 was created in a laboratory and accidentally escaped from there, or even that it was intentionally constructed and released as part of biological warfare, by far the most widely supported theory regarding the origin of the Covid-19 outbreak when this book went to press is that the Covid-19 virus emerged at a live ("wet") animal market in Wuhan, or at a similar human-organised bat event.¹⁰⁴

Large-scale industrial agriculture is thought to be the main source of the emergence of these pathogens in the ecotones of capitalism. Rather than the unhealthy habits of Chinese markets, it is the practices of capitalist agriculture that incubate such viruses.¹⁰⁵ (Cf., furthermore, Sect. 2.2.2.)

¹⁰⁵Nelson (2020), who further emphasises that due to the territorialisation of global (agricultural) enterprises, which ignore national borders, these commodity countries, integrated across ecologies and political boundaries, produce new epidemiologies along the way. According to this author, from standard breeds in promiscuous conditions to global production and supply chains, the entire

¹⁰¹Nelson (2020).

¹⁰²Nelson (2020).

¹⁰³Nelson (2020).

¹⁰⁴Cf. Nelson (2020).

For the sake of completeness, after this book went to press, the theory of a laboratory outbreak again gained some momentum, with some policy makers even insisting that the issue had to be further (internationally) investigated. Specifically, it had emerged that three researchers, working at a virology lab in Wuhan at the time, had been admitted to a hospital with Covid-like symptoms weeks before the first case of Covid-19 was confirmed in China on 8 December 2019, according to US intelligence obtained and reported by the Wall Street Journal in late May 2021—corroborating the State Department's earlier findings and casting new doubts on the long-standing assertion that Covid-19 had not escaped from a laboratory. As a result, according to Ponciano, a growing number of US officials—on both sides of the political spectrum—again called for investigations into the origins of Covid-19. Secretary of State Antony Blinken was even reported to have condemned China for its lack of transparency in the early days of the Covid-19 pandemic, saying that the country had not given international health experts real-time access to information about the spread of the Covid-19 virus and urging the country to help build a stronger global health security system to re-examine the origins of the pandemic. (Cf. Ponciano (2021).)

In this respect, Chomsky pointed out that the Covid-19 epidemic is not so trivial: as the animals' habitat is destroyed, animals with which humans have never had contact before start emerging from their forests and come into contact with humans. According to Chomsky, the threat posed by bats had already been known for a long time, as they happen to be the species that carries the most massive amounts of coronavirus. It is precisely for this reason that Chinese scientists have long ventured into very dangerous places, such as the inside of caves, to try to collect information on coronaviruses, risking their lives.¹⁰⁶ For Chomsky, all this is even a general truth: the more the habitat of animal species is destroyed due to human economic activity, the higher the probability of the appearance of as yet unknown diseases, caused by a coronavirus or otherwise.¹⁰⁷

Not surprisingly, inequality (cf. Chap. 10) and the dynamics of capitalism, including the poorly orchestrated response of the Western world, whose governments have been severely curtailed and weakened after decades of implementing the doctrines of neoliberalism (cf. Chap. 2), have all characterised the progression and outcomes of the coronavirus.¹⁰⁸

Kuchipudi has pointed to an unprecedented shift in human population as a further reason why more of these easily communicable diseases (viral or other) are coming from regions such as Asia and Africa. According to this author, rapid urbanisation is taking place in the Asia-Pacific regions, where, already by March 2021, 60% of the world's population was living. According to information provided by the World Bank¹⁰⁹ referred to by this same author, nearly 200 million people moved to urban areas in East Asia in the first decade of the twenty-first century alone (with several decades of urban growth still to come). Migration on this scale also implies that forest land is being destroyed to create both agricultural and residential areas. This forces wild animals to move closer to towns and villages, where they inevitably encounter domestic animals and humans. These wild animals often carry viruses. As we have already explained, e.g., bats can carry hundreds of these viruses. And the viruses, passing from one species to another, can end up infecting humans. Eventually, extreme urbanisation becomes a vicious circle: Human expansion and loss of habitat eventually kill off predators, including those that feed on rodents. With the predators gone—or at least their numbers greatly reduced—the rodent population explodes. And as studies in Africa show, the risk of zoonotic disease is also increasing.¹¹⁰

industrial-agricultural production chain is thus organised around practices that accelerate the evolution of pathogen virulence and subsequent transmission. We shall readdress this matter in more detail in Sect. 2.2.2.

¹⁰⁶Barsamian (2020).

¹⁰⁷Barsamian (2020).

¹⁰⁸Nelson (2020).

¹⁰⁹World Bank (2015), p. xx.

¹¹⁰Kuchipudi (2021).

According to Hennig, on 21 January 2020, the WHO started issuing regular situation reports on the then still new (and rather unknown) viral disease Covid-19. These reports made it clear that the new disease had only been first reported to the WHO country office in China 3 weeks earlier, more specifically on New Year's Eve 2019. Still according to Hennig, only 3 months after the release of these first official Covid-19 figures, and but 4 months after the release of the first WHO reports on Covid-19, reported cases had already reached the 3.5 million mark. The number of confirmed deaths from Covid-19 by then already exceeded 250,000.¹¹¹ Hennig pointed, furthermore, out that it took only 2 months from its initial appearance in China for the Covid-19 virus to start spreading around the world, with Italy being one of the first Western countries to be dramatically confronted with it by the end of February, early-March 2020. Very quickly, the unpreparedness of the political authorities, not only in Italy but throughout Europe, became evident. This overall unpreparedness concerned not only the assistance to the first affected regions that were affected by the virus, but also the total lack of a concerted response to contain the spread of the disease.¹¹² As a result of this total unpreparedness and this lack of concerted response throughout the Western world, starting with the outbreak in Italy in February 2020, it took only a few more weeks for the Covid-19 virus to sweep across the European continent and, soon after, the American continent as well.¹¹³ Indeed, witnessing another political failure, namely the presidency of US President Donald Trump, the next Covid-19 virus hotspot from March-April 2020 became the United States. Only a few weeks later, the latter country had both the highest number of reported cases and of confirmed deaths.¹¹⁴

This rapid spread of Covid-19 due to this weak public policy response in Western capitalist countries will be examined in more detail in Chap. 2.

At the same time, particularly in several Asian countries, it appeared that restrictive measures had begun to show signs of success in containing the spread of the Covid-19 virus, with the number of new cases increasing at a slower rate, and in some cases decreasing.

Yet by the end of March 2020, 100 countries had already put some form of restrictions in place, including full national lockdown measures to combat the spread of Covid-19. These containment measures, which had to be maintained during the following months of 2020, in most cases until May/June 2020 (to be relaunched in the fall of 2020, and in many Western countries again in the spring of 2021), are seen as one of the main reasons why the Covid-19 pandemic was soon expected to have a major impact on the global economy, with all its socio-economic and political implications still to play out in the years to come.¹¹⁵

¹¹¹Hennig (2020).

¹¹²Hennig (2020).

¹¹³Hennig (2020).

¹¹⁴Hennig (2020).

¹¹⁵Hennig (2020).

It has, moreover, been suggested that the Covid-19 virus spreads most easily in the most connected parts of the world, which according to Hennig explains why, in the first months of the pandemic, the Covid-19 virus mainly affected the wealthier nations of the northern hemisphere, as these were well connected by air travel and characterised by intense and frequent global interconnectivity, both for business and leisure.¹¹⁶ (Cf. Sect. 2.2.3.)

Unfortunately, it has also become clear that the Western countries that were confronted with the outbreak of Covid-19 on their territory had not learned anything from previous outbreaks of similar viruses in Asia. Moreover, despite early warnings about the risk of a coming pandemic already dating from the beginning of the twenty-first century, the WHO had shortly before the outbreak of the Covid-19 pandemic remarked that many countries were still in 2018 insufficiently prepared for such a scenario. According to the WHO, many countries had by then still no or inadequate pandemic plans and no or insufficient stocks of mouth masks or other protective clothing. As a result, the most affected countries in the Western world were extremely ill-prepared to deal with the Covid-19 virus,¹¹⁷ illustrating both the extreme degree of unpreparedness as the underlying political inability to adequately deal with the threat of a pandemic in some of the world's "richest countries".¹¹⁸

All these socio-economic issues will be discussed in more detail in the next chapters of this book.

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¹¹⁶Hennig (2020).

¹¹⁷Foulon (2021).

¹¹⁸Hennig (2020).

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Chapter 2 Initial (State) Response to Covid-19



2.1 The Neoliberal State as the Socio-Economic **Background Against Which Covid-19 Hit the World**

Neoliberal Diminishment of the Welfare State Model vs 2.1.1 the Ideal Neoliberal State Model

By the time Covid-19 hit the Western world-especially the European and North American continents-their societal organisation had, after four decades of applying various theories of economic neoliberalism,¹ been unilaterally, albeit with some cultural differences between countries, reshaped according to the dictates of said neoliberal ideology.²

The fundamental public policy approach of neoliberal ideology is that markets should never be controlled or governed by states, but rather the opposite, that states are merely a means to help free markets function as efficiently, harmoniously and profitably as possible.³ From the 1980s onwards, the theories of economic neolib-

¹The adjective "neoliberal" refers to the ideology of "economic neoliberalism". A cogent definition of the latter concept was given by Melinda Cooper in her book "Family Values. Between Neoliberalism and the New Social Conservatism" (cf. Cooper (2017)), where she defines economic neoliberalism as: "By neoliberalism I refer in particular to the American schools of new economic neoliberalism that emerged at the University of Chicago, the University of Virginia, George Mason University, Virginia Polytechnic University, the UCLA Department of Economics, and various other institutional outposts in the early to mid-twentieth century." (Cooper (2017), p. 18.)

²National Geographic (2021).

As we have remarked earlier, a "blueprint" of the ideal neoliberal state is not available as such. This is due, among other things, to the fact that in the various capitalist countries where economic neoliberalism has struck over the past four decades, the variations in the fabric of social protection, and in other regulations that have shaped the welfare state model, were obviously too great.

³Cf. Brown (2003). Cf., furthermore, Byttebier (2018), p. 39.

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eralism translated into a policy approach⁴ according to which the main, if not the only, objective of a state is to make the free market function as freely, and therefore as optimally, as possible to serve the objectives of the financial and business world.⁵ Moreover, this approach also gradually started determining the policy of international institutions, such as the International Monetary Fund, the World Bank and the World Trade Organisation. The latter has also been indicated as the "Washington consensus". (Cf. furthermore Sect. 3.4.1.)

As phrased by Brown, to achieve this overall goal, states need to do the following⁶:

- (1) A (neoliberal) state must (always) respond to the needs of the market, be it through its monetary, fiscal and labour policy, its immigration policy, the way it treats criminals, the organisation of social welfare and/or the provision of public services, such as public education and healthcare. Neoliberal rationality hereby indexes the success or failure of the state in terms of its ability to support and foster the free market and it, moreover, even links the legitimacy of the state to this continued success (of failure).
- (2) A state can only be enveloped and driven by the rationality of the market. This characteristic of a neoliberal state is not simply a question of mere profitability, but rather of a generalised and continuous calculation of costs and returns which has been turned into the measure of all state objectives and practices (which, in the EU, has led to the so-called ESA 95 standards and which, in a more recent past, explains the adherence to austerity). The political discourse on all these issues is framed in entrepreneurial terms: A state should not only be concerned with making markets as free as possible, but should also force itself to start thinking and behave as a (free) market player in the exercise of all its functions, including education, social care, law and its enforcement, safety...
- (3) The health and growth of the economy becomes the (only) basis of state legitimacy, both because the state is held responsible for the health of the economy, but also because of the economic rationality to which state practices have themselves become subject. The slogan "It's the economy, stupid" has hereby become the sole guiding principle of state legitimacy and the sole basis for all state actions, from constitutional adjudication and campaign finance reform, to welfare and education policy, to foreign policy, including war and the organisation of homeland security.

⁴Cf., furthermore, Cooper (2017), p. 19, who explains how neoliberalism lost the identifiable profile it still enjoyed in the 1970s, once it was widely accepted by policymakers of all stripes and diffused deep into the economic mainstream.

⁵The arguments, as well as their phrasing, have been developed by Brown (2003). Cf., furthermore, Byttebier (2018), p. 39.

⁶Cf. Brown (2003).

Anything that hinders the state's ability to make the economy prosper and grow is, by definition, considered harmful, and the state, therefore, has a sacred duty to eliminate these elements.⁷

In this context, the proponents of economic neoliberalism launched an unprecedented attack on the welfare state model from the 1980s onwards, which to a large extent has continued to this day (cf., for example, the EU's neoliberal austerity in the aftermath of the severe financial crisis in 2008).⁸

Among the key measures used by neoliberal governments in their efforts to transform former welfare states into neoliberal free market states are⁹:

- The implementation of the neoliberal doctrine of "consumerism" (which essentially amounts to stimulating consumer spending, and thus the demand side of the economy, even more than is already the case in the capitalist logic of "consumption for consumption's sake").
- A total focus on production and full employment—the idea being that every member of society should be continuously, and for as long as possible, at work to keep the free-market machine running. Not surprising, ensuring full employment has been indicated as one of the two guiding principles of the mandate given to the US Federal Reserve by the US Congress (which we shall explore further in Sect. 3.3.1).
- An unprecedented stimulation of all types of (consumer) credit mechanisms (obviously to help stimulate consumption itself).¹⁰
- Extensive deregulation of many economic sectors, such as the financial sector and the energy sector.
- Increased military spending (and even warfare).
- Tax reforms mainly benefiting the rich in society (especially (large) companies and their underlying capital providers, as well as their CEOs and other executives).
- The systematic dismantling of social protection systems, including access to healthcare and public education.
- The systematic dismantling of public institutions, alongside the privatisation of all kinds of public sectors and/or public services (e.g., the energy sector, transport sector, the education sector...).

⁷According to Trappenburg, the welfare state of the 60s of the twentieth century—both in the Netherlands and in other countries of Western Europe—has been described by sociologists as a "Fordian equilibrium", referring to one of the business philosophies of the car manufacturer Henry Ford, who paid his employees as high wages as possible, so that all his employees could afford a Ford car. The welfare state was a comparable Fordist equilibrium, in which vulnerable citizens were cared for, resilient citizens were relieved (in return for the rest of the population paying a substantial amount of taxes and premiums), and in which professional care providers were adequately compensated. (Cf. Trappenburg (2019), p. 291.)

⁸Cf. however Cooper (2017), pp. 14–15, who warns against theorising capitalism as solely and exclusively destructive of previous social solidarities.

⁹National Geographic (2021).

¹⁰Byttebier (2019), p. 70.

- The adoption of the doctrine of "monetarism" (which has attributed to all strata of society a frantic recourse to credit financing).
- Breaking the influence of trade unions.
- ...

According to Lohmann, this all went hand in hand with an increasing privatisation and commercialisation of public services, and by extension of the state and its resulting functions itself, which has primarily been aimed at redistributing wealth upwards to the benefit of profit-hungry capital (i.e. the rich) or at improving the basic conditions for capital accumulation.¹¹ This is due to the fact that previous public services have more and more been turned into market services by which the providers enrich themselves to the detriment of society, with the (new) private service providers charging increasing fees and even making claims of getting subsidized out of public financial means. As we shall explore further in more detail, a noticeable example of this evolution has been characterising the sector of the nursing homes for the elderly (cf. Chap. 6.).

According to Lohmann, this has, obviously, involved a "rollback" of a wide variety of social and public services, such as health, education and welfare. Still according to Lohmann, this has been possible thanks to various types of environmental, financial and social regulation, along with a "roll-out" of new heterogeneous state and inter-state mechanisms and regulations. These range from (international) trade treaties, public-private partnerships, governance based on a cost-benefit analysis, new property rights regimes (especially in the field of intellectual property), licensing of new activities, laws facilitating offshore tax havens and secretive jurisdictions, a relaxation of capital reserve requirements and, to cite one more dramatic example in recent history, "the allocation of huge shares of public treasuries to the 'rescue' of private financial institutions".¹²

This also went hand in hand with an increased political dominance of and economic dependency on the financial sector (also known as the "financialization" of the global economy).¹³ This "financialization" has not only channelled more wealth from the poor to the rich (to the extent that former social services have been turned into market services only to be acquired against the payment of a price), but also inflated bubble after bubble, while exacerbating global inequalities and imbalances. It has also accelerated the corporate take-up of cheap labour,¹⁴ land and raw materials, as well as smaller public and private enterprises in new regions and areas, and, through a significant expansion of finance's traditional role of underwriting current spending with the promise of future production, it stimulated demand by offering unsustainable amounts of credit to a workforce whose wages continued to be attacked by a class of capital owners constantly seeking new sources of profit

¹¹Lohmann (2012).

¹²Lohmann (2012).

¹³Byttebier (2017), pp. 5 and 220.

¹⁴For an example relevant in the context of Covid-19, cf., furthermore, Sect. 7.11.1.

(based on a "profit maximisation and cost minimisation" approach in general, and "the iron law of wages" more specifically).¹⁵

This subjugation of all sectors of societal life to the logic of neoliberalism can be illustrated, for example, by the gradual elimination of social security systems in the form of unemployment benefits, which had since the 1980s become a thorn in the eyes of neoliberal governments both in the United States and in Europe. This explains how, from the 1980s onwards, neoliberal governments throughout the Western world focused their policies on reducing unemployment benefits, as well as similar systems of protecting labour, such as early retirement systems or career breaks. Whereas with the construction of the welfare states from the 1950s to the 1970s, the need for these systems had been increasingly recognised in order to offer at least some protection to workers against the ruthlessness of capitalist exploitation, the policy approach from the 1980s onwards has been to increasingly feeble counter-call for their continuation by left-wing political parties gradually acquired the status of a societal taboo.

Very recently, in the aftermath of the severe financial crisis of 2008 (and in order to help paying back the huge deficits caused by the bail outs of the ailing bank sector), this attitude has been strongly reflected in the neoliberal-driven debate in almost all EU countries to raise the minimum retirement age. The general opinion became that it is not deemed acceptable that the working classes should already be able to enjoy their retirement at a reasonable time in their lives. On the contrary, the retirement age should be set as late as possible in life. In the same vein, it was felt that pensioners, especially if they belong to the working class, are too much of a burden for consumption-oriented societies that do not want to experience wealth-sharing systems with people who can no longer participate in the capitalist production apparatus (and who, therefore, are no longer able to earn their own income to finance their own consumption).

Several other social security systems have, of course, been the subject of many other neoliberal attacks, the most relevant example in the context of this book being, of course, the reorganisation of the sectors of health and elderly care. We shall return to this in Chaps. 5 and 6 respectively.

All this is, obviously, not mentioned to allow us to vent for a moment, but because all these examples given of rock-hard neoliberal logic in the abovementioned areas of societal life—while there are, of course, numerous other conceivable examples to the extent that neoliberalism has in recent decades imposed itself in all possible areas of social and public service—help to explain that when the Covid-19 pandemic reached the Western would, most Western countries were completely unprepared for it (with all the disastrous consequences that this has entailed).

By way of one more example, consumerism provided various socio-economic ingredients for the outbreak of the Covid-19 pandemic. An obvious illustration has

¹⁵Lohmann (2012).

been the entertainment industry, which has become a very important part of the capitalist economy in recent decades. Reading a good book at home is not a leisure activity that fits the neoliberal logic. On the contrary, the little free time that the working person in the West has at his or her disposal must be used as optimally as possible for actions that yield the highest possible profit for the business sector. This explains the emphasis on mass events in many leisure sectors, from culture to sport, often with very high entrance fees. Any academic will recognise the complaints of students when they are asked to buy a book that costs a few dozen euros, a price that is willingly paid to participate in mind-numbing summer festivals or similar events. The same neoliberal logic also explains cheap mass tourism with even companies specialising in selling trips and whose profit margins mainly stem from the large consumer audience they cater to. This also partly explains the rise of big cheap airlines which are based on the same logic of mass consumption. In the logic of neoliberal free societies, during the few weeks of real free time one has each year, everyone should travel as much and as far as possible, without many people still realising that this is but part of an economic logic developed in the 1980s, namely "consumerism", the idea that one must consume as much as possible to keep the capitalist machine running. Hardly any questions are asked about the impact this has on the environment (think, for example, of the highly polluting aeronautical industry), but also, for example, on cultural pollution: countries that rely heavily on a tourist economy are but a shadow of their former selves, with striking examples being villages all over Greece whose main streets have been reduced to endless lines of souvenir shops (where almost nothing of significance is offered for sale) and cheap mass restaurants, all ready to cater for the benevolent, spending tourist. In a similar manner-and even more relevant in the context of this book-reference can be made to the ski industry that exploded in the last quarter of the twentieth century based on this same neoliberal logic. The reader is asked to keep all this in mind when, later in this book, the case of "Ischgl" will be dealt with as one of the main "events" of the spread of Covid-19 in Europe (cf. Sect. 2.4.1.2.).

2.1.2 Underlying Neoliberal Doctrines

A brief explanation of the underlying neoliberal ideology is necessary to understand the forces behind this ongoing societal reform which on a global scale started in the 1980s, and by 2020–2021 had provided the socio-economic playing field for the rapid and unprecedented spread of Covid-19.

One of the basic tenets of the ideology of (economic) neoliberalism, and thus of the liberal societies and capitalist economies that are organised according to its theories, is that every human being stands alone in life and must act accordingly.

According to the doctrine of neoliberalism, human beings are not only (supposed to be) self-sufficient, but must also behave as selfishly, egoistically and greedily as possible and, when acting (especially at a socio-economic level), not take into consideration the interests of others, nor expect help from others.

The socio-economic order advocated by the adherents of neoliberal ideology is one in which human beings are merely competitors of one another and which is, moreover, characterised by a belief system that, when everyone acts fully in their own selfish interest, an ideal society will emerge in which everyone will prosper. The underlying belief system of this approach to society (insofar as it is still accepted that society exists) is that by behaving as selfishly, egoistically and greedily as possible, everyone will act at their highest level of performance, as a further result of which human resources and skills will be optimally deployed to ensure the overall wellbeing of society.¹⁶

Hence, solidarity and economic neoliberalism do not mix well.

On the contrary, for neoliberal ideologies, there is no societal need to have (or, where they have been installed in the past, to maintain) solidarity systems, as these are only a means to allow lazy people to profit from the efforts of diligent people. In such a vision of society, there is obviously no room for societal organisation or planning in the socio-economic field. On the contrary, the entire socio-economic field should be left to the logic of the free market.¹⁷

Given these basic premises of neoliberal ideology, it is not surprising that for adherents of neoliberal ideology, there has been a lot of wasted energy in the organisation of (welfare) states in the period from the Second World War until \pm the 1970s.¹⁸ This also explains why, from the 1970s onwards, these followers of neoliberal ideology decided to do something about it...¹⁹ Basically, in this approach

¹⁶Cf., for example, Byttebier (2019), pp. 65-66.

¹⁷According to the ideology of (economic) neoliberalism, the socio-economic order cannot afford to rely on solidarity systems, as these undermine economic prosperity because they are simply too costly and, therefore, impossible to finance. For the proponents of economic neoliberalism, economic policy is not about finding better ways to redistribute wealth, but rather about ensuring that there is continued wealth creation for the benefit of the rich and powerful (or, put another way, the banker and entrepreneurial classes). Again according to neoliberal theories, public deficits are mainly caused by all kinds of overly expensive solidarity systems (such as public services and social security systems), while on the contrary, the private money creation systems that are at the root of many societal problems are, under the ideology of (economic) neoliberalism, completely taken for granted. (cf. Byttebier (2018, 2019)).

¹⁸In the post-World War II period, a large number of capitalist countries had made considerable efforts to organise this "welfare state model" (which can be defined as the set of socio-economic planning mechanisms put in place by states with the aim of offering some form of protection to the poorer classes of society against the more dominant mechanisms of capitalist exploitation). These efforts have resulted, in many countries, in the establishment of a variety of public services and social security systems, all of which are based on the idea that they should be financed by collective efforts—either through tax money or through special "contributions" or "fees"—and that they are supposed to ensure that all members of society have equal access to them. (Cf., furthermore, Byttebier (2018), pp. 90–98.)

¹⁹Cf. the comments of UN Special Rapporteur Professor Philip Alston on how many Americans, after decades of being brainwashed by neoliberal doctrine, blindly believe and share this neoliberal view: "I have been struck by the extent to which caricatured narratives about the purported innate differences between rich and poor have been sold to the electorate by some politicians and media and have been allowed to define the debate. The rich are industrious, entrepreneurial, patriotic, and the drivers of economic success. The poor are wastrels, losers, and

as, e.g., expressed in the writings of neoliberal economists such as Milton Friedman and Friedrich (von) Hayek, besides Ayn Rand, anything that might impede the free market is economically damaging and should be eliminated as much and as quickly as possible.

The most obvious example of these "barriers" against economic prosperity that had to be eliminated, are the various types of regulations aimed at providing a basic degree of social protection to the weakest members of society, such as social security systems, as well as public services financed by governments. But this neoliberal approach is also about the elimination of certain types of regulation that aims to rationalise economic processes or forms of market behaviour, with obvious examples being anti-trust legislation, alongside prudential financial regulation that encourages financial institutions to behave more reasonable and prudent than they are inclined to do by nature, as well as all similar types of regulation which protect consumer interests or the environment.

According to the doctrine(s) of neoliberalism, to the extent that all these methods of correcting unbridled capitalism are seen as an obstacle to the functioning of the free market, it was assumed that all these forms of regulation had to be eliminated as much and as quickly as possible, a doctrine that resulted in the neoliberal programme of "deregulation" (and "(neo-)liberalisation") of the (world) economy.²⁰ As a result, over the past four decades, the (Western) world has witnessed such an unprecedented (neo-)liberalisation and deregulation of a vast set of systems that, not long before, had been established to protect the poorer classes of society from exploitative capitalist practices.²¹ Moreover, these neoliberal attempts to make the free market ever freer have in many countries succeeded in seriously damaging the welfare state model, even if they have not yet achieved their ultimate goal of dismantling all welfare state mechanisms worldwide.²²

The result of all this has been that, on a global scale, capitalism has become increasingly "unbridled" again,²³ implying that the entire organisation of the socioeconomic order has been increasingly subject to free markets and that there is little

scammers. As a result, money spent on welfare is money down the drain. To complete the picture, we are also told that the poor who want to make it in America can easily do so: they really can achieve the American dream if only they work hard enough". (Cf. Alston (2017), n° 10.) ²⁰Cf., furthermore, Brown (2003).

Ross and Gibson have defined the objectives of neoliberalism as follows: "Neoliberalism is embraced by parties across the political spectrum, from right to left, in that the interests of wealthy investors and large corporations define social and economic policy. The free market, private enterprise, consumer choice, entrepreneurial initiative, deleterious effects of government regulation, and so on, are the tenets of a neoliberalism. Indeed, the corporate-controlled media spin would have the public believe that the economic consequences of neoliberal economic policy, which serves the interests of the wealthy elite, is good for everyone. In fact, neoliberal economic policies have created massive social and economic inequalities among individuals and nations". (Cf. Ross and Gibson (2006), pp. 1–14, especially p. 2.)

²¹Cf. generally World Health Organization (2014), p. 5.

²²Compare Alston (2018).

²³Cf. Byttebier (2018).

room for any form of state involvement.²⁴ As will be developed further in this chapter, it is precisely these characteristics of neoliberal societies that have been among the main reasons for the success of Covid-19.

2.1.3 Possible National Accents

Clearly, there are significant differences between the different "neoliberalised" (Western) countries. As already noted, there is no ideal neoliberal state model against which countries could (would) mirror their neoliberal reform actions. On the contrary, over the past decades, (most) Western countries (and some global supra-national organisations, such as the EMU), have been rather arbitrarily inspired by parts of neoliberal ideology (itself being very diverse to begin with), which explains why each country has given it an appropriate implementation.

However, the common thread running through all of this has been the universal pursuit of the greatest possible freedom of the markets, besides the gradual elimination of public service and social security systems. These in turn have been replaced by similar services provided by private market actors. As a result, the playing field of the free market itself has widened (insofar as the free market has managed to incorporate ever wider areas of societal life that were previously left to government organisation) and the domain of government action—i.e., the domain of the public interest—has progressively shrunk, or at the very least has increasingly become the victim of an explicit or implicit neoliberal austerity policy. All of this is in line with the basic neoliberal principle of their ideology that everyone should fend for themselves (except for large companies that need help from the state, such as financial institutions when faced with market turbulence).

This also explains why there are still large differences between countries, as the process of neoliberalisation has not proceeded in a same manner and at the same speed in all countries. The Western countries that have succeeded most in pushing the neoliberalization process to the top are, for example, the United States and the United Kingdom. Countries where a somehow alternative neoliberal model has been applied are, for example, Germany and Austria, with very successful economies but also still deploying important social accents due to extensive participation models for employee representative organisations (the "Rhine-land model"). In countries like Belgium, neoliberalisation—how could it be otherwise—has taken a rather disordered pace, which may be attributed to the inexplicable Belgian political and constitutional landscape, as a result of which neoliberalisation efforts have not even led to increased market-performance—partly because, due to a disastrous

²⁴Cf. Lipman (2006): "Neoliberalism reframes all social relations, all forms of knowledge and culture in the terms of the market. All services established for the common good are potential targets of investment and profit-making. In the discourse of neoliberalism, the society becomes synonymous with the market, democracy is equated with consumer choice, and the common good is replaced by individual advantage". (Cf. Lipman (2006), p. 51.)

government policy, the decision-making centres of companies operating in Belgium have largely been (re)located abroad. As a result, Belgium has mainly been turned into a sales and transit market for foreign interests and has, furthermore, been characterized by a policy of extreme austerity in all domains of public service and social welfare (with an important exception of the still abundantly available political mandates with which the numerous political parties reward their members very generously for their loyalty). Finally, there are also several European countries that have only modestly succumbed to neoliberal ideology, such as the Scandinavian countries that managed to continue to conform most closely to the welfare state model (as a result of which they remain continually ranked among the "happiest countries on Earth"—the four Scandinavian countries, e.g., all being in the top ten list of the World Happiness Report 2021).²⁵

The American model of capitalism and (some) Western European models especially those of Germany and the Scandinavian countries—have even been seen by some as opposites: "wild" versus "soft" capitalism'. Wild capitalism is believed to be good for innovation, but is seen as generating extreme levels of inequality, not only in income protection, but also in employment and health; soft capitalism is said to be (somewhat) better at income redistribution and employment and health protection, but—according to some—less good at producing cutting-edge innovations.²⁶

2.1.4 Some Further Specifics on the US Economic and Public Policy in the Period 2016–2018, with Its Impact on Healthcare

2.1.4.1 Overall Intent of the Public Policy of the Trump Administration in Matters of Socioeconomics

One of the countries in which, from the 1980s onwards, public policies have been based in an extreme manner on the theories of economic neoliberalism, and which we therefore mention here as a practical illustration of what neoliberal ideology is all about, is obviously the United States. An additional reason for choosing the United States as an example for illustrating the general impact of economic neoliberalism, is that in the period 2017–2020, under the Trump administration, this country has been once more in its history subjected to this dreadful ideology in an extreme manner.

²⁵Cf., for example, the World Happiness Report (2021) and Yardney (2021).

According to the report, the ten happiest countries are (cf. BBC News (2021a)): "(1) Finland. (2) Denmark. (3) Switzerland. (4) Iceland. (5) The Netherlands. (6) Norway. (7) Sweden. (8) Luxembourg. (9) New Zealand. (10) Austria."

²⁶Aghion et al. (2020).

According to Sasha Bush, from the outset of his presidency, Trump's socioeconomic agenda was primarily aimed at reorienting the activities of the US government along the lines of neoliberal market fundamentalists such as Milton Friedman, who, as explained above, advocate limiting the role of government to marketsupporting functions such as national defence and domestic public order.²⁷ As a result, what little money America still spent on (other) government functions at the time Donald Trump came to power, for example in the areas of health care provision or public education, alongside some basic environmental and public land protection programmes, became, under Trump, entirely open to privatisation and disengagement. For Trump, the scope of the federal government was to be reduced to public domains such as infrastructure, national defence, policing and surveillance, i.e., public domains serving the interests of the business community, hence the rich and powerful. In this way, Trump's socio-economic policy adopted neoliberal advice not only as a guiding principle of economic policy, but also regarding business regulation (= "less is more") and the role of the private sector in selfregulation (= "industry insiders understand regulatory needs better than government officials").²⁸

Curiously, Trump's embrace of the neoliberal agenda at the same time reduced it to the level of domestic policy, while at an international level, from the very beginning of his presidency, Trump strongly opposed globalisation and diminished the US role in several international organisations, as well as the presence of US regulatory or other public institutions in foreign nations.²⁹ In this way, the Trump administration aimed to transform neoliberalism into a geographically fragmented and localised system (an approach which, at the time, could also be observed in other countries; cf., for example, Brexit).³⁰ Trump's socio-economic programme also aimed to implement a complete merger of state and market interests, but one in which the market and big business have almost total power and freedom of movement (and where labour is treated badly).³¹

According to Chomsky, President Donald Trump's Republican Party thus became totally dedicated to wealth and corporate power, aiming to subject American society to an even more authoritarian and harsher version of "the neoliberal plague" that already devastated American society for 40 years, except for the very rich and powerful, and that has resulted in a society in which 0.1%—not even 1%—of the population owns 20% of the wealth and has been getting richer like bandits since 2008, having created the Great Recession and since been rewarded for it.³² At the

²⁷Bush (2016).

 $^{^{28}}$ Bush (2016). Sasha Bush further refers to Trump's plan for the first 100 days by stating: "a requirement that for every new federal regulation, two existing regulations must be eliminated". (Bush (2016).)

²⁹Bush (2016).

³⁰Bush (2016).

³¹Bush (2016).

³²Barsamian (2020).

same time, half the US population has a negative net worth, "having more debt than assets". According to Chomsky, it is hereby even estimated that about 70% of Americans can barely get by from 1 week to the next. Their real wages have virtually stagnated since the 1970s, while at the same time wealth has become extremely concentrated and has reached the stratosphere.³³

As has been phrased in a report by The Lancet Commission on Public Policy and Health³⁴:

Trump has exploited the anger of low- and middle-income whites at their deteriorating life prospects to mobilise racial animosity and xenophobia and secure their support for policies that benefit high-income individuals and corporations and threaten health care. His major legislative achievement, a trillion-dollar tax cut for corporations and high-income individuals, opened a hole in the budget that he used to justify cuts to food subsidies and health care. His appeals to racism, nativism and religious bigotry emboldened white nationalists and vigilantes, and encouraged police violence and, by the end of his term, insurrection. He has selected judges for US courts who despise affirmative action and reproductive, labour, civil and voting rights; ordered mass detention of immigrants in unsafe conditions; and promulgated regulations that reduce access to abortion and contraception in the US and around the world.

With regard to some of the most remarkable and specific achievements of the Trump administration, one can, for example, refer to the passage of the so-called Tax Cuts and Jobs Act of 2017,³⁵ an initiative that clearly demonstrated that the promotion of neoliberal policies had become a key objective of Trump's socio-economic policy.³⁶ However, as Joseph Stiglitz has pointed out, the act also contained important pitfalls.³⁷ This all was, moreover, based on the classic neoliberal defence of the

This bill primarily lowers the top personal tax rate from 39.6% to 37% and reduces the corporate tax rate to 21%, a dramatic drop from its current rate of 35%. (Cf. Siddiqui et al. (2017).)

It has been pointed out that this "Tax Cuts and Jobs Act" is a textbook example of neoliberal policy, as tax cuts are a key aspect of the economic doctrine of neoliberalism and, more generally, the promotion of the rich in society. While the supposed rationality of the law was to stimulate economic growth, it is therefore much more likely to further increase inequality, while at the same time the law was intended to add at least USD 1 trillion to the existing US national debt. (Cf. Anonymous (2017). Cf., furthermore, Byttebier (2019), p. 74.)

³³Barsamian (2020).

³⁴Woolhandler et al. (2021), p. 705.

³⁵An Act to provide for reconciliation pursuant to titles II and V of the fiscal year 2018 budget concurrent resolution (Public Law 115-97; 131 Stat. 2054).

³⁶Rossi (2018). Cf., furthermore, Stiglitz (2020a).

³⁷Stiglitz (2020a).

Although the law initially cut taxes for many Americans, it also provided for automatic, incremental tax increases every 2 years, starting in 2021, which by 2027 would affect almost everyone except those at the top of the US economic hierarchy. According to the assessment made by Stiglitz, if the law were to be upheld, all taxpayers with incomes of USD 75,000 or less—about 65% of US taxpayers—will face a higher tax rate in 2027 than in 2019. In this regard, Stiglitz himself estimated that by 2027, when the provisions of the law were supposed to be fully implemented, with the end of stealth tax increases, the US would be divided into two groups: On the one hand, those earning more than USD 100,000 on average would receive a tax cut. While those

"trickle-down economics". However, as Stiglitz warned, it should be clear that this "trickling down" does not usually happen.³⁸

A subsequent example of Trump's neoliberal approach to reshaping the socioeconomic order involved a further deregulation of the financial sector. This initiative was also taken up to mark a new "pro-business" triumph for President Donald Trump.³⁹

2.1.4.2 Healthcare Reform (Attempts)

More importantly, however, in view of the Covid-19 pandemic reportedly affecting the United States early 2020 (cf. Sect. 2.5.1.), is the fact that, reversing promises made during his 2015 presidential campaign, Donald Trump expressed great ambitions to reform the US health care system, which according to him had suffered too much interference from his predecessor, President Barack Obama.

For Chomsky, the US health care system is first and foremost a scandal to begin with and has, moreover, worsened during the neoliberal period (which, roughly speaking, began under Ronald Reagan's presidency and has since continued its course, with ups and downs, until today). As a result of four decades of neoliberal interference in the health sector, US health care institutions, such as hospitals (cf. Chap. 5.), but also nursing homes (cf. Chap. 6.), were, at the time Covid-19 hit the United States, essentially run on a business model, a key feature of which was that there was no room for either spare capacity or stockpiling of drugs, equipment and medical supplies, as such a pile-up was considered a waste of resources.⁴⁰ It has precisely been this feature of the US health system that was to prove highly problematic during the Covid-19 pandemic. We shall return to this in Chap. 5 when dealing with shortages the US faced regarding all types of medical material.

Throughout his presidency, President Donald Trump's own main (neoliberal) health policy was aimed at fulfilling his campaign promises to repeal and replace the "Patient Protection and Affordable Care Act" (ACA), better known as "Obamacare".⁴¹ One of President Trump's first efforts to achieve this goal involved his support for House and Senate bills that proposed to amend parts of the ACA. E. g., in 2017, the House of Representatives passed a bill aimed to accomplish this goal—under the denomination the "American Healthcare Act of 2017"—but members of the Senate failed to agree on a final replacement plan, which ultimately left most of the ACA's provisions in place. However, Republicans took a step closer to

earning less than USD 100,000—an income bracket that includes three quarters of taxpayers—did not. (Cf. Stiglitz (2020a).)

³⁸Stiglitz (2020a).

³⁹Cf. DM/RC (2018) and McKenna (2018).

⁴⁰Barsamian (2020).

⁴¹Magdaleno (2020).

changing the ACA by removing the individual mandate from the law, an alteration to the ACA that went into effect in January 2019.⁴²

In October 2017, the Trump administration took a new initiative to change the ACA. This led to a presidential directing Trump's cabinet members to create rules "that would allow small businesses to collectively purchase health insurance through association health plans, expand short-term health coverage, and expand the use of health reimbursement arrangements (HRAs)." The President's Executive Order did, however, not make direct changes to existing health insurance rules; rather, it directed agencies to consider new rules that would be subject to a notice and comment period.⁴³

Although Trump's efforts to repeal the ACA failed, he still managed to weaken its coverage and to increase the number of uninsured by two to three million, even before the massive dislocation of the Covid-19 pandemic, and, moreover, to accelerate the privatisation of government health programmes.⁴⁴

Throughout his presidency, Donald Trump continued his attempts to overhaul the US healthcare system, although from 2018 on, these attempts were severely hampered when the Democrats regained the majority in the US House of Representatives.⁴⁵ (Cf. Sect. 5.2.2.6.) Despite this, President Donald Trump has continued to explore the limits of his presidential powers to introduce further cuts where possible.

2.1.4.3 How Donald Trump's Health Policy Has Undermined the US and the World's—Ability to Deal with Covid-19

Unfortunately, Trump's neoliberal policy of cutting health care spending as much as possible has since been identified as one of the many things that went wrong with the surveillance of dangerous viruses, such as Covid-19, in the run-up to the Covid-19 pandemic that hit the (Western) world.

Specifically, in the 3 years leading up to the Covid-19 crisis, the Trump administration had considered it a good idea to drastically reduce a CDC team working in

⁴²Magdaleno (2020).

⁴³Magdaleno (2020).

⁴⁴Woolhandler et al. (2021), p. 705.

⁴⁵Smith (2020a). Cf., furthermore, Scott (2018).

As Scott (2018) argued: "The new House Democratic majority knows what it opposes. They want to stop any further efforts by Republicans or the Trump administration to roll back and undermine the Affordable Care Act or overhaul Medicaid and Medicare. But Democrats are less certain about an affirmative healthcare agenda. Most Democrats campaigned on protecting preexisting conditions, but the ACA has already done that. Medicare-for-all is energizing the party's left wing, but nobody expects a single-payer bill to start moving through the House. Drug prices offer the rare opportunity for bipartisan work with Senate Republicans and the Trump White House, but it is also a difficult problem with few easy policy solutions — certainly not any silver bullet that Democrats could pull out of the box and pass on day one, or even month one, of the next Congress. Winning a House majority to ensure Obamacare's safety is an important turning point after so many years in which healthcare hurt Democrats much more than it helped''. (Scott (2018).)

China, one of whose main tasks was to identify global health threats such as Covid-19.⁴⁶ As a result, when Covid-19 struck, the 11 CDC members originally slated for the initiative, were down to only three people. At the same time, 39 workers listed as local staff had been reduced to just 11.⁴⁷

Prior to Trump's interference, the Atlanta-based "CDC" was reported to provide public health assistance to countries around the world and to work closely together with them to prevent outbreaks of contagious diseases and to prevent these from spreading on a global scale. When President Donald Trump took office on 6 January 2017, the CDC had been working in China for already 30 years.⁴⁸ After President Donald Trump took office, the CDC's staff in China was reportedly reduced to 14 people, down from about 47. The losses included both epidemiologists and other health professionals. As a result, the CDC's Beijing office was according to some turned into "an empty shell".⁴⁹

As reported by Taylor, after these cuts, the CDC still employed a mere three people in China (namely (1) a country director, (2) an influenza expert, and (3) an information technology expert). A temporary deputy director was afterwards added to this reduced staff. In addition, two Chinese staff members continued to work on specific public health areas, including a training programme.⁵⁰

Separately, the National Science Foundation (NSF) and the United States Agency for International Development (USAID), which oversaw a global relief programme to help China respond to viral outbreaks, also had to close their offices in Beijing under President Donald Trump. The NSF reportedly had to close all its overseas offices later in 2018.⁵¹ The USAID's Beijing office, staffed by a senior US officer and two Chinese employees, was closed in 2019. In addition, in 2018, the US Department of Agriculture (USDA) moved the head of an animal disease surveil-lance programme out of China.⁵²

These various reduction of staff and reorganisation measures were reported to be part of an overall policy of the Trump administration to push US agencies that had physical activity in China, to end their programmes.⁵³

According to CNN, when Covid-19 first appeared in China in late December 2020, the Trump administration, moreover, notified the US Congress that it intended to proceed with a plan to shut down an US Agency for International Development surveillance programme, whose mission included detecting new and potentially dangerous infectious diseases and helping foreign laboratories to stop emerging pandemic threats around the world. The Trump administration ultimately reversed

⁵⁰Taylor (2020).

⁴⁶Milman (2020).

⁴⁷Milman (2020) and Taylor (2020).

⁴⁸Taylor (2020).

⁴⁹Taylor (2020).

⁵¹Taylor (2020).

⁵²Taylor (2020).

⁵³Taylor (2020).

course almost 3 months later, deciding to grant a 6-month emergency extension to the so-called PREDICT programme on 1 April 2020. This extension allowed the United States to continue to provide emergency support to other countries for epidemic response. But by this time, the WHO had already declared the Covid-19 outbreak a global pandemic, with 4300 people having already died from Covid-19 in the United States alone.⁵⁴

These cuts to the aforementioned US agencies are reported to have largely sidelined health experts, scientists and other professionals who could have helped China in responding more quickly to Covid-19 at the onset of the outbreak, as well as to provide the US government with more accurate information about what was happening since late December 2019. However, this did not stop the Trump administration, in February 2020, from publicly chastising China for withholding information about the Covid-19 outbreak and for not allowing US experts into the country to help.⁵⁵

2.2 Other Examples of Neoliberal Ideas and Working Methods Which Have Been Ideal for Helping to Spread Covid-19

2.2.1 General

Since the beginning of the twenty-first century, there have been repeated warnings of a possible pandemic. Several reasons for the increased risk of a pandemic have been cited, including: (1) an increase in the world's population, (2) an encroachment of uninhabited areas, such as forests, so that people come into closer contact with wild (and disease-carrying) animals, and (3) climate change, which leads to heatwaves and floods that, in some countries, can cause an increase in the mosquito population, another cause of the rapid spread of certain pathogens (e.g., the Zika virus). There is also the factor of increased (international) mobility which facilitates the rapid spread of diseases. There are, furthermore, numerous ongoing conflicts and wars which destabilise countries, making diseases more difficult to contain and control.⁵⁶

Early pandemic warnings had already before in recent history been issued as soon as the "SARS" outbreak in China in 2002 spread to Southeast Asia, and the "MERS" outbreak 10 years later caused an epidemic in the Middle East. In both these earlier cases, it was a coronavirus that had been responsible.⁵⁷

There is also a fundamental difference between an epidemic and a pandemic. In a "pandemic", the sources of infection are spread over several countries and

⁵⁴Cohen (2020a).

⁵⁵Cohen (2020a).

⁵⁶Foulon (2021).

⁵⁷Foulon (2021).

continents. It is not a local problem like an "epidemic".⁵⁸ While, moreover, the implementation of neoliberal ideas since the 1980s has already been disastrous in itself for the organisation of societies in the Western world, the resulting globalised capitalist world order has even proved to be a further breeding ground for a pandemic, such as the one caused by the Covid-19 virus.

This will hereafter be illustrated below by some striking examples, that characterize the socioeconomics of (neo)liberal societies, namely:

- (1) Capitalist farming methods.
- (2) Travel and tourism (in a globalised context).
- (3) Laissez-faire, laissez-passer.
- (4) The health care sector.
- (5) The long-term care home sector.
- (6) The overemphasis on economic interests, including the hierarchical scale of capital versus labour interests, and
- (7) The organisation of neoliberal education as a childcare system for working parents.

As Alfredo Saad-Filho explains⁵⁹:

The pandemic hit after four decades of neoliberalism had depleted state capacities in the name of the 'superior efficiency' of the market, fostered deindustrialization through the 'globalization' of production and built fragile financial structures secured by magical thinking and state guarantees, all in the name of short-term profitability. The disintegration of the global economy left the wealthiest and most uncompromising neoliberal economies, the USA and the UK, exposed as being unable to produce enough face masks and personal protective equipment for their health staff, not to speak of ventilators to keep their hospitalized population alive. These insufficiencies were caused not only by the lack of productive capacity due to changing technologies or China's trade policies but also by deliberate policies: from universities to labs to manufacturing, neoliberalism actively promoted the fragmentation and disarticulation of a wide range of systems of provision as individual firms scrambled for short-term profits. The ensuing shortcomings were exacerbated by the destruction of state planning capacity and the disinclination of neoliberal governments to use all necessary means to mobilize industry, labor and private capital for a common purpose during the pandemic. Under pressure from the pandemic, service provision was transformed beyond recognition; online work became the norm in countless areas in a matter of days rather than the years that this transition would have normally taken, while the neoliberal worship of consumption dissolved into empty supermarket shelves, scrambles for hand sanitizer, pasta and sardines and fistfights for toilet paper.

2.2.2 Capitalist Agricultural Methods

According to Waitzkin, the Covid-19 pandemic—as well as all other major epidemics of a viral nature in the recent past, and probably also in the (near) future stems from the same (and interconnected) "upstream causes": (1) capitalist industrial

⁵⁸Foulon (2021).

⁵⁹Saad-Filho (2020).

agriculture; (2) destruction of the natural habitat, and (3) meat production.⁶⁰ Moreover, in the recent past, due to the ongoing globalisation of capitalist production processes, there has been a rapid increase in the intensity and global scale of all these practices.⁶¹

According to this author, natural forest habitat provides ecological control of viruses such as SARS-CoV-2, and their hosts, especially bats. More precisely, the destruction of these natural forest habitats for industrial agriculture in China began to occur as a central feature of the post-Mao Zedong "neoliberalisation" of the Chinese economy into a bastion of global capitalism.⁶² As a result, hosts carrying the virus—for example, bats—were forced to migrate, coming into contact with humans which in its own turn resulted in interspecies transmission. Already in the past, similar sources of zoonotic transmission due to the destruction of natural habitats occurred in China with the coronavirus in the case of "Severe Acute Respiratory Syndrome" (SARS) and in Africa with Ebola and Zika, and probably HIV.⁶³

Another practice that has emerged from capitalist agricultural models concerns the industrial production of meat. Particularly in the case of pigs and chickens, but also in other species, the entire meat production process, from the breeding of offspring, growth to adulthood, slaughter and packaging, is increasingly taking place under industrial conditions which, on a global scale, are subject to little or no regulatory oversight or control. As a result, on a global scale, a small number of oligopolistic multinationals dominate what is referred to as "factory farming". Due to the unsanitary conditions of such meet processing factories, viral contamination and even mutations to more virulent organisms have already, in recent history, led to epidemics such as: bird flu, swine flu, in addition to a variety of (common) flu viruses.⁶⁴

A particularly discouraging earlier example of this problem has been the 2009 swine flu outbreak. Still according to Waitzkin, this outbreak occurred less than a kilometre from a Smithfield Foods-owned factory pig farm in rural Veracruz state, Mexico. Smithfield Foods, a US company, had before outsourced the operation from the US to Mexico at the time, in part to avoid US requirements for professional and environmental clean-up. Although Mexican public health authorities and investigators had at the time found a link between the swine flu epidemic and capitalist factory farming, institutions such as the CDC, WHO and several other international health

⁶⁰Waitzkin (2020), p. 56.

⁶¹Waitzkin (2020), p. 56: "Pioneering microbiological and epidemiological studies have clarified these upstream causes of emerging epidemics. In addition to viral outbreaks, these and similar agricultural practices also deepen parallel crises of multidrug-resistant bacterial infections (through excessive use of antibiotics in industrial meat and fish production), climate change (through destruction of rainforest habitats and long-distance food transport that requires burning oil), plastic pollution (through agricultural packaging methods), and other serious environmental problems". (Cf. Waitzkin (2020), p. 56.)

⁶² Waitzkin (2020), p. 56.

⁶³Waitzkin (2020), pp. 56–57.

⁶⁴Waitzkin (2020), p. 57.

organisations would, subsequently, rather keep pursuing reductionist strategies, rather than adopting more radical changes in the meat processing industry itself.⁶⁵

Waitzkin, furthermore, has pointed out that the effects of capitalist industrial agriculture on natural habitat loss and meat production only occasionally appear in the mainstream media. Such media attention, albeit limited, has also occurred, to some extent, regarding the possible source of Covid-19. The impact of large food processing companies on emerging epidemics has also appeared in communications or policy papers from international health organisations and the Gates Foundation.⁶⁶

According to Waitzkin, the leaders of international agencies were also well aware that virus-like epidemics could originate from capitalist industrial agriculture. According to this author, this was, for example, clearly demonstrated in the context of "Event 201", a happening which took place on 18 October 2019, ironically only about 2 months before the start of the Covid-19 outbreak in Wuhan.⁶⁷ After the actual start of the Covid-19 outbreak, the promoters of Event 201 emphasised that (1) they had not meant to predict the timing of Covid-19 and (2) that the death toll they had predicted in their tabletop exercise of around 65 million deaths, would not necessarily apply to the Covid-19 case. According to Waitzkin, said organizers of Event 201 also failed to mention more useful initiatives to eradicate the practices of industrial capitalist agriculture that had led to the hypothetical Event 201 scenario, the current global Covid-19 pandemic, and the inevitable future pandemics that will occur on a similar or worse scale.⁶⁸

Unfortunately, these practices do not only pose problems on farms: Live animal markets, common throughout Asia and Africa, may also pose a particular problem in terms of the emergence and spread of deadly pathogens between species. Another risk, identified by Kuchipudi, is the hunting and butchering of bushmeat, which is particularly prevalent in sub-Saharan Africa.⁶⁹ As this author has pointed out⁷⁰:

These activities, as they threaten animal species and irrevocably change ecosystems, also bring people and wild animals together. Bushmeat hunting is a clear and primary path for zoonotic disease transmission. So is traditional Chinese medicine, which purports to provide remedies for a host of conditions like arthritis, epilepsy, and erectile dysfunction. Although no scientific evidence exists to support most of the claims, Asia is an enormous consumer of traditional Chinese medicine products. Tigers, bears, rhinos, pangolins and other animal species are poached so their body parts can be mixed into these questionable medications. This, too, is a

⁶⁵ Waitzkin (2020), p. 57.

⁶⁶ Waitzkin (2020), p. 58.

⁶⁷According to Waitzkin, in this "tabletop exercise", coordinated by the Johns Hopkins Centre for Health Security, the Gates Foundation and the World Economic Forum, "a new coronavirus pandemic begins in pig farms in Brazil and spreads rapidly around the world, resulting in 65 million deaths and catastrophic effects on the global economy, political stability and international security". (Cf. Waitzkin (2020), p. 58.)

⁶⁸Waitzkin (2020), p. 58.

⁶⁹Kuchipudi (2021).

⁷⁰Kuchipudi (2021).

major contributor to increasing animal-human interactions. What is more, demand is likely to go up, as online marketing soars along with Asia's relentless economic growth.

Recent research by Morand and Lajaunie on the impact of deforestation for industrial agriculture, is along the same lines: Deforestation is in this research mentioned as a major cause of biodiversity loss, with a negative impact on human health. Given the growth in the human population, it even appeared that the increase in zoonotic and vector-borne disease outbreaks between 1990 and 2016 was linked, on the one hand, to "deforestation", mainly in tropical countries, and, on the other hand, to "reforestation", mainly in temperate countries. These authors also found that vector-borne disease outbreaks were largely associated with the increase in palm oil plantations. Their study also implied a link between global deforestation and outbreaks of zoonotic and vector-borne diseases, as well as evidence that reforestation and plantations may contribute to infectious disease outbreaks. Their study, furthermore, added to a growing body of evidence that viruses are more likely to transfer to humans or animals if the latter live in or near human-disturbed ecosystems, such as recently cleared forests or wetlands drained for agricultural land, mining projects or residential developments. According to these authors, business patterns and consumer behaviour all contribute to this phenomenon.⁷¹ It was, moreover, predicted by these authors that, by March 2021, a guarter of the world's forest loss would be due to the production of commodities such as beef, soy, palm oil and wood fibre. Mining further exacerbated this problem by contaminating rivers and streams, which are essential for ecosystem resilience, carbon sequestration and soil quality.⁷²

At the policy level, the research of Morand and Lajaunie showed that disease risks should be added to the risk-benefit analysis of any new agricultural or mining project. Of particular concern in this regard has been the ongoing, deteriorating environmental health of the Amazon rainforest. Under the presidency of the President of Brazil Jair Bolsonaro, deforestation has reached levels not seen for over a decade, while public health systems have been so poorly managed that, as of March 2021, the country had one of the worst Covid-19 mortality rates in the world. (Cf. Sect. 2.4.2.5.) Still according to Morand and Lajaunie, tropical forests in the Congo Basin and Southeast Asia, as well as monoculture afforestation projects in China, Europe and the United States, all raise similarly major concerns.⁷³

In a more general manner, Assa has pointed out that research has linked the spread of deadly viruses to an increasing encroachment of humans on previously untouched natural environments. When species in these areas disappear, disease vectors such as Covid-19 can find a new home in human bodies. According to Assa, this danger of neoliberal "laissez-faire, laissez-passer policy" (cf. Sect. 2.2.4.)— "hurting people, destroying the environment, and thus hurting more people in the name of economic growth"—is becoming a huge problem in many developing countries, where decades of implementing neoliberal policy (based on the

⁷¹Morand and Lajaunie (2021) and Watts (2021).

⁷²Morand and Lajaunie (2021) and Watts (2021).

⁷³Morand and Lajaunie (2021) and Watts (2021).

so-called Washington Consensus model) devastated social safety nets, commodified the environment, and hollowed out democracy, while, in the best cases, leaving elected governments completely powerless to deal with multinationals and in the worst cases acting in collusion with them.⁷⁴

Given these considerations, a direct link between Covid-19 and neoliberalism has to be established: The increased occurrence of coronaviruses such as SARS, MERS or Covid-19 in the human population is only the predictable result of the devastating impact of capitalist agribusiness on natural ecosystems, rather than the result of isolated incidents.⁷⁵

As Sumonja has phrased this⁷⁶:

What is seen is an interplay between industrial production of food and a growing market for exotic wild food. The multinationals' land-grab and deforestation pushes wildlife deeper into the remaining primary ecosystems. This enables the spillover of previously boxed-in pathogens to human communities that are forced to breach the natural barrier between them while working.

Capital is spearheading land grabs into the last of primary forest and smallholder-held farmland worldwide (...) As industrial production – hog, poultry, and like – expand into primary forest, it places pressure on wild food operators to dredge further into the forest for source populations, increasing the interface with, and spillover of, new pathogens, including Covid-19.

Capitalist agriculture—with its emphasis on meat production and its tendency to overproduce and even destroy food surpluses, while at the same time global hunger and food insecurity remain huge problems—is in this approach not only ill-suited to feed the world's hungry, but at the same time appears to carry huge health risks for the whole of humanity.⁷⁷

Al these considerations immediately raise the question of whether there are alternatives to capitalist industrial agriculture. There obviously are. According to Waitzskin, all over the world, often against the resistance of big agribusiness and neoliberal governments, farmers are reportedly reverting to peasant farming practices. According to this author, a range of research has hereby shown that traditional agriculture is safer than capitalist agriculture and is also more efficient and productive.⁷⁸

But being one of the causes of the Covid-19 pandemic is not the only Covid-19related problem created by the meat (processing) sector. As we shall see in more detail in Sect. 7.11.1, the meat (processing) sector also played a key role in the spread of the Covid-19 virus in the Western world.

⁷⁴Assa (2021); Chomsky (1999), p. 19.

Assa added to this: "Ironically, global corporations appeared first as instruments of colonization (e.g., the British and Dutch East India companies), but during the industrial revolution came home to roost, e.g., by 'colonizing' working classes in the rich countries'". (Assa (2021).)

⁷⁵Sumonja (2020).

⁷⁶Sumonja (2020).

⁷⁷Waitzkin (2020), p. 58.

⁷⁸Waitzkin (2020), p. 58.

2.2.3 Travelling and Tourism

2.2.3.1 General

After Covid-19 was first detected in Wuhan, China, in late 2019, it has since been spread by travellers to almost every country in the world at an astonishing rate. Less than 3 months after its first detection in China, every country in the world had, to some extent, been affected by the disease.⁷⁹

This is a consequence of the globalisation of travel and tourism.

2.2.3.2 Arrival of Covid-19 in Europe

According to Spiteri et al., as of 09:00 on 21 February 2020, 47 confirmed cases of Covid-19 had been reported in the WHO European Region. Of these cases, one had already died.⁸⁰

The first (official) case on the European continent had been reported shortly before, in France, on 24 January 2020. The first death on the European continent had also been reported in France, more precisely on 15 February 2020.⁸¹

As of 21 February 2020, nine countries on the European continent had reported cases of Covid-19 on their territory, namely: Belgium (1), Finland (1), France (12), Germany (16), Italy (3), Russia (2), Spain (2), Sweden (1) and the United Kingdom (9)⁸² Place of infection (assessed nationally on the basis of a presumed incubation period of up to 14 days, in addition to travel history and contact with probable or confirmed Covid-19 cases) had been reported for 35 cases (missing for three cases), of which 14 had been infected in China (Hubei province: 10 cases; Shandong province: one case; province not reported for three cases).⁸³ The remaining 21 cases had been infected in Europe. Of these, 14 were linked to a cluster in Bavaria, Germany, and seven to a cluster in Haute-Savoie, France. The Bavarian cluster cases were reported in Germany and Spain, while the Haute-Savoie cluster cases were reported in France and Spain. Cases linked to the Haute-Savoie cluster had also been detected in the United Kingdom, including the index case of this cluster, a person who had been infected in Singapore before travelling to France. The index case for the Bavaria cluster himself was reported to have been infected in China.⁸⁴ All these cases had a history of travel to or from China. These findings were, moreover, consistent with the epidemiological situation in Asia and supported

⁷⁹Russell et al. (2020).

⁸⁰Spiteri et al. (2020).

⁸¹Spiteri et al. (2020).

⁸²Spiteri et al. (2020).

⁸³Spiteri et al. (2020).

⁸⁴Spiteri et al. (2020).

the recommendation to test suspected cases with a history of travel to China, as well as other areas where ongoing community transmission was at the time suspected.⁸⁵

The situation would however change rapidly afterwards, with the number of countries reporting Covid-19 transmission increasing rapidly, in early March 2020 culminating in a major outbreak of Covid-19 in northern Italy, with 3089 cases reported on 5 March 2020.⁸⁶

Numerous outbreaks of Covid-19 all over Europe have subsequently been attributed to ski resorts. One well-known such source of spread of the Covid-19 virus was the Austrian town of Ischgl, a ski resort located just above the Tyrolean Alps in Davos.⁸⁷ According to Karnitschnig, the Tyrolean village of Ischgl had once been advertised as a "white winter dream". However, for the tourists who spent their ski holidays there in February 2020, and by extension for the rest of Europe, the town would soon turn out to something "more like a prolonged nightmare".⁸⁸ Especially the city's après-ski bar scene, that every winter attracts millions of people, would prove to be a perfect incubator for Covid-19 in the winter of 2020. By the time Austrian authorities realised the scale of the Covid-19 outbreak in Ischgl in February-March 2020, the damage had already been done.⁸⁹ Around that time, health authorities in the Scandinavian countries had already traced several hundred cases of Covid-19 to Ischgl at an early stage. E.g., Norway had reported that almost 40% of its first round of 1400 Covid-19 infections all had originated in Austria.⁹⁰ Despite early warnings from these Scandinavian countries, the Tyrolean authorities first refused to take action for a long time, allegedly for fear of the negative impact on local trade. The reason for this attitude was that the economy of the whole region depended on tourism. The central, Austrian authorities did not intervene either.⁹¹ In the best of neoliberal traditions, "greed took precedence over responsibility for the health of the community and of the customers", sounded the conclusion reached by the Austrian newspaper "Der Standard".⁹² In a similar manner, it was for journalist Mayer of "Der Standard" clear that⁹³:

Greed has conquered responsibility for the health of citizens and guests. They wanted to "take" this last "strong tourist week" with them, so that the tills of the lift operators and hoteliers would ring.

Signs of serious problems with Ischgl were even clearer by 1 March 2020, when Icelandic authorities discovered that 15 passengers on an Icelandair flight that had

⁸⁵Spiteri et al. (2020).

⁸⁶Spiteri et al. (2020).

⁸⁷Herszenhorn and Wheaton (2020).

⁸⁸Karnitschnig (2020b).

⁸⁹Karnitschnig (2020b).

⁹⁰Karnitschnig (2020b).

⁹¹Karnitschnig (2020b).

⁹²Karnitschnig (2020b).

⁹³Mayer (2020).

arrived from Munich the day before, had tested positive for Covid-19. Fourteen of those infected had visited Ischgl.⁹⁴ Iceland immediately notified the Austrian authorities, but the Austrian health authorities dismissed the concerns. The Tyrolean authorities even suggested that it was more likely that a passenger on that plane who had visited Italy and who had also tested positive for Covid-19, had been the one infecting the group returning from Ischgl. In the following days, however, similar reports of infections from Ischgl tourists came in from Denmark, Norway, Sweden and Germany.⁹⁵

By 7 March 2020, a bartender at one of Ischgl's popular après-ski bars tested positive. The Austrian authorities still took no action, until they finally discovered that 15 other people with whom the bartender had come into contact at work, had also contracted Covid-19. In response, on 10 March 2020, the local authorities ordered the closure of all bars in Ischgl. However, ski lifts and hotels remained open.⁹⁶ In the meanwhile, Covid-19 continued to spread in the region. This ultimately forced the Australian government, on 13 March 2020, to take the unprecedented step of placing the entire valley around Ischgl under quarantine. The quarantine included the Paznauntal valley and St. Anton, another popular ski area nearby. Even so, the lifts continued to operate for a few more days.⁹⁷ Still according to Karnitschnig, Christof Lang, a journalist for the German news channel n-TV, arrived in Ischgl on 5 March 2020 with five friends. Three days later, they all left the city infected.⁹⁸ The scandal was that authorities had indications a week before the journalist arrived that there might have been infections, and that these were simply ignored, Lang later declared about the attitude of the Austrian authorities.⁹⁹ According to another journalist, Thomas Mayer, at least dozens of international holidaymakers infected with Covid-19 came from the "Ballermann der Alpen" après-ski bar. Be this as it may, in the days that followed, in Denmark, Sweden and especially in Germany, reports of new positive cases came about people with one thing in common: they all had just returned from a skiing holiday in Ischgl.¹⁰⁰ Still, Austrian officials continued to insist that they had done everything in their power to stop the spread of the Covid-19 virus as soon as they became aware of the severity of the epidemic.¹⁰¹

So much for now about the story of how the merry tourist industry—specifically ski tourism which has a large following among the middle classes of many European countries—attributed the rapid spread of the Covid-19 virus across much of the European continent during February-March 2020. We shall return to this topic in

⁹⁴Karnitschnig (2020b).

⁹⁵Karnitschnig (2020b).

⁹⁶Karnitschnig (2020b).

⁹⁷Karnitschnig (2020b).

⁹⁸Karnitschnig (2020b).

⁹⁹ Karnitschnig (2020b).

¹⁰⁰Mayer (2020).

¹⁰¹ Karnitschnig (2020b).

Sect. 2.4, where we shall examine how different countries (initially) reacted to the Covid-19 outbreak in their territories. In the following Sect. 2.2.3.3, we shall first see how another segment of the travel industry, in particular intercontinental aviation, allowed Covid-19 to enter the United States via Europe.

2.2.3.3 Arrival of Covid-19 in the United States (via Inbound Travellers from China and Italy)

Given the consensus that the Covid-19 virus originated in Wuhan, China, it was quickly assumed that, at least during the early period of the Covid-19 pandemic, international passengers, particularly coming from China, brought the virus to the United States.¹⁰²

Indeed, on 21 January 2020, a Washington State citizen who had just returned from Wuhan became the first confirmed case of Covid-19 in the United States. In the weeks that followed, a first cluster of Covid-19 cases was identified in Washington State, including an outbreak in a nursing home that resulted in at least 37 deaths.¹⁰³

However, in February 2020, Italy was one of the first countries on the European continent to experience its own, first major epidemic. Shortly thereafter, the focus of the epidemic in the United States shifted from the West Coast of the country to the East Coast, leading epidemiologists to pay more attention to Europe, and particularly Italy, as a probable source of incoming infections. To validate this shift in focus, researchers began to provide evidence that the East Coast outbreaks appeared to result more from exposure to people traveling from Italy, than to people traveling from China. The research also showed that the strain of the virus in New York was the same as the one circulating in Europe, but different from that in China.¹⁰⁴ The research also linked the predominant strain of the virus in New York City at the start of the pandemic to Europe.¹⁰⁵

Although this research provided compelling evidence that international travel from Italy had increased the spread of Covid-19 in the United States during the first wave of the Covid-19 pandemic, this had occurred at a time when most people were still largely unaware of the virus and the threat it posed.¹⁰⁶

From this, it has been concluded that travellers from Italy have been the ones that led the first wave of the Covid-19 pandemic to the United States, much more than travellers from China.¹⁰⁷ The latter may even have been the result of travel bans that

¹⁰²Prince and Simon (2020), p. 2.

¹⁰³Prince and Simon (2020), p. 2.

¹⁰⁴ Prince and Simon (2020), p. 2.

¹⁰⁵Prince and Simon (2020), pp. 2–3.

¹⁰⁶Prince and Simon (2020), p. 3.

¹⁰⁷ As the number of Covid-19 cases increased in New York, Governor Andrew Cuomo said that the US had "closed the front door with the China ban (...) but (...) left the back door wide open" as the virus had already spread to other countries. (Cf. Hood (2021).)

were quickly imposed on travellers from China, but only much later on travellers coming from Europe. Indeed, according to Hood, Covid-19 was still a distant problem in Wuhan when US President Donald Trump announced a travel ban from China in late January 2020. In contrast, it took Trump another 6 weeks, as Covid-19 ravaged Italy, to close travel from Europe as well.¹⁰⁸

Research on the different impact of travellers from China and Italy respectively has, furthermore, shown the following¹⁰⁹:

- (1) US counties that received more passengers from China at the start of the pandemic did not experience higher rates of Covid-19 infection and death than other US counties on average through May 2020; in fact, both outcomes were lower.
- (2) US counties that received more passengers from Italy at the start of the Covid-19 pandemic experienced higher infection and death rates for Covid-19. Specifically, an additional 100 passengers from Italy arriving in a given US county during the fourth quarter of 2019 corresponded to an increase in case and death rates of about 5%.

Based on this research, the relatively early ban on travel from China appears to have been effective in reducing both infections and deaths. At the end of January 2020, just before President Donald Trump made the decision to close flights from China, the Covid-19 virus may not yet have spread sufficiently among travellers from China to have contributed significantly to the first wave of the Covid-19 pandemic in the United States. By contrast, waiting until mid-March 2020 to impose a similar ban on travellers coming from Europe could have been one of the main reasons for the fast spread of Covid-19 throughout the United States.¹¹⁰ This is illustrated in Fig. 2.1 which gives an overview of the early travel pathways of the Covid-19 virus during the first month of the Covid-19 outbreak.

From this, the quoted study draws two conclusions regarding travel bans: First, if a government is going to impose a travel ban, it must act quickly. Secondly, a narrow travel ban that only targets certain countries makes little sense, not least because the Covid-19 virus spreads so quickly.¹¹¹

2.2.3.4 Provisional Conclusions

It is clear that over the past four decades, travel in general and tourism in particular have grown at an ever-increasing rate around the world.

The neoliberal globalisation of all human interactions, particularly in the socioeconomic sphere, has undoubtedly played a crucial role in this regard. Indeed, as

¹⁰⁸Hood (2021).

¹⁰⁹Hood (2021).

¹¹⁰Prince and Simon (2020), p. 3.

¹¹¹Hood (2021).



Fig. 2.1 Early travel pathways of the Covid-19 virus, through March 2020 [Source: Hood (2021)]

capitalist economies have become increasingly interconnected under the impetus of neoliberal economic theories, the need to travel had also drastically increased. For all sorts of reasons (at least until the outbreak of Covid-19), people boarded a plane as easily as a domestic train, both for business and leisure.

The emergence of new low-cost airlines (such as "RyanAir"), furthermore, accentuated this trend, making the purchase of a plane ticket accessible to all. This went hand in hand with the rise of mass tourism, which in Europe, during the summer, mainly focuses on beach holidays in various countries of the Mediterranean world (such as Spain, Italy, Greece, etc.), and in the winter mainly on ski holidays in all kinds of Swiss, Austrian, Italian and French ski resorts.

It is not surprising that while the world economy, measured in terms of gross domestic product (GDP), has grown at an average annual rate of 2.8% since 1995, global air passenger traffic (expressed in revenue passenger kilometres) has grown at an ever higher average annual rate of 5.0%.¹¹² This is illustrated by Fig. 2.2 which gives an overview of the world economic growth compared to the air traffic growth in the period from 1996 until 2012.

The ease of travel, both for business as for pleasure, helps explain why an infectious virus such as "SARS-CoV-2" could spread so quickly around the world. The Covid-19 virus was first detected in Wuhan, China, in late December 2019. Less

¹¹²ICAO (n.d.), accessed 12 March 2020.

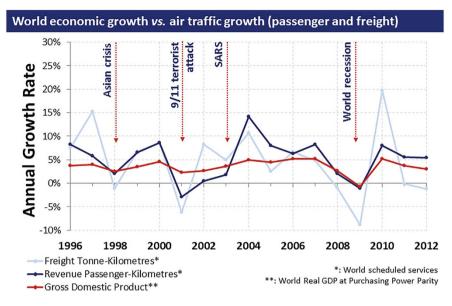


Fig. 2.2 World economic growth and air traffic growth [Source: ICAO (n.d.), accessed 12 March 2020]

than a month later, the Covid-19 virus was already present in France and Italy (and most likely, be it under the radar, in numerous other European countries as well).

As a result, thanks in part to the ease of travel in the globalised, neoliberal world, the spread of the Covid-19 virus was frighteningly rapid: Barely a month later, the Covid-19 virus had spread to every continent, including large parts of the Western world. As a result, for the first time in over a century, the Western world was forced to adopt lockdown and social distancing measures, which would continue to determine the socio-economic climate of these countries throughout 2020 and well into 2021.

In addition to travel in general, it seems that especially tourism played a special role in the spread of Covid-19. In particular, the massive presence of tourists in bars and restaurants in popular holiday resorts, each year attracting thousands of people at the same time, seems to have become real dispersal events, the most evocative example being the one of Ischgl, Austria. As will be explained later in this book, this scenario was, moreover, repeated a few times thereafter, for example during the carnival festivities in Belgium and the Netherlands at the end of February 2020 (but probably also in other countries where carnival is popular, e.g., in Germany), and in the United States during the Sturgis rally in the summer of 2020 (cf. Sect. 2.5.4.5.).

Be this as it may, the travel frenzy that had characterised the neoliberal world until the emergence of Covid-19 would at least subside for a while due to the emergence of Covid-19 and the measures that were taken to contain it.¹¹³

2.2.4 Laissez-Faire, Laissez-Passer

One of the hallmarks of neoliberal economic policy is the idea that there can only be limited state intervention in socio-economic life, alongside an adherence to both the creation and reduction of budget deficits, and a commitment to the preservation of "laissez-faire". This policy approach can be traced back to nineteenth century economic liberalism, characterized by liberal governments—despite their highly authoritarian characteristics, e.g., in suppressing the poor and fighting (pity) crime—essentially deploying "laissez-faire" in most socio-economic matters. This has been referred to as the passive role of the state as "night watchman", basically providing security for its (rich) citizens, rational administration (especially for taxing the poor) and—in Menon's words—"a minimum of social advance on the basis of which economic progress was supposed to occur".¹¹⁴

Up to this very date, the idea of "laissez-faire, laissez-passer" still predominates within neoliberal ideology, although the proponents of this doctrine themselves rarely refer to it explicitly or make use of the term themselves. Rather, the proponents of economic neoliberalism rely on an Anglo-American conceptual framework, although the message remains essentially the same: The state should refrain from developing any activities itself in socio-economic areas that are best left to the free market and should interfere as little as possible with free market activities through regulation.¹¹⁵

¹¹³ According to the ACI, also in the past, the development of civil aviation has "been largely affected by several crises directly or indirectly related to aviation. The Asian crisis of 1998, the US terrorist attack of 11 September 2001, the Severe Acute Respiratory Syndrome (SARS) outbreak in 2003 and the global financial crises of 2008–2009 have all been detrimental to the overall profitability of the air transport system". (Cf. ICAO (n.d.), accessed on 12 March 2020.) ¹¹⁴Menon (2019).

Colander explained the role of laissez-faire in classical economics as follows: "For the best Classical economists, laissez faire was not a rigid proscription of all government involvement in the economy. Instead, it was a warning to think five or six times before one advocates a policy that had to be implemented by government. Laissez faire was not a theoretically derived precept, a purported product of scientific work; Classical economists explicitly disavowed any scientific foundation for their laissez-faire policy prescriptions, which they arrived at using a combination of their theories and their educated common sense—based, in turn, on their study of history and their understanding of how government actually worked. On this foundation they developed a belief that policy interventions often had unintended and undesirable consequences. When the political controller is himself controlled by political intrigue, not by genuine concern for the welfare of society, it makes sense to limit the controller's control". (Cf. Colander (2011).)

¹¹⁵Cf. Chomsky (2017), p. 90.

Key neoliberal concepts are notions such as "privatisation", "marketisation", "liberalisation" and "deregulation" of the economy. The first concepts (i.e. privatisation and marketisation) are based on the idea that the state itself cannot be the organiser-or actor-of socio-economic issues and, where it has done so in the past, these must be transferred to private market actors.¹¹⁶ The latter notions, namely liberalisation and deregulation, imply that the state should intervene as little as possible to subject socio-economic activities to rules and regulations, but should let them take place unhindered in accordance with the rules of the free market, including the principle of voluntary association. The latter principle implies that private parties themselves should agree on their mutual relations based on contractual negotiations, and that the state should not interfere in these relations by means of additional regulation.¹¹⁷ In short, one should "let the market do its thing" (= laissezfaire) and intervene as little as possible in what the market brings about (= laissezpasser). Even when things go completely "BZRK"-which, for the followers of neoliberal thinking can only be the result of a temporary failure-this is considered fundamentally good, because the free market is supposed to always correct itself.

Although supporters of economic neoliberalism do not like to hear this, it is precisely this fundamental attitude of neoliberal politics that have determined the disastrous resilience of the Western world to the onset of the Covid-19 pandemic, both in the run-up to this onset and in their reaction once the Covid-19 pandemic had been an established fact.

Indeed, years of neoliberal laissez-faire and laissez-faire policies in Western countries completely undermined the capacity to resist the onset of a pandemic. The traditional application of the laissez-faire, laissez-passer doctrine, in the United States and the United Kingdom from the early 1980s onwards, and in the EU countries, particularly in the run-up to the 1992 Maastricht Treaty, and even more so in the period following the entry into force of that Treaty, has implied that neoliberal Western governments had increasingly withdrawn from many socio-economic areas, both as actors (e.g., through privatisation and commercialisation) and as regulators (through the liberalisation and deregulation of entire markets). The application of these neoliberal methods in the health care and nursing home sectors, which will be explored more closely in Chaps. 5 and 6 respectively, is particularly relevant in the context of this book.

After the financial crisis of 2008, an additional neoliberal sauce would be added to this already disastrous neoliberal meal. While this financial crisis was clearly triggered by the neoliberal policies of the 1980s and 1990s,¹¹⁸ Western countries began to counter its effects with even more ambitious neoliberal remedies, which of course made the situation worse. It is since then that the neoliberal magic word "austerity" has increasingly surfaced in neoliberal rhetoric and policies, leading to huge cuts and savings in many areas of society, such as education (and higher

¹¹⁶Chomsky (1999), p. 70.

¹¹⁷Byttebier (2018), pp. 56–63.

¹¹⁸For a more in-depth reading, cf. Byttebier (2017). Cf., furthermore, Byttebier (2015).

education), but also, more relevant in the context of this book, in general health care and care for the elderly.

In the countries that had been most exposed to this austerity policy, it particularly turned out that there was little resistance to Covid-19. For example, the health sector of these countries was completely unprepared—with, amongst other things, (1) a shortage of hospital beds (especially intensive care units) (one of the most crucial factors in the care for the seriously ill in Covid-19), (2) a shortage of protective equipment (from masks to respirators), (3) underfunding and understaffing in hospitals and nursing homes... As we shall discuss in more detail in Chaps. 5 and 6, all these characteristics had wreaked havoc in hospitals and long-term care homes across the West.

But the neoliberal laissez-faire, laissez-passer approach has had a second, perhaps even more disastrous effect. Deeply ingrained in the minds of neoliberal policymakers and politicians is the view that, as a government, doing nothing and just letting everything happen is always a better solution than bothering to act. After decades of neoliberal policymaking, this attitude has become deeply entrenched in members of successive governments in the United States, the United Kingdom and the EU (both at a supranational level and within the individual EU Member States themselves). This explains why, in all these legal systems, the initial response of governments to the Covid-19 epidemic was: Do nothing, and let it happen (= laissez-faire, laissez-passer). This in particular explains, for example, why, for more or less a month and a half after the first cases of Covid-19 were reported on their territories, Western policy-makers sat back and did nothing, except make (or "tweet") bold statements such as: "It will pass"; "In good weather, it will just disappear"; "It's no worse than seasonal flu"; "It will be fine"; "It's all a hoax", etc.

In short, the average response of Western, neoliberal governments has been to ignore (e.g., at the EU level) and downplay (for which one needs only to refer to all the idiotic tweets of the then US President Donald Trump in the period from late January 2020 on). What is even worse is that we have seen this pattern play out in almost every country run by neoliberals, with the aforementioned examples of the United States, the United Kingdom and the EU—which are also the special subject of this book—being among the most extreme examples. In these countries, restrictive measures (such as testing or quarantine) were not even considered in the initial phase of the Covid-19 epidemic.

When we shall return to the example of the Ischgl propagation below (cf. Sect. 2.4.1.2.), we shall also look more closely at some of the consequences of this (non-) policy during the initial stage of the Covid-19 pandemic.

Linked to the consequences of decades of austerity, the consequences of this laissez-faire, laissez-passer approach have, to put it simply, been disastrous. For example, in most of these countries there were no decent protocols for responding to a pandemic, as, under a laissez-faire, laissez-faire policy, these were never deemed necessary. Moreover, there were no (effective) public agencies to deal with such an epidemic, and where such specialised institutions had existed in a more distant past (e.g., in the United States; cf. Sect. 2.1.4.3.), they had been largely gutted as part of a logic of large-scale austerity.

According to Assa, by the time Covid-19 was launched, decades of neoliberal austerity had undermined countries' ability not only to support vulnerable people in normal times, but also to save their lives in the event of a pandemic. Indeed, while viral infections do not, as such, discriminate by income, from the outset of Covid-19, it has been clear that the poorest were the most vulnerable and least equipped to cope, especially in rich countries.¹¹⁹ (Cf. Chap. 10 in more detail.) For Acca, the virus "can be blind to political beliefs, but not the other way around", referring, by way of illustration, to the fact that the "red states" in the United States clearly reacted more slowly and with less concern than the "blue states" to Covid-19.¹²⁰

From the outset of the epidemic, the Covid-19 virus has also shown that pushing private and economic freedoms to the limit, at the expense of the common good, may bring about disastrous consequences. Prioritizing such political freedoms has more in particular come at the expense of public goods such as health and security and, ironically, at the expense of long-term economic well-being itself.¹²¹

Neoliberals will probably excuse their behaviour by saying that there was no alternative (i.e., the often used "TINA"—or "there is no alternative"—argument¹²²), that no one had experience with such a pandemic and that they reacted as best they could. But this argument is incorrect. Many countries-particularly in Asiaresponded well to Covid-19, not by simply letting it all happen for a month and a half, but by reacting in the complete opposite way, based upon immediate government action, leading to measures such as: (1) indiscriminate closure of external borders (especially incoming air traffic); (2) implementing a very thorough screening and testing policy; (3) extensive contact tracing, coupled with immediate quarantine of contacts of those (suspected to be) infected; (4) if necessary, general or local lockdowns; (5) activation of specialised health services (which existed in various countries due to previous experience with infectious viruses, such as the SARS virus), and (6) the application of extensive disinfection protocols (e.g., in China), and all this not from ± 45 days after the detection of a first case of Covid-19 (as in the EU), but from the first day (and even hour) after a case of infection was detected, and in some cases even without actual cases of infection already observed in one's own country. In short, instead of relying on the laissez-faire, laissez-passer idea that the Covid-19 virus was to go away on its own, these other governments based their response on a complete opposite attitude, namely that the entire government apparatus had to be deployed immediately to nip the virus in the bud. Later in the book, when we turn to the example of Taiwan (cf. Sect. 2.4.2.4.1.), we shall also show the extreme success of such an "elimination approach".

This was in stark contrast to the complete fiasco that neoliberal policies caused in the free West, with as result that the Covid-19 virus was not contained in the

¹¹⁹Assa (2021).

¹²⁰Assa (2021).

¹²¹Assa (2021).

¹²²Byttebier (2017), p. 498.

immediate aftermath of its appearance on Western soil, but instead continued to run rampant for more than a year afterwards.

Or how neoliberal laissez-faire and laissez-passer have proven to be the worst possible form of policy, both to prevent and to respond to an epidemic or pandemic caused by a virus, which leaves only the question of how many neoliberal policymakers and politicians in the West are likely to feel remorse about this, and how many assume—in the rare cases that they would feel such remorse—that this too will simply go away...

Let us end this Sect. 2.2.4 by referring, once again, to Acca, who rightly held that a pandemic leads a society into war, which implies, by definition, that inaction cannot be an option, but also—as several neoliberal countries have found out since the beginning of the Covid-19 crisis—that Maggie Thatcher was quite wrong: "Society exists", and it needs to be protected and, certainly in times of crisis, to be led¹²³:

While we need to be cautious not to curtail political freedoms, we cannot sacrifice ourselves to the short-term 'economic freedoms' of a minority. If we do, we are all dead, even before the long run.

2.2.5 The (Abominable) Situation of the Health Care Sector at the Beginning of 2020

The submission of Western societies to economic neoliberalism has had a particular influence on the health care sector, which since the 1980s had been increasingly subjected to the principles of (neo-)liberal austerity.¹²⁴

Compared to the long-term nursing home sector, the impact of neoliberal ideology on the organisation of the hospital sector has been less important (but not less significant). Unlike the nursing home sector, the hospital sector has not so much been privatised as (1) partially commercialised, besides (2) increasingly been subjected to the iron logic of the neoliberal austerity principle. Basically, this implies that all health care institutions—especially hospitals—must not only be completely self-sufficient, but also be as profitable as possible.

This neoliberal austerity policy has manifested itself in the following ways: (1) a reduction in staff (especially nurses); (2) a reduction in the number of hospitals, and (3) a reduction in hospital capacity (mainly evidenced by a reduction in the number of hospital beds—ICU-beds and others—available per 1000 members of the population). This will be discussed in more detail in Chap. 5.

This hard and numerical logic that started to increasingly characterise the hospital sector has, in addition, been applied in many other healthcare and related areas that

¹²³Assa (2021).

¹²⁴Trappenburg (2019).

are important for Covid-19, such as (dis)investment in medical and protective equipment stocks.

Under the neoliberal (austerity) logic, there is generally no need to take preventive measures, for example by stockpiling materials to anticipate diseases that are not "current", such as, regarding airborne viruses, face masks and protective clothing. This would incur too many costs (e.g., storage costs), while generating no immediate benefits. The logic of the free market, on the other hand, is based on the principle that everything produced is intended to be sold as quickly as possible, preferably at a high profit. Any anticipation of future risks at the expense of short-term profitability is, in other words, to be avoided as much as possible.

A similar example concerns access to medicines, especially in cases where the cost of a certain medicine has (still) to be covered by (what remains of) the (public) social security systems. Under neoliberal logic, the latter exist, at best, only to ensure that a member of the working class who falls ill is "patched up" and returned to work as soon as possible. Any long-term illness is monitored with suspicion, especially if it involves too much time away from the workplace. The co-financing of medicines by these public social security systems is, likewise, only still tolerated in cases where the medicines serve to ensure that people remain fit enough to perform labour. The co-financing of medicines already becomes much more suspect in the case of medicines that combat diseases of a rather rare nature, and which, therefore, are not likely to affect a large proportion of the working classes. Insofar as a neoliberal society cannot tolerate that, for example, 10% of the working population would suffer from an illness and remain collectively absent from the workplace, it still allows the (co-)financing of drugs that combat such illnesses by social security money. Woe, however, the individual suffering from a rare disease, especially when the drugs that can be useful to treat such a disease exist but are still relatively new and expensive. A ruthless cost-benefit reasoning will be applied here, according to which a sick individual will easily be sacrificed in favour of balancing social security expenditure.

According to Nelson, as a result of the above, neoliberal policies throughout the Western world in the period 1980–2020 greatly exaggerated capitalism's innate tendency to downplay the capacities and capabilities associated with health care and, in particular, pandemic prevention measures, let alone preparedness.¹²⁵

The result of four decades of neoliberal policy implementation, as applied to the health care sector, has thus been that by the beginning of 2020 most (Western) countries were completely unprepared for a pandemic.¹²⁶

According to Chomsky, by 12 January 2020, a few days after the discovery of a problem with the Covid-19 virus, Chinese scientists had identified the Covid-19 virus, sequenced its genome, and transmitted all their information to the WHO (and through it, to the world). As a result, by 12 January 2020, all the relevant scientists in the world knew—or could know—what was happening, what to expect and what to

¹²⁵Nelson (2020).

¹²⁶Nelson (2020).

do.¹²⁷ (Cf. Sect. 1.1.1.) However, after being informed in this way, countries reacted differently. Most countries in Asia and Oceania—such as Australia, New Zealand, Taiwan, South Korea—responded quickly and effectively, thus managing to contain the spread of the Covid-19 virus at an early stage of the pandemic.¹²⁸ Unfortunately, European countries and the United States (as well as some other countries, such as Brazil and India) responded much less effectively.¹²⁹

In light of the above, it should also be similarly clear that early 2020, when Covid-19 hit the Western world, many Western countries were facing the consequences of a poorly resourced health sector: Health care workers had been paying the price of neoliberal budget cuts for four decades already, with as result that, especially in the first weeks after the Covid-19 pandemic broke out, they had to do their work and in many cases perish—under the most appalling, even deadly conditions.

The total lack of preparedness of the (neoliberal) Western world was, moreover, linked to the adaptation of the health sector to the long-chain and just-in-time delivery systems of modern capitalism, as well as to a policy of reducing storage space for all possible medical and protective equipment (which, at an early stage of the pandemic and throughout the Western world, made access to personal protective equipment extremely difficult).¹³⁰ Similarly, the globalisation of the "buy from the cheapest source" mentality¹³¹—which had generally led to a decline in manufacturing capacity in the northern hemisphere already during the second half of the twentieth century implied that in many cases there was an exclusive reliance on a few (foreign) suppliers, often located on the other side of the world.¹³² However, when Covid-19 struck, the pandemic broke out in both producer countries (e.g., China) and consumer countries (e.g., the United States and EU Member States) alike, essentially crippling the production of a wide variety of medical equipment, protective gear and even drugs for export and, as a result, proving literally fatal for countries on the demand side of the curve.¹³³

We shall return to this in Chap. 5, where we shall examine in more detail how decades of neoliberal (austerity) thinking in the Western world had weakened the hospital sector, and what this has meant for Covid-19 management.

¹²⁷Barsamian (2020).

¹²⁸Barsamian (2020).

¹²⁹Barsamian (2020).

¹³⁰Nelson (2020).

¹³¹As will be explained later in the text, from the end of 2020 onwards, this "buy-from-thecheapest-source" mentality' has also been one of the factors behind the complete "fiasco" of the early-day European vaccination strategies.

¹³²For further reading on this topic, cf. Byttebier (2017), p. 216 a.f.

¹³³Nelson (2020).

2.2.6 The (Abominable) Situation of the Nursing Home Sector in Early 2020

By the time Covid-19 reached Western countries—especially the EU countries and the United States—the (long-term) nursing home sector was, if anything, in even worse shape than the hospital sector, as the fury of neoliberalisation had hit the care or nursing home sector much harder than it had hit the general health care sector.

In the United States, a considerable proportion of retirement homes for the elderly had already become in the hands of private market players since the 1980s. Partly as a result of the neoliberalization measures of the Reagan administration, these institutions had increasingly supplanted the former public welfare institutions, as well as the traditional non-profit religious institutions. As a result, retirement homes for the elderly in the United States, had increasingly become in the hands of for-profit corporations, which in some cases even started running large retirement home chains like any other business.

A similar wave of privatisation and commercialisation of the nursing home sector occurred in EU countries as of the 1990s. Whereas in the EU Member States the nursing home sector was previously much more in the hands of the state—or religious institutions—after the entry into force of the Maastricht Treaty (which led to an extreme degree of financialization of European societies), a permanent neoliberal austerity policy led to a radical change in the nursing home sector. As a result, since the 1990s, EU Member State governments have been increasingly unwilling to be further involved in the sector. Through actual privatisations and PPP constructions, but also through intermediate forms that relied on a gradual divestment of certain subtasks, the nursing home sector had in such a manner increasingly been handed over to profit-oriented companies.

The result of these factors, both in the EU and the United States, has been that the for-profit nursing home sector had become increasingly important (although public nursing homes and private not-for-profit nursing homes would still continue to operate in both jurisdictions as well). Indeed, at the time of Covid-19, this process of privatisation of the nursing home sector was still underway. (Cf. also Chap. 6).

Such private for-profit companies are characterised by the fact that they operate according to the principles that apply to all capitalist enterprises, including: (1) the pursuit of the largest possible market share (in so far as this does not reduce cost efficiency); (2) the organisation of the provision of services to the elderly as a commodity, and (3) cost efficiency, which manifests itself in different areas, such as (a) in the area of personnel—as in any private enterprise, the workforce of a private nursing home operating according to capitalist working methods is (in accordance with the capitalist principle of "profit maximisation and cost minimisation") preferably kept as low as possible for reasons of cost efficiency; (b) with regard to the remuneration of employees (cf. "the iron law of wages"); and (c) with regard to the quality of food, in addition to other services.

The quality of services provided by these private for-profit nursing homes has often been poor.

One of the biggest problems the sector faced when Covid-19 hit, were its low staffing levels. Not surprisingly, these proved to be one of the main reasons for the disastrous impact of the Covid-19 pandemic on the sector, or more precisely on the elderly people living in these for-profit homes.

We shall return to these issues in Chap. 6, where we shall examine in more detail how decades of neoliberal public policy weakened the (long-term) nursing home sector to a point where, by early 2020, it was completely unprepared and unadjusted to deal with the onset of the Covid-19 pandemic.

2.2.7 Supremacy of Economic Interests

The aspect of economic neoliberalism which, both in the EU Member States and in the United States, from the beginning of the Covid-19 crisis, has probably hampered the fight against the Covid-19 pandemic the most, has been the doctrine of the absolute supremacy of the economic domain (which under economic neoliberalism is—always and in all cases—considered to be more important than any other aspect of socio-economic life, including public health).¹³⁴

This prioritisation of economic interests over the common good in most Western countries already dates from the early 1980s.

Any realistic description of the many idiocies which this attitude has caused in relation to the management of the Covid-19 pandemic would defy all imagination, were it not for the fact that, during the period 2020–2021, we have all been able to experience it first-hand. As this is one of the underlying themes of this book, we shall return to this aspect of neoliberal public policy at various points later on—but let's have a few "tasters" already now.

The fact that the EU was created as a European "monetary" and "economic" union already gives an indication of its main areas of concern. The European treaties, therefore, mainly deal with the economic field and pay much less attention to other subjects, such as social issues, the environment or public health. These are inherently of little economic interest. According to neoliberal doctrine, they are even more likely to be obstacles to efficient free markets, than that they are able to help support them. As a result of this attitude, the EU has virtually no competence, let alone means, to deal with a health crisis such as a pandemic. This explains why, when Covid-19 reached the European continent at the end of January 2020, the EU heard the proverbial "thunder in Cologne" and did virtually nothing for more than a month and a half. (Cf., furthermore, Sect. 2.3.)

The predominance of the economic domain also helps to explain why, even after the WTO in late January 2020 began issuing strong warnings about the seriousness of the Covid-19 situation, the EU continued to focus on all sorts of economic issues

¹³⁴On this point, cf. already Byttebier (2017), pp. 184–206. Cf., furthermore, Byttebier (2018), pp. 144–146.

that it considered far more important than taking any action that might have nipped the spread of Covid-19 in the bud. Here the EU also stubbornly refused to learn from the experiences of some Asian countries with such kind of health crises. For the EU, even after the WHO announced the seriousness of the situation until at least mid-March 2020, everything else was, hence, deemed far more important than spending time, attention or energy on Covid-19. As a result, during the extremely long period of one and a half months in terms of a virus, Covid-19 had free rein to spread across the European continent, alongside Britain. It is, therefore, not surprising that by the end of March 2020, the centre of gravity of the Covid-19 pandemic had shifted from Asia to Europe, where the number of cases exploded.

The various EU Member States acted accordingly. It was only at the end of February and the beginning of March 2020, after television images made the gravity of the situation in Italy clear, that EU countries started to consider measures, although by then they were completely overwhelmed by the brutal reality of the high Covid-19 figures, which left no other choice than to take real lockdown measures, which most EU countries, reluctantly, started to take as of March 2020.

However, it would soon become clear that neoliberal Europe could not sustain this kind of tough lockdown for long, and certainly not long enough, or tough enough, to keep Europe completely safe from the Covid-19 threat. Indeed, for the only time in decades that EU countries were prepared to prioritise public health over economic interests, protests from the business community soon followed. Concerned about the decline in turnover and profits—which would later turn out to be less than 5% compared to the past—a loud call from the business community rang out in mid-April 2020, proclaiming that "the economy should open up again" (by analogy with a similar slogan that was launched by US President Donald Trump at the time).¹³⁵ In the wake of this, there was an even stronger call to reopen schools as well so that childcare could be provided sufficiently in order to allow the working classes get back to work. In response to this outcry, and with little to no regard for the fact that Covid-19 was not at all contained, let alone eliminated, throughout Europe, containment measures were being systematically lifted as of the end of April-early May 2020.

This newfound freedom would soon turn sour: After the summer months usually a time when coronaviruses calm down—Europe would soon find itself hurtling towards a severe "second wave" of the Covid-19 pandemic, characterised again by high infection and mortality rates from October 2020 onwards.

The picture in the United States was similar, albeit drenched in the sauce of US President Donald Trump's sense of drama and controversy. In retrospect, however, one must conclude that in some areas US policy has been more sensible than European policy, though in other areas, if possible, even more foolish. E.g., have

¹³⁵ According to neoliberal reasoning, even during the most terrible of pandemics, everyone must return to work as quickly as possible. The fact that this comes at the cost of many more human lives is of no concern to the followers of neoliberal dogma (since, according to another dogma of neoliberal thinking, the week will perish, and the strong will win anyway).

made the case for the United States: the swift action to issue a travel ban to and from China, which saved the US from a direct import of Covid-19 from China. Unfortunately, the travel ban to and from Europe was not enacted as quickly and thoroughly, so Covid-19 was able to be smuggled into the United States from Europe, particularly from Italy. Making a similar case for the Trump administration: the fact that the Trump administration had already committed to supporting the development of Covid-19 vaccines in March 2020, and that it had even begun negotiations to purchase vaccines at a time when the EU itself barely realised that it would have to start taking action against Covid-19, let alone that it would have already committed to purchasing Covid-19 vaccines itself.¹³⁶

As was the case with the neoliberal EU, so too with the Trump administration, the dogma of the primacy of economics would, nevertheless, keep prevailing all the time. After lockdown and hygiene measures were enacted in the United States, both at federal level as at the level of some states (but not, or hardly, of others), in March and April 2020, it would be the US president himself who would start to question them most. (Cf. Sect. 2.5.)

What should be clear by now is that the adherents of neoliberal thinking react with horror to anything that undermines the primacy of economics. Presumably, a little less dogma in this area could have prevented a great deal of human suffering, both in the United States, as in EU countries. In adhering to the neoliberal dogma of the primacy of economics at all costs, the many geniuses of neoliberal politics and economics seem to have barely realised that the Covid-19 pandemic, which would continue to rage for more than a year, would ultimately come at a higher cost—even in socio-economic terms—than a fairly short, intense and severe period of tough measures that would have managed to eliminate the Covid-19 virus.¹³⁷

What is probably even worse is that the call to "open up the economies" has not been just once, but repeatedly throughout the Covid-19 pandemic. Indeed, after new, stricter measures were needed, especially in the United States and EU countries, to combat a second wave of Covid-19, these were all too quickly again met with new calls to relax these measures in the light of economic interests. The same scenario was repeated when a third wave emerged after this new period of easing. Thus, neoliberal public policy of combatting the Covid-19 pandemic, both in Europe as in the United States, began to exhibit the characteristics of an "accordion movement", which has also been referred to as a "mitigation strategy" and which is schematically shown in Table 2.1.

¹³⁶It took several months for the EU to finally enter into supply negotiations with vaccine developers, but these quickly turned into a debacle. We shall return to this subject in Chap. 9.

¹³⁷ This immediately underlines that economic neoliberalism has little to do with economic reality, but (as Joseph Stiglitz has written about the teachings of Adam Smith revived by economic neoliberalism; cf. Stiglitz (2006), p. 68.) rather expresses a mythical worldview that, applied to Covid-19, cannot allow people to stay at home for a month or two, even if it is to prevent the spread of a virus.

Phase	Neoliberal policy attitude	Approximative moment in time	
At the out- break of Covid-19	Denial that something is wrong, or that it could get worse (in which the neoliberal "laissez-faire, laissez-passer" principle resonates)—only concern for economic issues.	End of January 2020 to beginning of March 2020	
Phase 1	Alarmingly high contamination and death numbers.	As of March 2020	
Phase 2	Need for strict lockdown and social distance mea- sures (which are reluctantly taken).	Second half of March 2020 to April 2020	
Phase 3	Falling numbers, provoking the outcry: "Open the economy".	By the end of April 2020	
Phase 4	Relaxation of measures.	As of the end of April 2020	
	Cooling off period for coronaviruses.	Summer 2020	
Phase 5	Rising Covid 10-numbers (so-called "second wave").	September 2020	
Phase 6	Again: need for strict lockdown and social distance measures.	October 2020	
Phase 7	Falling numbers, again provoking the outcry: "Open the economy".	January 2021	
Phase 8	Relaxation of measures.	February 2021	
Phase 9	Rising Covid 10-numbers (so-called "third wave").	Late February to early March 2021	
Phase 10	Again: need for strict lockdown and social distance measures.	As of the end of March 2021.	
Phase 11	Falling numbers, again provoking the outcry: "Open the economy".	End of April 2021	
Phase 12	Relaxation of measures.	Beginning of May 2021	

 Table 2.1
 Schematic representation of the accordion movement characterizing neoliberal public policy regarding Covid-19, esp. in the EU

We shall return to the issue of re-opening the economies in Sect. 7.10, where it will become clear that the biggest victims of this neoliberal public policy have been the members of the working classes.

2.2.8 Neoliberal Education (as a System of Childcare for Working Parents)

One of the most difficult issues to grasp during the Covid-19 pandemic has been the closure of schools. The context of the problem was that when the first wave of Covid-19 hit the world, schools were all over the world closed as part of the response to Covid-19. Moreover, as will be explored in more detail in Chap. 8, these school closures occurred simultaneously in a multitude of countries, with as result that

during the period from \pm March 2020 to \pm June 2020, school-going young people around the world were forced to stay at home and learn from a distance. Although distance learning systems were hastily put in place in many countries in order to deal with this problem, the weeks or months of school closures had a profound impact, both in terms of educational disadvantage, as in terms of damage to the general wellbeing of the school-going youth.

These issues will be discussed in more detail in Chap. 8.

Because of the profound impact of school closures, several international authorities—such as UNICEF and UNESCO—by the end of the first wave of the Covid-19 pandemic started to make claims that school closures had not only been detrimental to the young people in school, as well as posing a variety of other societal problems—such as an assumed, enormous economic damage due to the educational disadvantage suffered by an entire generation of young people—but that they might not even have been necessary. In support of the latter claim, it was argued that the risk of the Covid-19 virus spreading through schools was extremely low and that this risk, therefore, did not outweigh the great educational and economic damages caused by closing schools.

In addition to this argument, it was noted that part of this economic damage was caused by the fact that, due to the closure of schools, the parents of children who stayed at home were severely hampered in their work, both in the case of working at home, as in the case of having to be physically available at the workplace. Especially for the part of the working population for whom the Covid-19 epidemic was already inherently the most problematic, the problem of childcare became acute. This was especially the case for those parents who had to stay physically at work, such as health care workers, alongside those who were ordered to return to their physical workplace as a result of the reopening of the economy that neoliberal governments started to implement by the end of April 2020 and the beginning of May 2020. The economic damage caused by the school closures was, therefore, partly the result of the fact that during the times that the schools were closed, they were unable to properly fulfil their societal role of childcare, in order to keep the capitalist machine running.

This explains why after the summer of 2020, at the start of a new school year, in many countries that had been hardest hit by Covid-19, neoliberal governments were no longer willing to commit to closing schools. In canon with the call for the economy to reopen as of the end of April-beginning of May 2020, in many (capitalist) countries a similar call started to be heard that schools should also remain open (at all costs).

Given the question of the extent to which the closure of the schools constituted an additional obstacle to the functioning of the business world, the question has since arisen as to the extent to which the call to keep the schools open was echoed by the interests of the school-going youth themselves or being motivated by the concern that the working parents of the school-going youth should no longer be inconvenienced by the closure of the schools at a time when they were needed on the working floor by the capitalist machinery.

2.2.9 In-Between Conclusion: Neoliberal Public Policy Choices Having Delivered Some of the Main Reasons for the Fast Spread of Covid-19

In view of the above—as before, in the run-up to the great financial crisis of 2008— (economic) neoliberalism can be pointed to as one of the main factors behind the disastrous course of the Covid-19 pandemic in many Western countries (in addition to some other countries that had mastered Western socio-economic thinking).

First, while many Asian countries responded to a first outbreak of Covid-19 on their territory—if only in one case—with the most severe tracking and elimination, containment, or similar measures, Western neoliberal governments found it far more appropriate to do nothing for a considerable time.

As Sumonja has argued¹³⁸:

As for the speed at which the virus has spread, the unprecedented physical connectivity in the word of global supply chains and low-cost flying was not the only contributing social factor. It should not be forgotten that the initial reaction from most governments to the outbreak was an exercise in 'epidemiological neoliberalism'. (...) This policy bluntly exposed the politics of the whole project: pretend to do nothing while making sure that the 'natural laws' of markets keep functioning, even if it means allowing people to get sick and die from 'just another flu'. Encapsulated in social-Darwinian 'survival of the fittest' notion of 'herd immunity', this solution in practice consisted of voluntary behaviour guidelines – business as usual, just wash your hands and keep your distance. This, in effect, turned a social problem into an individual matter, thus shaking off any responsibility the authorities had for the public health crisis.

Second, in the wake of what was to become the largest pandemic since the Spanish flu, the disastrous effects of 40 years of neoliberal privatisation of public health and nursing institutions were revealed in the most dramatic way as soon as Covid-19 appeared. Namely: A lack of staff and material capacity in underfunded public hospitals, and a total inability of the private for-profit health and nursing sector to provide even the most basic medical treatment in a health crisis. Summonia illustrates this point by referring to what happened in Italy. At the end of February, beginning of March, Italy was one of the countries hardest hit by the pandemic, but at the same time had to face ongoing austerity cuts in its national health system. This had resulted in "an extraordinary 50% reduction in hospital beds between 1997 and 2015, and 46,000 fewer hospital employees between 2009 and 2017". Add to this: (1) a practice of outsourcing medical and other services in search of cheap labour and (2) the fact that for-profit health institutions have no commercial interest in preparing for or preventing of health emergencies-e.g., by keeping a sufficient number of hospital beds, including intensive care units, empty, or by keeping a stock of masks and gloves available, or even by investing in the development of vaccines-and what you got was a century-long public health crisis that has exploded in the blink of an eye.¹³⁹ (Cf. Chaps. 5 and 6.)

¹³⁸Sumonja (2020).

¹³⁹Sumonja (2020).

Third, in response to the crisis, the resources of neoliberal states were, after a long period of hesitation (in most cases, plus or minus 6 weeks), finally mobilised in force, with compulsory closures imposed and branches of industry asked to produce emergency medical supplies. However, according to Sumonja, with a majority of workers out of work, global supply chains broke down, demand declined, production collapsed, corporate revenues fell sharply, and stock markets plunged.¹⁴⁰ At a time when lockdowns and similar measures succeeded in lowering mortality and contagion curves, although the Covid-19 virus was still circulating, "re-opening the economy" measures would be taken throughout the Western world. The virus could then simply start to spread again, and take lives to such an extent that valuable time was lost in several countries—including those with more intransigent rightwing neoliberal administrations, such as: the United States, the United Kingdom and Brazil', as well as many EU member states, even with government attempts to implement a strategy of "herd immunity" (a term previously reserved for farm animal management rather than human epidemiology). According to Saad-Filho¹⁴¹:

This strategy would inevitably lead to the elimination of the old, the weak and those with fragile health (thus cutting their (dead)weight on the fiscus), instead of rapidly imposing a lockdown that, although proven to reduce the loss of life, would hurt profits, while also showing that states can play a constructive role in social life. Mass pressure and the evidence of success in China and elsewhere eventually forced even the most reluctant governments to impose lockdowns, but – just as surly teenagers forced to empty the dishwasher – they often did so dragging their feet, grumbling contradictory excuses, making implausible threats and undermining their own policies with both incompetent implementation [and unclear communication]. In these countries, Covid-19 testing also tended to be restricted and health service staff were often left to cope with unmanageable workloads without adequate personal protection equipment: daily brushes with death gallantly accepted in the name of professionalism.

We shall now explore all these issues in some more detail in the following sections and chapters.

2.3 The EU's Utter Lack of Coordination in Responding Early to the Covid-19 Crisis During February and Early-March 2020

Throughout the first month and a half of the Covid-19 pandemic, EU countries stood mostly alone in responding to the Covid-19 crisis, while the EU itself did virtually nothing to prevent the spread of Covid-19 from the outset after Covid-19 had first been detected in France and Italy in late January 2020.

In the words of Herszenhorn and Wheaton¹⁴²:

¹⁴⁰Sumonja (2020).

¹⁴¹ Saad-Filho (2020).

¹⁴²Herszenhorn and Wheaton (2020).

They could have known. They should have prepared. They didn't listen.

According to Herszenhorn and Wheaton, in the initial period of Covid-19, the EU failed to listen to the warnings about the potential dangers of Covid-19. The EU "ignored experts who said that no country could fight the Covid-19 virus on its own". The EU "failed to recognise that the world's most advanced health systems were at risk of being overwhelmed". The EU also "failed to understand that drastic measures would be needed". In short, the EU did nothing and understood nothing, until Italy—patient zero among EU member states—in early March 2020, frantically began imposing travel restrictions that would hamper the personal travel and meeting plans of EU leaders themselves.¹⁴³

The European Commission, which has only limited power over health issues anyhow (to the extent that the EU is, in principle, only concerned with economic issues), could already have sensed the danger in January 2020. Yet it failed to convey a real sense of urgency until mid-March 2020. As a result, valuable time was lost, giving Covid-19 time to spread across the European continent and, via travellers from Italy to the United States, to the American continent as well.¹⁴⁴

Given that Covid-19 reached the European continent as early as the end of January 2020 (with the first case reported in France on 24 January 2020), and given the widely available information about what was happening in China, the EU and its Member States should have started to react much earlier, and not have waited until it was basically too late.¹⁴⁵

At the time, as Covid-19 was of little concern to European leaders,¹⁴⁶ these still expressed their belief that the likelihood of Covid-19 being imported from China into Europe was remote, regardless of the fact that the WHO had already declared the Covid-19 virus a "public health emergency of international concern" on 30 January 2020.¹⁴⁷ (Cf. Sect. 1.1.1.)

Still according to Herszenhorn and Wheaton, on 29 January 2020, the European Commissioners for Crisis Management, Janez Lenarčič, and for Health, Stella Kyriakides, held a joint press conference during which they announced that the European Commission had decided to activate its internal crisis response mechanism.¹⁴⁸ Indicating the little importance Covid-19 met throughout the EU, the event itself obtained little or no attention. By contrast, the WHO proceeded with doing its

¹⁴³Herszenhorn and Wheaton (2020).

¹⁴⁴Herszenhorn and Wheaton (2020).

¹⁴⁵Chadwick (2020).

¹⁴⁶Herszenhorn and Wheaton (2020).

¹⁴⁷Chadwick (2020).

¹⁴⁸Herszenhorn and Wheaton (2020).

[&]quot;Our press conference (...) took place in a press conference room, press room, almost empty, in the Berlaymont," Lenarčič recalled in an interview he later gave. "All the media attention was devoted to the last session of the European Parliament in which the British parliamentarians were still participating for the very last time. Of course, I understand, and I understood even then, that it was a highly emotional moment. It was a historic moment, but we somehow felt a lack of interest in what we were saying." (Quoted by Herszenhorn and Wheaton (2020).)

best to prepare the world for what was about to come: By the end of January 2020, 31 of the 53 Member States in the WHO European Region had the capacity to test for SARS-CoV-2, with all countries in the WHO European Region having established viral diagnostic capabilities for SARS-CoV-2. Almost all the WHO European Region countries also had installed national laboratories for SARS-CoV-2 testing.¹⁴⁹

In retrospect, Lenarčič and others admitted that there had been critical gaps in the preparedness of the EU and EU countries, and that the EU had shown little sense to the unpreparedness of the national governments of the EU Member States to adequately respond to the Covid-19 crisis. E.g., neither the EU, nor the European Centre for Disease Prevention and Control, had kept statistics on national stocks of medical equipment.¹⁵⁰

On 1 February 2020, the day after the WHO had declared a public health emergency of international concern (more precisely on 31 January 2020), technocrats from various EU Member States and agencies came together at a meeting of the Health Security Committee in order to debate the threat posed by Covid-19. At this occasion, only four EU Member States formally admitted that they might be facing shortages of personal protective equipment. In reporting about all of this, Herszenhorn and Wheaton even made the observation that China's announcement on 4 February 2020 that it was about to open a new 1000-bed "pop-up hospital" which had been built in less than 2 weeks in order to cope with the influx of Chinese Covid-19 patients requiring intensive care, did not impress EU leadership at all.¹⁵¹

The disinterest for the emerging Covid-19 threat was mostly to be observed at a political level and less so among career civil servants who had already experienced SARS and swine flu, and who themselves gradually began to recognise the need for "unsexy" measures, such as the purchase of ICU's and respiratory ventilators.¹⁵²

On 10 February 2020, at a press conference which was held at the EU's coordinated response centre in Brussels, Lenarčič attempted to make a new appeal to the EU Member States to start taking the Covid-19 threat more seriously. The Commissioner's message was still largely ignored. On the contrary, just three days afterwards, when the EU Member States' health ministers assembled in Brussels for an emergency meeting on 13 February 2020, they still demonstrated a huge resistance to taking coordinated action.¹⁵³

Herszenhorn and Wheaton rightly remarked that in China the Wuhan lockdown had begun just two days before the Lunar New Year festivities. According to these authors, this timing reflected the fear of the Chinese government that the holiday

In a separate interview, Health Commissioner Kyriakides echoed his message: "We are facing an unprecedented situation, and the measures taken at every stage have been based on the evidence at the time... with a lot of excellent scientific advice." (Quoted by Herszenhorn and Wheaton (2020).) ¹⁴⁹World Health Organization Regional Office for Europe (2020a), p. 9.

¹⁵⁰Herszenhorn and Wheaton (2020).

¹⁵¹Herszenhorn and Wheaton (2020).

¹⁵²Herszenhorn and Wheaton (2020).

¹⁵³Herszenhorn and Wheaton (2020).

festivities, and especially the travelling back and forth to this event, would have become a spreading event for the Covid-19 virus (cf. Sect. 1.1.1.). A month later, at the level of the EU and its Member States, there were made no similar precautions. On the contrary, on Friday 21 February 2020, in most EU Member States, schools closed for the Carnival holidays. In full compliance to the laissez-faire, laissez-passer paradigm (cf. Sect. 2.2.4.), the EU and its Member States simply let this happen, as a result of which families all over Europe were allowed to depart on ski holiday without any reservations in place. In retrospect, this situation—more specifically the masses of ski tourists returning home 1 or 2 weeks later—would be the start of an "avalanche of infections" which helped spreading Covid-19 all over the European continent.¹⁵⁴

Even at the end of February 2020, when Italy was forced to gradually start taking measures to prevent the spread of Covid-19 on its territory (cf. Sect. 2.4.2.3.1.), the EU and its other Member States were still content to watch by and do nothing.¹⁵⁵

On 25 February 2020, the health ministers of Italy and some of its neighbouring countries, namely Austria, France, Slovenia, Switzerland, Germany and Croatia, convened in Rome. Rather than taking serious measures to fight the Covid-19 threat, they easily agreed that closing their borders would have constituted a disproportionate and ineffective measure at that time. They similarly were in full agreement that major events should not be automatically cancelled.¹⁵⁶ Even on the next day, European Commission President Ursula Von der Leyen, still declared that the risk of Covid-19 infection was to be considered "low to moderate" in the EU, as there were "only" 275 confirmed cases in the EU at the time, including eight deaths, most of them among elderly people.¹⁵⁷

Still according to Herszenhorn and Wheaton, the only concern about the Carnival holiday week was that European Commission staff members might have to travel back and forth to high-risk areas in Italy. This led to the enactment of one of the few Covid-19 measures at the time, namely an obligation for Commission staff members to quarantine themselves (and to perform telework) upon their return to Brussels.¹⁵⁸

While the earlier mentioned tragic events occurred in China and gradually started to unfold in Italy as well, EU leaders remained primarily concerned about the side effects of a slowdown in the Chinese economy, showing little interest for the health threat that was looming for the European population.¹⁵⁹ A similar concern was raised about the possible economic side-effects of airport closures in Italy. Another concern that diverted the attention of the EU leadership from Covid-19, was the fear of a new migrant crisis.¹⁶⁰

¹⁵⁴Herszenhorn and Wheaton (2020).

¹⁵⁵Herszenhorn and Wheaton (2020).

¹⁵⁶Herszenhorn and Wheaton (2020).

¹⁵⁷Herszenhorn and Wheaton (2020).

¹⁵⁸Herszenhorn and Wheaton (2020).

¹⁵⁹Herszenhorn and Wheaton (2020).

¹⁶⁰Herszenhorn and Wheaton (2020).

EU leaders finally began to take the threat posed by Covid-19 more seriously when, at the end of February 2020, Italy formally requested EU assistance to deal with the disastrous events unfolding on its territory. Despite much rhetoric about European solidarity, this request was, surprisingly, largely refused.¹⁶¹ According to Herszenhorn and Wheaton, the sole response of the European Centre for Disease Control (ECDC) was to increase its assessment of the risk of Covid-19 clusters in Europe from "moderate" to "high".¹⁶² Unfortunately, by then it was too late: by that time, Covid-19 had already been on European soil for more than a month, spreading largely unnoticed and rapidly, with the return of the Carnival week ski holiday in early March 2020 as one of the most crucial spreading events.¹⁶³ One of the first cases of Covid-19 detected in the WHO European Region, more precisely in France, already dated back to 24 January 2020. By the end of February 2020, with virtually no action whatsoever taken in the meantime, Covid-19 was believed to have spread rapidly throughout the WHO European Region. Since this first detection case, it took Europe only 3 months to reach the first one million of Covid-19 cases, and 8 months to reach its first ten million cases.¹⁶⁴

With no policy response at all during the first month and a half after Covid-19 had reached the European continent, by mid-March 2020, the WHO European Region had become the epicentre of the epidemic, at the time accounting for 40% of all global cases.¹⁶⁵

Yet, even then, the fight against Covid-19 was still not high on the European Commission's political agenda. Instead, as reported upon by Herszenhorn and Wheaton, on Monday 9 March 2020, the European Commission chairwoman Ursula von der Leyen marked her 100th day in office with a press conference that mainly focused on the situation along the Turkish border, but hardly dealt with the spread of Covid-19.¹⁶⁶

Only after the situation in Italy (and especially in Italian hospitals) worsened by the day and Italy was forced to resort to announcing a regional lockdown on 8 March 2020 (which by the following day was extended to the whole of Italy, with all schools and non-essential shops closed), other EU countries finally started to react. Among these first reactions were the closing of internal borders with Italy and export bans of personal protective equipment.¹⁶⁷ The Italian government itself started enacting "progressive mitigation measures" on 9 March 2020 and on 11 March

¹⁶¹Herszenhorn and Wheaton (2020).

¹⁶²Chadwick (2020).

¹⁶³Herszenhorn and Wheaton (2020).

¹⁶⁴World Health Organization Regional Office for Europe (2020a), p. 2.

¹⁶⁵World Health Organization Regional Office for Europe (n.d.).

¹⁶⁶Herszenhorn and Wheaton (2020).

¹⁶⁷Chadwick (2020).

2020, with the intention of "radically limiting social interactions and preventing the spread of the virus".¹⁶⁸ (Cf. Sect. 2.4.2.3.1.)

From then on, the EU and its Member States finally started to take Covid-19 more seriously, with the situation in Italy becoming a true deterrent of the dangerousness of the Covid-19 virus when Italian doctors and nurses started to die in large numbers because they lacked adequate protective equipment in the hospitals where they were supposed to cope with an exponentially increasing number of Covid-19 patients.¹⁶⁹ Already on 20 March 2020, Italy reported the second highest number of confirmed Covid-19 cases in the world, second only after China.¹⁷⁰

From then on, things in Europe started moving extremely fast. According to Chadwick, the number of Covid-19 related deaths across the EU and the United Kingdom would rapidly rise in April 2020, with some Western European countries reporting hundreds of deaths per day. This also marked the start for taking Covid-19 containment measures, such as social distancing and lockdown measures: By early April 2020, half the world's population was reported to be under some form of Covid-19 restriction measure(s). By mid-April 2020, the number of Covid-19 cases on a global scale exceeded two million, with the IMF even announcing that the global economy would experience its worst year since the 1930s.¹⁷¹

As of 19 April 2020, more than 100,000 Covid-19 related deaths and more than one million Covid-19 infection cases had been recorded in Europe, at the time accounting for almost half of all global cases.¹⁷² As of 28 April 2020, 63% of global Covid-19 mortality was reported to originate from the WHO European Region.¹⁷³ Clearly, Europe was experiencing the peak of its first wave of the Covid-19 pandemic, while at the same time having obtained the status of being the epicentre of the pandemic.

By mid-April 2020, several European countries, such as Norway and Austria, started experiencing a decrease in their number of new daily Covid-19 cases, which they deemed a sufficient reason to start relaxing previously imposed Covid-19 restrictions. Soon, showing much more eager to abandon efforts to fight the Covid-19 pandemic than it had ever done to take them in the first place, the EU followed this example: Already on 15 April 2020, the European Commission and the European Council presented their roadmap for "a coordinated approach to lifting containment measures across the EU". On 17 April 2020, the European Parliament adopted its own resolution in which it expressed its views on the EU's coordinated

¹⁶⁸Saglietto et al. (2020). Data from the Centre for Systems Science and Engineering at Johns Hopkins University suggest a recorded number of 24,747 cases as of 15 March 2020, although they also suggest that the measures introduced by 11 March 2020 had already started to reduce the number of new cases within 3–4 days. (Cf. Saglietto et al. (2020).)

¹⁶⁹Chadwick (2020).

¹⁷⁰Saglietto et al. (2020).

¹⁷¹Chadwick (2020).

¹⁷²Chadwick (2020).

¹⁷³World Health Organization Regional Office for Europe (n.d.).

approach to dealing with the Covid-19 pandemic. But for giving a further illustration of the EU's priorities: Faced with ailing airlines and an as ailing tourism sector, a debate among the ministers of transport of the EU Member States was held at the end of April 2020 on important matter such as the rights of EU passengers and the rules applicable to cancelled tickets.¹⁷⁴

During the second half of April 2020, as a result of social distance and lockdown measures, the numbers of Covid-19 contamination cases and related deaths gradually began to fall. Considering what has been explained under Sect. 2.2.7 on the supremacy of economic interests, soon a call for the reopening of the economy gained ground all over Europe. By the end of April 2020 and the beginning of May 2020, more and more EU countries, hence, already decided to relax their Covid-19 measures,¹⁷⁵ although by May 2020, 54 of the 55 Parties to the International Health Regulations (IHR, 2005) in the WHO European Region still reported Covid-19 cases on their territory.¹⁷⁶

As of May 2020, the EU resumed its activities on assuring that travel in Europe could become possible again under certain conditions. E.g., an 13 May 2020, the European Commission published a series of initiatives aimed at providing "a common framework for revitalising the transport and tourism sectors across the EU"."¹⁷⁷ Furthermore, on 11 June 2020, the European Commission announced that internal borders could reopen again as of mid-June 2020, while the EU's external borders were announced to reopen as of 1 July 2020.¹⁷⁸ With Covid-19 far from gone, the OECD similarly added to the case for further reopening and easing of the Covid-19 measures, warning that the economic effects of the lockdowns would be both unprecedented and long-lasting, particularly in the euro area.¹⁷⁹

In June 2020, EU leaders failed in a first attempt of agreeing on a EUR 750 billion stimulus package that would have included debt sharing as a tool to help EU countries hardest hit by the Covid-19 pandemic.¹⁸⁰ The failed attempt to reach such an agreement were shortly after revived, leading to a historic EUR 1.82 trillion budget that was agreed upon on 21 July 2020. (Cf., furthermore, Sect. 4.2.3.)¹⁸¹

By 27 July 2020, the first wave of the Covid-19 pandemic had resulted in the loss of 180,000 lives in the 39 countries and territories of Europe.¹⁸²

After the summer of 2020 had brought some temporary relief, probably more because of the good summer weather than because of sound policy from the part of the EU and its Member States, as of mid-September 2020, Europe again witnessed a

¹⁷⁴European Sources Online (2020).

¹⁷⁵Chadwick (2020).

¹⁷⁶World Health Organization Regional Office for Europe (2020a), p. 2.

¹⁷⁷European Sources Online (2020).

¹⁷⁸Chadwick (2020).

¹⁷⁹Chadwick (2020).

¹⁸⁰Chadwick (2020).

¹⁸¹Chadwick (2020).

¹⁸²The Economist (2021).

sharp increase in Covid-19 cases, with numbers of contaminations and deaths even rising at a higher rate than during the previous peak moment of March 2020. During the first half of September 2020, more than half of the EU countries had already reported an increase of more than 10% of Covid-19 cases.¹⁸³ The ECDC called on EU Member States to rapidly implement newly targeted measures in order to address this worrying increase in Covid-19 cases which would soon be referred to as "the second wave" of the pandemic. This at the same time also implied that the "soft measures" which were still upheld at the time, were not working.¹⁸⁴

For the second time in a row, the response of the EU and EU Member States came too late. By the end of October 2020, Europe was clearly in the grip of a severe second wave of the Covid-19 pandemic. During the last week of October 2020, countries across Europe—including Belgium, Croatia, the Czech Republic, France, Germany, Hungary, Poland, Portugal, Slovakia, the United Kingdom and Ukraine—all recorded their highest number of daily cases since the start of the Covid-19 pandemic. Two of these countries stood out. As of 25 October 2020, Belgium and the Czech Republic reported 146 and 115 new daily cases per 100,000 inhabitants respectively, well above the EU average of 33 per 100,000.¹⁸⁵

On 6 November 2020, the New York Times published a detailed report in which it was held that the number of Europeans seriously ill with Covid-19 was higher than ever. The New York Times hereby referred to "new hospital data for 21 countries", from which it appeared that the new Covid-19 numbers exceeded those of the worst days during the spring of 2020. The New York Times also reported that, once again, the Covid-19 pandemic threatened to overwhelm the European "overburdened hospitals" and "exhausted medical workers".¹⁸⁶

According to the renowned newspaper, European numbers had begun to gradually increase as of September 2020, as a result of which, by 6 November 2020 and measured on a per capita basis, more than twice as many people in Europe had been hospitalised with Covid-19 than in the United States. Still according to the New York Times, in the Czech Republic, the most affected European country at the time, "one in 1,300 people were hospitalised with Covid-19". And in Belgium, France, Italy and several other Western European countries, a new batch of patients had filled hospitals at levels even unseen during the months of March and April 2020.¹⁸⁷

According to the UK Office for National Statistics, during the autumn and early winter of 2020, especially some Central and Eastern European countries experienced extreme high levels of excess mortality. Western European countries similarly experienced some excess mortality, but at lower levels than during the spring of 2020. Of all European countries, Poland was reported to have the highest cumulative

¹⁸³AJMC Staff (2021).

¹⁸⁴Chadwick (2020).

¹⁸⁵Time (2020).

¹⁸⁶McCann and Leatherby (2020).

¹⁸⁷McCann and Leatherby (2020).

excess mortality (so-called "age-standardised relative cumulative mortality rate" (or "ASMR")) which, as of 18 December 2020, was reported to be 11.6% higher than the 5-year average. The highest weekly peak in excess mortality (ASRMR) during the autumn of 2020 was, however, recorded in Bulgaria, at 112.3% (in the week ending on 27 November 2020).¹⁸⁸ This is illustrated in Table 2.2 which points out where people were ill with Covid-19 on 6 November 2020.

According to the already above-quoted special report that appeared in the New York Times, it appeared that most European policymakers had, once again, "waited too long to impose a full lockdown", in this way having resisted early warning signs dating back to the late summer of 2020 that the situation was worsening again. By November 2020, these delays would prove very costly. As a result, in the words of the New York Times' special report, during the fall of 2020, European countries had "to start scrambling desperately to find solutions". E.g., Swiss authorities approved the deployment of "up to 2500 military personnel" in order to assist hospitals in dealing with the rise in Covid-19 infections, while in other countries, such as France, it was decided to postpone elective surgery. And in Belgium, chronic staff shortages even made some hospitals to ask asymptomatic doctors and nurses who had tested positive for Covid-19 to continue working.¹⁸⁹

Public health officials across Europe soon faced additional challenges during the second wave of the Covid-19 pandemic. E.g., the cold autumn and winter weather made people spend more time indoors, which further facilitated the spread of the Covid-19 virus. Moreover, after having endured lockdown and similar restrictions for the most part of 2020 already, many people across Europe started experiencing what has been referred to as "Covid-19 pandemic fatigue". This complicated enforcement efforts in many countries even more (= on this so-called "Covid-19 pandemic fatigue"; cf., furthermore, Sect. 2.4.3.3.4.)¹⁹⁰

Finally, the New York Times also reported that, in what was referred to as "a tense exchange at the French National Assembly", Olivier Véran, the French health minister, had described the situation in the French hospitals as being filled with young patients in critical condition.¹⁹¹

Still according to the assessment made by The New York Times, the huge second wave of Covid-19 infection in Europe was to a substantial part due to the relative normality Europe had allowed itself during the summer of 2020. Unlike the United States, where the epidemic had already reached a second peak as early as July 2020 and where Covid-19 had been breaking records of contaminations and deaths ever

¹⁸⁸UK Office for National Statistics (2021), accessed 18 April 2021.

According to the same source, cities in Central and Eastern Europe suffered high excess mortality during autumn and winter 2020; Sofia (112.5%) and Warsaw (103.8%) had the highest weekly excess mortality rates, but their rates were still much lower than those of affected cities and regions in spring 2020, e.g., Madrid (452.0%), Barcelona (266.0%) and London (228.4%). (Cf. UK Office for National Statistics (2021), accessed 18 April 2021.)

¹⁸⁹McCann and Leatherby (2020).

¹⁹⁰McCann and Leatherby (2020).

¹⁹¹McCann and Leatherby (2020).

	Patients in hospital per 100,000	Spring peak	% of spring peak
Czech Republic	77	4	1952
Belgium	63	50	126
Hungary	56	7	798
Poland	51	9	556
Slovenia	51	6	914
Bulgaria	49	6	880
Spain	43		
Italy	43	55	78
France	42	48	88
21 European countries	37	31	119
Luxembourg	35	35	100
Slovakia	32	4	785
Austria	26	12	213
Croatia	25	9	276
Portugal	23	13	181
United Kingdom	19	30	65
United States	16	18	87
Lithuania	15		
Latvia	13	2	561
Ireland	6	18	33
Estonia	3	12	30
Denmark	3	9	36
Finland	1	4	30
Norway	1	6	19

 Table 2.2
 Where people are ill with Covid-19 by 6 November 2020 [Source: Herszenhorn and Wheaton (2020)]

since, during the summer of 2020, people were travelling through Europe, students were returning to campuses (especially in September 2020) and many large gatherings simply resumed, all while the Covid-19 virus continued to spread.¹⁹²

Finally, in November 2020, many European countries again started resorting to social distancing and containment measures, while experts across Europe eventually reached the conclusion that the increase in hospitalization cases and Covid-19 related deaths all implied that the restrictions had simply been lifted too quickly before and during the summer of 2020.¹⁹³

Throughout 2020, the WHO European Region was reported to have experienced more than 26 million confirmed contamination cases of Covid-19, and more than 580,000 Covid-19 related deaths. According to Kluge, in the 27 countries participating in the so-called "EuroMOMO all-cause excess mortality surveillance", nearly 313,000 excess deaths were reported for the year 2020. This marked a threefold

¹⁹²McCann and Leatherby (2020).

¹⁹³Chadwick (2020).

increase in excess deaths compared to 2018, and almost a fivefold increase of excess deaths compared to 2019.¹⁹⁴

At the beginning of 2021, more than 230 million people in the WHO European Region were living in countries under full national lockdown, with several other countries expected to announce further lockdown measures. Transmission rates in the WHO European Region were, moreover, reported to be still very high. As of 6 January 2021, across all countries and territories in Europe, nearly half had a 7-day incidence of more than 150 new cases per 100,000 population, while a quarter reported an increase of more than 10% in the incidence of cases during the preceding 2 weeks. Furthermore, over a quarter of EU Member States and territories reported both a high incidence of Covid-19 cases and their health systems being under high pressure.¹⁹⁵ This is illustrated in Table 2.3 which gives an overview of some Covid-19 related figures within the EU/EEA during weeks 7 and 8 of 2021.

2.4 Covid-19 Response in Some Specific European Countries

2.4.1 First Indications of Trouble (March 2020)

2.4.1.1 An Italian Wakeup Call

By the end of February 2020, it was clear that Covid-19 was present on the European continent, with Italy as its first target, leading to scenes of horror that emerged from the Italian city of Bergamo and that surprised the entire Western world which until then had not taken the appearance of Covid-19 in China very seriously. Italy's painful example showed the rest of the European continent (in the words of German President Frank-Walter Steinmeier) "the depth and dimension of the crisis". However, Italy also showed the rest of Europe how things could be turned around, at least temporarily. Indeed, in response to the dramatic death toll that initially emerged in the Lombardy region, the Italian government of Prime Minister Giuseppe Conte quickly sprang into action. The Italian government's efforts eventually enabled Italy to flatten the curve more quickly than expected, ¹⁹⁶ while however not completely defeating the Covid-19 virus. (Cf., furthermore, Sect. 2.4.2.3.1.)

Probably the worst thing that emerged from the Italian experience has been that, at a time when Covid-19 had become spectacularly known because of what happened in Italy, due to a combination of events, on the one hand, spreading events

¹⁹⁴Kruge (2021).

¹⁹⁵Kruge (2021).

¹⁹⁶Karnitschnig (2020a).

According to Karnitschnig, "Conte also argued for a generous European recovery fund, playing a key role in convincing Merkel to drop Germany's resistance to the joint debt issue, proving that even the stone-faced chancellor was not immune to Italian charm". (Karnitschnig (2020a).)

	Sum of	Sum of	14-day case notification rate per 100,000 inhabitants for the reporting	14-day death notification rate per 1,000,000 inhabitants for the reporting	Reporting period YYYY
EU/EEA	cases	deaths	period	period	WW
France	3,755,968	86,454	431.97	68.92	2021-07 and 2021-08
Spain	3,204,531	69,609	249.82	87.89	2021-07 and 2021-08
Italy	2,925,265	97,699	341.01	69.11	2021-07 and 2021-08
Germany	2,447,068	70,105	129.96	60.47	2021-07 and 2021-08
Poland	1,711,772	43,793	316.86	78.01	2021-07 and 2021-08
Czechia	1,240,051	20,469	1395.10	207.50	2021-07 and 2021-08
Netherlands	1,091,056	15,565	346.23	42.45	2021-07 and 2021-08
Portugal	804,956	16,351	173.83	91.30	2021-07 and 2021-08
Romania	804,090	20,403	211.06	49.56	2021-07 and 2021-08
Belgium	772,875	22,111	279.00	33.50	2021-07 and 2021-08
Sweden	666,270	12,845	487.64	12.88	2021-07 and 2021-08
Austria	456,112	8414	294.55	35.16	2021-07 and 2021-08
Hungary	432,925	15,058	451.67	133.68	2021-07 and 2021-08
Slovakia	308,925	7270	561.96	241.49	2021-07 and 2021-08
Bulgaria	247,038	10,191	249.72	81.57	2021-07 and 2021-08
Croatia	243,064	5537	131.56	48.79	2021-07 and 2021-08
Ireland	219,592	4319	201.63	74.73	2021-07 and 2021-08
Denmark	211,692	2365	118.38	10.99	2021-07 and 2021-08
Lithuania	199,398	3253	302.82	61.92	2021-07 and 2021-08
Greece	191,100	6504	177.00	35.27	2021-07 and 2021-08

Table 2.3 Figures on Covid-19 within the EU/EEA, in weeks 7 and 8 of 2021 [Source: European Centre for Disease Prevention and Control (2021)]

(continued)

EU/EEA	Sum of cases	Sum of deaths	14-day case notification rate per 100,000 inhabitants for the reporting period	14-day death notification rate per 1,000,000 inhabitants for the reporting period	Reporting period YYYY- WW
Slovenia	190,324	4113	517.31	64.89	2021-07 and 2021-08
Latvia	86,186	1618	496.94	87.54	2021-07 and 2021-08
Norway	71,002	623	83.86	5.59	2021-07 and 2021-08
Estonia	66,628	589	1038.47	66.22	2021-07 and 2021-08
Finland	58,064	750	140.17	6.15	2021-07 and 2021-08
Luxembourg	55,425	638	405.84	49.51	2021-07 and 2021-08
Cyprus	34,707	231	247.07	11.26	2021-07 and 2021-08
Malta	22,657	316	527.05	40.81	2021-07 and 2021-08
Iceland	6054	29	5.77	0.00	2021-07 and 2021-08
Liechtenstein	2575	54	90.33	25.81	2021-07 and 2021-08
Total	22,527,370	547,276	312.32	69.59	

 Table 2.3 (continued)

such as (1) the returning ski tourists at the end of February-beginning of March 2020 (cf. Sect. 2.4.1.2.) and (2) the Carnival festivities in some European countries around the same and, on the other hand, a total lack of policy response from EU leaders and European governments, Covid-19 still managed to spread across the whole European continent.

When European leaders finally started to wake up to what was happening in Italy, it was simply too late: the Covid-19 virus was everywhere in Europe and it was there to stay for an extremely long time.

2.4.1.2 The Role of Ischgl in the Contamination of the European Continent Revisited

Shortly after Covid-19 began to spread in Europe, Austria was heavily criticised for having failed to properly deal with a major, early outbreak of Covid-19 in the ski resort of Ischgl in February 2020, and for in this manner having contributed to the spread of Covid-19 throughout Europe. (Cf. Sect. 2.2.3.2 already) It was indeed

mainly in the pubs and restaurants in Ischgl that, during the Carnival vacation period, many ski tourists from all over Europe contracted Covid-19 and returned home with it. At the same time, local authorities and pub owners in Ischgl would continue to downplay their role in this, although it should have been clear that the Covid-19 virus was present in the ski resort in February 2020, and that no precautions had been taken to avoid contamination. All this made the Ischgl pubs and restaurants outbreak one of the major early spreading events in Europe.¹⁹⁷

According to the findings of an independent expert commission that thoroughly investigated the Covid-19 debacle in the Austrian ski resort of Ischgl in February 2020 and that released its investigation report on 10 October 2020, local Austrian authorities had piled up mistake after mistake after the discovery of a first Covid-19 outbreak in February 2020. According to the report, the Ischgl authorities had failed to keep up with the Covid-19 outbreak, while the central Austrian government allowed tourists to return home far too quickly, which gave Covid-19 the chance to easily spread to many other countries.¹⁹⁸

According to the report, the local authorities made a series of assessment errors with serious consequences, not least because of "great time pressure and workload". From this report, it has appeared that at the beginning of 2020, thousands of people were infected in Ischgl, a small town that at the time was also known as the "Ibiza of the Alps". Covid-19 was reported to have been be circulating in the après-ski bars. This made Ischgl, popular for its nightclubs and après-ski parties, the epicentre of the Covid-19 epidemic on the European continent. An estimated 6000 tourists from 45 countries were reported to have been infected there and to, from there, having further spread the Covid-19 virus all over Europe. The report points out that although it was known that there were local Covid-19 infections, no action had been taken and that, at the end of their respective ski holidays, tourists had simply been allowed to return home without any quarantine measures in place. As a result, winter sports enthusiasts simply took the Covid-19 virus back to their home countries across the European continent. The report is not only critical of the failure of the local authorities of Ischgl, but also of the Austrian Chancellor's office and of the Austrian Ministry of Health. In particular, the report criticises the total lack of communication between the national authorities and the responsible local authorities in the region. The report, furthermore, mentions that the Austrian authorities, although aware of the Covid-19 epidemic, allowed an uncontrolled exodus of ski tourists to their home country. The report thereby states that foreign guests, at the end of their holiday, should simply not have been allowed to leave immediately and without any quarantine measures. The report even considers that the Tyrolean state authorities deliberately concealed the seriousness of the Covid-19 epidemic in the ski resort in order to avoid of having to deal with it.¹⁹⁹

¹⁹⁷Karnitschnig (2020a). Cf., furthermore, Cooney (2020).

¹⁹⁸ van der Mee (2020).

¹⁹⁹van der Mee (2020).

The October 2020 report also mentions that, after the Covid-19 outbreak in Ischgl during February 2020, on 7 March 2020, a bartender at the Kitzloch bar in Ischgl tested positive for the Covid-19 virus. In the said report, he is considered as "patient zero".²⁰⁰

However, other research contradicts this latter conclusion.

According to Kreidl et al. (whose findings have been cited hereafter), the first documented case of Ischgl was not the abovementioned bartender, but rather a woman who had stayed in Kühtai (Tyrol) from 24 to 26 January 2020, and who had before been infected by a Chinese instructor in Starnberg (Germany), apparently between 20 and 22 January 2020. According to the quoted researchers, this case must hence be considered as a German case, to the extent that said woman was diagnosed in Munich (Germany), on 28 January 2020. On 25 February 2020, two more cases that had been imported from Italy were diagnosed in Innsbruck, but again no secondary cases appeared in Austria itself. Still according to the same researchers, the first three infection cases among Austrian residents were diagnosed on 27 February 2020, in Vienna. Also according to Kreidl et al., on 12 March 2020, the first fatality of Covid-19 in Austria occurred. It concerned a 69-year-old Viennese man who had died in a Vienna hospital after having participated in a cruise in Italy. On 6 March 2020, three further Austrian cases—with contaminations believed to have occurred in Austria itself-were reported in Tyrol, all of these linked to the ski resort of Ischgl.²⁰¹

Of the first 14 Icelandic Covid-19 cases that were infected in Ischgl, 11 had already returned to Iceland by 29 February 2020. From this, Kreidl et al., conclude that the incriminated bartender who tested positive for Covid-19 on 7 March 2020, cannot have been the primary case, nor a super spreader. For Kreidl et al., an undetected transmission of Covid-19 was already occurring in Ischgl before the first laboratory-confirmed cases among the inhabitants of Ischgl.²⁰² Kreidl et al., therefore consider the aforementioned bartender as "a scapegoat" rather than as "a super propagator", without however minimizing the fact that the noisy and crowded après-ski bars were a perfect scenery for super spreading occurrences. The conclusion reached by these researchers is that a silent and undetected transmission of SARS-CoV-2 was most likely already taking place in Ischgl some time before the first laboratory-confirmed cases were made known. The crowded conditions in the après-ski bars, with several infected staff members showing mild symptoms during what is in normal circumstances the flu season (from which it may be suspected that these people probably thought that they had the flu), most probably resulted into an uncontrolled transmission of the Covid-19 virus. Then, in cable cars, in queues and in other places where ski tourists gather for prolonged periods of time, as well as during the weekly exchange of about 150,000 "day-trippers" in the Tyrol region which usually happens on a Saturday, the Covid-19 virus has probably been further

²⁰⁰van der Mee (2020).

²⁰¹Kreidl et al. (2020), p. 1.

²⁰²Kreidl et al. (2020), p. 1.

spread on a large scale. Be this as it may, as of 12 May 2020, Tyrol was believed to be the most affected province in Austria, with 3518 confirmed Covid-19 contamination cases, and with 107 Covid-19 related deaths. Still according to Kreidl et al., the district of Landeck, in which Ischgl is located, reported the highest number of cases (n = 991) per district.²⁰³

In any case, at the time when the first Covid-19 cases appeared in Ischgl, 10,000 winter sports tourists were staying in the Alpine village. The aforementioned Kitzloch bar was reportedly often so full that staff members had to use whistles to move through the crowd, while visitors played games where they had to spit pingpong balls from their mouths into the drinks of other customers. It was only after all the bar staff members had tested positive for Covid-19 that the bar finally closed. In the meantime, unintentional visitors, who had not been informed about the reasons for the closure of the Kitzloch bar, continued to party in other bars in Ischgl.²⁰⁴

Although there were early indications that Ischgl was responsible for contributing to the spread of Covid-19 across Europe, local authorities would long afterwards continue to downplay their role in the events. For example, in early March 2020, Icelandic authorities had warned their Austrian counterparts of the danger of an outbreak because, after their return from Ischgl, some Icelanders had been found to have contracted Covid-19, with two of these Icelanders stating that they might have fallen ill on the return flight. These statements were then used by the Tyrolean authorities in their public relations machine to deny any responsibility from their part. In an official press release, local authorities simply stated that the Icelanders had most likely been contaminated on the return flight and that this implied that Ischgl had no responsibility for the events. From the investigation report made public in October 2020, it moreover appeared that Tyrolean officials were far more concerned about Tyrol's reputation, than about the spreading events themselves.²⁰⁵ It was only after the number of confirmed cases in Ischgl began to rise dramatically that the Austrian federal government finally announced the complete closure of Paznaudal. This, in turn, led to a chaotic exodus of thousands of tourists and seasonal workers who rather should have stayed in the quarantined valley, which most probably has made things even worse than they already were. This was only 6 days after the Kitzloch bartender had tested positive.²⁰⁶

2.4.1.3 Attempts at Classification

If one thing has become clear in the aftermath of the events in Italy and around the returning ski tourists in late February and early March 2020, it is that, due to a lack of

²⁰³Kreidl et al. (2020), p. 7.

²⁰⁴ van der Mee (2020).

²⁰⁵ van der Mee (2020).

²⁰⁶van der Mee (2020).

an overall EU policy, each European country would mainly start trying to tackle the Covid-19 virus in its own way.

According to Stiglitz, this was no different elsewhere. Around the world, there have thus been "marked differences" in the way the Covid-19 pandemic has been handled with by public authorities, both in terms of the success, or failure, of countries in protecting the health of both their citizens and their economy, as with regard to the extent of the inequalities in approach.²⁰⁷

Stiglitz identified the following reasons for these differences (quoted directly)²⁰⁸:

- (1) The pre-existing state of health care and health inequalities.
- (2) The preparedness of a country and the resilience of its economy.
- (3) The quality of public response, including reliance on science and on experts.
- (4) The confidence citizens had in their government's policies.
- (5) How citizens balanced their individual "freedoms" to do what they wanted with their respect for others, recognising that their actions generated externalities.

Among the EU member states, there was, hence, no unanimous or coordinated approach whatsoever, with the EU itself remaining remarkably aloof. As a result, individual European countries all would react in their own when dealing with the spread of Covid-19 on their territory.

The response of a random selection of European countries is examined below, with countries ranked according to their success rate in the first few months after the outbreak of the Covid-19 pandemic (and without prejudice to whether their actions have been as successful, or less successful, afterwards).²⁰⁹

Three groups of countries were thus distinguished, namely:

- (1) European countries that (initially) reacted well.
- (2) European countries that (initially) responded (more) poorly.
- (3) European countries that (from the beginning) have responded (rather) miserably.

It is hereby striking that some countries that reacted poorly to the Covid-19 epidemic at the outset, such as Belgium and France, have subsequently failed to reverse this trend, illustrating once more that the only way to combat a new virus is to resort to an elimination strategy, rather than to a wide set of unrelated measures that allow the virus to persist. Unfortunately, the latter (elimination) approach has not been chosen by any of the European countries, a mistake that would drag the European continent for more than a year into the biggest health crisis it has witnessed in more than a century.

The fact that countries use different counting methods hereby posed a particular problem when comparing the effect of Covid-19 between countries: For example,

²⁰⁷Stiglitz (2020a, b, c).

²⁰⁸Stiglitz (2020a, b, c).

²⁰⁹One could even raise the (probably rhetorical) question of whether a Western country has been successful in combating Covid-19, certainly in comparison to the much more successful actions of various other countries, including mainly Asian countries, but also, for example, New Zealand.

Sciensano in Belgium counted suspected and confirmed deaths by Covid-19, while Hungary only counted hospital deaths with laboratory confirmation. As a result, the UK Office for National Statistics simply begun to ignore these national labels and just started looking at excess mortality compared to the 2015–2019 average, normalising the figures to a "standard European" population, in order to account for differences in population size and age structure.²¹⁰

2.4.2 Response of European Countries During the First Year of the Covid-19 Pandemic (±March 2020 to ±March 2021)

2.4.2.1 Countries That Have Reacted—More or Less—Decently

2.4.2.1.1 Nordic and Baltic States

The Nordic countries—Norway, Iceland, Finland and Denmark—all came through the first wave of the Covid-19 pandemic in good shape, which raises the question of whether the fact that all four countries were led by women at the time is not a coincidence. Except for Sweden, the rapid imposition of restrictions by the Nordic countries at the beginning of the Covid-19 crisis helped to mitigate the infection rate from the outset. It even allowed the governments of these four countries to keep shops open and relax most controls in the summer of 2020. This has saved lives, while limiting the economic impact.²¹¹

The same applies to the neighbouring Baltic countries, which were also spared in the first wave of the Covid-19 pandemic.²¹²

In both groups of Nordic and Baltic countries, the effectiveness of the public administration in deploying testing and the willingness of the general public to comply with restrictions were reportedly key to the successful reduction of the spread of Covid-19 at an early stage of the pandemic.²¹³

In Norway, after the March 2020 restrictions, the number of infections initially fell sharply. On 7 May 2020, the government announced the reopening of the

²¹⁰Spiegelhalter and Masters (2021).

²¹¹Karnitschnig (2020a).

Finland's millennial Prime Minister, Sanna Marin, has been among those most praised for showing, despite her relative inexperience, grace under pressure. While Finland (and the rest of the region) has a number of natural advantages such as geographical isolation, strong social cohesion and a relatively small population, Marin had only been in office for 4 months when the pandemic struck. Finland's famous crisis preparedness offered the new leader a practical model, but in the end it was through the efforts of her government that Finland handled the crisis very well. (Cf. Karnitschnig (2020a).)

²¹²Karnitschnig (2020a).

²¹³Karnitschnig (2020a).

economy. This reopening of the economy would, moreover, be based on a phased timetable in function of the further spread of the Covid-19 virus. In addition, non-essential travel to and from other Nordic and EEA countries again became permitted, although such travel was made provisional upon quarantine requirements and upon the level of both the number of Covid-19 contamination cases and the measures the other countries resorted to for preventing the further spread of the Covid-19 virus.²¹⁴ However, despite these precautions, by the end of July 2020, new cases started to increase again, indicating that Norway had also abandoned the first wave containment measures too early.

In Iceland, as of 4 March 2021, only 6058 domestic cases of Covid-19 had been confirmed, of which 11 were still active. Only 29 people had died. Surprisingly, the cure rate for the latest wave of infections in Iceland was reported to be over 99%. Iceland's strategy for containing the disease was a national pandemic plan that bore enormous similarities to the approach of some Asian countries, with an emphasis on mass testing, contact tracing and quarantines. Less than a year after the first cases of Covid-19 appeared, vaccination of the population was rolled out effortlessly, subject to the availability of vaccines. Nevertheless, the Icelandic economy was hit hard: GDP fell by 6.6% in 2020.²¹⁵

In Finland, throughout the Covid-19 pandemic, the number and occurrence of Covid-19 contamination cases remained relatively low (among the lowest in Europe). In order to deal with the Covid-19 crisis, in addition to the measures taken by the EU, the Finnish government had itself resorted to various fiscal, liquidity and regulatory measures which-in combination with the existing automatic stabilisers—would (when fully utilised) provide a stimulus of almost 30% of GDP.²¹⁶ In addition, on 16 March 2020, the Finnish government made use of the so-called Emergency Powers Act. This Act made it possible to close the country's borders, to restrict domestic travel and to extent service duties on essential personnel. Unemployment in Finland rose to almost 12% in March 2020. As the containment measures soon proved successful, travel limitations to and from the Helsinki region were already abandoned on 14 April 2020. As of 4 May 2020, the Finnish government announced a plan to replace the general containment restrictions by more specific containment measures. This led, on 14 May 2020, to the reopening of primary and lower schools and to the reestablishment of cross-border essential travel. On 1 June 2020, this strategy of releasing containment measures was completed by a reopening of restaurants and some other public facilities, while the limits for public gatherings were raised from 10 to 50 people. On 31 July 2020, public events of more than 500 people were again allowed. On 16 June 2020, the Finnish government also announced that the powers under the Emergency Powers Act would no longer be used, through which the state of emergency of the country was also ended. On 23 June 2020, the Finnish government also ended internal border control

²¹⁴International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²¹⁵ Julie (2021).

²¹⁶International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

and movement restrictions between Finland and other countries with a similar low number of Covid-19 contamination cases of no more than 8 new cases per 100,000 people during the previous 14 days. On 13 August 2020, the government passed resolutions on recommendations for wearing face masks and on working remotely. However, by 18 August 2020, the Finnish government had to reinstate travel bans between Finland and several countries, based on higher Covid-19 contamination rates during the preceding 14 days. This indicated that, like many other EU countries, Finland had failed to escape the effects of the second wave of the pandemic. On 11 September 2020, the Finnish government thus decided to reinstall internal border controls and travel bans, effective as of 19 September 2020. The Finnish government, in addition, issued a resolution on a "hybrid strategy" for cross-border traffic and travel. This strategy called for a fast increase in cross-border testing and analysis capacity, with as aim to have at least 10,000 tests/day.²¹⁷

As soon as it became clear that the second wave of the Covid-19 pandemic was starting to affect Finland, on 24 September 2020, the Finnish government decided to reintroduce tighter travel bans between Finland and several other Schengen countries. As of 8 October 2020, the Finnish government also imposed new restrictions on the opening and licensing hours of restaurants and bars. On 20 November 2020, these restrictions on the activities of catering enterprises had to be continued in five regions, due to the epidemiological conditions in these regions. On 19 November 2020, the Finnish government decided to extend the restrictions on entering Finland until 13 December 2020, due to the acceleration of the Covid-19 outbreak elsewhere. The Finnish government continued to reiterate that Finnish citizens and residents would avoid all non-essential travel to high-risk countries.²¹⁸ On 4 February 2021, the Finnish government submitted a proposal to Parliament to prolong the duration of the temporary provisions of the Communicable Diseases Act concerning restrictions on catering businesses until the end of June 2021.²¹⁹

However, due to the rise of the third wave of the Covid-19 pandemic, as of 1 March 2021, the Finnish government resorted to a new state of emergency and again decided to close restaurants and bars until 28 March 2021.²²⁰

Already on 10 December 2020, the government passed a resolution on the Finnish Covid-19 vaccination strategy: Vaccination in Finland was to be administered on the basis of medical risk assessments, with priority given to health and social care laborers dealing with Covid-19 patients, home-based laborers, the elderly, and people at high risk of serious illness because of underlying medical conditions.²²¹ Finland also participated in the (initially disastrous) joint supply of

²¹⁷International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²¹⁸International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²¹⁹International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²²⁰International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²²¹International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

vaccines to the European Union. The cumulative number of Covid-19 vaccinations per 100,000 people was about 8900 as of 4 March 2021.²²²

As of 5 March 2021, Denmark had reported a total of 212,798 cases. The country had a total of 2370 deaths. Denmark is one of the EU countries that has proceeded rapidly with its vaccination campaign, choosing to leave intervals between the two doses of the vaccine in order to vaccinate as many people as possible. 466,430 people had received the first dose of the Covid-19 vaccine. Denmark was also about to launch "coronapas", a digital pass for travelling, eating out or visiting cultural venues.²²³

2.4.2.1.2 Greece

The first official case of Covid-19 in Greece was reported on 26 February 2020. The Greek government responded quickly with strict containment measures, including: (1) a national lockdown that submitted all but essential travel and economic activities to restrictions, (2) school closures, (3) restrictions on internal travel, (4) travel limitations for visitors from third high-risk countries; and (5) quarantines for both international visitors and Greek citizens returning from foreign countries.²²⁴

When Covid-19 first reached the European continent, Greece's economy was still in recovery from the depression it had suffered as a result of the 2007–2008 debt crisis and the austerity measures international organisations, such as the International Monetary Fund and the EU itself, had imposed on Greece. In addition, Greece had one of the oldest populations in Europe, which was believed to make the country more vulnerable to the worst imaginable impacts of the Covid-19 virus. However, under the able leadership of Prime Minister Kyriakos Mitsotakis, the Greek government quickly and effectively convinced the Greek population that they had to take the Covid-19 pandemic seriously. The Greek population, moreover, obeyed, committing themselves to one of the most severe blockades in Europe, which included the closure of schools and churches. The radical measures taken by Greece from March 2020 onwards soon helped to contain the Covid-19 pandemic, at the same time putting a huge strain on the Greek economy. Because of this, already in early May 2020, the Greek government deemed it necessary to ease restrictions, in the hope of saving at least a part of the 2020 tourist season, one of the main sources of revenue for the Greek economy.²²⁵ As a result, already in the second half of the spring of 2020, the Greek government implemented a gradual reopening of the Greek economy which came close to a full normalisation of economic activity (except for major public events) as of 1 July 2020.²²⁶ Thereafter, for most of

²²²International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²²³ Julie (2021).

²²⁴International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²²⁵Karnitschnig (2020a).

²²⁶International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

2020, the Greek government, by and large, successfully managed to keep Covid-19 under control.²²⁷

Due to an increase in contamination cases during the second wave of the Covid-19 pandemic, the Greek government found itself compelled to announce a new national lockdown as of 7 November 2020, although some key businesses could remain open.²²⁸

As of 5 March 2021, 197,279 cases had been reported in Greece since the start of the Covid-19 pandemic. There had, moreover, been 6597 deaths in the country. 643,218 people had received a first dose of Covid-19 vaccine.²²⁹

2.4.2.1.3 Germany

Germany recorded its first confirmed case of Covid-19 a day later than Greece, namely on 27 January 2020.²³⁰

In response, the German government adopted a series of measures in the hope of containing the spread of the Covid-19 virus. These included (1) border closures, (2) closures of both schools and non-essential businesses, (3) mandatory social distancing, mandatory masking and (4) a ban on public gatherings. After these measures caused a gradual decline in the number of contamination cases and deaths as of the beginning of April 2020, also in Germany the measures wear eased. Because of this, infections would soon be on the rise again, with new daily cases gradually increasing as of the end of July 2020, soon to exceed the previous peak.²³¹ Most probably because of the efficient German health care system, mortality rates in Germany remained low overall compared to other EU countries. One of the probable explanations is that, contrary to EU countries such as Italy, Spain and Portugal, Germany itself had never been subject to EU neoliberal austerity measures, which had allowed the country to maintain a high number of both regular hospital beds and intensive care units (at levels even more than twice those of the abovementioned southern EU countries that themselves had been subject to severe neoliberal austerity measures). (Cf., furthermore, Sect. 5.2.1.2.)

Germany's main problem in responding to the Covid-19 pandemic has not so much been the quality of its health care system, but rather its disjointed federal governance structure. Germany's constitutional system, more precisely, gave responsibility for matters such as health and education to the 16 German states. This made it difficult for the federal government led by Chancellor Angela Merkel to impose national policies. Not unlike the situation in Belgium that faced similar problems (cf. Sect. 2.4.2.3.6.), this attributed to the occurrence of a patchwork of

²²⁷Karnitschnig (2020a).

 ²²⁸ International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).
 ²²⁹ Julie (2021).

²³⁰International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²³¹International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

rules and regulations to fight the Covid-19 pandemic which were for the German population more often confusing than helpful.²³² Even so, Merkel's persistently called on the German population to take both face mask wearing and social distancing seriously, which helped Germany to keep Covid-19, more or less, under control, especially so during the first wave of the Covid-19 pandemic.²³³

Angela Merkel's government also resorted to some more controversial measures which even questioned the foundations of the EU legal system. More precisely, on 4 March 2020, the German government decided to issue an export ban on all kinds of medical protective equipment. The ban was broadly scoped and applied to all kinds of medical protective equipment in a broad sense of the word, such as goggles, gowns, suits, face shields, gloves, and surgical masks. The ban was, moreover, put in place quickly. It has hereby been assumed that Germany had decided to issue this ban out of fear of running out of the most basic medical supplies itself at a time when the Covid-19 pandemic was hitting Germany extremely hard. The ban, furthermore, coincided with other unusual emergency health measures, such as ordering hospitals to postpone non-emergency procedures in order to keep the intensive care capacity of the hospitals, and especially the number of hospital beds, sufficiently free for Covid-19 patients. The export ban, however, soon triggered a severe backlash. For example, local and decentralized authorities started seizing large consignments of face masks and protective gloves that were either in storage or in transit on their territory, even though being destined for other countries that had already paid for them (notably Italy). Several other EU Member States reacted in an outraged manner, some even accusing Germany of undermining the EU's single market (which, ironically, in times pre-Covid-19, Germany had always upheld the most as one of the most faithful EU Member States).²³⁴

Later that month, Germany challenged another fundamental rule of the EU, when it took the decision of unilaterally closing its western borders. Again, other EU Member States responded critically, deeming the move in contradiction with the Schengen agreement.²³⁵

For a while, it seemed that Germany, traditionally one of the main driving forces behind the EU machinery, had started to undermine some of the most fundamental pillars of the European unity.²³⁶ However, Germany soon came to its senses and started looking for ways to repair the damage it had inflicted because of its earlier misdeeds. First, Germany amended and then completely lifted its export ban. Second, in a symbolic gesture of adherence to the principle of European solidarity, German hospitals decided to take in 229 Covid-19 patients from France, Italy and the

²³²Karnitschnig (2020a).

²³³Karnitschnig (2020a).

²³⁴Hall et al. (2020).

²³⁵Hall et al. (2020).

²³⁶Hall et al. (2020).

Netherlands. Third, on 19 March 2020, Germany sent 7.5 tonnes of emergency aid to Italy, such as ventilators and anaesthesia masks.²³⁷

Notwithstanding these gestures of atonement, especially Germany's earlier decision to close its western borders, was especially hard to reverse. This was because other EU countries had been particularly stunned by this decision, especially in light of the fact that Merkel had shortly before spoken out against any unilateral action to fight the Covid-19 pandemic. Only a few days before Germany had closed its borders, Merkel had declared that EU countries "should not isolate themselves from each other" and that there was a strong need to adopt a "unified approach that is, as far as possible, coordinated [among ourselves]".²³⁸

According to Hall et al., already by 20 April 2020, the Covid-19 containment measures were eased, with small businesses being allowed to reopen subject to social distancing requirements. This measure was soon, on 5 May 2020, followed by the reopening of some school classes, as well as cultural and leisure venues. On 6 May 2020, the German government, furthermore, announced a more general relaxation of the Covid-19 containment measures which covered all shops, restaurants and sports facilities, however with the exact timing for the easing of the closure measures still to be determined at state level. This general reopening was, furthermore, subject to an "emergency brake". The latter implied that if there were to be an occurrence of more than 50 new infections per 100,000 population, over a 7-day period, state governments would be forced to cancel the reopening and to reinstate the containment measures.²³⁹

Still according to Hall et al., external border controls were being phased out from 16 May 2020 on. A quarantine requirement which had applied to all travellers from EU countries, was abandoned in several states as of 18 May 2020. On 26 May 2020, the federal and state governments also agreed to relax restrictions on public gatherings of ten people or two separate households. This relaxation however remained subject to minimum distance rules and to the overall requirement to keep wearing a face mask in public places. Germany, furthermore, lifted its travel warning to EU countries, Schengen states, the United Kingdom and Northern Ireland on 15 June 2020, albeit with some "high risk" destinations still to be placed under a travel warning when Covid-19 infections resumed. On 16 June 2020, the German government, moreover, launched a "Corona Warning App". This application allowed users to track potential contacts with Covid-19 infected people on a both voluntary and anonymous basis. On 1 July 2020, Germany lifted an entry restriction for travellers from 11 non-EU countries (three of them on a reciprocal basis).²⁴⁰

As was the case for many other EU countries, Germany did not manage to escape the second wave of the Covid-19 pandemic. The International Monetary Fund thus reported that, in view of an increasing number of new infections that Germany was

²³⁷Hall et al. (2020).

²³⁸Hall et al. (2020).

²³⁹Hall et al. (2020).

²⁴⁰International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

facing by the end of the summer of 2020, the country deemed it necessary to issue new containment measures. With regard to incoming travellers, these included: (1) a Covid-19 testing requirement, and (2) a 14-day quarantine obligation for people returning to Germany from about 130 "high-risk" countries. Said measures came into effect on 8 August 2020. Moreover, Germany decided to, again, forbid mass events until at least the end of 2020. Local governments renewed their commitment to strengthening Covid-19 containment measures where infections would exceed the "emergency brake". Germany, furthermore, discouraged all non-essential travel to and from high infection areas. As these measures were not enough to contain the second wave of the pandemic, on 14 October 2020, the federal and state governments reached an agreement on a joint strategy for hotspots: Whenever the threshold of 50 (new Covid-19 cases per 100,000 population, measured over a period of 7 days) was to be exceeded, local governments would immediately respond by reinforcing face mask wearing, restricting all public and private gatherings, and instituting a curfew with regard to visits to bars and restaurants.²⁴¹

However, the fight against the second wave of the Covid-19 pandemic required even further measures, which in November 2020 led to a nationwide "lockdown light": All restaurants, bars, leisure and sports facilities, and human service providers were closed, with schools however remaining open. Private gatherings were, moreover, limited to a maximum of five people from two households. All non-essential travel was strictly discouraged, with hotels no longer being allowed to offer accommodation to tourists. These containment measures were, afterwards, extended until 10 January 2021.²⁴²

Still according to the International Monetary Fund, from 16 December 2020 onwards, this "lockdown-light" had to be further strengthened because of continuing high numbers of Covid-19 infections and deaths. As part of this new strengthening of the containment measures, all non-essential businesses and schools and childcare centres were closed, pointing to a harder lockdown than its predecessor. These new closures were, moreover, to apply until at least 10 January 2021. Some of Germany's states also decided to institute night curfews. As even this stricter approach was not enough, on 5 January 2021, the containment measures, including the closures, were further tightened and extended until at least the end of January 2021. On 19 January 2021, the federal and state governments, again, decided to extend the lockdown until 14 February 2021. On 30 January 2021, the federal and state governments, moreover, issued a new ban on traveling from countries with a high incidence of new Covid-19 variants. On 10 February 2021, the lockdown measures were, once more, extended until 7 March 2021. However, states were this time allowed to reopen schools and day-care centres. Hairdressers were also given the permission to reopen by 1 March 2021. On 3 March 2021, the containment measures had, again, to be extended until 28 March 2021. This time, it was however also decided upon a phased

²⁴¹International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²⁴²International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

reopening of society in five steps, conditional upon the regional incidence of infection. $^{\rm 243}$

As of 2 March 2021, Germany had reported 2,471,942 Covid-19 cases, as well as 71,240 (+359) Covid-19 related deaths. Initially scheduled to run from 2 to 30 November 2020, the closure of bars, restaurants, cultural and sports venues was prolonged until 7 March 2021.²⁴⁴ On 5 April 2021, more than 4100 Covid-19 patients had been treated in intensive care units, with 55% of them on ventilators. During the Covid-19 pandemic, the highest level of patients admitted to intensive care units had been reached in early January 2021.²⁴⁵

By 2 March 2021, 4,541,389 people had received a first dose of a Covid-19 vaccine.²⁴⁶ About a month later, on 5 April 2020, 12% of Germans had received a first dose of the vaccine, and just over 5% of the population were fully vaccinated.²⁴⁷

2.4.2.1.4 Austria

According to Karnitschnig, the events in Ischgl in February and March 2020 (cf. Sect. 2.4.1.2.) had, not surprisingly, been a huge wake-up call for the Austrian government led by Chancellor Sebastian Kurz.²⁴⁸ The Austrian government responded to the dramatic events that had occurred in and around Ischgl by imposing severe containment measures throughout the entire country. These even included sealing off entire cities in an attempt to control the Covid-19 virus. In general, Austria's approach for fighting Covid-19 was, from then on, based on prevention and infection control implemented in a wide variety of areas of societal life, and aimed at controlling local transmission. By 16 March 2020, the Austrian government resorted to a nationwide lockdown which was to end on 1 May 2020. This lockdown included severe restrictions on leaving one's home. The Austrian government also resorted to a wide variety of sanitary rules and recommendations regarding (1) face mask wearing, (2) keeping a physical distance of at least 1 m, (3) frequent hand washing, (4) covering coughs and sneezes, and (5) frequent cleaning of high-contact surfaces. There was, moreover, an obligation of staying at home when ill.²⁴⁹

As reported by the International Monetary Fund, Austria initiated a gradual reopening of its economy by 13 April 2020. This reopening first applied to small shops and to construction and garden centres, while other shops and hairdressers were allowed to open by early May 2020. By mid-May 2020, some other societal activities were allowed to open as well, such as religious services, outdoor sports,

²⁴³International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²⁴⁴Julie (2021).

²⁴⁵Connolly (2021).

²⁴⁶Julie (2021).

²⁴⁷Connolly (2021).

²⁴⁸Karnitschnig (2020a).

²⁴⁹Kreidl et al. (2020), p. 7. Cf., furthermore, Karnitschnig (2020a).

museums, libraries and archives. The Bundesliga also received permission to restart. From 1 June 2020 on, certain open-air markets and commercial premises were granted an exemption from the general face mask obligation. With low infection rates occurring during the second half of the spring of 2020, containment measures were even further eased, resulting in the reopening of Austria's borders with Germany, Switzerland, Lichtenstein, the Czech Republic, Slovakia and Hungary as of 5 June 2020. On 16 June 2020, Austria, furthermore, lifted travel restrictions for most European countries. Adhering to EU policies, Austria more precisely lifted its travel ban to 15 other countries, with as notable omissions the United States, Brazil, India and Russia.²⁵⁰

However, the number of new daily cases increased significantly after these reopening measures. As a result, by October 2020, the number of contaminations even surpassed the previous peak of March 2020 and was characterized by an effective reproduction rate of more than 1. This resumption of the Covid-19 infection rate urged the Austrian authorities to reintroduce new containment measures, amongst which the reintroduction of mandatory face mask wearing as of July 2020.²⁵¹

With the second wave of the Covid-19 pandemic persisting, Austrian authorities decided to announce a second (partial) lockdown which would initially apply to the period between 3 November 2020 and 6 December 2020. Already on 17 November 2020, this lockdown had to be reinforced. Still, the second lockdown remained less strict than the first. E.g., during this second lockdown, businesses could remain open, while restaurants, bars, all non-essential shops, hairdressers and schools were closed. In the period from 26 December 2020 to 8 February 2021, a new lockdown had to be implemented. From 25 January 2021 on, Austria resorted to the remarkable measure of making high quality face mask (FFP2) wearing mandatory in certain public places, amongst which airports.²⁵²

By 3 March 2021, Austria had reported a total of 464,374 Covid-19 contamination cases and 8489 Covid-19 related deaths. By the same date, 339,470 people had received the first injection of a Covid-19 vaccine.²⁵³ These figures, considered together, suggest that Austria had fared rather well, particularly with regard to the first wave of the Covid-19 pandemic, and that the country had managed to keep the numbers, especially the number of Covid-19 related deaths, down.²⁵⁴

²⁵⁰International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²⁵¹International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

 ²⁵²International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).
 ²⁵³Julie (2021).

²⁵⁴Kreidl et al. (2020), p. 7. Cf., furthermore, Karnitschnig (2020a).

2.4.2.2 European Countries That (Initially) Responded (Rather) Poorly

2.4.2.2.1 Sweden

Although Sweden is generally one of the leading examples of the welfare state, it failed on properly answering to the challenge of the Covid-19 outbreak.²⁵⁵

A first confirmed case of Covid-19 in Sweden had been reported on 31 January 2020. 256

At the start of the Covid-19 outbreak in Sweden, the Swedish government led by Prime Minister Stefan Löfven, made the decision of putting Sweden's chief epidemiologist, Anders Tegnell, in charge of the government's response. However, Tegnell was a fan of unorthodox measures for fighting the pandemic. He, e.g., opposed face mask wearing, and, furthermore, advised against the closing of schools, shops, bars and restaurants. In Tegnell's vision, such closures were the equivalent of "using a hammer to kill a fly". Tegnell would later declare that he had "absolutely not been" pursuing "herd immunity" among the Swedish population. From emails Tegnell had exchanged with a Finnish colleague and which had been obtained by a Swedish journalist, it however appears that this may have been the case. Whatever Tegnell's approach, it has resulted into many more infections and deaths in Sweden than in the neighbouring country Norway.²⁵⁷

Still, notwithstanding Sweden's unorthodox approach for fighting the pandemic, its number of reported contamination cases and deaths during the first wave of the Covid-19 pandemic turned out to be better than expected. However, during the second year of the Covid-19 pandemic, the situation would be remarkably different.²⁵⁸ Indeed, by 3 March 2021, a total of 680,130 Covid-19 contamination cases and 12,882 Covid-19-related deaths had been reported. 539,387 people had received a first dose of a Covid-19 vaccine.²⁵⁹

But, as we shall see below, Sweden was particularly hard hit during the third wave of the Covid-19 pandemic. (Cf. Sect. 2.4.3.1.)

2.4.2.2.2 Czechia

According to Karnitschnig, the first official case of Covid-19 in the Czech Republic has been reported on 1 March 2020.²⁶⁰

Shortly after this first case of Covid-19 had been detected in Czechia, its government resorted to declaring a state of emergency. This state of emergency was

²⁵⁵Karnitschnig (2020a).

²⁵⁶International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²⁵⁷Karnitschnig (2020a).

²⁵⁸Henley (2021a).

²⁵⁹Julie (2021).

²⁶⁰International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

accompanied by a nationwide quarantine, a ban on international travel and a series of socio-economic measures for supporting the population, jobs and businesses.²⁶¹ The Czech Republic was also one of the first countries in Europe to resort to the following containment measures: (1) mandatory face mask wearing, and (2) closures of schools and non-essential shops. Unfortunately, Czechia was also among the first countries to relax these containment measures, already leading to the reopening of small shops on 9 April 2020. Unsurprisingly, that is also when Czechia's real problems began.²⁶²

After having ended the initial containment measures, the Czech government, which at the time was led by populist Prime Minister Andrej Babiš, made the remarkable decision to side-line epidemiologist Roman Prymula. This was a surprising move to the extent that Prymula had been the architect of the country's initial. successful response to Covid-19. The decision to remove Prymula would soon prove to have disastrous consequences. Deprived of one of its leading epidemiologists, when Covid-19 cases began to rise again by early August 2020, the Czech government ignored all warning signs, seemingly being more concerned that re-installing containment measures would anger the business world, than with containing the pandemic itself. As a result, no new containment measures were taken. This soon led to new contamination cases exceeding the levels witnessed during the spring of 2020. Czech Health Minister Adam Vojtěch then tried to reimpose mandatory face mask rules applying to certain public areas, such as shops. However, Babiš himself opposed such a return to this kind of measures which resulted in even more new Covid-19 contamination cases. Babiš responded to this rise in the number of cases by firing Health Minister Adam Vojtěch on 21 September 2020. Surprisingly, Vojtěch was replaced by none other than Prymula, Czechia's leading epidemiologist whom the Czechia government had side-lined for months.²⁶³ On that day, there were officially 49,290 confirmed Covid-19 contamination cases and 503 Covid-19 related deaths, with over 500 people being hospitalised.²⁶⁴

When the second wave of the Covid-19 pandemic broke through in October 2020, Czechia (together with Belgium) reported the highest number of new cases in the European Region.²⁶⁵ On 23 October 2020, the Czech Republic even reached a new daily record of 15,258 new infection cases.²⁶⁶

The magazine Time has reported that, according to Jan Pačes, a renowned Czechian virologist working at the Czech Academy of Sciences, cases in Czechia had started to spike shortly after the schools had reopened on 1 September 2020. "The increase in new infections in September was reported mainly in young people, and now it has reached higher ages," Pačes was quoted explaining to Time.

²⁶¹International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²⁶²Karnitschnig (2020a).

²⁶³Karnitschnig (2020a) and Mortkowitz (2020).

²⁶⁴Mortkowitz (2020).

²⁶⁵Time (2020).

²⁶⁶Time (2020).

Czechia's numbers were at the time indeed impressive: During the first 2 weeks after the reopening of the Czechian schools, 144 of the country's approximately 11,000 schools (with this number including pre-schools and primary and secondary schools, as well as higher learning institutions) all had reported new cases of Covid-19. It was, furthermore, estimated that 30% of Czechia's new infections had been contracted by people mixing at home with school-going children.²⁶⁷

Time also quoted Olga Loblova, a research associate in sociology working at the University of Cambridge (in Prague). Loblova was quoted declaring that the increase in contamination numbers could be attributed to the Czechian government having rejected the advice of public health experts during the late summer of 2020. As an example, Loblova was cited referring to the abovementioned fact that, in late August 2020, with daily new infections rising, Prime Minister Andrej Babis had overturned a decision made by the then Czech Health Minister Adam Vojtěch to make face mask wearing mandatory again in public places, amongst which schools.²⁶⁸

During a press conference that was held on 21 September 2020 (on which day Czechia counted 1474 new cases), Babis admitted that having ignored the advice of the former Health Minister Vojtěch might have constituted an error in judgment.²⁶⁹

Again according to Pačes—as quoted by Time—Czech Senate elections may have been another relevant factor for the huge Czechian numbers of new cases. The first round of these elections took place on 2–3 October 2020, and a second round on 9–10 October 2020. According to Pačes, these elections may have attributed to the Czechian government's decision of postponing further containment measures. Indeed, new containment measures were only introduced after the first round of the elections was finished.²⁷⁰

Be this as it may, on 5 October 2020, Czechia re-instated a new 30-day state of emergency, which has since been extended numerous times—when this book was closed for peer review on 15 May 2021, for the (then) last time until 17 May 2021.²⁷¹

As of 12 October 2020, Czechian authorities also issued a series of further containment measures, such as: (1) banning events with more than ten people inside and with more than 20 people outside, and (2) ordering high schools and universities to switch to online learning. In addition, (3) bars and restaurants were closed, and (4) all public gatherings were limited to six people. Furthermore, one more week later, Babis decided to reintroduce a strict face mask mandate similar to the one that had been in place during the spring of 2020. This requirement imposed everyone to wear a mask outside their homes.²⁷²

For an overview of all subsequent measures adopted by the Czech government in the fight against the Covid-19 pandemic, cf. Government of the Czech Republic (2021).

²⁶⁷Time (2020).

²⁶⁸Time (2020).

²⁶⁹Time (2020).

²⁷⁰Time (2020).

²⁷¹International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²⁷²Government of the Czech Republic (2021).

According to Pačes (as again quoted by Time), these new containment measures should have been introduced much earlier.²⁷³

The International Monetary Fund has reported that the Czechian vaccination campaign against the Covid-19 initially prioritised certain specific groups, such as health professionals and people over the age of 80. By 4 March 2020, approximately 243,000 people, or 2.3% of the Czechian population, were reported to have been vaccinated (with two doses).²⁷⁴

Covid-19 also had severe implications for the Czechian economy, with GDP falling by 5.7% in 2020.²⁷⁵

2.4.2.3 European Countries That (Already from the Start) Responded (Rather) Miserably

2.4.2.3.1 Italy

According to Kerner, in one version of events, a first case of Covid-19 occurred in Italy on 30 January 2020. A Chinese tourist couple traveling from Wuhan via Beijing was reported to have been admitted to the Spallanzani Hospital in Rome, there to be diagnosed with Covid-19.²⁷⁶

On the same day, the Italian Health Minister Roberto Speranza announced an embargo on air traffic for flights coming from any Chinese city, as well as from the autonomous regions of Hong Kong and Macau. With this travel ban, Italy made its first attempt to block the spread of the Covid-19 virus. The Italian government, moreover, immediately organised a special plane to repatriate some 80 Italians who had been staying in Wuhan.²⁷⁷ In the days to follow the abovementioned Chinese couple's hospitalisation, a few more cases of Covid-19 were detected in the group of Italians who had been repatriated from the Wuhan area. Thinking they had managed to nip the Covid-19 virus spread in the bud, Italian experts initially felt relieved, with their opinion based on the fact that all reported cases had originated from abroad, and that there had been no local contagion case among these.²⁷⁸

On 31 January 2020, the Italian government took the precaution of declaring a state of emergency. The Italian government also allocated \$5.5 million to address the

²⁷³Time (2020).

²⁷⁴ International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²⁷⁵ International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²⁷⁶Kerner (2020). According to this author, said hospital was highly specialised in infectious diseases.

In another vision of the events, the Italian outbreak may already have started on 25 or 26 January 2020 because of traveling within the Schengen zone: A German businessman travelling to Italy who had contracted the virus during the previous week in Munich may also have been Italy's 'patient zero'. (Cf. Herszenhorn and Wheaton (2020).)

²⁷⁷Castelfranco (2020) and Redazione Ansa (2020).

²⁷⁸Ovadia (2020).

Covid-19 crisis. These decisions were not accompanied by strict containment measures. Instead, it would take almost one more month before Italy decided to adopt such further containment measures.²⁷⁹

The immediate declaration of a state of emergency was, in this regard, rather to be seen in the context of a WHO declaration of 30 January 2020. (Cf. Sect. 1.1.1.) On the latter day, the WHO had announced that the Covid-19 virus constituted "a public health emergency of international concern" and had asked all its members to closely monitor the situation in their respective territories. The decision of Italy to declare a state of national emergency was thus to be seen as a response to this invitation from the part of the WHO, and not as much intended to already deploy a true containment strategy.²⁸⁰

At the time, the Italian Health Minister Roberto Speranza explained to the press that the state of emergency status would grant the Italian government more powers to deal with the threat posed by Covid-19, but that it would not affect daily life. Speranza also declared that Italy was resorting to efforts to trace all places the infected Chinese couple had visited since their arrival in Milan on 23 January 2020.²⁸¹ The Minister, furthermore, explained that the 18 other tourists and the driver who had been travelling with the couple in a bus, had also been tested and placed under observation. As a further tracing measure, at the hotel where the couple had been staying before being admitted to the hospital, their room had immediately been closed and subjected to decontamination.²⁸²

Fournier mentions that by 23 February 2020, once it had become clear that the Covid-19 outbreak had resurfaced (with 30 new cases in Lombardy and Veneto), 11 Lombardy cities in which more than one contamination case had been detected, had been placed under lockdown. With the situation in Italy becoming more worrisome by the day, other EU countries resorted to imposing ad hoc travel bans to Italy. E.g., during the night of 23 February 2020, Austrian authorities were reported to have stopped a train driving from Venice to Munich in order to investigate two suspected contamination cases. Moreover, the French police similarly cordoned off a Lyon bus station after a driver of a bus from Milan had demonstrated possible symptoms of Covid-19.²⁸³

On the same day, the Italian government decided to adopt a (presidential) decreelaw.²⁸⁴ This decree-laws provided for urgent measures relating to the containment and management of the rising Covid-19 emergency,²⁸⁵ "taking note of the evolution

²⁷⁹Castelfranco (2020). Cf., furthermore, Redazione Ansa (2020).

²⁸⁰Fournier (2020).

²⁸¹Castelfranco (2020) and Redazione Ansa (2020).

²⁸²Castelfranco (2020) and Redazione Ansa (2020).

²⁸³Herszenhorn and Wheaton (2020).

²⁸⁴Decreto-leggo 23 febbraio, n. 6—Misure urgenti in materia di contenimento e gestione dell'emergenza epidemiologica da Covid-19. (20G00020) (GU Serie Generale n.45 del 23-02-2020) (available at https://www.gazzettaufficiale.it/eli/id/2020/02/23/20G00020/sg).
²⁸⁵Fournier (2020).

of the epidemiological situation, in particular the widespread nature of the epidemic and the increase in the number of cases and deaths reported to the World Health Organisation" and "considering the extraordinary necessity and urgency of adopting measures to counter the epidemiological emergency of Covid-19".²⁸⁶

The decree-law of 23 February 2020 provided for a non-exhaustive list of containment measures which were to apply to the entire Italian territory, such as: (1) a ban on entering or leaving a given area, (2) the suspension of public events, (3) the suspension of educational and cultural services, (4) the application of quarantine measures, (5) the suspension of all non-essential commercial and public activities ... The decree-law also provided for a criminal sanction based on Article 650 of the Penal Code, consisting of 3 months' imprisonment and a fine of 206 euros in case of non-compliance with the containment measures.²⁸⁷

According to Fournier, the decree-law was of a "programmatic" nature. This was because it was deemed impossible to foresee the evolution of the Covid-19 threat and, hence, to predict the exact measures which had to be resorted to at any given moment in time. Moreover, the application of the containment measures was deemed to be of a "progressive" nature, with: (1) on 4 March 2020, the closure of schools and universities; (2) on 9 March 2020, the closure of public areas all over the country; (3) on 11 March 2020, the closure of all non-essential businesses; and (4) on 22 March 2020, the suspension of non-essential economic activities.²⁸⁸

According to Hall et al., on 8 March 2020, the Italian government implemented some further, extraordinary containment measures. These included restrictions on travel in the Lombardy region and were issued in order "to minimise the likelihood of uninfected people encountering infected people".²⁸⁹

At the time, Italy was facing dramatic figures. While because of having been exposed to severe EU austerity measures in the aftermath of the financial crisis of 2008, Italy had but 5200 available beds in intensive care units (ICUs) left, of these, as of 11 March 2020, 1028 had already been assigned to Covid-19 patients, with this number still gradually growing from day to day. It was hereby increasingly feared that the Italian hospitals would reach a point where thousands of beds would be occupied by Covid-19 patients. This implied that the number of Covid-19 infected people in Italy were expected to soon put a strain on the Italian ICU capacity, with, furthermore, many hospitals lacking sufficient resources or staff to deal with such a catastrophic scenario. Especially in the Lombardy region, there was a growing

²⁸⁶As quoted by Fournier (2020).

²⁸⁷Fournier (2020).

²⁸⁸Fournier (2020).

For Fournier, despite their severity, the Italian measures passed the test of a legitimate offence. The limitation of freedom of movement is specifically provided for in Article 16 of the Italian Constitution. The measures served a specific purpose identified in the declaration of the state of emergency. Finally, the measures were proportionate. Containment was at the time the most effective measure to combat the spread of the coronavirus. The measures also had a limited lifespan until 3 April 2020. (Cf. Fournier (2020).)

²⁸⁹Remuzzi (2020).

concern among health professionals that the number of Covid-19 patients who appeared at the doors of hospitals' emergency departments would become much larger than the system would still be able to handle. Health professionals themselves were reported to work day and night, in many cases under dangerous circumstances (especially due to a lack of protective material). By 20 February 2020, about 20% (n = 350) of these health professionals were reported to have been infected with Covid-19 themselves, and some of them had even died.²⁹⁰

Still according to Hall et al., in a time period of less than a month, hospitals in the region had been overwhelmed with contamination cases. Around that time, images of dead bodies being evacuated out of hospitals by military trucks started to be broadcasted around the world.²⁹¹ The dramatic events occurring in the Lombardy region helped trigger changes in responding to Covid-19 all over the world. The Covid-19 pandemic that took place in Italy, in the spring of 2020, has in this regard been compared to "an explosion, with an epicentre whose blast dissipates outwards".²⁹²

Both Italian health experts and figures in authority would later share their belief that the horror that had unfolded in the Lombardy hospitals in March 2020 had been shaped by a series of small but crucial local decisions with a global impact.²⁹³ E.g., days after Italy's first citizen had tested positive for Covid-19, the Italian Prime Minister Giuseppe Conte blamed the Codogno hospital for having failed to contain the Covid-19 virus. According to Conte—as quoted by Hall, Chazan et al.—the hospital had, more precisely, neglected to comply with health protocols. In the viewpoint of Conte, this was one of the causes for the spread of Covid-19 on the Italian territory.²⁹⁴

During the second week of March 2020, the number of patients in Lombardy's hospitals were reported to still increase. Of the 750 or so ICU beds the region had at its disposal, more than 600 were occupied by Covid-19 patients, with doctors fearing that the system was approaching its breaking point. Scientists all over the world who, until then, had only limited data on the Covid-19 disease at their disposal, became increasingly worried by the disease's high mortality rate—more than 5% of the cases diagnosed in Lombardy at that time—as well as by the large number of Covid-19 patients who had to be admitted to intensive care units. After having processed the information stemming from Lombardy into their models, a group of scientists led by Professor of Epidemiology Neil Ferguson of the Imperial College London, published an alarming report on 16 March 2020. In this report, said researchers made the prediction that ICUs in the United Kingdom would quickly face capacity

²⁹⁰Remuzzi (2020).

²⁹¹Hall et al. (2020).

²⁹²Spiegelhalter and Masters (2021).

The highest ASMR was 841.7% in the city of Bergamo, Northern Italy, in the week ending 20 March 2020. (Cf. UK Office for National Statistics (2021), as accessed on 18 April 2021). ²⁹³Hall et al. (2020).

²⁹⁴Hall et al. (2020).

problems as well, as a further result of which hundreds of thousands of people were likely to die. Regarding the United States, the number of deaths was even expected to amount to 1.2 million people.²⁹⁵

In Italy, the (first) nationwide lockdown ended on 4 May 2020. On that date, businesses were allowed to reopen, however with new, less severe containment measures put in place (such as (1) staggered hours, (2) spaced work stations, (3) temperature controls, (4) obligations regarding face mask wearing...). Retail shops, restaurants, bars and hairdressers were allowed to reopen on 18 May 2020 (although the original reopening date had been set on 1 June 2020). Sports facilities could reopen on 25 May 2020, soon followed by cinemas and theatres on 15 June 2020. Regional authorities were, however, granted the power to adjust the reopening dates in both directions. Regional travel also became possible again, while travel restrictions between regions were lifted on 3 June 2020. Italy's borders were also reopened again without restrictions for people traveling to and from other EU countries.²⁹⁶

The International Monetary Fund, furthermore, reported that following an increase in the number of contamination cases in early August 2020, the Italian government soon issued new containment measures. These included: (1) closing nightclubs; (2) limiting the capacity of cultural sites; (3) mandatory face masks wearing in public places (both indoors and outdoors); (4) increased fines for those who failed to comply with infection control and quarantine rules; (5) mandatory Covid-19 tests for travellers returning from a number of European countries; and (6) allowing for the use of Covid-19 tests in schools.²⁹⁷

Still according to the International Monetary Fund, a series of additional containment measures had to be put in place as of mid-October 2020, to be extended until mid-February 2021, and then again until early April 2021. The Italian government hereby resorted to more targeted containment measures. E.g., service closures and mobility restrictions in response to the second wave of the Covid-19 pandemic varied in accordance with the risk levels assigned to a given region. Based upon this new, more targeted approach, (only) areas with the highest level of infections had to close schools, bars, restaurants and most non-essential shops. Moreover, travel in such high-risk areas (and between municipalities in these areas) was limited to essential work and health-related reasons. In early 2021, a new interregional travel ban was also introduced for traveling between low-risk areas.²⁹⁸

By early November 2020, the Italian government announced some new, more severe containment measures. These included: (1) a nationwide overnight curfew; (2) early closure hours for bars and restaurants; and (3) new traveling restrictions for people travelling between regions with high infection rates. Moreover, several

²⁹⁵Hall et al. (2020).

²⁹⁶International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

²⁹⁷International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021); Christoferi and Segreti (2021).

²⁹⁸International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

regions—including Lombardy which had, as explained above, already been the epicentre of the first wave of the Covid-19 pandemic—were again declared "red zones" to be placed under lockdown.²⁹⁹

By 4 March 2021, the number of active contamination cases had risen to approximately 437,000. By the same date, almost 99,000 people had died because of Covid-19. 300

On 21 April 2021, the Italian government approved a so-called "reopening decree" which covered the period from 26 April 2021 until 31 July 2021.³⁰¹

Through all of this, the Italian state of emergency has been re-installed and/or extended a couple of times.³⁰²

2.4.2.3.2 France

France is said to be the country in the WHO European Region having experienced the first confirmed cases of Covid-19 on its territory. Three such cases were, more precisely, detected in France on 24 January 2020. All these three cases had a history of travel to Wuhan, at a time when some European leaders were still implying that the likelihood of Covid-19 being imported from China to Europe was remote. The first Covid-19 death case in Europe, on 15 February 2020, moreover, also occurred in France. Less than a month later, by 21 February 2020, a total of nine European countries had reported Covid-19 cases, more precisely: Belgium, Finland, France, Germany, Italy, Russia, Spain, Sweden and the United Kingdom.³⁰³

According to Herszenhorn and Wheaton, France's initial response to Covid-19 hitting its territories, has been both "unclear" and "disastrous". According to these authors, at first, it appeared that France did not possess a strategic stockpile of face masks, nor the industrial capacity to produce Covid-19 tests. Then, once the French government had somehow succeeded in assuring that everyone had face masks at their disposal, many French people started objecting government guidelines making it mandatory to wear such masks, as these were deemed to be too coercive. Second, Macron's government failed at effectively implementing testing and tracking. Third, the French government failed in issuing consistent safety guidelines. Needless to say, all these elements attributed to sullying the overall confidence of the French people in its government. Then, to make things even worse, on 3 March 2020, the French government announced that it would (1) take control itself of the production of personal protective equipment, (2) requisite existing face masks and (3) cap the price of disinfectant gel. These measures had little effect but for triggering a domino

²⁹⁹Dettmer (2020).

³⁰⁰International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³⁰¹The Local (2021).

³⁰² International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021); Christoferi and Segreti (2021).

³⁰³Chadwick (2020).

effect that would prompt Germany to extend an export ban on such equipment, even prohibiting sales to other EU countries.³⁰⁴

Hall et al., furthermore, reported that when the French President Emmanuel Macron visited a nursing home in Paris, on 6 March 2021, he had an urgent public message to declare, namely pointing to a duty to protect the vulnerable against Covid-19. According to these authors, the French president explained hygiene and warned against physical contact. However, neither visitors, residents nor staff members were at the time wearing face masks, as the practice was not yet official policy. At that time, France had officially recorded only nine Covid-19-related deaths, including the first reported death on the European continent, an 80-year-old Chinese tourist from Hubei province. President Macron seems to have realised that the elderly were far more vulnerable than the young, but he and the health officials and carers who accompanied him during said visit to the Parisian nursing home seemed to have had no clue about the disaster that was already sweeping through France's nursing homes, besides these located elsewhere across the European continent. Some weeks later, thousands of people throughout Europe would be dead. (Cf. Sect. 6.2.1.2.)³⁰⁵

By mid-March 2020, the French government introduced a first series of containment measures, including: (1) closing schools, (2) banning all non-essential activities, outings and long-distance travel, and (3) introducing a night-time curfew in some cities. These measures would initially lead to a decline in new contamination cases, but shortly after, infections would be on the rise again.³⁰⁶

According to Karnitschnig, as of 11 May 2020, France decided to relax its containment measures, starting with a reopening of primary schools, shops and businesses, on a regionally differentiated basis. By 22 June 2020, France had abandoned most of these "first generation" containment measures (including travel restrictions).³⁰⁷

Some months in the Covid-19 pandemic, the French government did still not seem to have a clue how to handle the crisis. Of particular concern was the fact that France seems to have simply avoided implementing stricter containment measures during the summer of 2020, for fear of a social revolt that could have been worse

³⁰⁴Herszenhorn and Wheaton (2020).

[&]quot;Our press conference [...] took place in a press conference room, press room, almost empty, in the Berlaymont," Lenarčič recalls in an interview he later gave. "All the media attention was devoted to the last session of the European Parliament, in which the British parliamentarians were still participating for the very last time. Of course, I understand, and I understood even then, that it was a highly emotional moment. It was a historic moment, but we somehow felt a lack of interest in what we were saying." (Quoted in Herszenhorn and Wheaton (2020).)

In a separate interview, Health Commissioner Kyriakides echoed his message: "We are facing an unprecedented situation, and the measures taken at every stage have been based on the evidence at the time... with a lot of excellent scientific advice." (Quoted by Herszenhorn and Wheaton (2020).) ³⁰⁵ Hall et al. (2020).

³⁰⁶International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³⁰⁷Karnitschnig (2020a).

than the Gilets Jaunes movement that had occurred in the year before the pandemic. This however also implied that no adequate containment measures were in force during the entire 2020 tourist season (when traditionally many foreigners hold their holidays in France). As a result, France would rank among the European countries with the worst initial response to the Covid-19 crisis.³⁰⁸ Moreover, through this omission, France has also been preparing for the second wave of the Covid-19 pandemic.

Indeed, according to Karnitschnig, a resurgence of contamination cases occurred at the end of August 2020. This initially prompted the French government to implement, at first, regional night-time curfews, and then a second lockdown that was to start on 30 October 2020. During this second lockdown, schools were to remain open, but all non-essential shops and services were ordered to close. In addition, France issued both regional and international travel bans.³⁰⁹

According to the International Monetary Fund, France again started to gradually lift its containment measures by the end of November 2020. E.g., retail shops were allowed to reopen. Moreover, as of mid-December 2020, the lockdown was replaced by a curfew during the hours between 8 pm to 6 am. The curfew was then tightened in mid-January 2021, to start earlier at 6 pm, and has remained in force since then across France. Bars, restaurants, sports and cultural facilities were all mandated to close again.³¹⁰ By 15 May 2021, the French curfew was still listed as being in force on the official website of the French government.³¹¹

Hall et al., made the general assessment that the first wave of the Covid-19 pandemic that had hit France during the spring of 2020, had been the worst in the east of the country and in the Paris region. With regard to the Grand Est region (bordering Germany), it has even been assumed that two thirds of the region's 620 nursing homes for elderly people had been affected by Covid-19 and that 570 residents living in these nursing homes had died. During the second wave of the Covid-19 pandemic, the cities of Paris, Lyon, Marseille and Lille were the ones most affected. During this second wave, however, the nursing homes for the elderly had been better equipped and prepared for dealing with the ongoing pandemic. Of the 1512 active Covid-19 infection clusters which had been identified by the French authorities by mid-October 2020, still 293 were in nursing homes.³¹²

According to the International Monetary Fund, the French economy contracted by 5.9% in Q1 2020, compared to the previous quarter, and by 13.7% in Q2 2020. Activity rebounded strongly in Q3 2020 (= the tourist season), with GDP growth of

³⁰⁸Karnitschnig (2020a).

³⁰⁹Karnitschnig (2020a).

³¹⁰International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³¹¹French Government (2021) On 15 May 2021, the website mentioned that the curfew was still in force from 7 pm to 6 am in mainland France.

³¹²Hall et al. (2020).

18.5%—but shrank again by 1.3% in the last quarter of 2020 (when further containment measures were taken). In total, France's GDP contracted by 8.3% in 2020.³¹³

Covid-19 vaccinations in France started on 28 December 2020.³¹⁴

As of 5 March 2021, approximately 3,810,125 contamination cases had been reported. On Thursday 4 March 2021, there were, moreover, 293 deaths reported in 24 h. The total number of deaths in nursing homes was on this date said to be 24,973. 62,862 people had moreover died in hospitals, bringing the total of Covid-19 related deaths in France to 87,835. On the bright side, 984,202 people had received a first dose of a Covid-19 vaccine,³¹⁵ but another source mentions that more than three million people had been vaccinated with at least one dose of a Covid-19 vaccine by the same date.³¹⁶

2.4.2.3.3 Spain

Spain also ranks among the European countries hit hardest by both the first and the second waves of the Covid-19 pandemic.

According to a special report that appeared in The Financial Times in October 2020 (and that was written by Hall et al.), in February 2020, Fernando Simón, head of both Spain's health emergency coordination centre and of Spain's task force for dealing with Covid-19, could not have been clearer when he declared, on 23 February 2020, that there was no Covid-19 in Spain. In reality, the situation in Spain was already extremely bad at the time. As would become clear afterwards, Simón had simply been wrong to insist that there had been no true Covid-19 contamination cases in Spain. On the contrary, Covid-19 had already been spreading rapidly in Spain, which would soon even appear to be hit much harder than any other EU country. Spain's main problem was that public health procedures were not adequate to track the extent of the Covid-19 spread in the country.³¹⁷

Still according to Hall et al., on 25 February 2020, an Italian couple on holiday in Tenerife had tested positive. While local authorities acted quickly and ensured that several hundred people staying in the same hotel all got quarantined, it would appear that Covid-19 infections had already been spreading in an undetected manner throughout Spain's largest cities.³¹⁸

Moreover, even after Italy had imposed strict containment measures for the north of the country (cf. Sect. 2.4.2.3.1.), it would take Spain several more days to consider taking similar measures. On Sunday 8 March 2020, only a few hours after Italy's dramatic interventions, Spain's Health Minister Salvador Illa still referred to the

³¹³International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³¹⁴International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³¹⁵Julie (2021).

³¹⁶International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³¹⁷Hall et al. (2020).

³¹⁸Hall et al. (2020).

Italian lockdown measure as "very drastic", implying that Spain itself had no need for resorting to a similar approach. Furthermore, on that same day, the Spanish government authorised an International Women's Day march in Madrid in which 120,000 people were expected to partake. This decision would later be criticised as "a criminal act" that had been carried out in the name of feminism. Still, many epidemiologists believe the march had not been a major vector of infections. According to Hall et al., of far bigger concern was the fact that, around the same period, still nearly three million people kept using Madrid's metro and commuter trains on a daily basis, while millions of people also kept visiting the city's many bars and restaurants. It was around the same time that the Spanish Ministry of Health started receiving first reports that Spain was starting to face an increasing surge in Covid-19 infections. E.g., from official data of 8 March 2020, it appeared that the number of official Covid-19 contamination cases had increased by 70% in just 24 h to a total of 999. These official figures would initiate Spain's first containment measures. As a result, on 9 March 2020, several Spanish regions, amongst which Madrid itself, announced the imminent closure of schools. On 12 March 2020, the Madrid mayor José Luis Martínez-Almeida, even formulated the suggestion that the city might have to go into lockdown.³¹⁹ Still according to Karnitschnig, it would from then on take Prime Minister Pedro Sánchez another two more days to declare a national lockdown. Spain thus finally committed to what had become the standard Covid-19 response pattern of first declaring a "(national) state of emergency" and then applying containment measures which were among the tightest restrictions on the European continent.³²⁰ At that point, the official figures had only revealed the proverbial tip of the iceberg as underneath these official figures, there had been occurring a very high level of transmission of the Covid-19 virus.³²¹

The fact that Spain in mid-March 2020 finally acknowledged that Covid-19 was posing a serious problem on its territory, did not mean the end of Spain's ordeal. Having been another victim of a severe neoliberal austerity policy to which the EU had subjected the country in the aftermath of the financial crisis of 2008, Spain now had to face another wake-up call, more precisely a confrontation with its completely underfunded and understaffed health care system which soon proved to be no match for the Covid-19 pandemic. As a result, the country got stuck with one of the highest Covid-19 death rates in the world (namely 72 per 100,000).³²²

For Hall et al., the country was virtually running blind. According to these authors, Spain's response to the Covid-19 pandemic was severely hindered by a highly partisan political climate, as well as by a fragmented health care system that lacked all central coordination. But it was above all Spain's inability to have spot the early spread of the Covid-19 infections, with all its resulting delays for implementing containment measures, that contributed most to the tragic outcome the country had to

³¹⁹Hall et al. (2020).

³²⁰Karnitschnig (2020a).

³²¹Hall et al. (2020).

³²²Karnitschnig (2020a).

undergo: Soon, Spain would count the second highest number of Covid-19 related deaths in the EU, preceded only by Italy.³²³

According to the International Monetary Fund, in response to the first wave of the Covid-19 pandemic, Spain issued a state of emergency that came into effect on 14 March 2020. This state of emergency was initially announced for 15 days only, but it would soon afterwards become extended a couple times, ultimately until 21 June 2020. The state of emergency was, moreover, accompanied by a wide arsenal of containment measures, such as: (1) travel and movement restrictions, with moving only permitted for essential purposes; (2) severe limitations on activities of a commercial, cultural, and recreational nature, as well as on hotels and restaurants; and (3) a reduced availability of public transport. From 30 March until 9 April 2020, these measures were even enhanced further, with all non-essential activities being halted.³²⁴

According to Hall et al., less than a month after Simon's declaration, more precisely on 23 February 2020, Spain was, almost ironically, recording 10,000 new contamination cases per day. The true level of Covid-19 contamination cases may probably have been several times higher. According to official numbers, probably more than two million people contracted Covid-19 during the first wave of the Covid-19 pandemic. Hall et al., furthermore, reported that during the first week of April 2020, overcrowded hospitals set up beds in all kinds of facilities, such as corridors of the hospital buildings themselves, besides sport buildings, libraries and emergency tents. In Madrid, ranking among the most affected regions of the country, the number of people who required intensive care was about three times above the pre-pandemic capacity. These numbers basically forced hospitals to set up makeshift intensive care and respiratory units wherever possible.³²⁵

According to the International Monetary Fund, Spain also resorted to temporary travel restrictions that were imposed from 15 to 24 May 2020 at entry points to ports and airports, even to other Schengen countries. Only people of Spanish nationality and residents, besides cross-border laborers and health and elderly care professionals were still allowed to freely enter the country. From 15 May 2020 until 21 June 2020, Spain implemented a 14-day quarantine requirement for all people arriving from abroad. These containment measures would eventually result into a significant drop in contamination cases during the remains of the first half of 2020. However, this was soon afterwards followed by a partial rebound in the number of contamination cases and Covid-19 related deaths in the period from April 2020 until mid-July 2020, new daily infections would start to increase again in the late summer of 2020, reaching a peak in mid-November 2020.³²⁷

³²³Hall et al. (2020).

³²⁴International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021). ³²⁵Hall et al. (2020).

³²⁶International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³²⁷ International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

Hall et al., reached the conclusion that, like many other European countries, one of the main problems that Spain had to endure during the first wave of the Covid-19 pandemic, concerned its limited testing capability. Because of this, Spain had been incapable of detecting at an early stage if the Covid-19 virus was spread over the country's territory. When it would later become clear that the Covid-19 virus had, most probably, been present in Spain during the whole month of February 2020, it was simply too late. In fact, a later post-mortem examination even revealed that a Covid-19 patient had already died on 13 February 2020, days before the Spanish government still declared in public that Spain had been spared of the Covid-19 virus so far. According to the quoted authors, the holes in the official data and the completely flawed testing capability had resulted into a fatal complacency. While critics reached the conclusion that both national and regional authorities had been too slow to impose controls, these errors would be again repeated during the summer of 2020, when containment measures were relaxed too soon thus allowing for the second wave of the pandemic to take hold.³²⁸

The International Monetary Fund reported that the first state of emergency was lifted on 21 June 2020. This allowed for unrestricted traveling in all provinces of the country and for the reopening of the borders with other countries. Moreover, as of September 2020, Spain allowed for the reopening of its school based upon physical teaching activities at all levels, albeit at the same time resorting to a series of containment measures, such as compulsory face mask wearing for every one of the age of 6 years and older. According to the International Monetary Fund, the following further containment measures were also kept in place: (1) social distancing requirements, (2) limitations on the capacity of people allowed indoors, and (3) sanitary measures on the workplace. The latter measures included mandatory face mask wearing in confined spaces as well as on the streets in cases where a safety distance of at least 1.5 m was unable to maintain.³²⁹

By the time Spain's first state of emergency expired on 21 June 2020, Sánchez's government had notwithstanding all of the foregoing, somehow, managed to smooth out the curves. However, the latter effect did not last. Already by mid-July 2020, at the height of the Spanish tourist season, the number of Covid-19 contamination cases in Spain was on the rise again.³³⁰ Moreover, 6 months in the Covid-19 pandemic, Spain had still not managed to implement an effective regime of tracking and tracing the spread of the Covid-19 virus on its territory, a flaw that would keep on frustrating all efforts to contain the spread of the Covid-19 virus.³³¹

³²⁸Hall et al. (2020).

 ³²⁹ International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).
 ³³⁰ Karnitschnig (2020a).

According to this author, while Madrid, the epicentre of the Spanish epidemic, had recorded more than 560 cases per 100,000 residents during the first half of October 2020, regions such as Valencia and Asturias, subsequently, reported less than half this amount. (Karnitschnig (2020a).) ³³¹Karnitschnig (2020a).

As reported again by the International Monetary Fund, a national closure of nightclubs and bars had to be reintroduced on 14 August 2020, while restrictions on sports gatherings were reinstated as of 28 October 2020. On 30 September 2020, a coordinated action plan was agreed upon between the Spanish government and the local communities. This included triggers for regional containment measures which could be implemented as of October 2020. The Spanish government also declared a new state of emergency on 25 October 2020, initially for 15 days, but afterwards prolonged until 9 May 2021.³³²

2.4.2.3.4 The Netherlands

With regard to the situation in the Netherlands, the International Monetary Fund has reported that, by means of an early response to the first wave of Covid-19 infections which had occurred in late February 2020, the Dutch authorities had adopted a series of containment measures. Following a gradual relaxation of these measures as of 11 May 2020 and a resurgence in the number of Covid-19 contamination cases during the late summer of 2020, The Netherlands issued new containment measures on 6 August 2020, 18 August 2020, 25 September 2020, 2 October 2020, 14 October 2020 and 4 November 2020.³³³

Indeed, a second, even worse wave of the Covid-19 pandemic had begun to occur during the late summer of 2020, leading the Dutch authorities to implement its most severe containment measures since the start of the Covid-19 pandemic. This new set of containment measures involved: (1), the closure of all non-vital businesses, schools (some cases excepted) and day care centres, besides many public spaces, such as parks and zoos; (2) a recommendation to work from home, unless this would not be possible; (3) a recommendation to avoid public transport; (4) a requirement to restrict gatherings to one guest belonging to another household (with this number increased to three during the Christmas holidays), (5) a requirement to maintain social distance, and (6) a discouragement of travel abroad. These measures were first only in force from 15 December 2020 until 9 February 2021 but were later extended until 15 March 2021. Furthermore, between 23 January 2021 and 15 March 2021, a curfew from 9 pm to 4.30 am applied. Moreover, a negative PCR test was made compulsory for people travelling to the Netherlands from certain high-risk foreign territories.³³⁴

The International Monetary Fund also mentions that the Dutch vaccination plan started on 6 January 2021, initially targeting health professionals, the elderly and people with pre-existing health problems, in succession. As of 3 March 2021, the containment measures were relaxed very gradually. Secondary schools were to be allowed to reopen (after primary schools had reopened earlier). This was also

³³²International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³³³International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³³⁴International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

permitted to certain professions requiring close physical contact, such as hairdressers, albeit subject to severe conditions.³³⁵

2.4.2.3.5 The United Kingdom

2.4.2.3.5.1 Failed Attempts of Coping with the Covid-19 Pandemic

The first confirmed case of Covid-19 in the United Kingdom has been reported to have occurred on 31 January 2020.³³⁶

According to Karnitschnig, most of the European countries hardest hit by the Covid-19 pandemic mainly suffered because they had basically been caught off guard. According to the same author, the United Kingdom, by contrast, slipped into Covid-19 oblivion with its eyes wide open.³³⁷

In an opinion piece of 17 March 2021, Dr. Chaand Nagpaul, at the time the Chairman of the British Medical Association, assessed the UK government's response to the Covid-19 outbreak during the initial phase of the pandemic. From this, it appeared that when Covid-19 arrived in the United Kingdom, the country was both defenceless and unprepared. E.g., the NHS had already been facing record waiting times for medical procedures such as operations, cancer treatment and GP appointments, for a long while. After decades of neoliberal austerity, successive cuts to psychiatric and social care, as well as severe staffing shortages, had left health services exposed and unable to function properly in normal times, let alone during a pandemic.³³⁸ As a result, the UK health care sector has been basically unable to cope with as good as all "normal" medical treatments during the first wave of the pandemic: E.g., there have been around 2.5 million fewer first outpatient appointments, and around 280,000 fewer urgent cancer referrals between April 2020 and June 2020 compared to the same period in 2019. Less than half of the planned number of operations could be performed, creating a backlog in other types of care and a record waiting list of 4.6 million people, with over 220,000 patients being put on waiting lists for more than a year already for all types of non-Covid-19 treatments by March 2021.³³⁹

On a general policy level, according to Saad-Filho, the haphazard administration led by the "ever-unreliable" Boris Johnson soon found itself faced with two evils: First, increasing estimates of the Covid-19 related death toll, and second, increasingly gloomy estimates of the country's probable GDP decline.³⁴⁰

³³⁵International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³³⁶International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³³⁷Karnitschnig (2020a).

³³⁸Nagpaul (2021).

³³⁹Nagpaul (2021).

³⁴⁰Saad-Filho (2020).

Pressed early on by the Conservative Party, amongst which some of the strongest supporters of Brexit, the UK government had in its early response to Covid-19 purportedly appealed to its medical experts in order to justify protecting (business) profits and the idea of a small state that was not to interfere with the proceeds of a disease in the name of science. This basically implied that the conservative Johnson government at first wanted to pursue herd immunity, which would most likely have killed hundreds of thousands of people. However, soon running out of serious arguments to justify such an approach and, moreover, being faced with an increasingly angry public, the UK government was forced to make a dramatic U-turn by mid-March 2020, but by then it was too late. Because of its earlier decision to delay action, compounded by both a lack of preparation and by an overwhelming ineptitude, the United Kingdom would inevitably find itself in the worst of both worlds: countless deaths (literally countless, since there had been a deliberate effort to underreport casualties) and economic losses running into the hundreds of billions of British pounds.³⁴¹

According to Karnitschnig, even in early March 2020, at a time when the Covid-19 pandemic held northern Italy in its deadly grip, not unlike the US President Donald Trump, the British Prime Minister Boris Johnson had seemed oblivious to the danger caused by the Covid-19 threat. At the time, Johnson even boasted at a press conference that he had visited a hospital treating Covid-19 patients and that he had "shook hands with everyone".³⁴²

According to the International Monetary Fund, the first nation-wide lockdown in the United Kingdom started on 23 March 2020 (already to be relaxed in early-May 2020).³⁴³ This first lockdown was characterized by a range of measures, such as: (1) travel restrictions, (2) social distancing measures, (3) closures of entertainment facilities, (4) closures of bars and restaurants; (5) closures of non-essential shops and indoor premises, and (6) increased testing protocols.³⁴⁴

Early April 2020, the UK Prime Minister Boris Johnson had to spend some time in intensive care after having tested positive for Covid-19.³⁴⁵ According to some, he barely survived.³⁴⁶

When looking at contamination cases in general, one must remark that contamination cases had peaked for a first time in April/May 2020. After a period of decline, a second, and then a third wave of the Covid-19 pandemic set in, with the number of Covid-19 cases significantly higher than during the first peak.³⁴⁷ However, these findings did not prevent the UK government from continuously striving to relax its Covid-19 containment measures. E.g., after the first wave of the pandemic, on

³⁴¹Saad-Filho (2020).

³⁴²Karnitschnig (2020a).

³⁴³Committee on Public Administration and Constitutional Affairs (2021).

³⁴⁴International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³⁴⁵Chadwick (2020).

³⁴⁶Karnitschnig (2020a).

³⁴⁷International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

18 May 2020, individuals were again given more freedom to meet outdoors, and a gradual reopening of schools began on 1 June 2020.³⁴⁸

By June 2020, England was on top of the statistics with the highest "agestandardised relative mortality rate" (of 7%) among 21 European countries. For England, the impact on mortality was wider, longer and more even across the entire country, so that, when looking at regions, of the 20 areas in Europe with the highest peak of mortality, only four were to be found in England (more precisely Brent, Enfield, Ealing and Thurrock). At that time, on the level of comparing countries, Scotland came third (at 5%), ranking just behind Spain (at 6%).³⁴⁹

Already at an early stage of the Covid-19 pandemic, criticism started mounting over the UK's lack of preparedness and adequate response to the Covid-19 pandemic.³⁵⁰ According to Nagpaul, UK policymakers have throughout the pandemic especially been slow and indecisive in their policy decisions. E.g., the BMA only called for precautionary face masks to be worn in April 2020, when face mask wearing was already the norm in most other European countries. Yet, in the words of Nagpaul, the UK government "dithered" for more than 2 months before requiring face masks to be worn. At first, these were, moreover, only required for people traveling on public transport, although they were ultimately applied more widely by July 2020.³⁵¹ Among the many further public policy issues, Nagpaul says that one of the longest-standing problems that has also been detrimental in the fight against the Covid-19 pandemic, has been the utter failure to address structural inequalities. Indeed, throughout the first wave of the Covid-19 pandemic, around a third of the patients ending up in intensive care beds have been identified as black. Asian or minority ethnic (= "BAME"). By May 2020, it was even reported that six out of ten healthcare workers who had died from Covid-19 had been from BAME backgrounds. According to this same source of information, ethnic minority populations were up to four times more likely to have died from Covid-19, while people living in the most deprived areas of England and Wales were around twice as likely to have died from Covid-19.³⁵² (Cf., furthermore, Sect. 10.3.2.2.)

Karnitschnig has, furthermore, pointed out that the UK government's total lack of preparedness allowed the Covid-19 virus to hit the country extremely hard. England was even reported to having experienced the worst mortality rate of any European country between January 2020 and June 2020. According to this author, the main failings of the UK government included: (1) a huge number of deaths in nursing homes, and (2) the failure to rapidly build up significant testing capacity.³⁵³ Throughout the Covid-19 pandemic, Johnson's government also continued to

³⁴⁸Committee on Public Administration and Constitutional Affairs (2021).

³⁴⁹Spiegelhalter and Masters (2021); UK Office for National Statistics (2021), accessed 18 April 2021.

³⁵⁰Chadwick (2020).

³⁵¹Nagpaul (2021).

³⁵²Nagpaul (2021).

³⁵³Karnitschnig (2020a).

struggle with articulating a long-term strategy, and/or clear messages to the general public (a failure that some would argue could be attributed to being torn between scientific advice and the neoliberal political viewpoint that individual freedoms always should take priority over containment measures, a problem that, as we shall explore later (cf. Sect. 2.5.2.), also hugely impacted the fight against Covid-19 in the United States).³⁵⁴

Most of these findings and criticism were, subsequently, confirmed, to a large extent, by a National Audit Office (NAO) report of 13 May 2021.³⁵⁵ This NAO report has, more precisely, been particularly critical of the fact that the UK government did not seem to have any specification whatsoever for many aspects of its response. E.g., the pre-existing pandemic contingency plan was criticised for not including detailed plans for³⁵⁶:

(1) Identifying and supporting a broad population of counsellors.

According to the NAO report, testing plans and policies for identifying and protecting clinically extremely vulnerable people (CEVs) were not the aim of Exercise "Cygnus", an exercise that had been conducted in 2016 in order to assess the UK's preparedness for an influenza pandemic.

(2) Employment support schemes.

According to the NAO report, the HM Treasury and HM Revenue & Customs (HMRC) said that they had drawn on: (i) an economic contingency plan designed for financial rescues and developed in the wake of the credit crisis of 2008, (ii) draft policy work on wage subsidy schemes, and (iii) lessons learned from other countries, such as Germany.

(3) Financial support to local authorities, such as compensation mechanisms for authorities in case of revenue shortfalls.

According to the NAO report, the Ministry of Housing, Communities and Local Government (MHCLG) said it had tested its response to an economic shock as part of its contingency planning. However, the economic impact of the Covid-19 pandemic largely exceeded the economic shock assumed for this stress test.

(4) Managing a massive disruption to schooling, on the scale of that caused by Covid-19.

According to the NAO report, the Ministry of Education's emergency response function was designed to deal with disruptions due to localised events such as flooding, but not at all for disruptions due to the magnitude of a global pandemic.

While recognising that no manual could have covered all the specific circumstances of every potential crisis, the NAO felt that more detailed planning for the

³⁵⁴Karnitschnig (2020a).

³⁵⁵Cf. National Audit Office (NAO) (2021).

³⁵⁶National Audit Office (NAO) (2021), pp. 12–13.

main impacts of a pandemic and other high-impact, low-probability events would have improved the government's ability to respond to this type of emergencies.³⁵⁷

The NAO report was also critical of the fact that the UK government's communications had not always been clear and timely. The report, e.g., made reference to the following³⁵⁸:

- The PPE guidance (published jointly by the DHSC, Public Health England and NHS England & NHS Improvement) had been amended 30 times up to 31 July 2020, including significant and relatively minor changes.³⁵⁹
- (2) The Ministry of Education has calculated that between 16 March and 1 May 2020, it had published 148 new guidance documents and updates to existing documents.³⁶⁰

By contrast, the NAO report praised the fact that, as soon as the scale of the Covid-19 outbreak in the United Kingdom had become apparent, the UK government had managed to make several rapid and large-scale spending decisions and to implement some measures at a rapid pace. E.g., the NAO report referred to food box deliveries for people with CEV which had been put in place within days of their announcement. Similarly, within weeks after having reached the relevant decisions, (1) the purchase of personal protective equipment (PPE) and fans was put in place, (2) employment assistance and business loan programmes were operational, and (3) the rough sleeper accommodation and school meal voucher campaigns had been both designed and implemented. According to the report, the UK government has also been remarkably fast in announcing unrestricted funding (for an amount of ± 3.2 billion between March 2020 and April 2020) to help local authorities cope with the financial pressures caused by the Covid-19 pandemic.³⁶¹

As has been, furthermore, reported by the International Monetary Fund, as early as 10 May 2020, the UK government set out an initial roadmap for easing the lockdown measures in England (with Scotland, Wales and Northern Ireland having separate rules). Specifically, the reopening was announced to take place in three stages. In a first stage, the reopening was supposed to start on 13 May 2020. During a second phase, the reopening was to continue until July 2020, with in the third stage, an eventual reopening of schools by September 2020. However, due to significant increases in contamination cases that appeared after the summer of 2020, the UK

³⁵⁷National Audit Office (NAO) (2021), p. 13.

³⁵⁸National Audit Office (NAO) (2021), p. 18.

³⁵⁹While frequent updates are necessary to reflect a better understanding of a new virus and a rapidly evolving policy position, welfare representatives expressed concerns about the guidance, including that the frequency of changes made it confusing (cf. National Audit Office (NAO) (2021), p. 18).

³⁶⁰Stakeholders told the NAO that guidance was often issued at the end of the week or late in the evening, which put schools under pressure, especially when guidance had to be implemented immediately. When guidance was updated, it was not always clear to schools what changes had been made. (Cf. National Audit Office (NAO) (2021), p. 18).

³⁶¹National Audit Office (NAO) (2021), p. 13.

government had to ease down on its reopening plans, thereby initially opting for localised restrictions based on a three-tiered intensity system, but eventually choosing for a second country-wide lockdown which got implemented on 5 November 2020 (with similar restrictions in Scotland, Wales and Northern Ireland). During the latter lockdown period, some entities, such as educational institutions and construction and manufacturing businesses were allowed to remain open.³⁶²

Following the relaxation of the national lockdown as of May 2020, more localised responses came into force. In England, such local restrictions were introduced in Leicester from 29 June 2020, and in other cities, including Manchester, parts of Yorkshire, and later Newcastle, from 30 July 2020. From October 2020 on, these stand-alone restrictions (introduced as regulations under the Public Health (Control of Disease) Act 1984) were replaced by three levels of more restrictive measures across England (at Level 3).³⁶³

All by all, the response of the Johnson government to the Covid-19 pandemic has been rather messy. Research has shown that England has experienced higher Covid-19 mortality and more excess deaths during the first half of 2020 than other European countries for which comparable data are available. This is not just a factor related to the age structure of the UK population, or to high unemployment rates in certain sectors, or to just the management of the Covid-19 pandemic itself, although these have all been indicated as major factors. According to this research, the main cause for the disastrous response of the UK government to Covid-19 is related to the UK's less favourable health conditions prior to Covid-19: England's poor position relative to excess mortality in other countries, therefore, came not unexpected, given that, after having endured years of neoliberal public health policy, the improvement in life expectancy in the United Kingdom between 2011 and 2018 had been the lowest among OECD countries, with the exception of Iceland and the United States.³⁶⁴ As a result, by the end of August 2020, the United Kingdom had the highest mortality rate for an English-speaking OECD nation, with 621.3 deaths per one million population.³⁶⁵

On 19 December 2020, with the United Kingdom suffering under a severe second wave of the Covid-19 pandemic, the UK government decided to introduce a fourth tier (stay at home) approach, which closed non-essential shops, besides some other venues (including sports venues), and which, moreover, restricted almost all contact between households. In December 2020, the UK government again reverted to a national policy approach.³⁶⁶

According to the Public Administration and Constitutional Affairs Committee, on 4 January 2021, amidst increasing contamination numbers and confronted with a rapid spread of a new (the—at the time—so-called "British") strain of the Covid-19

³⁶²International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³⁶³Committee on Public Administration and Constitutional Affairs (2021).

³⁶⁴Marmot et al. (2020), p. 11.

³⁶⁵Summers et al. (2020).

³⁶⁶Committee on Public Administration and Constitutional Affairs (2021).

virus, Prime Minister Boris Johnson decided to impose a third Covid-19 lockdown across England (effective on 5 January 2021). This time it concerned a level four lockdown, based on closing schools, restaurants, bars and non-essential shops and on ordering the public to stay at home. Northern Ireland, Scotland and Wales also went into lockdown.³⁶⁷

Leach, Clarke and Kirk have made the general observation that, when looking at the United Kingdom during the Covid-19 pandemic, cases in the United Kingdom first peaked in early April 2020, before falling in late spring and during the summer of 2020. Numbers began to rise again in the fall of 2020, then fell back briefly in November 2020, before reaching a new peak in January 2021. Since then, probably due to the progress of the successful vaccination campaign in the United Kingdom (cf. Sect. 9.4.4.), cases fell sharply, although this fall stabilised in March 2021. However, it is taken into consideration that the number of tests available has also influenced the number of official cases recorded.³⁶⁸

Be this as it may, on average, 2021 saw a steady decline in the number of Covid-19 related deaths in the United Kingdom, while the rate of Covid-19-related deaths in Italy and France was ten times higher than in the United Kingdom. This was most likely due to the success of the UK vaccination campaign, with vaccines racing against the Covid-19 virus and its variants.³⁶⁹

Similarly, the number of people hospitalised due to Covid-19 had also risen sharply by the end of March 2020, reaching a peak in April 2020, to then go down again. The number of hospitalisations started to increase again in September 2020, and reached a new peak in January 2021, although, in line with the evolution of the number of contamination cases, it decreased thereafter.³⁷⁰

2.4.2.3.5.2 Economic Impact During 2020

2.4.2.3.5.2.1 Overall Economic Consequences

As the International Monetary Fund has observed, the biggest blow to the UK economy came in Q2 2020, when GDP fell by 19.8% compared to Q1 2020, reflecting a sharp contraction that had started in April 2020. GDP grew again by 15.5% in Q3 2020, while still remaining 10% below its pre-Covid-19 level.³⁷¹

Overall, during 2020, the UK economy contracted by 10%. However, this has not solely been attributed to Covid-19 itself. According to International Monetary Fund estimates, in 2020, the friction of implementing the post-Brexit trade regime also weighed heavily on economic activity in the United Kingdom (which is believed to be at least a short-term effect of Brexit). In addition, after social distancing had

³⁶⁷Committee on Public Administration and Constitutional Affairs (2021).

³⁶⁸Leach et al. (2021).

³⁶⁹Spiegelhalter and Masters (2021).

³⁷⁰Leach et al. (2021).

³⁷¹International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

somehow subsided in the summer of 2020, a period of "corporate balance sheet repair" was expected to depress investment, while labour reallocation was expected to again proceed gradually. The International Monetary Fund, moreover, made a projection that (1) the pre-crisis level of economic output would be restored by the end of 2022, but also that (2) by 2025, the economic output would remain about 4% below the pre-2020 trend.³⁷²

Butler has made some more specific assessments of certain economic activities in the United Kingdom during 2020. According to this author, in 2020, online sales in the United Kingdom surged during the Covid-19 shutdown, while the forced closure of high street shops hurt the UK retail sector as a whole. According to further economic reports quoted by Butler, after having experienced the largest decline ever during the first wave of the Covid-19 pandemic, the total volume of retail sales then gradually returned to near pre-pandemic levels. Butler also observed a remarkable shift in consumer spending which may have contributed to somehow containing the economic shock caused by the pandemic. With pubs and restaurants closed and people spending less on services during the first lockdown, supermarket sales by contrast jumped, as did spending on DIY-articles (= "do-it-yourself articles") and gardening material. The latter has been attributed to the fact that more people spent more time at home. By contrast, clothing sales fell, with many city centre shops being pushed to the brink of collapse as their doors had to remain closed during prolonged periods of time.³⁷³

³⁷²International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³⁷³According to Butler, by 2020, more than 11,000 retail outlets permanently disappeared from Britain's high streets, shopping centres and retail parks, however with independent retailers and shops located in villages, having fared much better than chain shops and shops located in town centres. According to the Local Data Company (LDC), as quoted in detail by Butler, a net total of 9877 chain shops and 1442 independent retailers, restaurants and leisure centres were expected to close in England, Wales and Scotland by the end of 2020. This analysis covered 680,000 outlets across 3000 retail sites. Still according to Butler, government support, such as (1) business rates relief, (2) a moratorium on evictions for renters unable to pay their landlords, (3) support grants, and (4) seniority payments for workers, has helped to slow the pace of closures of independents by 11%compared to 2019. As a result of these support measures, the pace of closures has not been as bad as LDC had previously predicted, with at least 14,900 outlets to be released. However, still according to Butler, the true impact of the Covid-19 pandemic was still not completely apparent at the beginning of 2021. E.g., many of the outlets included in the research quoted by Butler, were temporarily closed during the lockdown closures and were not counted as (definitively) closed, while it was not to be excluded that they might never reopen after the restrictions would ease. (Cf. Butler (2021).)

In 2020, fashion and clothing shops were reported to lead the decline, followed by bookmakers, estate agents and mobile phone shops. Still according to Butler, barbers were the fastest growing high street businesses, despite months of lockdowns keeping them out, followed by beauty salons, fast food outlets and nail salons. Supermarkets and grocery shops were also among those doing well, which may be attributed to the fact that they had been given 'essential' status during the lockdowns and had, hence, be allowed to continue trading. (Cf. Butler (2021).)

According to the study referred to by Butler, especially the loss of commuters and tourists hit town centres hard. As a result, unit vacancies rose by 2.5 percentage points to 16.1%, more than any other type of location. By contrast, in villages, which are surrounded by residential areas with a

According to Butler, more than 11,000 retail outlets permanently disappeared from the high streets in 2020.³⁷⁴

According to Partington, in 2020, in addition to having experienced one of the highest Covid-19 mortality rates in the world, the United Kingdom was also confronted with an economy which was performing the worst among the G7 group of most wealthy nations. According to this author, this was to be attributed to the fact that the UK government had initiated containment measures, amongst which lockdown measures, at a much later stage in the pandemic than many other countries, as a further result of which, moreover due to the persistence of Covid-19 contamination cases caused by poor policy decisions, the United Kingdom also had to wait longer to ease down on its restrictions. The specific structure of the British economy, with a huge reliance on so-called "social consumption"—such as face-to-face spending in restaurants, bars and shops—has, amongst other factors, also been referred to as one of the causes having contributed to this greater decline.³⁷⁵

Also according to Partington, the number of journeys undertaken on Britain's roads, as well as the number of rides on public transport, also plummeted during each period of severe containment measures. According to this author, this at the same time reflected the weaker degree of economic activity during these periods, characterized by fewer people leaving their homes for work or leisure. Partington, furthermore, mentions that, during these periods of severe containment measures, especially during the first wave of the Covid-19 pandemic, the UK roads have been the quietest since the 1950s. On the bright side, this was believed to help reducing pollution levels. By contrast, cycling was reported to have boomed during these periods, probably because more people stayed at home, allowing them to use their bikes more than when commuting to go to work. International air passenger arrivals also collapsed, down 91% in January 2021 compared to the same month in the preceding year.³⁷⁶

Partington made a further observation that a decreasing demand for goods and services during the Covid-19 pandemic drove down the rate of inflation, with the consumer price index (CPI) even coming close to zero. This was, moreover, attributed to lower energy costs and to the fact that many businesses resorted to cutting prices in the hope of attracting reluctant buyers.³⁷⁷

Again according to Partington, Covid-19, furthermore, has resulted in the fastest rate of redundancies ever recorded, even far exceeding the damage caused by the

higher balance of independent retailers, shops had been more resilient, with vacancies increasing by "only" 0.4 percentage points to 11.1%. (Cf. Butler (2021).)

³⁷⁴Partington (2021).

³⁷⁵Partington (2021).

³⁷⁶Partington (2021).

³⁷⁷Partington (2021).

According to this author, reflecting the collapse in demand, US oil prices turned negative for the first time in history. With record support from governments and global central banks, economists nevertheless still expected inflation to rise, as consumers were expected to embark on a spending spree following the easing of lockdown measures (cf. Partington (2021).

financial crisis of 2008. Among the people hit hardest were: (1) young workers, (2) people in precarious employment, and (3) people working in the hardest hit sectors, such as hospitality. The unemployment rate was hereby reported to have risen to 5%, (implying that, at its peak moment, 1.7 million people were unemployed), coming from 4% before the Covid-19 crisis. However, the unemployment rate slightly fell in January 2021, which was at the same time the first drop since the start of the Covid-19 pandemic. Still according to Partington, in July 2020, the Office for Budget Responsibility nevertheless forecasted a further peak unemployment rate of 12% (the equivalent of about four million people).³⁷⁸

Partington made the further observation that, in 2020, the UK government pumped more than £400 billion into the UK economy by means of emergency response to the Covid-19 pandemic. This happened while tax revenues at the same time collapsed because of the decline in economic activity. It was, hence, not surprising that, due to these combined elements, the UK government's budget deficit for 2020 was expected to reach "a peacetime high" of £355 billion, or 17% of GDP for the financial year ending March 2021. By that time, the UK national debt exceeded £2.1 trillion, or almost 100% of GDP, the highest level reported for the United Kingdom since the 1960s. However, the cost of servicing the UK's debt also plummeted to historically low levels,³⁷⁹ which was probably due to low interest rates.³⁸⁰

As furthermore observed by Partington, several official figures have confirmed that, in 2020, the UK economy has been exposed to its biggest annual decline in 300 years. However, said author also made the remark that, by the end of 2020, a double-dip recession has nevertheless been avoided. Throughout 2020, the UK GDP has been reported to have fallen by 9.9%, which was indicated as the biggest drop since the "Great Freeze" of 1709. However, as the nation gradually adapted to the Covid-19 containment measures, further falls in economic activity were to a large extent prevented during the second and third lockdown periods. Moreover, thanks to a remarkable rapid progress in vaccine delivery (cf. Sect. 9.4.4.), the UK economy was expected to return to its pre-pandemic size earlier than expected in 2021–2022, albeit with lasting scars likely to persist.³⁸¹

Partington made the further remark that, unlike previous recessions during which property prices generally followed a decline in economic activity, the Covid-19 crisis itself has by contrast been accompanied by a rise in property prices. This has been, in part, attributed to the fact that the UK government's "stamp duty exemption" fuelled market growth, while at the same time making people revalue where

³⁷⁸Partington (2021).

³⁷⁹Partington (2021).

According to Partington, the UK Chancellor, Rishi Sunak, planned to raise taxes and cut public spending in response. Some economists argued that this was unnecessary if the economy recovered quickly, while others warned that efforts to reduce the deficit too soon would stifle growth. (Cf. Partington (2021).)

³⁸⁰Partington (2021).

³⁸¹Partington (2021).

they lived during the shutdown and making some decide to move—in search of more (garden) space, or in search of a home further away from urban centres. According to the same author, the housing market was probably also supported by wealthier households who have been able to save money during the Covid-19 crisis while working from home. There was, by contrast, at the same time a vast number of low-income workers who did no longer manage to pay for their rent. Still, Partington also noted that real estate experts warned that property prices could again drop after the end of the tax break and because of rising/structural unemployment.³⁸²

Partington finally also noted that the UK government's lay-off scheme—which had been committed to pay 80% of a worker's salary, up to £2500 a month—has been deployed to protect more than 11 million jobs in the United Kingdom since it had been launched in March 2020, at a total cost of more than £57 billion by March 2021. Moreover, almost nine million jobs had turned redundant by May 2020 (i.e., at the height of the first wave of the Covid-19 pandemic). The use of the lay-off scheme then started decreasing steadily through the summer of 2020, to remain above two million thereafter. The number of layoffs was reported to again be rising sharply during the second wave of the Covid-19 pandemic, to reach a lower peak of almost five million as employers started adapting to the containment measures. According to the latest UK official figures, as again quoted by Partington, around 4.7 million people were still on unemployment leave by the end of February 2021. The highest take-up rates occurred in London, among both women and younger workers, and especially in the accommodation and catering sector.³⁸³

2.4.2.3.5.2.2 Estimates About the UK Government Spending

By the end of March 2021, the estimated financial cost of the support measures resorted to by the UK Government in its response to Covid-19 was £372 billion. The largest programmes, in terms of estimated lifetime cost were: (1) the Coronavirus Job Retention Scheme (£62 billion), (2) NHS Test and Trace (£38 billion) and (3) income support for the self-employed (£27 billion).³⁸⁴

The largest spending departments were: (1) HM Revenue and Customs (£111 billion), (2) the Department of Health and Social Care (£92 billion), (3) the Department for Business, Energy and Industrial Strategy (£59 billion), (4) HM Treasury (£46 billion), (5) the Department for Work and Pensions (£21 billion), (6) the Department for Transport (£18 billion), and (7) the Department for Housing, Communities and Local Government (£11 billion). Other core departments together were reported to account for £12 billion.³⁸⁵

³⁸²Partington (2021).

³⁸³Partington (2021).

³⁸⁴National Audit Office (NAO) (2021), p. 10.

³⁸⁵National Audit Office (NAO) (2021), pp. 9–10.

Figure 2.3^{386} provides a breakdown of the estimated lifetime costs of the UK government's response to the Covid-19 pandemic, by programme, with respect to the situation at the end of March 2021.³⁸⁷

2.4.2.3.5.3 The UK Roadmap Out of Lockdown

Already by the end of 2020, the United Kingdom had started its (successful) vaccination campaign (cf. Sect. 9.4.4.). Based on the success of this vaccination campaign, on 2 February 2021, the UK Prime Minister Boris Johnson announced a "roadmap" for exiting the (subsequent) UK lockdown situations.³⁸⁸

The roadmap was made conditional on four key indicators³⁸⁹:

- (1) The vaccine roll-out program continuing to be successful.
- (2) Evidence that vaccines would be sufficiently effective in reducing hospitalizations and deaths among those vaccinated.
- (3) Infection rates not likely to lead to a further increase in hospital admissions that would put unsustainable pressure on the NHS.
- (4) The risks not fundamentally changing because of "new variants of concern" of the Covid-19 virus.

According to information provided by the Committee on Public Administration and Constitutional Affairs, it was announced that the at the time still prevailing full emergency lockdown which was originally scheduled to end on 15 February 2021, would be lifted in phases. In a first phase, there would be a reopening of schools and outdoor public spaces, which was to take place on 8 March 2021. In a second phase, a reopening of shops, hairdressing salons, gyms and open-air hotels was announced to happen on 12 April 2021 (in England). In a third phase, the reopening of non-core facilities (e.g., outdoor leisure facilities and indoor facilities, such as gyms and swimming pools) was announced for 17 May 2021. In a fourth phase, which was about to start on 17 May 2021, most of the still prevailing social distance rules would be lifted, with indoor hotels and hospitality facilities allowed to reopen. By 21 June 2021, all legal social contact restrictions would have been completely removed, and the reopening of all sectors of the economy would be an established fact.³⁹⁰

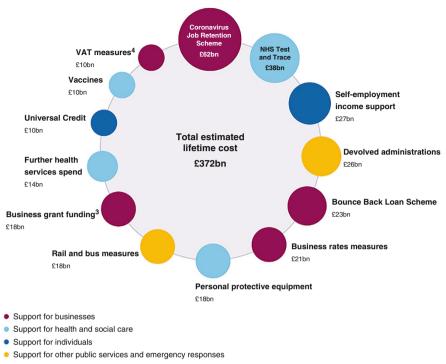
 $^{^{386}}$ "(1) Figures are rounded to the billion. (2) The area of each bubble is proportional to the cost of the programme. (3) Business grant funding includes the Closed Business Lockdown Payment, the Innovate UK Business Support Package, the Retail, Hospitality and Leisure Grant Fund and the Small Business Grant Fund. (4) VAT measures include reduced VAT rates and VAT deferrals, except for the temporary VAT zero rate on personal protective equipment, which has been included in the personal protective equipment measures. (5) The programmes shown in this diagram account for £294 billion of the estimated lifetime costs of the government's response. The remaining cost (£78 billion) relates to support for individuals, businesses, health and social care, and other public services and emergency responses" [Source: National Audit Office (NAO) (2021), p. 10].

³⁸⁷National Audit Office (NAO) (2021), p. 10.

³⁸⁸Committee on Public Administration and Constitutional Affairs (2021).

³⁸⁹Committee on Public Administration and Constitutional Affairs(2021); International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³⁹⁰Committee on Public Administration and Constitutional Affairs (2021). Cf., furthermore, Thomas (2021).



The programmes highlighted in this diagram accounted for 79% of the estimated cost of the government's response announced up to 31 March 2021

Fig. 2.3 Breakdown of the estimated lifetime costs of the government's response to the Covid-19 pandemic by programme, March 2021

However, around mid-May 2021, the fourth condition would start to cause reasons for concern. While the 17 May 2021 date approached, by 12 May 2021 to be precise, UK scientists began to worry that a dramatic increase in the number of UK cases of the Indian variant of the Covid-19 virus (cf. Sect. 1.1.2.) would jeopardise the country's roadmap for reopening. Already shortly before, on 7 May 2021, Public Health England had designated the "B.1.617.2." variant as a "variant of concern". Through this, PHE seemed to have acknowledged that the variant was at least as transmissible as the UK variant, while it was at that moment still unclear whether and to what extent the B.1.617.2. variant could also reduce vaccine

effectiveness. Professor Christina Pagel, director of the clinical operational research unit at University College London and a member of the independent Sage panel, was quoted saying that the growth of the number of B.1.617.2 cases might be(come) worrying enough to delay the next stage of the roadmap due by Monday 17 May 2021. At that time, 1393 cases of the B.1.617.2. variant had been identified in the United Kingdom, which made it the second most common variant in the country. In addition, it was also reported that approximately 6.1% of Covid-19 genomes in England sequenced in the 4 weeks prior to 24 April 2021, might have been attributed to the B.1.617.2. variant. While the absolute numbers of the B.1.617.2. variant were believed still not to be very high, they nevertheless had been doubling every week, all within a brief period of but 3 weeks.³⁹¹

2.4.2.3.6 Belgium

2.4.2.3.6.1 Introduction

Among European countries, there is probably no country that has gone through such an arduous process of dealing with Covid-19 as the Kingdom of Belgium.

Foulon noted that, to start with, Belgium had consciously ignored all early warning signs at the beginning of the Covid-19 outbreak. E.g., at the end of January 2020, the Belgian government deliberately ignored the fact that the WHO had declared Covid-19 an international medical emergency, and that China had already made it very clear how fast the disease was spreading on (and beyond) its territory.³⁹²

Moreover, on 31 January 2020, Joseph Wu published an article in "The Lancet", in which he explained in detail about what was happening in Wuhan, while at the same time warning the world that Covid-19 was on the way of becoming a pandemic and explicitly urging countries around the world with reported Covid-19 cases on their territory to immediately start taking containment measures³⁹³:

On the present trajectory, 2019-nCoV could be about to become a global epidemic in the absence of mitigation. Nevertheless, it might still be possible to secure containment of the spread of infection such that initial imported seeding cases or even early local transmission does not lead to a large epidemic in locations outside Wuhan. To possibly succeed, substantial, even draconian measures that limit population mobility should be seriously and immediately considered in affected areas, as should strategies to drastically reduce within-population contact rates through cancellation of mass gatherings, school closures, and instituting work-from-home arrangements, for example.

³⁹¹Grover (2021).

³⁹²Foulon (2021).

³⁹³Wu et al. (2020), p. 695.

This urgent appeal went completely unnoticed in Belgium, although it was known that the first cases of Covid-19 were already present on the European continent, more specifically in France, one of Belgium's neighbouring countries.³⁹⁴

More decisive action was also called for from within the country itself but even so completely ignored, albeit this happened much later (more precisely after Italy had already been facing a disastrous Covid-19 scenario). When some more time later, namely on 8 March 2020, virologist Marc Wathelet wrote an open letter to the Belgian Prime Minister in which he stated that the response to a pandemic could be summed up in one word, "Urgent", and that every hour lost meant more infected people,³⁹⁵ the Belgian Health Minister De Block simply responded—in a way that might even have inspired US President Trump—with the shortest of tweets, in which she called Wathelet a "drama queen". (Cf. Sect. 2.4.2.3.6.3.)

In other words, the Belgian political system completely failed. According to Foulon, the Belgian political leadership hereby very consistently ignored all medical expertise, in this way rapidly dragging Belgium into an avalanche of Covid-19 contagion cases and deaths. For Foulon, the Belgian system had several opportunities to take immediate action but preferred to let things take their course (= thus

³⁹⁴Foulon (2021).

³⁹⁵The letter was published on the website of The Specialist (cf. Wathelet (2020)). Wathelet, among others, wrote the following: "The attitude of the Ministry of Public Health is paternalistic, with the message: we are prepared, we have a pandemic plan, we have expert groups, we are monitoring the situation closely, we are monitoring the situation, we are communicating as it is necessary, and we are not interested in independent criticism from medical professionals or scientists. However, apart from the disinterest in the opinion of independent government professionals, nothing is further from the truth: we are not prepared, we do not have a pandemic plan, government experts demonstrate a lack of knowledge of the characteristics of this new coronavirus. They are following the situation closely but refuse to anticipate it, and communication remains inconsistent, for the simple reason that they do not sufficiently understand the nature of the danger we face. Belgium does not have a pandemic plan. This information will probably even surprise the Minister of Health, but Belgium has, in fact, no pandemic plan! Instead of having one, Belgium has an epidemic plan and there is a crucial difference between the two. Unlike epidemics where the outbreaks of infection remain localized in certain regions of the globe as was the case for both SARS and MERS, in a pandemic these outbreaks continue to spread uncontrollably in most countries. The consequence of this difference is a logistical problem: the supply chains for the equipment needed for healthcare are interrupted. For this reason, a true pandemic plan is based on the concept of strategic reserve. All the material necessary, not only to ensure the normal functioning of our healthcare system, but also to have the capacity to absorb the inevitable increase in the number of patients to be treated, must be kept in stock in sufficient quantity. it is not produced on Belgian territory. We are already in shortage of masks. Belgium therefore does not have a pandemic plan. Contrary to the assertions of the Minister of Health, we are therefore not prepared, and it is urgent that the government take all the necessary measures to remedy this deficiency. Confront the reality of the situation. Those who lack the professional skills to judge the situation for themselves are left with trying to figure out which expert is closest to the truth, a futile exercise. On the contrary, I believe that it is possible to explain in an intelligible way to the government and to the general public the reality of the situation, but it requires a little effort from everyone to understand the two most important figures in epidemiology, of a public health point of view. Once this information is understood, everyone will be in a position to assess the proportionality of the public health measures that have been taken and remain to be taken". (Cf. Wathelet (2020).)

resorting to a so-called "laissez-passer" approach; cf. Sect. 2.2.4.). Asian countries that reacted quickly, such as Taiwan, Vietnam and Singapore, and immediately resorted to an elimination strategy (based on testing, contact tracing and quarantine measures), did not experience any excess mortality. If Belgium had also acted so quickly in such a manner, its mortality rate from Covid-19 would probably have been much lower: instead, Belgium would soon lead Europe in both the number of infection cases and Covid-19 related deaths.³⁹⁶

2.4.2.3.6.2 February 2020: "Laissez-Faire, Laissez-Passer" (or "No Need To Be Drama Queens")

On 2 February 2020, quarantine measures were resorted to with regard to nine Belgians who had just been repatriated from Wuhan. One of them, the 55-year-old West Belgian Philip Soubry, tested positive for Covid-19 but showed no symptoms. The first official case in Belgium of a person infected with Covid-19 was thus confirmed. This was on 4 February 2020.³⁹⁷

A few days later, a new indication of the extreme weakness of Belgium's pandemic preparedness made newspaper headlines. Specifically, on 6 February 2020, it was officially established that the Belgian emergency stock of FFP2 masks had been destroyed shortly before, allegedly because their expiry date had passed and/or because Belgium was lacking storage space. Two renowned Belgian virologists, Erika Vlieghe and Marc Van Ranst, among others, immediately requested a new strategic stockpile. A day later, the WHO itself explicitly warned against of a shortage of medical supplies.³⁹⁸ Belgium being Belgium, it took a few more months before new FFP2 masks could be purchased (with producers on the world markets no longer being able to meet the growing demand, but with Belgium itself making a complete mess out of its procurement strategy). And this was how specialists Erika Vlieghe and Marc Van Ranst made one of their first appearances in front of the Belgian public; in the following year, both would appear almost daily in the Belgian media.³⁹⁹

As of 20 February 2020, more and more Belgian scientists expressed their concern about the shortage of protective equipment. On 22 February 2020, Van Ranst also warned for the first time about a pandemic. The Federal Minister of Public Health, Maggie De Block, reacted by asking the virologist not to create unnecessary panic.⁴⁰⁰

In the meantime, there was a growing concern about the return of tourists from their skiing holidays, which had been a favourite pastime of the Belgian elite and

³⁹⁶Foulon (2021).

³⁹⁷Roelandt (2021); International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

³⁹⁸Roelandt (2021).

³⁹⁹Roelandt (2021).

⁴⁰⁰Roelandt (2021).

middle classes during early spring vacation periods for years already. Despite this concern, on 24 February 2020, microbiology professor Herman Goossens stated that he considered the risk of Covid-19 infection in ski resorts to be "infinitesimal".⁴⁰¹ As a result, the Belgian authorities did not bother to develop a quarantine procedure for returning ski tourists, a mistake that would soon prove detrimental. The return from the Austrian ski resort of Ischgl, amongst others, turned out to be one of the main spreading events, resulting in the first wave of the Covid-19 pandemic in Belgium (alongside a number of other European countries) which, moreover, quickly put Belgium in the leading position in terms of both the number of Covid-19 cases and the number of deaths during the first wave of the Covid-19 pandemic.⁴⁰²

On 26 February 2020, a tender for the purchase of face masks was again launched. Shortly afterwards, it became apparent that even a task as simple as the purchase of face masks was turning into a classic Belgian farce scenario of mismanagement and accumulated errors, for which politicians, in the best of Belgian traditions, would be very inventive in producing a wide variety of excuses.⁴⁰³

On 28 February 2020, Belgian experts called for the activation of the epidemic crisis centre. With the Belgian financial markets crashing, Health Minister Maggie De Block tried to reassure the population. Even one more week later, with Covid-19 spreading through the country, Minister De Block called virologist Marc Wathelet who had (rightly) warned that Belgium was not responding to the rising Covid-19 pandemic, a "drama queen".⁴⁰⁴

Shortly afterwards, there was officially a new case of infection with Covid-19: a woman who had just returned from a business trip to France.⁴⁰⁵ Steven Van Gucht, virologist at Sciensano, later explained that the particularity of this case had been that the woman had no direct connection with China or Italy. According to Van Gucht, this was an indication that the new coronavirus was spreading in Europe. Van Gucht, furthermore, explained that before this case, the Covid-19 virus had in Belgium mainly been considered as "a traveller's disease", and not as a pandemic virus. According to Van Gucht, it became increasingly clear that the Covid-19 virus had most likely already spread secretly throughout Belgium (and Europe).⁴⁰⁶

⁴⁰¹Roelandt (2021).

⁴⁰²Roelandt (2021).

⁴⁰³Roelandt (2021).

According to Galindo, by June 2020, it emerged that a total of 15 million face masks that had been ordered by the federal government for distribution did not meet official safety standards and could not be released to the public. Specifically, the instructions for the reusable masks stated that they should be washed at 30 °C, instead of the 60 °C recommended by federal health authorities and other health agencies in the country, as well as the WHO. This news was one more stumbling block in the government's attempts to complete a mass ordering of face masks since the National Security Council had first committed to giving every Belgian resident a face mask on 25 April 2020. (Cf. Galindo (2020).)

⁴⁰⁴Roelandt (2021).

⁴⁰⁵Roelandt (2021).

⁴⁰⁶Roelandt (2021).

From this, it appears that some Belgian experts may not have paid much attention to what had at the time already been published in medical journals for more than a month (such as the above-mentioned publication by Joseph Wu, which had been published in "The Lancet" already on 31 January 2020, and in which the authors of the study had explicitly warned against the outbreak of a pandemic).

2.4.2.3.6.3 March 2020: Containment Measures

In March 2020, the Belgian government finally started to act, albeit far too late, especially given Marc Wathelet's warning that every hour lost would lead to more contagion cases and deaths. In the best of traditions of Belgian governments, not just a few hours, but more than a month had been wasted.

On 6 March 2020, the FPS Foreign Affairs issued a negative travel advice for school trips to Italy, following a cancellation decision by the Italian government.⁴⁰⁷

On 10 March 2020, the first National Security Council was held, resulting in a series of recommendations based on the principle of "social distancing". The following concrete recommendations were issued:

- Wherever possible, working from home was recommended.
- It was suggested that schools would cancel school parties and multi-day school trips.
- There was a recommendation to cancel events with more than a thousand people.

On 12 March 2020, the Belgian federal government decided that from midnight on 13 March 2020, until 3 April 2020, the following measures would be in force:

- Cafés, restaurants and nightclubs were closed.
- Takeaways could remain open.
- Hotels could remain open, but their indoor restaurants and breakfast rooms had to be closed.
- All shops providing essential services, such as food shops (including supermarkets), pet food shops and pharmacies would remain open as usual, including at weekends. Other shops could remain open during the week but were told to close during the weekend.
- Markets could take place, subject to certain adapted guidelines, on weekdays. During the weekend, only food stalls were allowed.
- In nursery, primary and secondary schools, classes were suspended from 16 March 2020 to 3 April 2020.
- Crèches remained open.
- All major "events" were cancelled. This implied that sports and cultural events were no longer allowed, and that amusement parks and museums would be closed.

⁴⁰⁷Roelandt (2021).

On 13 March 2020, the Flemish Government took a series of additional measures concerning the closure of service centres, residential care centres, crèches and day-care centres, driver training institutions, vehicle inspection institutions, bus tickets selling places, and schools.⁴⁰⁸

On 17 March 2020, a national "lockdown light" was decided, to become effective on 18 March 2020, at noon. All non-essential shops were hereby closed until at least 5 April 2020. By contrast, supermarkets, food shops, drugstores and pharmacies were allowed to stay open. People were still allowed to go out to walk, jog or cycle. Working from home became the norm. All non-essential travel was prohibited, as well as non-essential travel abroad.⁴⁰⁹

A more comprehensive set of Belgian government decisions was published on 18 March 2020, soon to be replaced by a new set of measures on 23 March 2020. From that date onwards, the Belgian and local (Flemish, Brussels and Walloon) governments regularly modified their Covid-19 containment measures, often causing great confusion among the Belgian population.⁴¹⁰

2.4.2.3.6.4 April 2020: Reopening of the Economy

In the period to follow, containment measures were continuously modified, until by the end of April 2020 and the beginning of May 2020, the Belgian governments (federal and regional) decided to gradually relax the Covid-19 containment measures. On 24 April 2020, a first such decision was taken to relax the Covid-19 measures, while the general rules on hygiene and social distance were kept in force.⁴¹¹

It had hereby been clear from the outset that part of the Belgian population was not inclined to the Covid-19 containment measures and had had difficulties with their follow-up. Moreover, while the number of Covid-19 infections and deaths decreased somewhat from end-April 2020 onwards, the pressure from retailers and the business community to "reopen the economy" became stronger and stronger. Belgian governments started to give in to this pressure as of the end of April 2020. It would later turn out that the easing of containment measures had come too soon, although the onset of the summer period (characterized by long school holidays and the possibility of outdoor social activities) postponed the effects of the easing of measures until the fall of 2020, when Belgium found itself confronted with a severe "second wave" of the Covid-19 pandemic (to a much worse extent than most other countries).⁴¹²

⁴⁰⁸Roelandt (2021).

⁴⁰⁹Roelandt (2021).

⁴¹⁰Roelandt (2021).

⁴¹¹Roelandt (2021).

⁴¹²Roelandt (2021).

2.4.2.3.6.5 In-Between Assessment of Belgium's Handling of the First Wave of the Covid-19 Pandemic

Karnitschnig's analysis of Belgium's (initial) response to the Covid-19 virus threat leaves little to the imagination⁴¹³:

If the EU mandarins needed a reminder in recent months of how bad the crisis could get in Europe, they only had to look out their own window.

Theories abound as to why Belgium, especially in the first months after the outbreak of Covid-19 on its territory, was unable to adequately manage the Covid-19 health crisis, whether because of the country's status as a diplomatic and transport hub, or because of its densely populated urban population.⁴¹⁴

However, one of the most likely explanations for Belgium's total inability to deal with the Covid-19 pandemic in an appropriate manner, is Belgium's total political dysfunction. According to Karnitschnig, "Belgium barely functions at the best of times, due to its fragmented provincial structure and regional rivalries".⁴¹⁵ Unfortunately for the country, the Covid-19 pandemic, moreover, struck during one of the country's frequent political interregnums, specifically at a time when Belgium was ruled by an "ad interim" government with limited powers. As a result, the enormous task of combatting the Covid-19 pandemic was left in the hands of interim Prime Minister Sophie Wilmès, who lacked all experience of running a government, let alone of running a country facing its biggest (health) crisis in over half a century.⁴¹⁶

When Covid-19 struck Belgium by early March 2020, the Belgian interim government's overall communication with the general public proved disastrous. The non-traditional methodology used by Belgium to count Covid-19 deaths further confused the situation (while the number of deaths in the first months of the Covid-19 crisis was particularly high among residents of nursing homes for the elderly). As a result, it is even now still difficult to compare Belgium with other countries based on its government's own data collection method.⁴¹⁷

But what is clear is that the situation in Belgium has been extremely bad. Already in March 2020, Covid-19 wreaked havoc in Belgium.⁴¹⁸ Both death and infection rates reached an all-time high, especially in nursing homes.⁴¹⁹ At the end of August 2020, Belgium had the highest mortality rate among OECD Member States, with 860.9 deaths per million inhabitants.⁴²⁰

⁴¹³Karnitschnig (2020a).

⁴¹⁴Karnitschnig (2020a).

⁴¹⁵Karnitschnig (2020a). Cf., furthermore, Moens and Gijs (2020).

⁴¹⁶Karnitschnig (2020a). Cf., furthermore, Moens and Gijs (2020).

⁴¹⁷Karnitschnig (2020a).

⁴¹⁸Karnitschnig (2020a).

⁴¹⁹de la Baume and Gijs (2020).

⁴²⁰Summers et al. (2020).

2.4.2.3.6.6 May 2020: Towards the Second Wave of the Covid-19 Pandemic

According to the International Monetary Fund, in early May 2020, Belgium established a reopening plan conditional on health outcomes. This resulted in the reopening of the country in four phases, with economic sectors and activities of socio-economic life being treated differently according to their degree of contact intensity. However, following a resurgence of cases as of mid-July 2020 onwards, the fifth phase of the reopening plan was eventually put on hold, with some containment measures again being tightened. Because of this, and despite a partial relaxation at the end of August 2020, social distancing rules in Belgium had to remain in place for most of 2020.⁴²¹

2.4.2.3.6.7 October to November 2020: Belgium's Second Wave

While Belgium had already been hit very hard during the "first wave" of the Covid-19 pandemic, in October 2020, when the "second wave" of the Covid-19 pandemic started affecting more and more EU countries, Belgium once again soon ranked among the most affected countries on the European continent.⁴²² One of the main reasons for this seems to have been that the Covid-19 pandemic containment measures had been relaxed too early and too much in the summer of 2020, so that by the end of September 2020, the country was struggling to adapt to the danger of colder weather and was eventually caught blindsided by a catastrophic second wave.⁴²³

In early October 2020, the new Belgian government of Prime Minister Alexander De Croo promised better coordination in the fight against Covid-19.⁴²⁴ In the face of a sharp increase in cases and hospitalisations in early October 2020, extensive activity and mobility restrictions were imposed from 19 October 2020.⁴²⁵

These measures included⁴²⁶:

- (1) Close contact (so-called "cuddling") was limited to a maximum of 1 person.
- (2) Private meetings were limited to the same four people every fortnight.
- (3) Gatherings in public spaces were limited to a maximum of four people.
- (4) Working from home became the rule, for those jobs that allowed it (and provided that the continuity of companies' operations, activities and services could be ensured).
- (5) Markets and small fairs were allowed to remain open, but the consumption of food and drinks on such markets became prohibited. Flea markets and small Christmas markets got prohibited.

 ⁴²¹ International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).
 ⁴²² Moens (2020).

⁴²³ de la Baume and Gijs (2020). Cf., furthermore, Moens (2020).

⁴²⁴Karnitschnig (2020a). Cf., furthermore, Moens and Gijs (2020).

⁴²⁵International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

⁴²⁶Belgian Government (2020).

- (6) Bars and restaurants were closed. They were to remain closed for a period of 4 weeks, with this measure to be evaluated after 2 weeks. Meals could be collected until 10 p.m. Receptions and banquets provided by a professional caterer were prohibited, except in hotels for guests staying there and with regard to gatherings after funerals (attended by maximum 40 people).
- (7) Night shops had to close at 10 pm. The sale of alcohol was prohibited from 8 p. m. onwards.
- (8) A ban on entering the public space between midnight and 5 a.m. was issued, except for essential travel that could not be delayed, such as for urgent medical reasons, business travel and commuting.
- (9) For indoor activities, the existing protocols would continue to apply until a further assessment (announced for 23 October 2020). The sale of food and drinks during such gatherings was prohibited.
- (10) With regard to competitive sports, the number of spectators was halved from 400 to 200 (professionals) or limited to members of the same household (amateurs). Canteens and drinking establishments were closed.

When the second wave of the Covid-19 pandemic broke out across the European continent in October 2020, Belgium (together with the Czech Republic) reported the highest number of new cases in the European Region.⁴²⁷ On 24 October 2020, Belgium set its new record with 17,709 new daily contamination cases. Belgium even became the epicentre of the second wave in the EU, with the highest case rate per capita on the continent (besides Andorra). Belgium at the time also recorded the third highest number of Covid-19-related deaths per capita in the world, after Peru and San Marino.⁴²⁸

The "intermediate" measures of 19 October 2020 were soon deemed insufficient.⁴²⁹ With the new Minister of Health, Frank Vandenbroucke, warning of a virus "tsunami", Belgium then decided to impose some of the strictest containment measures in Europe, which started on 2 November 2020 and were largely to continue until early 2021. As a result, Belgium closed most non-essential shops, as well as all restaurants, bars and hairdressers. Belgium, furthermore, imposed a night-time curfew and allowed only one close contact from outside one's household. The latter restriction even applied on Christmas Eve, one of Belgium's most important holidays, which was in stark contrast to the much looser socialisation rules that applied in Belgium's neighbouring countries. Nevertheless, the new lockdown was less strict than the one in spring 2020, with e.g., non-essential shops allowed to reopen as of 1 December 2020.⁴³⁰

In response to a stagnation in the decline of infection rates and the emergence of new, more contagious strains of the virus, the rules and controls on travel and

⁴²⁷Time (2020).

⁴²⁸Time (2020).

⁴²⁹International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

⁴³⁰International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

teleworking were gradually tightened (based on decisions of the Advisory Committee of 30 December 2020 and 22 January 2021), with containment measures several times being extended throughout the winter of 2020–2021. Some contact-intensive businesses were allowed to reopen in stages on 8 February 2021, 13 February 2021 and 1 March 2021. Further relaxation was considered premature during meetings of the Advisory Committee of 26 February and 3 March 2021.⁴³¹

Over-mortality during the fall and winter of 2020–2021, saw one or more areas in Poland, Belgium, Bulgaria and Switzerland reach record levels of 160.0% or more.⁴³²

One potential factor for explaining the extreme second wave in Belgium may have been its relatively high population density. "You have to look at Belgium as a big city," said Marc Van Ranst, one of Belgium's leading virologists. "That's why in Brussels, where the population density is particularly high, the problem is acute." For Pierre Van Damme, one of Belgium's leading epidemiologists, the reopening of universities at the end of September 2020 has also been a major driver of transmission in the country. As students usually went home at weekends, they then exposed the infection to their parents, favouring transmissions in the 40–60+ age group, who were the people who then entered the hospitals during the second wave of the pandemic.⁴³³

However, considering the mortality rates of Belgium and the Czech Republic due to the first and second waves combined, it is not surprising that, according to the Johns Hopkins University Data Repository, these countries had the second and first highest Covid-19 mortality rates per million inhabitants, respectively, as of 24 March 2021.⁴³⁴ This is illustrated by Fig. 2.4 which gives an overview of the Covid-19 mortality rate in some countries per million population, as of 24 March 2021.

2.4.2.3.6.8 Early 2021

Belgium effectively banned non-essential travel from 27 January 2021 to 1 March 2021, which de facto forced Belgians to spend their traditional February "Carnival" week off at home.⁴³⁵

⁴³¹International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

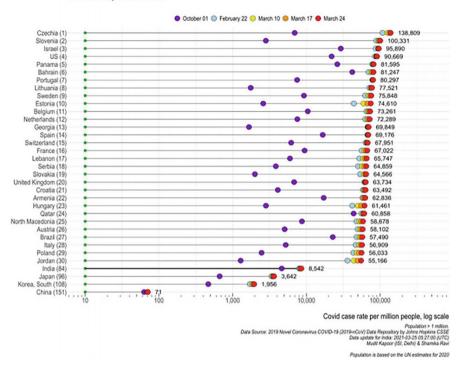
⁴³²UK Office for National Statistics (2021), accessed 18 April 2021.

⁴³³Time (2020).

⁴³⁴ Ravi (2021).

⁴³⁵Cf. de la Baume and Gijs (2020).

Virologist Steven Van Gucht, one of the government's top Covid-19 advisers and spokesman for the Belgian crisis centre, was quoted saying that he was convinced that by the fall of 2020, Belgian politicians had learned from the mistakes they had made between August and September 2020, when many experts still greatly underestimated the "awakening power of the virus". The tide seems to have turned in November 2020, with the entry into force of the close contact rule, known as 'knuffelcontact' in Dutch (cf. de la Baume and Gijs (2020)).



Covid case rate per million people in top 30 countries, India, China, Japan and South Korea from February 22 to March 24

Fig. 2.4 Covid-19 mortality rate per million population, as of 24 March 2021 [Source: Ravi (2021)]

The latter measure was most likely motivated by the assumption that, in February 2020,⁴³⁶ Carnival festivities might have been a key factor in the spread of Covid-19 during the initial phase of the Covid-19 epidemic in Belgium. This was highly likely because in February 2020, holidaymakers returning from Italy and Austria were believed to have brought the Covid-19 virus back with them. As neither Italy and Austria, nor Belgium, had quarantine measures in place at the time, these infected holidaymakers were then able to participate freely in the Carnival 2020 festivities, thus spreading the Covid-19 virus further. It should hereby be noted that carnival festivities in Belgium involve a lot of loitering and drinking in (often cramped) pubs,

 $^{^{436}}$ In 2020, the Belgian Carnival week officially took place from Friday 22 February 2020 to Sunday 1 March 2020.

Some Belgian scientists had been concerned about the Carnival festivities in 2020, not so much because of Covid-19, but because they feared that the Carnival festivities (in Aalst) would be an opportunity to express antisemitic feelings from the part of some Carnival participants, as had been the case in the previous year. Three Belgian professors, Vivian Liska (from the University of Antwerp), Didier Pollefeyt (from the Catholic University of Leuven) and Klaas Smelik (from the University of Ghent) had expressed their concerns about this matter in an opinion piece published in the Belgian newspaper "De Morgen". (Cf. Liska et al. (2020).)

similar to foreign ski resorts, such as Ischgl (Austria). This clearly indicates that visits to pubs, both in Belgium and abroad, were among the first spreading events that triggered the first wave of Covid-19 in Belgium. This has, since then, been confirmed by the (already cited) research published in "Nature" on 11 November 2020, which shows that most (new) cases of Covid-19 were found in places like cafés, bars, restaurants, gyms and grocery shops.⁴³⁷

At the time of the mingling of the returned ski tourists with other Carnival feast attendants during the late winter of 2021, the question had not yet been scientifically researched, but it had been convincingly voiced by, amongst others, Joris Van Duin, a Dutch journalist who reported on the spread of Covid-19 in the Netherlands in early March 2020.⁴³⁸ According to Van Duin, there were indications that the Carnival festivities of 2020 (in the Netherlands) had accelerated the spread of Covid-19 in the areas of Tilburg, Loon op Zand, Breda, Prinsenbeek and Uden. E. g., an employee of the Amphia hospital in Breda was quoted having stated that the carnival festivities had been "hotbeds" for the spread of Covid-19 in Brabant.⁴³⁹

By October 2020, this suspicion about the impact of the return of ski tourists (in February 2020) on the Covid-19 figures was confirmed by researchers from the Leiden University Medical Centre (LUMC). The LUMC researchers also found that Carnival had already been responsible for an increase in the number of flu cases in 2018. The LUMC researchers published their findings in the scientific journal "BMC Public Health". Their research showed that the number of Covid-19 cases after Carnival 2020 was much higher in regions where Carnival had been celebrated, than in municipalities that did not celebrate.⁴⁴⁰

The Belgian October 2020 travel ban has been continuously extended since then, albeit with variations, and was still being maintained at the date this book was prepared to be sent to peer review (i.e., on 15 May 2021).

As reported by the international Monetary Fund, the Belgian economy contracted by 3.4 and 11.8% (q/q) in the first two quarters of 2020, followed by a rebound to 11.6% in Q3 2020, and a further contraction of 0.1% during Q4 2020; bringing the contraction for the entire year 2020 to 6.3%.⁴⁴¹

⁴³⁷AJMC Staff (2021). Cf., furthermore, Cooney (2020).

⁴³⁸Van Duin (2020); cf., furthermore, Julen (2020).

⁴³⁹Van Duin (2020).

⁴⁴⁰Based on the RIVM data, the researchers were able to determine the number of Covid-19 cases per region and to compare these figures. The researchers found that the increase in new Covid-19 cases in a carnival region exceeded that in the non-carnival region about one week after a first contamination case had been reported. A similar conclusion was reached with regard to a severe flu season in 2018 that had also included the carnival period. For this 2018 flu epidemic as well, the researchers had compared the number of flu cases between regions, and this similarly had shown that carnival festivities had contributed to the spread of the flu virus as well. The quoted researchers also found that while in 2018 the number of flu cases was higher in the Carnival regions, the number of deaths over the year was comparable between the regions. For Covid-19, the researchers could not identify whether more people had died in the Carnival regions. (Cf. LUMC (2020); LUMC-COVID-19 Research Group et al. (2020).)

⁴⁴¹International Monetary Fund (2021) (Key Policy Responses as of 4 March 2021).

As of 5 March 2021, there had been a total of 780,157 Covid-19 contamination cases and of 22,169 Covid-19 related deaths.⁴⁴²

The vaccination campaign in Belgium was officially launched on 5 January 2021, prioritising the inoculation of residents of nursing homes and healthcare workers, with the aim of immunising nine million (adult) Belgians by September 2021—but supply constraints already from the start of the vaccination campaign led to constant delays.⁴⁴³ As of 5 March 2021, only 524,775 people had received a first dose of a Covid-19 vaccine.⁴⁴⁴

The dramatic situation Europe was at the time facing is illustrated by Fig. 2.5,⁴⁴⁵ which gives an overview of the cumulative relative age-standardised, all-cause mortality rates by sex in selected European countries, during the period between the week ending 3 January 2020 to week ending 12 June 2020.

2.4.2.4 By Comparison (1): The Successful Examples of Taiwan, New Zealand and South Korea

2.4.2.4.1 Taiwan

There is much to be learned from comparing the policies of an Asian country that has been extremely successful in its fight against Covid-19 (especially during its first wave), notably Taiwan, with a Western, neoliberal country that has largely failed (especially until the start of its vaccination campaign), notably the United Kingdom.⁴⁴⁶ This is exactly what a number of authors have undertaken. It concerns the authors: (1) Graham-Harrison and Davidson,⁴⁴⁷ (2) Summers et al.,⁴⁴⁸ (3) Nachman,⁴⁴⁹ and (4) Farrer.⁴⁵⁰ This section has largely been based on their findings, from which there has also been directly and indirectly quoted, as indicated in the footnotes.

The contrast between how Taiwan and the United Kingdom managed to handle (the first wave of) the Covid-19 pandemic, could hardly have been greater: While Taiwan emerged virtually unscathed from (the first wave of) the Covid-19 pandemic,

⁴⁴² Julie (2021).

⁴⁴³Julie (2021).

⁴⁴⁴ Julie (2021).

⁴⁴⁵ "Relative cumulative age-standardised mortality rates (rcASMRs) were developed by the Continuous Mortality Investigation (CMI). Rather than absolute values of death counts, rcASMRs sum all age-standardised mortality rates between two time points. In this figure, rcASMRs are calculated cumulatively from week 1, 2020 until week 24, 2020 and are relative to the 2015–2019 average cumulative age-standardised mortality rate for that time period in each country." [As cited in Marmot et al. (2020), p. 11].

⁴⁴⁶Graham-Harrison and Davidson (2021).

⁴⁴⁷Graham-Harrison and Davidson (2021).

⁴⁴⁸Summers et al. (2020).

⁴⁴⁹Nachman (2021).

⁴⁵⁰Farrer (2021).

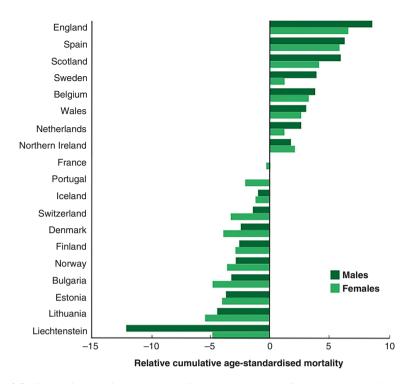


Fig. 2.5 Cumulative relative age-standardised, all-cause mortality rates by sex in selected European countries, week ending 3 January 2020 to week ending 12 June 2020

the United Kingdom has—as explained above (cf. Sect. 2.4.2.3.5.)—been crippled both economically and humanely, with deaths, illnesses and mental health crises taking an extremely huge toll.⁴⁵¹

As elaborated upon by Graham-Harrison and Davidson, the two countries show remarkable similarities: both countries are islands ruled by democratic governments, with their large populations—over 22 million people live in Taiwan and over 68 million in the United Kingdom—to a large extent crowded into cities, and both countries have (traditional) public health systems that imply that (general) medical care is widely available. According to the same authors, by the end of 2019, both countries were at high risk because of Covid-19 travellers: the United Kingdom because of its status as an international travel hub; Taiwan because its close cultural and economic ties implied that hundreds of planes crossed the narrow strait to mainland China—where the Covid-19 virus had first been detected—every week. But this is where the similarities ended. Just over a year after the initial outbreak of Covid-19, by mid-March 2021, the United Kingdom had one of the worst Covid-19 mortality and contamination rates in the world, with over 130,000 Covid-19 related deaths, and more than four million people having contracted the Covid-19 virus. By

⁴⁵¹Graham-Harrison and Davidson (2021).

contrast, Taiwan had lost only 10 people to the Covid-19 virus, and had only 1000 official contamination cases, the vast majority of whom were travellers from elsewhere put in quarantine.⁴⁵²

The first confirmed case of Covid-19 in Taiwan was reported on 21 January 2020. It concerned a woman, over the age of 50, who had been travelling back to Taiwan from attending her teaching position in Wuhan. By August 2020, Taiwan had reported Covid-19 contamination cases in 20 of its 22 administrative divisions, with the more geographically isolated eastern counties of Taitung and Hualien having reported no cases. Taiwan also reported an even gender distribution of confirmed contamination cases up to 31 August 2020, with 51.2% recorded as male.⁴⁵³

According to Nachman, two key backgrounds have set the stage for Taiwan's successful handling of Covid-19. The first and perhaps most fundamental key to the success of Taiwan's response to Covid-19 has been that the country had several strong health institutions. Because of these, Taiwan not only had the capacity to manage a large-scale viral outbreak on-or better: threatening to approach-its territory, but it also had the in-house experience to do so. The 2003 "SARS" outbreak, although this had occurred 17-18 years earlier, was hereby still fresh in the minds of many Taiwanese, especially the officials and experts running Taiwan's public health sector. Taiwan had, more precisely, experienced 73 deaths during the SARS outbreak of 2003, which had been the third highest number of deaths in the world, after Canada and China. At the end of 2003, Taiwan's health system had not only passed the SARS resistance test, but, more importantly, it had also learned how to better protect itself against a viral outbreak in the future. Precisely this experience has been of huge importance in dealing with the Covid-19 outbreak itself. The second key factor that ultimately proved vital for Taiwan's successful response to Covid-19, has-rather surprisingly-been its historic exclusion from the WHO. Indeed, while because of its special international status (of not being fully recognized by China, besides other countries, as an independent state), Taiwan had only been granted limited observer status in the WHO, as in the past, under Kuomintang (KMT) administrations, China had summarily prevented the country from actively participating to the WHO after the Democratic Progressive Party (DPP) came to power. This had already been the case in 2003, during the SARS epidemic and under the presidency of Chen Shui-bian, and it was (and remained) so under the Tsai administration. Taiwan's exclusion from the WHO, obviously, prevented local health officials from coordinating and exchanging information at an intergovernmental level, which added to the isolated status of Taiwan. But-according to Nachman—the positive aspect of Taiwan's exclusion has been a perpetual need to rely entirely on itself; as a result, Taiwan did not need, or have the means, to wait for the WHO, or other countries, to act or to ask for advice. Based entirely on its own expertise and insights, Taiwan instead began preparing for a pandemic as soon as it

⁴⁵²Graham-Harrison and Davidson (2021).

⁴⁵³Summers et al. (2020).

had heard of a new pneumonia disease in Wuhan. Its unfortunate autonomy in this manner allowed Taiwan to respond much timelier, and in a far more efficient manner, than any other country in the world.⁴⁵⁴

According to Graham-Harrison and Davidson⁴⁵⁵, the difference in the handling of the Covid-19 crisis between Taiwan and the United Kingdom (and, by extension, a variety of other Western countries) may also, in more practical terms, be explained by the approach resorted to by their respective governments. Taiwan's political leaders, aided perhaps by the presence of an epidemiologist in the vice-presidency, or by the experience the country had because of the "SARS" coronavirus outbreak of 2003, immediately recognised the terrible threat posed by Covid-19 as soon as the first data from China came in. They decided that the only way to protect their country, its people and its economy, was to keep the virus completely out. This implied, from the early start, that the country would resort to a severe elimination strategy. By contrast, the United Kingdom, led by a convinced neoliberal government whose natural reflex it is to always minimise such a situation (cf. Sect. 2.2.4, with regard to the "laissez-faire, laissez-passer" paradigm), instead made the catastrophic decision to deal with the threat as with a common flu outbreak, aiming to limit or control its spread, rather than to completely eradicate it.456 Such a flu response plan-which was the method resorted to by most neoliberal Western countries at the time-broadly aims at mitigating the spread of the virus, with a focus on preventing that the number of contamination cases would start to exceed the capacity of the health care sector. By contrast, the "SARS" model, as deployed by Taiwan, aimed at a radical and instantaneous elimination of the virus, under the argument that because of the potential number of victims, it was necessary to suppress the disease with an intent of completely eliminating it. To phrase this difference in approach in another way: the prevailing viewpoint in the United Kingdom (and in many other Western countries) in February 2020 was that of "we will have to live with it, we can't eliminate it". By contrast, the point of view that reigned in Taiwan was that the virus had to be cost wat cost eradicated. Yet even then, there were sufficient other international examples, particularly from Asian countries, of how Covid-19 could indeed be successfully eliminated. The success of countries such as Taiwan shows that the UK tragedy—and, with it, that of many other Western countries—had in the early stage of the Covid-19 outbreak not been inevitable, and that lives and livelihoods could have been spared if authorities in Western countries had taken the Covid-19 outbreak more seriously, and if they had showed a willingness to better manage it from the early start.⁴⁵⁷

Taiwan even never needed to resort to one of the most radical tools for dealing with a viral pandemic, more precisely lockdown measures. This is because the country had acted so quickly with an effective set of policies aimed at eradicating

⁴⁵⁴Nachman (2021).

⁴⁵⁵Graham-Harrison and Davidson (2021).

⁴⁵⁶Graham-Harrison and Davidson (2021).

⁴⁵⁷Graham-Harrison and Davidson (2021).

the spread of the virus from the early start, including: (1) border controls, (2) effective tracking, tracing and isolation systems, (3) testing and quarantine measures, and, above all (4) the immediate and widespread use of face masks.⁴⁵⁸

It has been assessed by the earlier quoted authors that the Taiwanese government has been among the first (if not the first) to realise the seriousness of the threat posed by the new Covid-19 disease. Already on 31 December 2019, when China had reported cases of the outbreak of a mysterious new disease to the WHO, Taiwan immediately started screening incoming travellers from Wuhan. Taiwanese officials, though barred from the WHO, still tried themselves to raise the alarm internationally about (at the time still "unofficial") reports that the disease could probably be transmitted between humans, which Beijing itself did not want to confirm for three more crucial weeks. From 24 January 2020, Taiwan closed its borders to incoming travellers from China. As Covid-19 started spreading around the world, Taiwan tightened its control measures even more by requiring 2 weeks of strict hotel quarantine with regard to all arrivals to the country. In mid-January 2020, Taiwan activated its "Central Epidemic Command Centre". This move brought together government officials, members of academia, health workers and the private sector in a unified fight. The immediate actions of this Centre included: (1) rationing face masks, so that everyone in the country could have access to them, combined with (2) intensifying mass production, besides (3) launching a strong public communication campaign about the new control measures and why these were necessary. The Centre also resorted to (4) modern data collection methods while temporarily allowing to use these for disease control purposes, such as the use of mobile telephone data for electronic "fencing" of individuals isolated after possible Covid-19 contacts. These measures were, moreover, widely accepted by the general public.459

In addition, Taiwan also provided social and financial support to its population during the Covid-19 pandemic, while its people could also keep relying on Taiwan's existing universal health coverage.⁴⁶⁰

An anecdotical illustration (as referred to by the earlier quoted authors) sheds a light on how the approach deployed by Taiwan, functioned at a practical level. At the beginning of the Covid-19 pandemic, an outbreak of Covid-19 had occurred on "the Diamond Princess", a cruise ship that shortly before this outbreak had briefly visited Taiwan. When the ship had visited Taiwan, passengers had been allowed to

⁴⁵⁸Graham-Harrison and Davidson (2021).

⁴⁵⁹Graham-Harrison and Davidson (2021).

According to Summers et al., several of these factors, including Taiwan's proximity (130 km) to China (where the Wuhan initial epicentre of the pandemic was located), previous experience with the SARS pandemic in 2003 and high population density, triggered a coordinated national response in the early stages of the Covid-19 pandemic. As explained by these authors in detail, the Taiwan CDC, in collaboration with the Central Epidemic Command Centre (CECC), in this manner took the lead in managing the Covid-19 pandemic, as outlined in the Covid-19 pandemic plan for Taiwan. (Cf., furthermore, Summers et al. (2020).)

⁴⁶⁰Summers et al. (2020).

disembark for a day trip. This had taken place on 31 January 2020. Said day trip fell 5 days before the first Covid-19 case was confirmed on board of the ship. The Taiwan CDC, when hearing about the confirmed contamination cases, immediately responded by publishing the locations where all the passengers on the ship had been, and by instructing people who might have come in contact with these passengers to self-monitor and quarantine in their homes, if deemed necessary. All of the people in Taiwan who had been considered as possible close contacts of the passengers of the cruise ship, eventually, tested negative for the SARS-CoV-2 infection.⁴⁶¹

Another, comparable cluster of Covid-19 infection in Taiwan occurred in March 2020 on the fast combat support vessel "Panshi", with 36 confirmed contamination cases. The news about this outbreak immediately led to extensive testing, both on board of the vessel itself, as among potential contacts on shore.⁴⁶²

In both of these cases had the reported potential and/or confirmed outbreaks/ clusters of Covid-19 contamination prompted public health officials to immediately implement testing and control procedures. In accordance with established protocols, response measures included: (1) contact tracing, (2) testing and isolation of possible cases, and (3) quarantine measures for close contacts.⁴⁶³

As mentioned earlier, one of the key factors that helps explaining Taiwan's enormous success in containing the spread of Covid-19 within its borders, has been its face mask wearing policy. As in many Asian countries that had experienced SARS, Taiwan had already before the outbreak of Covid-19 a well-established culture of face mask wearing by the general public. After its experiences with SARS, the country had adopted a very proactive policy of supporting both the production and the distribution of face masks to all residents, in this manner securing supply and guaranteeing universal access to face masks. This implied that—contrary to the situation that occurred in a lot of Western countries—the population of Taiwan was able to obtain face masks already at a very early stage of the Covid-19 pandemic. Taiwan, moreover, immediately resorted to an official obligation to wear a face mask in confined indoor environments (including subways), even during periods when there was no community transmission.⁴⁶⁴

By the end of 2020, Taiwan would be one of the only places on Earth that had only marginally been affected by Covid-19, and where life still seemed more or less normal. Throughout the Covid-19 pandemic, Taiwan in this manner managed to maintain some of the best Covid-19 statistics in the world, despite its continued marginalisation on the world stage and despite a lack of international recognition of its de facto independent status. By 25 January 2021, Taiwan had officially recorded only seven deaths from Covid-19 and had, moreover, experienced 250 subsequent days without domestic transmission of Covid-19. Even as the disease spread across the world, Taiwan's institutional response prevented the emergence of new cases on

⁴⁶¹Summers et al. (2020).

⁴⁶²Summers et al. (2020).

⁴⁶³ Summers et al. (2020).

⁴⁶⁴Summers et al. (2020).

its own territory. Similarly, despite the ravages of the global Covid-19 pandemic on the world economy, Taiwan also managed to be one of the few economies in the world to experience economic growth in 2020, which was, moreover, expected to continue in 2021.⁴⁶⁵ Taiwan's public health response, in which there was no need for implementing containment measures, is hereby believed to have put Taiwan in a stronger economic position during and after the Covid-19 pandemic when compared to most other countries.⁴⁶⁶

According to Graham-Harrison and Davidson, there was nothing to stop the UK government, or other Western governments, from learning from the Taiwan experience. But perhaps because of British exceptionalism, perhaps because other coronavirus outbreaks—SARS and MERS—had been contained away from Europe, the United Kingdom, and with it a lot of other Western countries, preferred to go their own deadly way instead.⁴⁶⁷

While Taiwan had managed to prevent a local case of a Covid-19 virus contamination on its territory during a long time, on December 22, 2020, concern was high after health authorities had announced that they had diagnosed a woman in her 30s of having contracted Covid-19. The woman was a friend of New Zealand resident and pilot who, being in his 60s, had shortly before flown from the United States to Taiwan and who had then travelled to Taipei while being contagious, without having disclosed his symptoms or his previous whereabouts to the authorities. The public health department in Taoyuan, where the man lived, was of the opinion that the man had violated the Communicable Disease Control Act by failing to provide detailed and accurate information on his health status and, moreover, declared that the man would face the maximum penalty of 300,000 Taiwanese dollars (£8000). His employer, EVA Air, launched its own investigation and was reported to consider dismissing the pilot. From this investigation, it also appeared that the man had flown with two co-pilots while coughing and not bothering to wear a face mask.⁴⁶⁸

Davidson has reported that Taiwan's health authorities, in response to this event, announced new regulations on social distancing. These included the following measures: (1) Standing tickets for indoor events were banned; (2) spectators to events were required to wear face masks and not to eat; (3) people were urged to consider staying home for the New Year celebrations, and (4) new restrictions on foreign flights were issued, with more severe reporting obligations and quarantine arrangements for flight crews (with a mandatory quarantine stay at a government facility for 14 days).⁴⁶⁹

On 12 May 2021, local media, furthermore, reported that, in response to two new clusters of Covid-19 cases, the government was about to raise the Covid-19 alert to level three, just 1 day after it had been raised to level two. Under level two, Taiwan

⁴⁶⁵Graham-Harrison and Davidson (2021).

⁴⁶⁶Summers et al. (2020).

⁴⁶⁷Graham-Harrison and Davidson (2021).

⁴⁶⁸Davidson (2021).

⁴⁶⁹Davidson (2021).

was already subject to severe restrictions, amongst which a cap on indoor gatherings of 100 people and on outdoor gatherings of 500 people (until 8 June 2021), as well as a ban on stand-up ticket sales for the country's high-speed rail network.⁴⁷⁰ Level three would imply a mandatory use of face masks in all public places, and limits of five people for private gatherings and of ten people for public gatherings. Level 3 would also imply stricter restrictions—including the closure of schools and restricting people to their own neighbourhoods—that would apply to areas of community transmission. Health and Welfare Minister Chen Shih-Chung told a legislative session that took place on 12 May 2021 the following⁴⁷¹:

Taiwan currently has more than two chains of transmission for which we have yet to identify their sources. We are in critical condition now, and this is not a joke.

2.4.2.4.2 New Zealand

New Zealand recorded its first case of Covid-19 on 28 February 2020. This contamination case concerned a woman in her 60s who, on 26 February 2020, had arrived in New Zealand from Iran via Bali. By August 2020, more confirmed contamination cases of Covid-19 were reported from all 20 District Health Board areas in New Zealand. New Zealand, moreover, reported 47.0% (656/1397) of its confirmed cases in males up to 31 August 2020. The largest proportion of confirmed cases were in the 20–29 age group.⁴⁷²

New Zealand's initial response to the Covid-19 outbreak had followed its pre-existing influenza pandemic plan. This plan had for the last time been revised in 2017 and was (1) similar to plans in other Western countries, and (2) based on a mitigation strategy of "flattening the curve" and delaying the epidemic peak to reduce the impact of a pandemic on health care services.⁴⁷³

Although New Zealand already in February 2020 resorted to entry restrictions and self-isolation/quarantine requirements for travellers coming from various Covid-19 hotspots, cases in New Zealand were increasing significantly by early March 2020. New Zealand's original pandemic plan entirely focused on diseases similar to influenza, with limited applicability to other pandemic diseases, such as Covid-19. Furthermore, at least until early March 2020, New Zealand had no established infrastructure to deal with a pandemic such as Covid-19. As was the case in most other Western countries, New Zealand's original plan was, moreover, largely oriented towards mitigation and not in as much towards elimination of the virus. However, early evidence from China indicated that a mitigation strategy to deal with Covid-19 might not have been optimal, given, on one side, the high transmissibility and, on the other side, the relatively high case-fatality rate of SARS-CoV-2

⁴⁷⁰Farrer (2021).

⁴⁷¹Farrer (2021).

⁴⁷²Summers et al. (2020).

⁴⁷³Summers et al. (2020).

infection. New Zealand, hence, soon reached the conclusion that continuing with a mitigation policy would likely result in thousands of deaths and that it would rapidly overwhelm the New Zealand health system (in a similar manner to what was happening in the United States and in Europe). At the same time, New Zealand was persuaded by evidence from China that the Covid-19 pandemic could be contained with a sufficiently robust response. These considerations, together with the need to protect Maori and Pacific populations (who had already before been suffering from severe health inequalities due to other endemic and pandemic infectious diseases) and the need to intensify testing and contact tracing, would ultimately lead to a new policy approach. This new approach first started with New Zealand's decision to implement high-intensity border controls and physical distancing measures, with an aim of extinguishing community transmission of SARS-CoV-2.474 However, by mid-March 2020, it was clear that, notwithstanding the foregoing, community transmission was occurring in New Zealand and that the country did not have sufficient testing and contact tracing capacity to contain the Covid-19 virus. This insight led to some new policy changes.⁴⁷⁵

On 21 March 2020, in order to better prepare the public for the rapidly changing situations due to the Covid-19 virus and to be itself better equipped to adapt policy responses, New Zealand thus introduced a new "four-level warning system". Based on an existing system of forest fire warnings, the new system would clearly indicate the risk situation at any given time and provide a simple overview of the social distancing measures that would apply on each of these levels.⁴⁷⁶ New Zealand's "four-level warning system" is explained in some more detail in Table 2.4.

On 21 March 2020, the new system was set at "alert level 2". However, already on 23 March 2020, Prime Minister Jacinda Ardern announced that New Zealand had moved the alert system to "alert level 3", with immediate effect. On 25 March 2020, the alert level was again raised to level 4. The latter alert level triggered a total nationwide lockdown, with only essential services running and everyone being asked to stay at home in their bubble. A national state of emergency was declared at 12.21 p.m. of the same day.⁴⁷⁷ This state of national emergency was intended to support containment and was accompanied by legislative changes passed by the New Zealand Parliament, allowing for special powers granted to the government to deal with the pandemic situation.⁴⁷⁸ At that time, New Zealand had recorded only 102 Covid-19 contamination cases and no deaths. At around the same time, the United Kingdom recorded over 6500 contamination cases and over 330 Covid-19 related deaths.⁴⁷⁹

⁴⁷⁴Summers et al. (2020).

⁴⁷⁵Baker et al. (2020).

⁴⁷⁶Government of New Zealand (2021). Cf., furthermore, Jones (2020).

⁴⁷⁷Government of New Zealand (2021). Cf., furthermore, Jones (2020).

⁴⁷⁸Summers et al. (2020).

⁴⁷⁹ Jones (2020).

Level	Risk assessment	Range of measures (can be applied locally or nationally)	
Level 4—Eliminate Likely that disease is not contained	 Sustained and intensive transmission Widespread outbreaks 	 People instructed to stay at home Educational facilities closed Businesses closed except for essential services (e.g. supermarkets, pharmacies, clinics) and lifeline utilities Rationing of supplies and requisitioning of facilities Travel severely limited Major reprioritization of healthcare services 	
Level 3—Restrict Heightened risk that dis- ease is not contained	Community transmis- sion occurring, OR Multiple clusters break out	 Travel in areas with clusters or community transmission limited Affected educational facilities closed Mass gatherings cancelled Public venues closed (e.g. libraries, museums, cinemas, food courts, gyms, pools, amusement parks) Alternative ways of working required, and some non-essential businesses should close Non face-to-face primary care consultations Non acute (elective) services and procedures in hospitals deferred and healthcare staff reprioritized 	
Level 2—Reduce Disease is contained, but risks of community trans- mission growing	 Elevated risk of importing Covid-19, OR Uptick in imported cases, OR Uptick in household transmission, OR Single or isolated cluster outbreak 	 Entry border measures maximised Further restrictions on mass gatherings Physical distancing on public transport (e.g. leave the seat next to you empty if you can) Limit non-essential travel around New Zealand Employers start alternative ways of working if possible (e.g. remote working, shift-based working, physical distancing within the workplace, staggering meal breaks, flexible leave arrangements) Business continuity plans activated High-risk people advised to remain at home (e.g. those over 70 or those with other existing medical conditions) 	
Level 1—Prepare Disease is contained	Heightened risk of importing Covid-19, OR Sporadic imported cases, OR	 Border entry measures to minimize risk of importing Covid-19 cases applied Contact tracing 	

 Table 2.4
 New Zealand's the four-level approach [Source: New Zealand Government (2020)]

(continued)

Level	Risk assessment	Range of measures (can be applied locally or nationally)
	• Isolated household transmission associated with imported cases	 Stringent self-isolation and quarantine Intensive testing for Covid-19 Physical distancing encouraged Mass gatherings over 500 cancelled Stay home if you are sick, report flu-like symptoms Wash and dry hands, cough into elbow, do not touch your face

Table 2.4 (continued)	Fable 2.4	(continued))
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During the period of containment from 26 March 2020, with local cases of Covid-19 still increasing exponentially, many people wondered whether the new intensive controls would really work. However, after 5 weeks, and with the number of new cases falling rapidly, New Zealand was again able to move to alert level 3 which had to be maintained for a further 2 weeks, leading to a total of 7 weeks of what was essentially a national "stay at home" order.⁴⁸⁰

This situation of alternating situations of full lockdown (at "alert level 4") with situations of partial lockdown (at "alert level 3") was to continue until 13 May 2020. During these lockdown periods, most workplaces, schools and public meeting places were closed, with travel being completely stopped at level 4, and severely restricted at level 3.⁴⁸¹

According to Summers et al., from an April 2020 poll (conducted by "Colmar Brunton"), it appeared that there was at the time a huge public support for New Zealand's official response to the Covid-19 outbreak. This support was said to be well above that of the world's wealthiest countries. The survey, more precisely, found that 83% of respondents had "confidence in the [New Zealand] government to successfully address national issues", while 88% "trusted the [New Zealand] government to make the right decisions about Covid-19". The average approval rate for G7 countries at the time was 59%. Other polls conducted in New Zealand around the same time were said to give comparable results.⁴⁸²

During the first outbreak of Covid-19 in New Zealand (from late February to May 2020), 16 clusters of ten or more cases of Covid-19 had been reported. Of these clusters, many were from stays in (private) nursing homes and similar health care institutions, with others linked to overseas travel, secondary schools and cruise ship visits.⁴⁸³

Because of New Zealand's rapid improvements in both screening capacity and case management, by the end of April 2020, the average time from symptom onset to

⁴⁸⁰Baker et al. (2020).

⁴⁸¹Summers et al. (2020).

⁴⁸²Manhire (2020).

⁴⁸³Summers et al. (2020).

notification had been reduced from 9-7 days to 1-7 days, and the time from symptom onset to isolation from 7-2 days to 2-7 days. This implied that people started isolating on average 2-7 days prior to disease onset. This had as result that contamination cases were quickly isolated from the community, even before the disease itself had manifested, which significantly reduced the risk of local transmission. From mid-April 2020, New Zealand started targeting high-risk groups for testing through population-based screening surveys, a policy which was particularly aimed at avoiding undetected circulation of the Covid-19 virus.⁴⁸⁴

The new approach in New Zealand was remarkable in both its thoroughness and brevity: the daily number of cases fell below ten by mid-April 2020 already, which was less than a month after New Zealand's alert level had been raised for a first time. In addition, although most of the Covid-19 cases reported in mid-March 2020 had been imported to the country by travellers, almost no new imported cases were detected 2 weeks after the first travel bans and isolation orders had been implemented: While imported cases accounted for 58% of cases before 15 March 2020, they accounted only for 38% of the total of all cases New Zealand had to endure.⁴⁸⁵

It has, generally speaking, been observed that the successful control of both imported cases and local transmission cases in New Zealand has been achieved through rigorous non-pharmaceutical interventions (NPIs) implemented quickly when the total number of infections in the country was still sufficiently low. In order to illustrate this, it has been observed that the alert level was raised from 1 to 4 in only 5 days at the end of March 2020, while the number of cases had just exceeded 1000.⁴⁸⁶

By early May 2020, the last known case of (the first wave of the) Covid-19 (pandemic) in New Zealand was identified, with the contaminated person placed in isolation. This marked the end of the identified spread of Covid-19 within the New Zealand community. On 8 June 2020, the government announced the move of the country's status to "Alert Level 1", effectively declaring the end of the Covid-19 pandemic in New Zealand. Only 103 days since the first identified case on New Zealand territory had passed.⁴⁸⁷

New Zealand would during the rest of June 2020 remain at Alert Level 1, with all people arriving to the country (regardless of origin, or symptomology) being placed in managed isolation/quarantine facilities (mainly reassigned hotels) for 14 days, and with a subsequently introduced requirement that each such person would undergo two Covid-19 tests on days 3 and 12 of their quarantine period respectively.⁴⁸⁸

However, Summers et al., reported that after an initial period of successful elimination of Covid-19 on the New Zealand territory, in August 2020, a new

⁴⁸⁴Robert (2020).

⁴⁸⁵Robert (2020).

⁴⁸⁶Robert (2020).

⁴⁸⁷Baker et al. (2020).

⁴⁸⁸Summers et al. (2020).

outbreak of the Covid-19 virus occurred in Auckland City. All cases in this August 2020 outbreak appeared to be infected with exactly the same strain of Covid-19 virus, but New Zealand health authorities were unable to identify the source of this outbreak (although it was suspected that a breakdown in an inbound traveller quarantine facility might have been the most probable cause).⁴⁸⁹

While in the fall of 2020, other high-income countries (located in the northern hemisphere) reported increasing numbers of cases which could not be contained, New Zealand's experience showed that the success of non-pharmaceutical interventions (NPIs) largely relied on a combination of early decisive responses from health authorities, effective surveillance systems and targeted testing strategies, as much as on rigorously applying these NPIs.⁴⁹⁰

In each of the cases New Zealand was confronted with, both the reported potential Covid-19 outbreaks, as the confirmed Covid-19 outbreaks prompted public health officials to implement the same infection control procedures. Response measures in each of these cases included: (1) contact tracing, (2) testing, (3) isolation of confirmed cases, and (4) quarantine of close contacts of these confirmed cases. In addition, throughout the pandemic, New Zealand kept providing both social and financial support to its population, while its people were also still able to rely on the existing universal health coverage.⁴⁹¹

Because of all these reasons, New Zealand's response to the Covid-19 threat has been considered as one of the most effective in the world, similar to the early response to the Covid-19 threat by several of the Asian countries, such as China, Taiwan and Thailand. By mid-December 2020, the country of five million people had only experienced 25 Covid-19 related deaths, while it was assumed that it had successfully managed to stop the spread of Covid-19, which allowed people to return to their workplaces, schools and leisure activities, without restriction, as early as in the fall of 2020.⁴⁹² Table 2.5 gives an overview of the limited number of active Covid-19 cases in New Zealand on 1 April 2021.

On 18 January 2021, New Zealand's Covid-19 Recovery Minister Chris Hipkins announced that the Covid-19 vaccines would be available to the public by mid-year 2021. The vaccine rollout was billed as the largest mass vaccination campaign in New Zealand's history. On 20 February 2021, New Zealand was reported to have started administering Pfizer/BioNTech's Covid-19 vaccine to cleaners, nurses and security staff members working at Auckland's Jet Park quarantine hotel. The country, moreover, planned to vaccinate 12,000 isolation, quarantine and border workers over the next few weeks afterwards. The Ministry of Health explained that in the event of a Covid-19 outbreak, the at-risk population would be next to receive a

⁴⁸⁹Summers et al. (2020).

⁴⁹⁰Robert (2020).

⁴⁹¹Summers et al. (2020).

⁴⁹²Associated Press (2020).

Covid-19 cases	Change in last 24 h before reporting date	Total
Active	-5	67
Recovered	9	2408
Deceased	0	26

Table 2.5 Number of active cases in New Zealand on 1 April 2021 [Source: New Zealand Ministryof Health (2021), as accessed on 2 April 2021]

jab of one of the Covid-19 vaccines, only next in line to health and border workers.⁴⁹³

2.4.2.4.3 Some Ups and Downs of the Covid-19 Containment Attempts in South Korea

In the early days of the global Covid-19 pandemic, South Korea, a country of about 51.64 million people, appeared to be one of the hardest hit nations. According to Ryall, South Korea soon feared that the Covid-19 disease would spread through all sectors of society, kill thousands of people, leave health care institutions on the brink of collapse, and bring the country to its knees. This scenario was exactly what happened to several other countries that had even had more time to prepare for the arrival of the Covid-19 virus on their territory than South Korea itself. Nevertheless, already in the early days of the Covid-19 crisis, South Korea managed to gain control over the Covid-19 virus. This was mostly because of the attitude of the South Korean people themselves.⁴⁹⁴ The extent to which South Korea, ultimately, managed to contain the Covid-19 virus clearly appears from the numbers of both Covid-19 contamination cases and Covid-19 related deaths, especially in comparison to the numbers of some other countries. By the end of October 2020, South Korea had, more precisely, witnessed "only" over 26,000 confirmed contamination cases and 461 Covid-19 related deaths. By comparison, Germany had recorded 463,419 contamination cases and over 10,000 Covid-19 related deaths, while the United States, at the time, reported over 8.8 million contamination cases and 226,681 Covid-19 related deaths.495

At the early start of the Covid-19 pandemic, the people of South Korea relied on an approach to combat Covid-19 that was based on two leading principles: (1) a common sense approach that involved the cooperation of all of its citizens, and (2) trust in scientists and medical experts.⁴⁹⁶

Different from the population and policymakers of some Western countries, the South Korean people took the Covid-19 threat very seriously from the early outset.

⁴⁹³New Zealand RNZ (2021), accessed 2 April 2021.

⁴⁹⁴Ryall (2020a).

⁴⁹⁵Ryall (2020a).

⁴⁹⁶Ryall (2020a).

One of the best indications for this attitude has been the fact that most of South Korea's inhabitants spontaneously started wearing face masks, even before this practice had been recommended, or mandated, by the South Korean government itself. The people of South Korea did, moreover, not demonstrate any of the cynicism or resistance towards face mask wearing, and/or towards any of the other Covid-19 containment measures, which could be witnessed throughout the Western world. The South Korean people simply complied with these measures because they knew that the threat caused by the Covid-19 virus was to be taken seriously, but also because of a fundamental trust in their government and its capability to protect public health. A similar respect and obedience were shown towards the advice given by South Korea's health professionals. This trust the South Korean people put in their government and its advisers was, moreover, quickly rewarded, to the extent that the government of South Korea managed to quickly establish clear containment protocols based on but a few simple guiding principles: (1) effective testing and tracing, (2) clear communication, and (3) a minimal disruption of normal life.⁴⁹⁷

According to Ryall, this attitude of trust explains why the vast majority of the South Korean population had no problems whatsoever with the following measures: (1) face mask wearing when being outside; (2) keeping a physical distance from other people at all times, and (3) having one's temperature taken when entering certain public premises, such as schools, hospitals and shops.⁴⁹⁸

Traditional attitudes and curtesy customs are also believed to have created this attitude of compliance among the South Korean people: Compliance with face mask wearing and similar precaution measures was, hence, not only because people did not want to get ill themselves, but also out of respect for other people. This was basically a matter of politeness, as it would have been considered rude to demonstrate any form of behaviour that could have put the health of other people at risk. This applied thus the more in public places, such as on public transport or in shops.⁴⁹⁹

If the people of South Korea ever demonstrated any form of criticism towards their government, it has not been because the latter resorted to containment measures as such, but rather because it had taken some time to have these established to begin with. Indeed, upon the outbreak of Covid-19, many people were wondering why the authorities did not act much faster, e.g., by immediately imposing a ban on incoming travellers from China. Nevertheless, the "system" soon kicked in. Strengthening the innate responses by the general public itself, the South Korean government has especially been credited with immediately deploying a very efficient tracking and tracing system that was to become one of the main instruments of the South Korean government in its fight against Covid-19. Reference is made to the fully automated "Epidemiological Investigation Support System" (abbreviated as "EISS"), a tracking and tracing system that operates based on data collected from the use of credit cards

⁴⁹⁷Ryall (2020a).

⁴⁹⁸Ryall (2020a).

⁴⁹⁹Rvall (2020a).

and mobile phones. EISS went operational on 21 March 2020, which was about a month after the first Covid-19 cases had been detected in South Korea. Prior to EISS, it took on average 48 h to obtain information on the routes and interactions with others of people who had been contaminated with the Covid-19 virus. EISS managed to reduce this average time window to just 4 h. This implied that in case a person got tested positive for the Covid-19 virus, health authorities could immediately start tracing, and subsequently testing, over 100 people with whom the former person had been in contact with. EISS also allowed the health authorities to close places of frequent social interaction that such an infected person had attended, such as a gym, a church, a bar or a similar high-traffic area, which then could also immediately be ordered to comply with disinfection procedures.⁵⁰⁰

Ryall, furthermore, quoted education professor David Tizzard of Seoul Women's University, according to whom South Korea had learned its lessons from its experiences with MERS only some years before, which had resulted in 186 contamination cases and 36 deaths.⁵⁰¹ The South Korean government of the time had, more precisely, been severely criticised for its failure to manage this former MERS outbreak. This explains why the government in place at the time of the Covid-19 outbreak itself, reacted with such extreme diligence. Another important factor has been that Covid-19, and especially the measures for fighting it, did in South Korea not get politicised as has happened in some Western countries.⁵⁰²

However, after these first successful attempts to contain the Covid-19 virus, it had not yet been completely defeated. During the second half of August 2020, overconfidence in the victory over the Covid-19 virus has thus been blamed for a new upsurge in Covid-19 contamination cases, with especially public places, such as churches and bars, but also public demonstrations against the Covid-19 containment measures, being held responsible for this resurgence.⁵⁰³

On 15 August 2020, South Korean President Moon Jae-in had held a special speech to the Kingdom of Belgium and the European Union. During this speech, the South Korean President had proudly declared that South Korea had (already) managed to "overcome" the Covid-19 crisis.⁵⁰⁴ Making the case that one should

⁵⁰⁰Ryall (2020a).

However, there have been criticisms of the invasion of privacy of citizens. (Cf. Ryall (2020a).) ⁵⁰¹ Ryall (2020a).

⁵⁰²Ryall (2020a).

⁵⁰³Ryall (2020b).

⁵⁰⁴Cf. Embassy of the Republic of Korea to the Kingdom of Belgium and the European Union (2020).

In this special address on 15 August 2020 to the Kingdom of Belgium and the EU, President Moon Jae said: "We have also overcome the COVID-19 crisis through the Government, individuals, medical professionals and business leaders trusting and relying on one another. The Government has transparently disclosed all the information needed for epidemic prevention and control. The people trust the Government's approach and have voluntarily become the principal agents in anti-epidemic efforts. Korean businesses developed the first fast and accurate COVID-19 test kit in the world. Workers have produced epidemic prevention supplies, putting their neighbors first. Medical staff, volunteers, the public and businesses brought together their respective efforts,

not tempt fate, only some five days after this statement, new Covid-19 contamination cases were on the rise again, with South Korean epidemiologists soon warning that the country's overburdened health care system—particularly in the Seoul area—was again at a risk of collapse.⁵⁰⁵

The government's initial optimistic assessment had been based upon the fact that just two days before President Moon Jae-in had delivered his speech, i.e., on 13 August 2020, there had only been 56 new contamination cases in the country. The enthusiasm about this low figure has probably also been fuelled further by the fact that one of South Korea's most important holiday weekends was near, which helps explaining why the President was keen of delivering the good news to his people and to the rest of the world. Regretfully, the message was premature. Already by 16 August 2020, the South Korean health care system reported 279 new Covid-19 cases, which was, moreover, the first time that the daily average exceeded the 200 mark since early March 2020. The daily average continued to climb to 297 Covid-19 newly reported contamination cases on 19 August 2020. As had been the case for many Western countries, albeit to a far lesser extent, South Korea came to the realization that, after having started thinking that it had done well in dealing with the first wave of the Covid-19 pandemic, it had relaxed containment measures too soon. However, this was at the same time where all similarities with EU countries ended. Indeed, contrary to what happened in Europe (where authorities would wait until deep in the fall of 2020 to re-install containment measures), South Korea immediately resorted to new severe measures to stop the further spread of the Covid-19 disease. Already by 19 August 2020, the following measures were re-enacted: (1) Enhanced social distancing guidelines, including (2) a ban on outdoor gatherings of more than 100 people, and of 50 people if the event was to be held indoors. (3) This implied that sports games (e.g., baseball games) could only be played in empty stadiums. (4) All high-risk venues, such as karaoke bars, (ordinary) bars and buffet restaurants, were, moreover, ordered to close. Still, health experts warned that, even in the case of South Korea, these new measures came too late, and that a second wave of the Covid-19 pandemic had already taken hold of the country.⁵⁰⁶

Although some of the August 2020 cases have been linked to public venues such as bars, schools, and distribution centres, it was especially churches and their religious leaders that were to blame for the new wave of Covid-19 cases. As had already happened in an earlier stage of the pandemic, some churches had more in particular disobeyed government and health experts demands to limit physical church services, or to at least ensure that church members would always keep a

creating a catalyst for overcoming the COVID-19 crisis and setting an example lauded by the entire world." (Embassy of the Republic of Korea to the Kingdom of Belgium and the European Union (2020).)

⁵⁰⁵Ryall (2020b).

⁵⁰⁶Ryall (2020b).

safe distance from each other when attending church meetings.⁵⁰⁷ Especially the "Sarang Jeil" church was criticized for having defied Covid-19 safety guidelines on several occasions. As a result, hundreds of the church members tested positive for the Covid-19 virus. Jun Kwang-hoon, the church's leader, had moreover organised street protests against the Covid-19 measures, demanding that he and his followers would be guaranteed religious freedom. In answer to this appeal, thousands of people, many of whom not wearing face masks, had attended demonstrations on Gwanghwamun Square in central Seoul. Still, karma seems to have been on watch, as on 17 August 2020, it got announced that Jun himself had been diagnosed with the Covid-19 virus.⁵⁰⁸

As the church resistance against the Covid-19 rules persisted, the South Korean government decided to order all churches in Seoul to stop all in-person services until at least the end of August 2020. This order was given shortly after Sarang Jeil's leaders had refused to provide health authorities with a list of their followers, in this way refusing to comply with tracking and tracing protocols as well. This even made the city of Seoul file a formal criminal complaint against Jun for "wasting administrative resources and budget by evading, lying or disobeying during screening and tracing procedures."⁵⁰⁹ Jun, at the time 89 years old, was arrested on 1 August 2020. The branch of his church located in the southern city of Daegu had already before been indicated as South Korea's largest cluster in late February 2020, deemed responsible for more than 5200 Covid-19 contamination cases, which amounted to 36% of the total number of cases in South Korea at the time.⁵¹⁰ In August 2020, the church was again believed to be the main source for the new surge in Covid-19 infections.⁵¹¹

⁵⁰⁷Ryall (2020b).

⁵⁰⁸Ryall (2020b) and Chang (2020).

On 17 August 2020, a government official also announced that Jun should receive quarantine treatment in a hospital. However, it was not specified when the pastor underwent the diagnostic test. The official also called on people who may have come into contact with Jun during the massive rallies held a few days earlier in central Seoul to isolate themselves and get tested quickly. (Cf. Chang (2020).)

⁵⁰⁹Ryall (2020b).

Jun, who in February 2020 described the then-new Covid-19 virus as "the devil's act" to stop the cult's growth, allegedly withheld details of members and their meeting places as authorities tried to trace the infection routes in February 2020. Jun was also suspected of embezzling about 5.6 billion won (\$4.7 million) in church funds, including about 5 billion won he allegedly used to build a retreat (SRI/RC/Reuters (2020).)

⁵¹⁰SRI/RC/Reuters (2020).

⁵¹¹ED/KMM/NG/Reuters (2020).

2.4.2.4.4 Lessons from the Approach of Taiwan, New Zealand, and South Korea for Other Countries

According to Joseph Stiglitz, if there have been two countries that are most likely to illustrate the lessons to be learned from Covid-19, it is the United States that represents one extreme, and New Zealand that represents the other. According to Stiglitz, contrary to the United States, New Zealand demonstrated the following qualities in responding to Covid-19⁵¹²:

- (1) A competent government, which relied on science and expertise to make decisions.
- (2) A high level of social solidarity—with citizens recognising that their behaviour towards Covid-19 may affect each other's wellbeing.
- (3) Trust, including trust in government.

The question has arisen as to what lessons other countries (particularly highincome, Western countries) can learn from the Covid-19 experience in countries such as Taiwan, South Korea and New Zealand.

According to Summers et al., there are many such domains that could be explored further in order to improve the response of other countries to the ongoing Covid-19 pandemic, and to prepare for a next pandemic which could even appear to be more severe. The authors' recommendations are as follows⁵¹³:

- (1) Create or strengthen a dedicated national public health agency to manage both the prevention and control of epidemics and pandemics, besides other public health threats. This agency could take the form of a "Centre for Disease Control and Prevention", or a broader national public health agency, and should be invested with the power to coordinate the policies of other ministries/departments (similar to the CECC in Taiwan).
- (2) Formulate a generic pandemic plan in order to be able to respond to different pathogens showing distinctive characteristics.
- (3) Invest more in infrastructure that will enable a government to respond quickly to future disease threats.

Specific of the authors' recommendations include:

- (a) Strengthening national and regional disease and epidemic surveillance systems, such as sentinel surveillance, as well as more specialised systems, such as wastewater testing.
- (b) Developing effective border management policies and associated infrastructure that can be implemented quickly.
- (c) Establishing stricter quarantine rules, besides secure facilities where incoming travellers can be tested and, if needed, isolated and quarantined.

⁵¹²Stiglitz (2020a, b, c).

⁵¹³Summers et al. (2020).

- (d) Continuing to develop both conventional and digital solutions for contact tracing, as well as for isolation and quarantine control.
- (e) Developing effective means of producing, distributing and promoting face masks when border controls fail.
- (4) Review the workforce needed to support effective pandemic management, besides public health development more generally.
- (5) Improve training programmes of staff members dealing with fighting epidemics and pandemics accordingly.
- (6) Develop systems for evaluating and auditing pandemic responses, as well as for exercising capacity to respond to emerging infectious diseases.
- (7) Establish the cultural, societal and legal acceptability of all these pandemic response measures.⁵¹⁴

There may, in a similar manner be some other, more specific lessons to be learned from New Zealand's response to the Covid-19 pandemic as well. According to Baker et al., these include⁵¹⁵:

- (1) The importance of rapid, science-based risk assessment.
- (2) The importance of keeping an open mind, including a level of preparedness to change course, if necessary.
- (3) The implementation of interventions at different levels (e.g., border control measures, community transmission control measures and case-based control measures).

According to Baker et al., also New Zealand's Prime Minister Jacinda Ardern's empathetic leadership and talent of effectively communicating key messages to the general population—e.g., having portrayed the fight against the Covid-19 pandemic as teamwork of the entire population—helped establishing elevated levels of public trust in the country's both relatively new and heavyweight set of Covid-19 pandemic control measures. Lessons for New Zealand itself include the need for further strengthening its public health agencies, and providing greater support to international health organisations, such as the WHO.⁵¹⁶

The main lessons to be learned from South Korea are: (1) the importance of developing an efficient tracking and tracing system, besides (2) cultural adherence to containment measures.

But the Western, neoliberal political elites may even have more to learn from these examples. Unfortunately, during the Covid-19 pandemic itself, it appeared that the (neoliberal) governments of most EU countries, besides these of countries such

⁵¹⁴With regard to this recommendation, Summers et al., pointed to the fact that there may be legitimate concerns about the use of big data analysis, more specifically about the use of digital methods in public health responses (Cf., furthermore, Summers et al. (2020).)

⁵¹⁵Baker et al. (2020).

⁵¹⁶Baker et al. (2020).

as the United States, Brazil . . ., stubbornly refused to take to heart the lessons of the group of countries that had better dealt with Covid-19.

The main reasons for this surly attitude may have been the following:

- (1) Adherence to basic neoliberal dogma, which always gives priority to the economy—especially the economic interests of the rich—even if this comes at the expense of not being able to contain a pandemic, and thus basically of human lives. This, furthermore, helps explaining (1) why Western, neoliberal countries were so hesitant in starting to take measures to fight the spread of Covid-19 on their territories in the first place, besides (2) their constant desire to stop measures far too early in order to "reopen the economy" (in the broadest sense of the word) (cf. Sect. 7.10 and Sect. 8.4.), and
- (2) The related, erroneous "idea of liberty" on which the political system of Western societies as of the late eighteenth century onwards has been based, and which implies that everyone should be able to do freely what they want, even if this is at the expense of general safety, society and/or the welfare of others.⁵¹⁷

When comparing the extremely selfish behaviour that some individuals in Western countries deployed against e.g., face mask wearing, with the manner in which the South Korean people complied with this practice simply because it was the polite and considerate thing to do, one can but hope that there will ever again occur a change in attitude in the Western world, away from Ayn Rand and her gospel of selfishness and egoism, towards some more care and consideration for one another.

All these factors help to explain why, even after information provided by countries such as Taiwan, New Zealand, and many others, which had adopted a much better approach to tackling the Covid-19 pandemic, was widely disseminated (and, through scientific publications, and other methods, made broadly available to everyone), EU leaders simply chose to ignore it. Even calls that the WHO itself—or WHO staff members—specifically addressed to European leadership in which the latter were urged to start taking said better examples of dealing with the pandemic, more seriously, were in most cases simply ignored. (Cf. Sect. 2.4.3.1.) The extent to which this truth even continued to apply during the so-called third wave of the Covid-19 pandemic, will be discussed in a further Sect. 2.4.3, but not before having taken a closer look at the way Brazil dealt with Covid-19.

2.4.2.5 By Comparison (2): The Failed Example of Brazil

If there has been one country that has put the neoliberal approach to managing Covid-19—and thus sacrificing workers' lives for the benefit of the economy—even more to the fore than the United States, alongside a wide variety of EU countries, it has most probably been Brazil, where—in the words of Saad-Filho—President Jair

⁵¹⁷On this false idea of freedom, cf. already Byttebier (2018), pp. 80–81.

Bolsonaro's handling of Covid-19 has made former US President Donald Trump look like the "stable genius" and "gentleman" he likes to portray himself.⁵¹⁸

When Covid-19 first appeared in Brazil in February 2020, it was, like elsewhere, mostly considered a threat to the elderly and the infirm. However, by April 2021, as Brazil grappled with its most traumatic phase of the outbreak of Covid-19 on its territory, a disturbing trend emerged, namely that of intensive care units in hospitals filling up with younger patients, some of whom, moreover, appearing to be fighting a more severe form of the Covid-19 disease. This also implied that an unusually high number of infant deaths were reported, whereby it appeared that more than 1000 Brazilian babies had died because of Covid-19 in 2020, compared to 43 in the United States.⁵¹⁹

Lotta et al., have made the observation that Brazil, supposedly the largest economy in South America, had from the early start of the Covid-19 outbreak on its territory in early-February 2020, been relatively well equipped to deal with the Covid-19 pandemic. Lotta et al., have mentioned the following reasons for this:

- First, Brazil had a strong national health system, the so-called "Sistema Único de Saúde", or abbreviated "SUS".⁵²⁰ This health system had been established in the early 1990s. Despite chronic underfunding, SUS had nevertheless been successful in ensuring a broad access to health services, mainly through a health programme that had been given the name "family health strategy". Through this programme, SUS had gotten extended throughout Brazil and had managed to cover 74% of the Brazilian population, with family health teams, furthermore, tackling health problems on the ground and at local level. As universal health coverage has all over the world proved to be one of the key factors in managing the Covid-19 pandemic (cf., furthermore, Chap. 5.), Brazil was, therefore, well placed to prevent, detect and respond to the Covid-19 threat when this for the first time manifested on its territory in February 2020.
- Second, Brazil had as one of the rare countries worldwide, relevant experience of having successfully combatted epidemics in the recent past, such as "yellow fever" and the "Zika"-virus. These earlier outbreaks had, moreover, proven to be a stress test for the SUS primary health care system. With, according to Lotta et al., as many as 286,000 community health workers on the front line of the country's health care system, SUS had because of these earlier epidemics, acquired both a proven track record and relevant expertise in epidemiological surveillance. As a result, SUS' health system dataset (named "DATASUS") provided rich and relevant information on both national health and access to care, which could have been an important policy instrument in the fight against the new Covid-19 pandemic.⁵²¹

⁵¹⁸Saad-Filho (2020).

⁵¹⁹Phillips (2021).

⁵²⁰For more on the 'SUS', cf. Massuda et al. (2018).

⁵²¹Lotta et al. (2020).

These factors implied that Brazil has been in a relatively strong position to fight the Covid-19 pandemic, both in terms of its economic strength as in terms of a performant and experienced health system. This makes it thus the more incomprehensible that Brazil did such a lousy job of dealing with the Covid-19 pandemic.⁵²²

According to Lotta et al., the reasons for Brazil's catastrophic management of Covid-19, have not been so much related to the performance of its health system, as to political factors: On the one hand, the federal government had resorted to an extremely neoliberal "laissez-faire, laissez-passer" approach. This implied that the few and minor public health interventions that Bolsonaro's government has resorted to, have always been secondary to the government's main desire to keep the Brazilian economy, cost what cost, going. On the other hand, there have been many state and municipal officials who had sought to protect their citizens through public health measures. However, these have in most cases been seen as political opposition by the Bolsonaro government, than as initiatives that merited support and respect. This attitude of Bolsonaro's government to question all possible initiatives of local and decentralized authorities, even resulted in litigation by which Bolsonaro tried and combatted these measures. But there was more than just a lack of will and coordinated action to combat the Covid-19 pandemic: According to Lotta et al., Bolsonaro's federal government, moreover, deliberately acted to spread the Covid-19 disease. In particular, Bolsonaro encouraged people, especially the most vulnerable, to expose themselves to the Covid-19 virus. Lotta et al., have illustrated this observation with the following quotes stemming from Bolsonaro himself⁵²³:

"So what?" Bolsonaro asked after 5,000 deaths. "What are you afraid of? Face it!", he commanded when Brazil reached 91,000 deaths; after all "everybody dies". At 100,000 deaths, the president felt only that "we have to go on". And with 162,000 Brazilians dead, the president held a ceremony at the presidential palace to warn that "we can't run away from it, run away from reality; we have to stop being a country of faggots".

A further factor having contributed to Brazil's disastrous handling of the Covid-19 pandemic, has been Bolsonaro's exaggerated tendency to express populist and anti-scientific opinions, which would ultimately come at a significant human cost. Some remarkable illustrations⁵²⁴:

- (1) Against all expert advice, Bolsonaro encouraged large public gatherings,
- (2) Where he met with people without wearing a face mask himself,
- (3) Where he mingled with other people also not wearing face masks,
- (4) Where he promoted the use of unproven drugs for treating Covid-19, and
- (5) Where he even made speeches aimed at discouraging people from participating in any future vaccination campaign.
- (6) Bolsonaro also went out of his way to often express his opposition to containment measures in general, and lockdowns more specifically.

⁵²²Lotta et al. (2020).

⁵²³Lotta et al. (2020).

⁵²⁴With as sources: Lotta et al. (2020) and Saad-Filho (2020).

- (7) Bolsonaro continuously downplayed the seriousness of Covid-19.
- (8) Bolsonaro has been witnessed walking the streets, going to shops and shaking hands with admirers, all of this without wearing a face mask.
- (9) Bolsonaro on more than one occasion openly plotted against his own health minister and against state governors, mayors and the media, in what has been referred to as "a dismal spectacle" that would ultimately drive Brazil's middle classes into a frenzied opposition to Bolsonaro's administration.

By July 2020, Bolsonaro's federal government had invested only 30% of the country's emergency resources that had been made available for dealing with the Covid-19 pandemic into health-related measures. In the best of neoliberal traditions, Covid-19 priority emergency aid went mostly to large companies, to the detriment of small and medium-sized enterprises and independent entrepreneurs. The disbursement of the emergency cash transfer programme for socially vulnerable people, at the same time, occurred both late and in an inefficient manner.⁵²⁵

It has, furthermore, been remarked that, with regard to the monitoring and the understanding of the spread and the impact of the Covid-19 virus itself, the Ministry of Health has failed to produce a systematic and timely indicative system (e.g., a testing and/or contact tracing programme) that would have enabled Brazilian policymakers to better coordinate a more effective response. Instead, federal data continued to lack consistency with other sources, while the government did not even bother to collect many important data. To phrase it differently: Epidemiological surveillance was completely neglected. The federal government in the end opted for a surveillance system based on "rapid" serological tests instead of more reliable RT-PCR-test, even when the latter got universally acknowledged as the most effective method of diagnosing Covid-19.⁵²⁶

Ferigato et al., have made the following, quite remarkable general assessment of the Brazilian government's response to the Covid-19 pandemic, which was published in "The Lancet"⁵²⁷:

The federal government's denial of science and, consequently, of the seriousness of the pandemic to the health and wellbeing of Brazilians has led to a failure to coordinate, promote, and finance internationally sanctioned public health measures. The ministry of health has not developed a national plan to combat the pandemic, nor has any other federal government agency. States and municipalities continue to be neglected and receive insufficient assistance. Influenced by political interests, the federal government has disrupted the flow of financial transfers and slowed the deliveries of essential supplies to certain regions. Furthermore, Brazil's public health system, Sistema Único de Saude (SUS), is the largest in the world and provides universal coverage without any cost to patients. It is accessible nationwide and provides community-based primary healthcare to more than 70% of the population. Yet, primary healthcare has been overlooked by the federal government as a key element in this public health crisis response. Financial emergency aid to the most vulnerable populations was gravely delayed, insufficient, and cumbersome to obtain. Moreover, the

⁵²⁵Lotta et al. (2020).

⁵²⁶Lotta et al. (2020).

⁵²⁷Ferigato et al. (2020).

federal administration denies international recommendations for non-pharmacological interventions, refusing to establish a national mandate for social isolation and mask use.

Yun made a similar observation that experts kept confirming that the Covid-19 crisis in Brazil has to a substantial extent unfolded in such an extreme manner because of the mismanagement of the Covid-19 pandemic by Bolsonaro's federal government. Yun pointed to the further facts that Bolsonaro had opposed curfew restrictions and that he had even gone to court to fight local containment measures which had been imposed by both mayors and state governors to whom Bolsonaro referred as "tyrants".⁵²⁸

Neuroscientist Miguel Nicolelis has defined Brazil's approach of dealing with Covid-19 as "an open-air laboratory for the creation of the most dangerous mutations of Covid-19 and possibly even a new virus, an even more infectious and lethal SARS-CoV-3". To back this bold statement, Nicolelis referred to the emergence of the more contagious "P.1" variant of the Covid-19 virus, which at the time was suspected of causing reinfections and of being resistant towards the Covid-19 vaccines. Nicolelis also argued that the mismanagement of the Covid-19 pandemic in Brazil has in this way posed serious dangers, not only for the Brazilian people itself, but for the entire human race. For Nicolelis, Bolsonaro's approach can even be considered as the result of a "criminal herd immunity policy widely adopted by the world's ruling classes, and most aggressively promoted by the Brazilian government, which deliberately allowed the virus to spread through society".⁵²⁹

Lotta et al., reached the general assessment that, because of the combination of all these actions by its federal government, Brazil's response to the Covid-19 pandemic ranks among the worst in the world.⁵³⁰

By August 2002, when the WHO made a recommendation that the rate of positive Covid-19 test results should not exceed the threshold of 5% of the totality of tests taken over a 14-day period, this rate for Brazil amounted to 33.2%. This was at the same time the second highest test rate average in the world. By that time, Brazil also had: (1) the highest rate of deaths among Covid-19-infected nurses, and (2) the highest number of Covid-19-related maternal deaths, most of which because of severe care failures. Researchers in mortality studies have even qualified these high number of deaths among women as a form of state-directed "femicide".⁵³¹

⁵²⁸Yun (2021).

⁵²⁹Socialist Equality Group (Brazil) (2021). According to a statement by the Socialist Equality Group of Brazil: "In May 2020, when Brazil had yet to record 12,000 Covid-19 deaths, representatives of the largest big business associations marched alongside the fascistic President Jair Bolsonaro to denounce the minimal restrictive measures taken by local governments, saying they "have gone too far." Bolsonaro promised the capitalists that he would wage a "war on lockdowns." (...) The sociopathic demands of the national bourgeoisie were resisted by not a single party of the Brazilian political establishment, including the so-called opposition led by the Workers Party (PT). On the contrary, since then, all actions taken by state governments of every political stripe have been directed at ending social distancing policies". (Cf. Socialist Equality Group (Brazil) (2021).) ⁵³⁰Lotta et al. (2020).

⁵³¹Lotta et al. (2020).

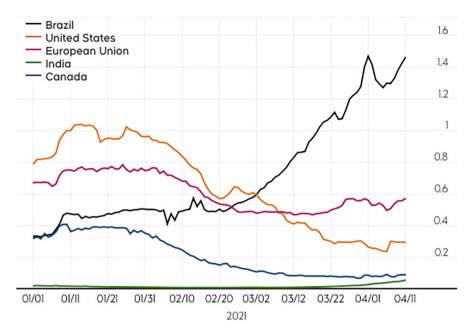


Fig. 2.6 Covid-19 deaths in Brazil compared to selected other territories (until 4 April 2021) [Source: Yun (2021)]

Covid-19 around the same time also rapidly gained ground in Brazil's countryside, resulting in alarming mortality rates and in the collapse of local health systems.⁵³²

By 11 November 2020, 871 of Brazil's indigenous people had died of Covid-19, while there had moreover been 38,978 confirmed contamination cases among this people. There were, not surprisingly, commentators who spoke of a form of "genocide".⁵³³

By 24 March 2021, there had in total been nearly 300,000 Covid-19 related deaths since the outbreak of the pandemic, a toll which at the time was only second to the one of the United States.⁵³⁴ The total number of contamination cases since the outbreak of the pandemic was at the time estimated at 11 million.⁵³⁵ By then, a further report confirmed that the Covid-19 virus had disproportionately affected Brazil's indigenous population. According to an investigative report titled "Brazil's Indigenous People Articulation", more than 51,000 indigenous people had tested positive for Covid-19, of which 1022 people had died. The highest number of deaths among the indigenous people had been reached in the state of Amazonas, where 242 indigenous people were reported to have died because of Covid-19.⁵³⁶ The dramatic situation in Brazil is illustrated by Figs. 2.6 and 2.7. Figure 2.6 gives an

⁵³²Cf. Lotta et al. (2020).

⁵³³Lotta et al. (2020).

⁵³⁴Yun (2021).

⁵³⁵BBC News (2021b).

⁵³⁶Lotta et al. (2020).

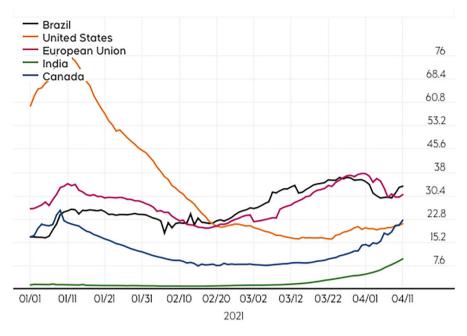


Fig. 2.7 Covid-19 Cases (7-day avg., per 100K) in Brazil compared to some other territories (until 4 April 2021) [Source: Yun (2021)]

overview of the Covid-19 deaths in Brazil compared to a selection of other territories until 4 April 2021. Figure 2.7 gives an overview of the Covid-19 Cases (7-day avg., per 100K) in Brazil compared to other territories until 4 April 2021.

In April 2021, there occurred a worrisome increase in the number of young patients contaminated by the Covid-19 virus. The press reported about hospital intensive care units that increasingly had to admit young victims contaminated with the Covid-19 virus and aged in their 20s or 30s, while the average age of Covid-19 patients who were being admitted in the hospitals, had decreased from age 80 to age 40. Although the reason for this "generational shift" was not yet completely clear, some held the new, highly transmissible "P1" variant of the Covid-19 virus responsible. Another scientist was quoted saying that behavioural factors were most probably also at play. This referred to the fact that younger people had been more likely to have been frequenting places where they might have been exposed to higher doses of the Covid-19 virus on more often occasions. This had, obviously, also to do with the complete lack of containment measures in Brazil, which was itself due to the fact that Bolsonaro's government opposed such measures. As a result, Brazil's younger population had kept attending work, parties, restaurants and nightclubs, as if nothing was going on. This suspicion seems to find confirmation in the fact that many of the hospitalised Covid-19 patients in their forties, or younger, were domestic workers, cleaners, retail salesmen and waiters, all of whom had one thing in common: they had to leave their homes in order to work. 537

By Thursday 29 April 2021, Brazil became the second country to officially surpass the 400,000 mark in Covid-19 related deaths. By that date, Brazil was reported to have lost another 100,000 lives during the time frame of just 1 month. Some health experts even warned that there would be worse days ahead as the southern hemisphere was entering winter. Be this as it may, April 2021 was at the time the deadliest month of the Covid-19 pandemic for Brazil so far, with thousands of people dying every day in Brazil's overcrowded hospitals.⁵³⁸

A 2020 OECD economic survey of Brazil came to the conclusion that while Brazil's response had spared it from a more severe economic impact, the Covid-19 pandemic had still significantly affected general welfare and prosperity. Covid-19 had especially taken a heavy toll on common people and small businesses, especially on those active in the informal economy. The OECD survey estimated that the Covid-19 crisis would, by and large, lead to a 5% contraction in GDP in 2020, followed by a return to economic growth of 2.6% in 2021, and of 2.2% in 2022.⁵³⁹

2.4.3 Second Year—and Third Wave—of the Covid-19 Pandemic in the EU and Its Member States

2.4.3.1 When, Despite Several WHO Warnings, the Third Wave of the Covid-19 Pandemic Still Hit Europe

By early March 2021, the WHO warned that the number of Covid-19 cases reported on the European continent was increasing. According to Khan, Hans Kluge, WHO Director for Europe, had urged EU leaders to "go back to basics" and to re-engage their populations in the fight against the Covid-19 pandemic.⁵⁴⁰ According to the same author, the WHO, in particular, warned about "Covid-19 pandemic fatigue" that could (again) cause people to start ignoring Covid-19 containment and social distancing measures. This concern was becoming all the more acute, as EU vaccination efforts finally were gaining pace, which made part of the European population think they could finally start relaxing⁵⁴¹ (cf. Sect. 9.4.3.). Similar warnings had, shortly before, been issued by the ECDC. Reference can, e.g., be made to an ECDC "update" of 15 February 2021, in which the ECDC had pointed out that the European vaccination programmes had not yet progressed in a sufficient enough manner to already start reducing the spread of the Covid-19 virus. The ECDC also warned

⁵³⁷Phillips (2021).

⁵³⁸CBS News (2021).

⁵³⁹OECD (2020).

⁵⁴⁰Khan (2021).

⁵⁴¹Khan (2021).

about anti-lockdown protests and civil unrest in some European cities, which were indicators of Covid-19 pandemic fatigue that could undermine public acceptance of, and compliance with, NPI measures still in force.⁵⁴²

The WHO from its part showed a keen insight in the European situation. In their assessment of the situation in Europe, WHO officials clearly alluded to the total failure of both EU countries and the EU itself in managing the Covid-19 pandemic in its beginning phase (cf. Sect. 2.3.), but also throughout its further duration. The same concern about the failure of EU's leadership to adequately deal with the Covid-19 pandemic, had already before made WHO officials express their strong concerns about a possible third wave of the Covid-19 pandemic in Europe. E.g., in an interview that was published in the "Solothurner Zeitung" in Switzerland, on 21 November 2020,⁵⁴³ WHO Special Envoy for Covid-19 David Nabarro had declared that Europe was likely to experience a third wave of the deadly Covid-19 pandemic in early 2021 and before it would be possible to start administering the Covid-19 vaccines.⁵⁴⁴ Nabarro, a London-born doctor⁵⁴⁵ and experienced health officer, had in the past led the UN's fight against viral outbreaks such as the bird flu, Ebola and cholera in Haiti. In 2017, Nabarro had, moreover, been defeated for the post of WHO chairman by Dr. Tedros Adhanom Ghebreyesus, the latter himself being a former Ethiopian health minister.⁵⁴⁶ Nabarro had, subsequently, been appointed as WHO's special envoy in the fight against Covid-19.547

According to Nabarro, EU leaders had failed to draw any lessons from the experiences with Covid-19 so far. They had especially failed to put the necessary infrastructure in place during the summer months of 2020, after the first wave of the Covid-19 pandemic had been contained. Nabarro explained that this failure had been the main cause for the severe second wave of the Covid-19 pandemic that had hit the European continent in October-November 2020. Nabarro had also warned that if European leaders would persist in this failure to install the necessary health infrastructure, a third wave of the Covid-19 pandemic was likely to occur in early 2021.⁵⁴⁸

Nabarro had phrased this concern in the following manner⁵⁴⁹:

They missed building the necessary infrastructure in the summer months after getting the first wave under control. And now you have the second wave. If they do not build the infrastructure now, they will have a third wave, early next year.

⁵⁴²ECDC (2021), p. 1.

⁵⁴³Vontobel (2020).

⁵⁴⁴Knight (2020).

⁵⁴⁵On Nabarro, cf., furthermore, Boseley (2017a).

⁵⁴⁶Boseley (2017b).

⁵⁴⁷Vontobel (2020).

⁵⁴⁸Vontobel (2020) and Knight (2020).

⁵⁴⁹Vontobel (2020).

Nabarro, furthermore, had shared his concern that EU countries should have shown more willingness to learn lessons from more capable Asian countries, such as South Korea (cf. Sect. 2.4.2.4.3.). This criticism, basically, implied that the EU and its Member States should have responded much more quickly, robustly and decisively to the threat caused by the Covid-19 virus, especially during the early phase of the Covid-19 pandemic, when the number of cases was still low and the virus had not yet been very present on the European continent. By instead having reacted half-heartedly, the EU and its Member States had, in essence, made the problem even worse. According to Nabarro, the EU and its Member States had, furthermore, not been making good use of the lower figures during the summer months of 2020, thus paving the way for the success of the second wave of the Covid-19 pandemic on the European continent.⁵⁵⁰

According to Nabarro, one of the main problems in all of this has been that al lot of European policymakers simply refused to understand that the Covid-19 virus was spreading exponentially, rather than arithmetically.⁵⁵¹

By contrast, Asian countries had managed to keep their contamination and deaths numbers relatively low in the period during and after the summer and fall of 2020. Still according to Nabarro, this was because Asian politicians and their people were far more committed to fighting the Covid-19 pandemic. This in its own turn resulted in a far greater willingness to continue to deploy the behaviours needed to fight the Covid-19 virus, amongst which: (1) keeping physical distance, (2) wearing face masks, especially when being outdoors, or when being indoors in the company of other people, (3) isolating one's self when sick, (4) washing one's hands, (5) cleaning surfaces, and (6) remaining committed to protecting the population groups most at risk, such as people suffering from a pre-existing medical condition, and the elderly.⁵⁵²

Nabarro also pointed to the fact that, unlike the leadership of the EU and its Member States, leaders in Asian countries had not prematurely relaxed containment and social distancing measures, implying that by having refused to wait until the number of Covid-19 cases was sufficiently low, the response in European countries by the end of the first wave of the Covid-19 pandemic had simply been incomplete. Nabarro at the same time praised the approach of Asian authorities' communication strategies, which had in most cases been based on a single, clear and simple message: "If we want our economy to be strong and if we want to keep our freedoms, we all need to stick to a few basics." By contrast, already as early as the summer of 2020, the leaders in EU countries had been all too eager to open up everything, from the economy and businesses to schools and universities, and this as soon as a part of the European population had started whining that the measures to combat the Covid-19 pandemic were just too much to bear. It has precisely been the latter attitude that has resulted in not only the second wave of the Covid-19 pandemic by October-

⁵⁵⁰Knight (2020).

⁵⁵¹Vontobel (2020) and Knight (2020).

⁵⁵²Vontobel (2020) and Knight (2020).

November 2020, but, in full accordance with Nabarro's predictions of 21 November 2020, also the third wave of the Covid-19 pandemic by the spring of 2021⁵⁵³ (while, in some countries, such as Spain, there was already talk of a "fourth wave" of the Covid-19 pandemic).

As Nabarro has explained these concerns⁵⁵⁴:

My colleagues in WHO, the head of the regional office in Europe, and my WHO colleagues in Geneva unfortunately always have the same experience: they have to say repeatedly that there is no alternative. We must implement the strategies described. In this way we can help maintain freedoms and freedom.

Be this as it may, as a result of the failure to deploy structural measures to combat the Covid-19 pandemic as successfully as many Asian countries, by mid-March 2021, many of the EU countries witnessed the start of a third wave of the Covid-19 pandemic, while the EU vaccination campaign had far from advanced enough in order to protect the European people from a new surge of contamination cases and deaths, and while, moreover, new, more contagious variants of the Covid-19 virus in some areas started to account for the majority of new cases.⁵⁵⁵

Connolly et al. have quoted Christian Drosten, a leading virologist at Berlin's Charité Hospital, who at the time shared his deep concern about the exponential increase of the spread of the B.117 variant of the Covid-19 virus, which already by mid-March 2021 accounted for around three quarters of the new contamination cases in Germany alone, as well as about the decision made by Germany to temporarily stop using the Oxford-AstraZeneca vaccine.⁵⁵⁶ Drosten was, furthermore, quoted warning the German people that by Easter 2021, German cases could reach the same high levels that had been witnessed around Christmas 2020. Drosten's stark warnings came at a moment when some regions in Germany—besides many other EU countries as well—were starting or considering to reopen, after a lengthy period of lockdowns, with the hope of being in time before the Easter holidays.⁵⁵⁷

According to Connolly et al., parts of Germany had began to reopen after a long lockdown period which, as was hoped, would be relaxed by the Easter 2021 holidays period. It had already been announced that the following places would reopen again: (1) non-essential shops albeit by appointment only, and (2) hairdressers. (3) Hotels and restaurants awaited a confirmation that they would be able to reopen as well, which was announced for 22 March 2021. By that time, students had started to return to universities in shifts. However, the bad news was that, by mid-March 2021, the incidence rate in Germany had reached 88.8 per 100,000 people over a period of 7 days, which was well above the 50 mark the German government had set as a minimum target some weeks earlier. On 18 March 2021, the Robert Koch Institute Germany's federal disease control agency, announced that there had been 13,435 new daily cases and more than 250 daily deaths, while it was to be feared that the number of daily cases would again reach the mark of 30,000–40,000 by Easter 2021 were containment rules to be relaxed further at such a critical time. In some hospitals, the average age of Covid-19 patients was reported to have decreased by 20 years in comparison with the second wave

⁵⁵³Knight (2020).

⁵⁵⁴Vontobel (2020).

⁵⁵⁵Connolly et al. (2021).

⁵⁵⁶Connolly et al. (2021).

⁵⁵⁷Connolly et al. (2021).

Shortly after, in his weekly "Corona Virus Update" podcast, Dorsten warned the German public that the situation could become "particularly tricky" for people over 50. The reason for this was that most people under 80 had not yet received a jab of a Covid-19 vaccine. Moreover, because of huge delays in the EU vaccination campaign, it was still unclear when this part of the German population would finally receive their jab. The fact that people in their 80s themselves had already been vaccinated, at least in part, thus implied that the group of people aged between 60 and 80 had become the main risk group, especially in light of the variants of the Covid-19 that were circulating throughout Europe.⁵⁵⁸ At the time, the European vaccination programme, which had, mainly due to a shortage of supplies (cf. Sect. 9. 4.3.1.), been very slow and hampering from the early start, was rolling out even slower than expected. This implied that German Chancellor Angela Merkel's promise that every German adult would be vaccinated by 21 September 2021, had started looking increasingly uncertain.⁵⁵⁹

By mid-March 2021, Covid-19 contamination cases had again drastically increased in Italy as well. On 16 March 2021, the country recorded a daily death toll of 502, its highest number since January 2021. Italian Health Minister Roberto Speranza was quoted declaring that in Italy as well, more than half of the new infection cases were due to the UK variant of the Covid-19 virus. Already the day before, on 15 March 2021, Italy had intensified its containment measures, as a result of which more than half of the country was put back in the most severe "red zone" category. It was estimated that the UK variant of the Covid-19 virus had spread around 35–40% faster, and that it accounted for 54% of the total cases. At the same time, also the South African variant of the Covid-19 virus was present, in particular in the Bolzano region, while the Brazilian variant of the virus was mainly active in the centre of the country.⁵⁶⁰

A similar evolution was taking place in Poland. By 17 March 2021, the UK variant there also accounted for the majority of new Covid-19 infections, with reports of a daily number of 25,000 new cases in the preceding 24 h.⁵⁶¹

In France, speculation started increasing about an imminent new lockdown, in addition to the already prevailing daily 6 pm–6 am curfew in both Paris and the Ilede-France region. Hospitals in the Paris region had started moving ICU patients to less affected areas of the country, while in the far west of France, eight people who had contracted the so-called "Breton" variant which had not been detected by existing tests, were reported to have died.⁵⁶² Also in France, on 22 March 2021, Labour Minister Elisabeth Borne was said to have become the fifth member of

of the Covid-19 pandemic. This pointed to a sharp increase in infections in the 20–59 age group, with even an increasing number among children. (Cf. Connolly et al. (2021).)

⁵⁵⁸NDR (2021).

⁵⁵⁹Connolly et al. (2021).

⁵⁶⁰Connolly et al. (2021).

⁵⁶¹Connolly et al. (2021).

⁵⁶²Connolly et al. (2021).

President Emmanuel Macron's cabinet—besides the president himself—to have tested positive for Covid-19. In the meantime, the 7-day average of new daily Covid-19 cases in France exceeded 30,000, up from a mere 10,000 in December 2020. It was, furthermore, reported that, in the Paris region, there were more people in ICUs than there had been during the second wave of the Covid-19 pandemic in November 2020. This implied that hospital capacity in Paris was saturated, explaining that ICU patients had to be moved to hospitals located in other parts of the country. Moreover, according to a study by the Pasteur Institute of March 2021, workplace contamination was reported to account for 15% of new Covid-19 cases.⁵⁶³

But it was especially in Central Europe, the Balkans and the Baltic States that the incidence of new Covid-19 contamination cases, hospitalisations and Covid-19 related deaths, had become among the highest in the world.⁵⁶⁴

On 18 March 2021, the WHO sounded the alarm bell at a press conference. According to the information provided by the WHO, the number of people dying from Covid-19 in Europe—which was around 20,000 per week—had even gotten higher than it had been around the same time in 2020.⁵⁶⁵ During this press conference, Dr. Hans Henri P. Kluge, WHO Regional Director for Europe, gave the following assessment of the European situation⁵⁶⁶:

Last week marked 1 year since WHO announced that the Public Health Emergency of International Concern declared on 30 January 2020 represented the first ever pandemic caused by a coronavirus.

Since then, we have seen nearly forty-two million cases in this region alone, and more than 120 million globally. But we've also seen giant scientific leaps and the introduction of effective tools that give us power over the virus, when used.

The power of the collective. The heroism of our frontline. When I look back at the past year, I see remarkable attributes we have all expressed to limit the spread of the coronavirus. Ultimately, our behaviour is saving lives.

The danger, however, is still clear and present.

The current situation is most acute in parts of the Region that were successful in controlling the disease in the first 6 months of 2020. It is in central Europe, the Balkans and the Baltic states where case incidence, hospitalizations and deaths are now among the highest in the world.

Case incidence continues its increasing trend and is moving eastwards. We have now seen three consecutive weeks of growth in COVID-19 cases with over 1.2 million new cases reported last week across Europe.

Last week, deaths in the Region surpassed 900 000. Every week, more than 20 000 people across the Region lose their lives to the virus. The number of people dying from COVID-19

⁵⁶³Henley (2021b).

⁵⁶⁴ Khan (2021).

⁵⁶⁵Khan (2021).

⁵⁶⁶World Health Organization Regional Office for Europe (2021).

in Europe is higher now than it was this time last year, reflecting the widespread hold this virus has.

We are yet to see the widespread health impact and benefits of vaccines, which I can also assure you will come. But for now, we need to remain steadfast in our application of the full range of tools to respond.

Some forty-eight out of 53 European countries or territories have reported the B.1.1.7 variant of concern, which is gradually becoming predominant in our region. And yet, in the context of this faster spreading variant, several countries – including but not limited to Denmark, Ireland, Portugal, Spain and the United Kingdom – have rapidly reduced transmission with public health and social measures to levels that can, and must, be kept low.

Five countries in the Region have received vaccines from the COVAX Facility – fair and equitable access to vaccines, the overarching concept of COVAX, is happening in reality. The gap in access to vaccines in our region is narrowing, yet inequity persists, with all high-income countries having rolled out vaccination, but only 60% of middle- and lower-income countries having done so.

As of today, a total of forty-six countries in the Region have administered more than 107 million doses of vaccine. Three percent of the population in forty-five countries have received a completed vaccination series, and data from twenty-three countries indicates that 51% of health workers have received at least one dose.

While twenty-seven countries are currently in a partial or full nationwide lockdown, twentyone are gradually easing restrictive measures. Some are doing so based on the assumption that increasing vaccination uptake in countries would immediately lead to an improved epidemiological situation. Such assumptions are too early to make.

Let there be no doubt about it, vaccination by itself – particularly given the varied uptake in countries – does not replace public health and social measures.

With vaccination coverage in the Region ranging from less than 1% to 44%, it is also far too early to demonstrate the effect of vaccines on overall COVID-19 hospitalization and deaths. Nonetheless, early data from Israel, Scotland and the UK, linked to effectiveness against severe disease by the Pfizer/BioNTech and AstraZeneca vaccines, is promising and show lives are being saved.

As vaccine uptake increases, their broader impact will become visible, and studies like these will guide policy and improve our understanding of how the different vaccines contribute to our response. We welcome these studies, stressing that the available data is limited – and that further research is urgently needed.

The WHO Regional Office for Europe and the European Centre for Disease Prevention and Control have developed a robust protocol to study vaccine effectiveness in community settings to allow effective comparison of the results between countries.

A number of countries in the Region have temporarily suspended use of the AstraZeneca vaccine as a precautionary measure, based on reports from a few countries of rare blood coagulation disorders in persons who had received the vaccine. The detection, investigation and assessment of these cases is a testimony to strong surveillance and regulatory mechanisms.

In vaccination campaigns, it is routine to signal potential adverse events. This does not necessarily mean that the events are linked to the vaccination. Venous thromboembolism is the third most common cardiovascular disease in the world. It happens in populations regardless of whether they are vaccinated or not. COVID-19 vaccination will not reduce illness or deaths from other causes.

As of now, we do not know whether some or all of the conditions have been caused by the vaccine or by other coincidental factors. WHO is assessing the latest safety data, and once completed, the findings will be made public. At this point in time, however, the benefits of the AstraZeneca vaccine far outweigh its risks – and its use should continue, to save lives.

Vaccines work and will eventually allow a return to a new normal. But for that to happen, we need to rely on science and have confidence in the incredible protection afforded by vaccines against all vaccine-preventable diseases, including COVID-19.

Meanwhile, we have one eye fixed on the future. This week, the Pan-European Commission on Health and Sustainable Development, chaired by Professor Mario Monti, issued a call to action – to rethink policy priorities in the light of pandemics, to fix the fractures and address the conditions that allowed COVID-19 to happen. This is a concrete step towards making health a centrepiece of society, preparing for future health emergencies and making sure that the notion of health as peripheral is a thing of the past.

Stay safe. Thank you.

According to Mallet et al., in early April 2021, the French Prime Minister Jean Castex told the French Parliament that in a fortnight, the official number of new Covid-19 contamination cases had increased by 55%, to around 38,000 per day.⁵⁶⁷ This growth in a single fortnight in France compared to a 95% increase of contamination cases in Belgium, and of 48% in the Netherlands, both in a similar time frame.⁵⁶⁸

In Spain and Italy too, the situation severely deteriorated in the month of April 2021.569

In Spain, by 9 April 2021, the 14-day cumulative number of cases per 100,000 people had risen to 174.52. This meant that it was gradually approaching the threshold of 250 cases which was by the Spanish government considered to indicate a situation of "extreme risk". On 8 April 2021, the Central Ministry of Health published a new report on the Covid-19 situation. This report showed a gradual increase in the 14-day cumulative number of Covid-19 cases per 100,000 people. From this, it appeared that the national average had risen from 167.97/100,000 on 7 April 2021 to 174.52/100,000. Some regions had already passed the 250/100,000 mark, namely Madrid, the Basque Country and Navarra, besides the North African cities of Melilla and Ceuta.⁵⁷⁰ The Ministry, furthermore, reported 9901 active infections cases, which was almost 3000 more than on 1 April 2021, when the figure had amounted to 7041. On 25 March 2021, the number had only amounted to 6393 cases, which was 3500 fewer than on 8 April 2021.⁵⁷¹ From this, it appeared that by 8 April 2021, Spain was experiencing a fourth wave of the Covid-19 pandemic, with the ICU departments of its hospitals being under great pressure.⁵⁷²

⁵⁶⁷Mallet et al. (2021).

⁵⁶⁸Mallet et al. (2021).

⁵⁶⁹Mallet et al. (2021).

⁵⁷⁰Hidalgo (2021).

⁵⁷¹Hidalgo (2021).

⁵⁷²Hidalgo (2021).

Eastern Europe had also been hit hard. In Poland, the third wave of the Covid-19 pandemic was even reported as the worst so far, with the number of daily infections at record levels. This also put a huge strain on the country's health care system. At the beginning of April 2021, there were more people in Poland in hospitals and/or on ventilators than at any previous point in time since the beginning of the pandemic in China in December 2019.⁵⁷³

By contrast, in Czechia, where the government had resorted to a new, strict lockdown following a severe outbreak of Covid-19 in late February 2021, cases were going down. In Slovakia, however, cases were on the rise as in most other European countries.⁵⁷⁴

However, probably the most remarkable events during the third wave of the Covid-19 pandemic occurred in Sweden. As has been explained before, Sweden had from the early start of the Covid-19 pandemic chosen for a totally different approach in dealing with Covid-19. This approach had neared striving for herd immunity, although Swedish authorities had refused to indicate their approach under this denomination. Notwithstanding this, the country had still withstood the first wave of the pandemic rather well. However, after the winter months of 2020–2021, things would start to change. By 13 April 2021, Sweden for the first time reported the highest number of new Covid-19 contamination cases per capita in Europe. The country also had more Covid-19 patients in ICU's than at any other moment during the Covid-19 pandemic. This situation had brought Sweden to the move of adopting containment measures after all, which before Sweden had refused to even consider. Then, with cases dropping again, Sweden had started to gradually tighten its mostly still voluntary restrictions, until the date of 13 April 2021, on which the country experienced a 7-day average of 625 new cases per one million people. On that same date, that figure was 521 for Poland, 491 for France, 430 for the Netherlands, 237 for Italy, 208 for Germany, 132 for Norway, 111 for Denmark and (only) 65 for Finland. Moreover, on 12 April 2021, 392 people were being treated in ICU units. This was more than the peak number that Sweden had experienced during the second wave of the Covid-19 pandemic, which then-in January 2021-had only amounted to 389, but still less than the number had been in the spring of 2020, when there had, at a certain moment in time, been 558 ICU patients. Surprisingly, while the numbers of new daily cases and of patients in ICU care had been increasing, the number of Covid-19 related deaths had not been rising as sharply. According to the Swedish national health agency, this may have been due to the fact that many of Sweden's most vulnerable people, including nursing home residents, had already been vaccinated by April 2021.⁵⁷⁵ The rising numbers in Sweden made Prime Minister Stefan Löfven's government decide to postpone an earlier announced easing of restrictions that had been planned for the end of March 2021. The government, instead, announced that it would be necessary to uphold existing containment measures

⁵⁷³Mallet et al. (2021).

⁵⁷⁴Mallet et al. (2021).

⁵⁷⁵Henley (2021a).

until at least 3 May 2021, however while insisting that there was no need to resort to even stricter measures. The initial plan had been to relax some measures, e.g., by raising the limits on the number of people who could attend theme parks, concert halls and sports events. This easing down had been foreseen to enter into force no later than at the beginning of the Easter holidays, but Swedish public health agency now advised to wait a bit longer. In the meanwhile, non-essential shops had been continuously allowed to remain open, although with limits on the number of customers. Also bars and restaurants had been allowed to continue to function, albeit with increasingly severe restrictions on opening hours and regarding the sale of alcohol. The situation of mid-April 2021, moreover, made the government tighten the rules on public gatherings, although schools could remain open, be it with variations between regions.⁵⁷⁶

Sweden has justified its policy under the argument that its aim had all the time been to strike a balance between the following goals: (1) prioritising life and health; (2) protecting the health care system as much as possible, and (3) ensuring a variety of important societal functions in order to allow society to continue to function, without (4) unduly disturbing people's privacy.⁵⁷⁷ By 13 April 2021, Sweden had experienced more than 13,000 Covid-19-related deaths. This implied a death rate per million persons of almost 1350, which was several times higher than the death rate in Sweden's Nordic neighbouring countries, but also lower than the death rate in several other European countries that had opted for lockdown measures. For the whole year 2020, Sweden's increase in excess mortality was also lower than that of most European countries. Health officials made the remark that, although Sweden's results were not to be taken as evidence against lockdowns, it had still to be acknowledged that Sweden's numbers could indicate that the country's overall approach for fighting the Covid-19 pandemic showed some characteristics worthy of further investigation.⁵⁷⁸ Eurostat statistics more in particular showed that in 2020, Sweden had 7.7% more deaths than its average during the four preceding years. This figure was lower than in 21 other of the in total 30 surveyed countries.⁵⁷⁹ By contrast, Spain and Belgium, both countries that had opted for strict and repeated lockdown measures, had a much higher excess mortality of 18.1% and 16.2% respectively.⁵⁸⁰ However, the number for Sweden was at the same time much worse than the one of its Nordic neighbouring countries, with Denmark having recorded an excess mortality of only 1.5% and Finland of 1.0%, while Norway had even shown no excess mortality for 2020 whatsoever.⁵⁸¹

⁵⁷⁶Henley (2021a).

⁵⁷⁷Henley (2021a).

⁵⁷⁸Henley (2021a).

⁵⁷⁹Henley (2021a).

⁵⁸⁰Henley (2021a).

⁵⁸¹Henley (2021a).

2.4.3.2 End-March 2021 Containment Measures

Throughout the month of March 2021, it was getting clearer and clearer that a third wave of the Covid-19 pandemic was unavoidable, which made most EU countries—albeit reluctantly—decide to reintroduce or extend Covid-19 containment measures.⁵⁸²

In Germany, containment measures were at the time still in force, albeit there were plans to ease down on these measures before the Ester holidays period. Instead, Germany saw itself forced to prolong the measures until at least 18 April 2021. There were even talks to have a new, full 5-day national lockdown which was decided to take place during the first 5 days of April 2021. However, the latter plans met much public backlash and whining, which made the German Chancellor Angela Merkel ultimately decide to reverse this decision.⁵⁸³

On 31 March 2021, France decided to put the city of Paris under a new 1-month lockdown-by the French press referred to as a "light lockdown"-along with some other regions. Travel between French regions was prohibited for the duration of this light lockdown period, except for "compelling" or work-related reasons. This light lockdown was expected to affect the lives of 21 million people in 19 regions of France. At the time, there was for the whole of France still a national curfew in force as well, notably between the hours from 7 pm until 6 am.⁵⁸⁴ The lockdown-light was accompanied by two important further restrictions, namely: (1) the closure of all non-essential shops, and (2) a ban on inter-regional travel. These measures were announced to last at least 4 weeks, but were considered less strict than previous lockdowns, with some health experts even questioning whether they would be sufficient. E.g., the following "shops" were allowed to remain open: (1) Hairdressers, (2) bookshops, (3) chocolate shops, (4) music shops, (5) car dealerships and (6) florists. People were, moreover, allowed to exercise outdoors as often as they wished, albeit under two conditions: the permission only applied during daytime and within a radius of maximum 10 km (6 mile) of their homes. In addition, schools were required to remain open (with senior secondary education however reverting to a "hybrid" half-distant learning from home, half-being physically at school schedule). Finally, all employees who could do their job from home, were required to do so.585

In Italy, as of 15 March 2021, the government of Prime Minister Mario Draghi decided on some new, severe containment measures which met severe protest from the part of the Italian population. These involved: (1) the closure of shops, schools and restaurants in a variety of major Italian cities, including Rome and Milan, besides (2) a nationwide closure during the 3-day Easter weekend and starting on Good Friday, 2 April 2021.⁵⁸⁶ The latter measure implied that the whole of Italy got

⁵⁸² Khan (2021).

⁵⁸³Khan (2021).

⁵⁸⁴ Khan (2021).

⁵⁸⁵Henley (2021b) and France 24 (2021).

⁵⁸⁶Khan (2021), Henley (2021b) and France 24 (2021).

"red-listed" for the duration of the Easter weekend, with people mandated to stay at home, except for work, health care or other essential reasons.⁵⁸⁷

On 17 March 2021, Poland as well resorted to a 3-week partial lockdown. The accompanying containment measures included a complete closure of (1) schools, (2) shopping centres, (3) swimming pools, (4) gyms, and (5) restaurants (which however had already been closed before). People were, furthermore, advised to stay at home.⁵⁸⁸

Although Greece had previously announced that it was making plans to again welcome tourists from abroad during the European summer of 2021, it too had to resort to new containment measures regarding the areas where cases were at the time most prevalent. E.g., in Athens, all non-essential shops and barber shops had to remain closed.⁵⁸⁹

Spain simply decided to prolong its existing restrictions until May 2021, and to restrict all non-essential travel outside the country.⁵⁹⁰

Also in the Netherlands, on 23 March 2021, under explicit reference to the fact that a third wave of the Covid-19 pandemic had started, the government of Prime Minister Mark Rutte decided to extend the country's strict Covid-19 lockdown. This lockdown decision was accompanied by the following further measures: (1) A 9 pm-4.30 am curfew (which had already been in force), although as of 31 March 2021, the curfew would start at 10 pm, (2) a request to the population to avoid all but unavoidable foreign travel until at least 15 May 2021, (3) a permission for secondary schools to open one day a week, (4) allowing hairdressers and other "contact professions" to return to work, (5) a permission to visit non-essential shops upon appointment, and (6) bars and restaurants remaining closed.⁵⁹¹

2.4.3.3 Looking for Explanations

2.4.3.3.1 Introduction

Needless to say, the containment measures that the governments of several EU countries had to resort to by the end of March 2021, in many cases, came as a heavy blow to their already Covid-19 pandemic-weary populations.⁵⁹²

The population of most EU countries had by then already been living under intermittent restrictions for a year, or more.⁵⁹³ Many of the EU countries that had to resort to new, tough containment measures in order to fight the third wave of the

⁵⁸⁷Henley (2021b).

⁵⁸⁸Connolly et al. (2021).

⁵⁸⁹Khan (2021).

⁵⁹⁰ Khan (2021).

⁵⁹¹Henley (2021b) and Het Parool (2021).

⁵⁹²Khan (2021).

⁵⁹³Khan (2021).

Covid-19 pandemic were, moreover, the same ones that had endured a severe first wave of the Covid-19 pandemic (that itself had only—more or less—ended after taking recourse to severe containment measures in the spring of 2020), followed by an as severe second wave of the Covid-19 pandemic (that likewise had to be fought by applying severe containment measures during the second half of the winter of 2020–2021). This implied that, in March 2021, the European people were facing a third severe wave of the Covid-19 pandemic, again resulting in new, restrictive containment measures. This obviously led to the questions as to where things had gone wrong, and what could be further done to prevent the situation from getting even worse.⁵⁹⁴

In the search for explanations, three new such explanations entered the picture, namely:

- (1) The role of new variants of the Covid-19 virus.
- (2) The disastrous EU vaccination campaign, which had failed to inoculate enough people during the first 4 months of 2021, as a result of which a too large part of the European population had still not been protected by a Covid-19 vaccine.
- (3) Covid-19 pandemic fatigue (which especially during the second wave of the Covid-19 pandemic had led to a rejection to comply with former containment measures among a part of the European people).

2.4.3.3.2 New SARS-CoV-2 Variants

New variants of the Covid-19 virus are believed to have played a key role in the development of the third wave of the Covid-19 pandemic.

According to an ECDC report of 15 February 2021,⁵⁹⁵ several EU/EEA countries had experienced a decline in the overall incidence of Covid-19 in the weeks preceding the date of said report. This was to a large extent attributed to the impact of increased NPI's which many EU/EEA countries had resorted to. Still, the epidemiological situation remained of great concern with most countries belonging to the EU/EEA still experiencing high and, in some cases, even increasing contamination rates and Covid-19 related deaths.⁵⁹⁶

The good news was that the roll-out of the vaccination campaigns had finally started in all EU/EEA countries. The bad news was that this vaccination campaign was, due to several mistakes that the EU had made in the procurement phase (cf. Sect. 9.4.3.), only progressing at a very slow pace. During the months of January and February 2021, the EU vaccination campaign only targeted some specific priority groups, namely: (1) the group of people who were at risk of developing severe disease if contracting Covid-19 (such as the elderly and, more

⁵⁹⁴Khan (2021).

⁵⁹⁵ECDC (2021), p. 1.

⁵⁹⁶ECDC (2021), p. 1.

in general, residents of nursing and/or long-term care facilities), as well as (2) healthcare workers and other frontline workers. By 15 February 2021, it was however still too early to detect any impact on Covid-19 related mortality and/or hospitalisations. A second matter of concern that the ECDC raised in its 15 February 2021 report concerned the fact that, while most EU/EEA countries were starting to witness a decline in the total number of contaminations in response to NIP's, the introduction and increased spread of new variants of the Covid-19 virus that had for the first time been identified in the United Kingdom (= the "B.1.1.7"-variant), South Africa (= the "B.1.351"-variant) and Brazil (= the "P.1" variant)⁵⁹⁷ (cf. Sect. 1.1.2.) created a new factor of uncertainty.

In its 15 February 2021-report, the ECDC made the following observations about these three variants of the Covid-19 virus⁵⁹⁸:

(1) Since 21 January 2021, several EU/EEA countries had witnessed a substantial increase in both the number and proportion of Covid-19 cases linked to the B.1.1.7 variant.

E.g., Ireland had reported in detail that the B.1.1.7 variant was the main circulating strain of the Covid-19 virus on its territory. Several other EU/EEA countries expected a similar situation in the weeks to follow.

The B.1.1.7 variant caused the following reasons for concern: (1) it appeared to be more transmissible than the previously predominantly circulating strains of the Covid-19 virus, and (2) it was considered to cause a more severe infection than these other strains.

According to the ECDC's own assessment, several of the countries where the B.1.1.7 variant had become dominant had experienced the following: (1) a rapid increase in incidence, leading to (2) increased hospitalisations, (3) overburdened health systems and (4) excess mortality.⁵⁹⁹

(2) Variant B.1.351 of the Covid-19 virus had also been increasingly showing up in several EU/EEA countries.

According to the ECDC, this variant showed the following characteristics: (1) it was often, albeit not in an exclusive manner, linked to travel; (2) it was associated with new epidemics and (3) with increased transmissibility, and (4) there was evidence that the efficacy of some of the Covid-19 vaccines with regard to this variant was reduced.⁶⁰⁰

⁵⁹⁷At the time, the so-called "Indian variant" (or the "B.1.617.2"-variant) was not yet in the picture to the same extent as the other three variants of concern.

⁵⁹⁸ECDC (2021), pp. 1–2.

⁵⁹⁹ According to the ECD-15 February 2021 report, the B.1.1.7 VOC, which had first been reported by the United Kingdom, had gradually become predominant United Kingdom, and had since been recorded in at least 83 other countries on a global scale. (For some further, interesting medical characteristics of this B.1.1.7 variant of the Covid-19 virus, cf. ECDC (2021), p. 3.)

⁶⁰⁰As of 11 February 2021, according to media and official sources, the variant B.1.351 of the Covid-19 virus had been identified in 40 countries (cf., furthermore, ECDC (2021), p. 3.)

(3) The third variant of concern was the "P.1" variant of the Covid-19 virus. This variant had so far only been reported at lower levels, probably because it was mainly linked to travel from Brazil where it was at the time creating more havoc (cf. Sect. 2.4.2.5.).⁶⁰¹

According to Khan, it would, furthermore, soon appear that, during the months February and March 2021, especially the Lombardy region in northern Italy got particularly affected by the variants. This was thus the more dramatic as it had been the same region that had already experienced an extremely high number of Covid-19 cases during the first wave of the Covid-19 pandemic less than a year before. This implied that, by March 2021, ICU's in the region were once again filled with Covid-19 patients, two-thirds of whom infected with Covid-19 variant B.1.1.7.⁶⁰²

By contrast, the B1.351 variant had been identified in much smaller quantities in several other European countries, such as Spain, Germany, France and Italy, where it was carefully monitored by local authorities.⁶⁰³

Based on this epidemiological situation in the EU and/or EEA, the ECDC indicated in its 15 February 2021 report that "immediate, strong and decisive public health interventions were essential to control transmission and preserve health care capacity". The challenges EU (and EEA) countries were thus confronted with, were twofold: (1) how to strengthen existing or new NPI's in order to reduce the incidence of Covid-19 to the lowest possible level, and (2) how to proceed at a faster pace with the roll out of the Covid-19 vaccination campaign, especially with regard to the segments of the European populations most at risk of high morbidity and mortality because of Covid-19.

The ECDC itself pointed to the following elements: (1) optimisation of NPI's—in particular by dealing with issues related to community use of face masks and considerations for school settings, (2) a more optimal use of vaccination, (3) testing and tracing approaches, including robust surveillance and sequencing, (4) more consideration for travel-related measures, and (5) more attention for effective risk communication.⁶⁰⁵

2.4.3.3.3 The EU Vaccination Disaster

In addition to all that has been discussed in the previous Sect. 2.4.3.3.2, a second factor that helps explaining the severe third wave of the Covid-19 pandemic EU

⁶⁰¹ The P.1 variant of the Covid-19 virus was first reported by Japan after it had there been identified in travellers returning from Brazil, and later in Brazil itself. It has since then been reported sporadically in travellers elsewhere. (Cf. ECDC (2021), p. 1.)

⁶⁰²Khan (2021).

⁶⁰³Khan (2021).

⁶⁰⁴ECDC (2021), p. 12.

⁶⁰⁵ECDC (2021), p. 12.

countries had to endure, concerned the worrisome slow pace of vaccination deployment in the EU Member States.⁶⁰⁶ (Cf., furthermore, Sect. 9.4.3.).

By the end of 2020, the EU had ordered 300 million doses of the BioNTech-Pfizer Covid-19 vaccine (also known under its mark name "Comirnaty"-vaccine; cf., furthermore, Chap. 9.). However, already in January 2021, it was clear that delivery of these vaccine doses to the EU was delayed, allegedly because the plant where the vaccine production for the European market was foreseen, was being renovated in order to increase long-term production.⁶⁰⁷ In addition, because of contractual obligations, Pfizer/BioNTech was giving priority to the delivery of its Covid-19 vaccine to the United States (besides some other countries, such as the United Kingdom and Israel), which implied that the EU was de facto on Pfizer/BioNTech's waiting list until there would have been delivered at least enough doses of the vaccine to the United States for all Americans who wanted to be vaccinated to be able to receive their two doses of the vaccine first.

The supply of the Oxford-AstraZeneca vaccine to the EU (Member States), similarly, became a "contentious issue" (worthy of a bad TV soap) as of January 2021. Early 2021, AstraZeneca had claimed to have supply chain problems at its factories in Belgium and the Netherlands, as a further result of which AstraZeneca made way fewer deliveries to the EU than had been contractually agreed upon (cf. Sect. 9.4.3.). The EU was, as a result of this, under the impression that the United Kingdom received priority treatment with regard to the vaccine deliveries, even though the latter country had signed its purchasing contract with AstraZeneca later than the EU. In addition, in January 2021, although the EMA had deemed the Oxford-AstraZeneca Covid-19 vaccine "safe and effective for all age groups", there were several European countries, such as France, Belgium, Germany and Sweden, that made the decision that the Oxford-AstraZeneca vaccine should not be used for people over 65. When shortly afterwards other countries stopped using the vaccine completely because of reported side-effects, the combination of all these decisions largely undermined public confidence in the vaccine, further slowing its roll-out and administration. Still some more time later, Germany, Belgium and Sweden reversed their decisions, declaring that the vaccine was indeed effective in all age groups, while France approved it for people aged 65–74. But at a time when scepticism about the Covid-19 vaccines was already high, there was no doubt that these decisions deterred some people from wanting to take the Oxford-AstraZeneca vaccine.⁶⁰⁸ To add to the confusion, on 7 April 2021, Belgium decided that, for 1 month, it would use the Oxford-AstraZeneca vaccine only for people over 55,⁶⁰⁹ precisely (at least in part) the age group that had just over a month before been told that the vaccine would be as good as ineffective for them.

⁶⁰⁶Khan (2021).

⁶⁰⁷Khan (2021).

⁶⁰⁸Khan (2021).

⁶⁰⁹ Garré (2021).

Then, nearing the end of March 2021, there were reports about the fact that the Oxford-AstraZeneca Covid-19 vaccine might be linked to the occurrence of blood clots. These allegations were quickly dismissed by the EMA that, after having reviewed the data on the vaccine for a first time, initially came to the conclusion that there was no such link between blood clots and the Oxford-AstraZeneca vaccine.⁶¹⁰ However, only a little while later, more precisely on 7 April 2020, the EMA already reversed this assessment, this time stating that there was indeed such a link but that the benefits of the vaccine still far outweighed the small risk of such blood clots occurring.⁶¹¹ (Cf., furthermore, Sect. 9.3.1.4.1).

Be this as this may, the slow deployment of the Covid-19 vaccines in general, in combination with all the confusion reports about both the effectiveness and safety of the Oxford/AstraZeneca vaccine more in particular, strongly limited the progress of vaccinations in the 27 EU Member States, and through this, especially during Q1 2021 and the month of April 2021, of their capability of containing the Covid-19 pandemic. This was in stark contrast to the speed of vaccination deployment in certain other Western countries such as Israel, the United Kingdom and the United Sates.⁶¹² It was, also assumed that the various delays in, and other problems with, the EU vaccination campaign (cf., furthermore, Sect. 9.4.3.10.) was not only giving the Covid-19 virus opportunities to spread further, but that this also allowed for some variants of the virus to become ever more dominant. The new and/or more severe containment measures that were put in place by governments of EU countries as of the end of March 2021 were, therefore, intended to: (1) stop the spread of the Covid-19 virus in general; (2) reduce the risk that existing variants (cf. Sect. 2.4.3.2.) would spread further and/or would become the dominant strain of the Covid-19 virus in certain regions/countries, and (3) contain the emergence of new variants (under the fear that one or more such new variants could be resistant towards the already existing Covid-19 vaccines, besides being more infectious and/or more likely to cause more severe symptoms). The identification and isolation of outbreaks of such

⁶¹²Mallet et al. (2021).

⁶¹⁰Khan (2021).

⁶¹¹EMA (2021).

On 7 April 2021, the EMA announced that its Safety Committee (PRAC) had reached the conclusion that day that "unusual blood clots with low blood platelet counts" were indeed to be listed as a very rare side effect of "Vaxzevria" (formerly referred to as the "Oxford-AstraZeneca" Covid-19 vaccine). In reaching this conclusion, the Committee declared that it had considered all the at the time available evidence, including the opinion of an ad hoc expert group. The EMA, hence, informed healthcare professionals and vaccine recipients to be aware of the possibility of very rare cases of blood clots associated with low blood platelet levels, occurring within 2 weeks after the administration of the vaccine. Still according to the EMA, most of the reported cases of such blood clots had occurred in women under 60 years of age and within 2 weeks of vaccination. Vaccine recipients were, therefore, advised to seek immediate medical attention if they developed symptoms of this combination of blood clots and low blood platelet levels. Still, the EMA continued to express its belief that the benefits of the vaccine continued to outweigh the risks for those who received it. (Cf. EMA (2021).)

"variants of concern" of the Covid-19 virus, therefore, became of paramount importance as long as vaccine deployment in the EU remained disastrously slow.⁶¹³

2.4.3.3.4 Covid-19 Pandemic Fatigue

A third "new" crucial factor that has, undoubtedly, contributed to the third wave of the Covid-19 pandemic in several of the EU Member States was a phenomenon that has been referred to as "Covid-19 pandemic fatigue" that increasingly started to affect a part of the European population, amongst with a lot of young people.⁶¹⁴

While behavioural scientists even question the existence of such a thing as "pandemic fatigue" to begin with,⁶¹⁵ throughout the Covid-19 pandemic, the term has still become a means of justifying a variety of nonsense, from private persons organising forbidden lockdown parties and/or rave protest parties against the Covid-19 containment measures, besides being an excuse to no longer wear face masks where mandated, to encouraging politicians and policymakers to release Covid-19 containment measures much earlier than scientifically or medically justified.

Already in 2020, the WHO even published a brochure on the subject, entitled "Pandemic Fatigue - Reinvigorating the Public to Prevent COVID-19", in which the phenomenon has been defined as follows⁶¹⁶:

We consider pandemic fatigue as an expected and natural reaction to the prolonged nature of this crisis and the associated inconvenience and hardship. However, it poses a serious threat to efforts to control the spread of the virus. Until a vaccine or effective treatments are available, public support and protective behaviors remain critical for containing the virus. The gains that each nation collectively achieved through lockdowns and other measures – sometimes at high social and economic costs – must be safeguarded.

Although the occurrence of this "Covid-19 pandemic fatigue" had already been reported in the fall of 2020 (hence, during the second wave of the Covid-19 pandemic on the European continent), the phenomenon was said to have even become worse in Q1 2021. Especially after having been subjected to constant confinement for more than a year, while feeling that there was no perspective for this situation to end due to the slow progress of the EU vaccination campaign, a large part of the Europeans were becoming gradually more tired about the whole situation. This Covid-19 pandemic was enforced because in some countries, such as Israel, the United States, the United Kingdom, various Arab (oil) countries . . ., the Covid-19 vaccination campaigns were proceeding much faster, which created the impression that the EU was running completely behind.

According to the WHO, pandemic fatigue especially may create or enforce a lack of motivation to follow recommended protective behaviours. This was deemed

⁶¹³Khan (2021).

⁶¹⁴Khan (2021).

⁶¹⁵ Abassi (2020).

⁶¹⁶World Health Organization Regional Office for Europe (2020b), p. 6.

likely to occur gradually over time and to be affected by a variety of emotions, experiences and perceptions. With regard to the Covid-19 pandemic fatigue itself, this was expressed in: (1) a lower perception of the risks posed by the Covid-19 threat, (2) decreasing efforts to stay informed about the pandemic, and (3) an increasing number of people not wanting to follow recommendations and restrictions in a sufficient manner anymore. E.g., previously communicated, effective core messages with regard to sanitary practices such as handwashing, wearing face masks and practising proper hygiene etiquette, besides basic behavioural recommendations, such as keeping one's physical distance, were no longer seen as effective or necessary. Still according to the WHO, this growing de-motivation was, moreover, considered of being part of a complex interplay of many factors which help determining protective behaviour. Said factors, furthermore, related to individual motivation and capacity, as well as to the opportunities created by the cultural, social, structural and legislative environment. As a result, each of these factors could be either a barrier to, or a driver of, protective behaviour.⁶¹⁷

Several of the individual motivation components were believed to have become strongly impacted by the long duration of the Covid-19 pandemic. First, the perceived threat of the Covid-19 virus gradually decreased as people became more accustomed to its presence within society. This even occurred in cases that the epidemiological data were showing that the risks from Covid-19 were, in fact, increasing. Second, the perceived losses of possibilities and opportunities resulting from the Covid-19 (containment) measures (such as closures of shops and leisure facilities, restrictions on work, travel and social interaction...) were increasing over time, while (some) people started suffering from the long-term personal, social and even economic consequences of the restrictions to a growing extent. Third, for some people, the balance started shifting when the perceived personal and socioeconomic costs of the containment measures started to outweigh the perceived risks of the Covid-19 virus itself. Fourth, and differing from country to country, a need for selfdetermination and person freedom developed when containment restrictions kept on continuing for long and indeterminant periods of time. This effect was felt more to the extent that the (containment) measures started imposing inconveniences on every daily life or got continually altered in ways over which people had no say or control.⁶¹⁸ Fifth, people became accustomed to the threat Covid-19 posed which led to complacency, implying that people bothered lesser and lesser about (other) people becoming contaminated and/or getting sick. According to the WHO, all these factors contributed an increasing Covid-19 pandemic fatigue.⁶¹⁹

Another possible explanation for the fact that Covid-19 pandemic fatigue happened much more in Europe than in other regions (e.g., Asian countries) may have been the higher degree of individuality—and selfishness—characterizing large sections of the Western population who, e.g., started to question the usefulness of

⁶¹⁷World Health Organization Regional Office for Europe (2020b), p. 7.

⁶¹⁸World Health Organization Regional Office for Europe (2020b), p. 7.

⁶¹⁹World Health Organization Regional Office for Europe (2020b), p. 8.

measures concerning a disease to which only (or at least mainly) older and weaker people were succumbing.⁶²⁰

These attitudes had already during the first wave of the Covid-19 pandemic been present in Western countries. Moreover, some of these attitudes had even been deliberately created or stimulated by neoliberal politicians and policymakers who, already as early as April 2020, started advocating that "everything", ranging from the economy, shops, schools, bars, restaurants . . . should reopen as soon as possible, and that existing NIPs had to be abandoned, or reduced, as soon as possible. However, it was especially during the second, and later third wave of the Covid-19 pandemic, that Covid-19 pandemic fatigue became a far more widespread phenomenon. It was also then—as of early October 2020—that the WHO itself issued its first Covid-19 pandemic fatigue alert.

In the weeks leading up to the third wave of the Covid-19 pandemic, the impact of Covid-19 pandemic fatigue was believed to have been even worse than ever. Especially the prospect that foreign travel, for many Europeans one of the most important methods of spending one's summer vacation, would again be severely restricted was believed to be severely demotivating.⁶²¹

Covid-19 pandemic fatigue manifested itself both among (some) EU citizens, expressing itself through a growing personal disobedience to the containment measures, as among part of the EU politicians an policymakers, who started calling for the relaxation of containment measures, and even started initiating decisions to relax them at times when it was clear that they still needed to be enforced.⁶²²

2.4.3.4 End-April 2021: Relaxing the Covid-19 Lockdown Measures

By 30 April 2021, relying on the acceleration of the vaccination campaign to contain new infections, much of continental Europe, once again announced plans for a gradual exit from lockdown and other containment measures over the weeks to follow, as the number of contamination cases and Covid-19 related deaths (again) began to decline. The situation was, in headlines, as follows⁶²³:

⁶²⁰Khan (2021).

⁶²¹Khan (2021).

⁶²²In Belgium, e.g., cases of aggression against supermarket (and other shop) employees increased in cases when the latter confronted customers with the need to continue to comply with Covid-19 containment measures, such as, especially, face mask wearing. During the first two waves of the Covid-19 pandemic, Belgium had been largely spared from people refusing to wear face masks in the name of individual freedom. However, by April 2021, according to a large-scale survey of 21,000 members of the ACV, one of Belgium's trade unions, many shop customers—particularly those belonging to the small percentage of the country's population already vaccinated at the time began to object to the requirement to continue wearing a face mask when visiting a shop. (Cf. Lelong (2021).)

⁶²³Henley (2021c).

- (1) Belgium (with at least one dose of a Covid-19 vaccine administered to 25% of the Belgian population by 30 April 2021) aimed to allow open-air dining in restaurants and bars again by 8 May 2021, with a mandatory 10 p.m. closing time and tables limited to groups of four persons. The reopening of non-essential shops and hairdressers was announced for Monday 3 May 2021.
- (2) Denmark was considering reopening bars, restaurants, cafes, museums, libraries and football stadiums as of the last week of April 2021. At the same time, the country announced that people would need to have a "coronapass"—in the form of a digital certificate—in order to be able to enter such promises.
- (3) France announced that it would start easing Covid-19 containment restrictions as of Monday 3 May 2021, with restrictions on domestic travel to be lifted and high school and university students being allowed to resume classes after a 3-week closure. From 19 May 2021 on, most non-essential shops would be allowed to reopen, as well as museums, theatres and cinemas, concert halls and café and restaurant terraces. The national night-time curfew would be maintained during the hours from 7 p.m. to 9 p.m. as of the same date. The resumption of indoor service in cafés and restaurants was announced for 9 June 2021. Sports halls were announced to reopen, with the curfew ending hour to be extended to 11 p.m., before the curfew would entirely be lifted on 30 June 2021. Major summer events, such as festivals, were announced to be facilitated by a "health passport". Vaccinated foreign tourists would again be welcomed as of 9 June 2021.
- (4) Germany announced that, given a 12% week-on-week drop in Covid-19 infections and an acceleration of vaccinations, the country's week-old "emergency brake" measures—including (1) a 10 p.m.–5 a.m. curfew, (2) limiting customers in shops, (3) closures with regard to leisure centres, and (4) restrictions on family contact in areas where infection cases exceeded 100 cases per 100,000 people (i.e. most of the country)—would be lifted earlier than expected.
- (5) Greece announced that it would reopen restaurants and bars on 3 May 2021, after Orthodox Easter, and that it aimed to reopen for fully vaccinated tourists as of 15 May 2021.
- (6) With three quarters of the country's regions downgraded to the low-risk "yellow" category, Italy announced the reopening of restaurants and bar terraces, museums, theatres and cinemas (at 50% capacity) in most of the country as of Monday 3 May 2021, with a return to indoor dining as of 1 June 2021. However, a 10 p.m. curfew was to remain in place. Swimming pools, gyms, sports events and theme parks were to follow suit as of 1 July 2021.
- (7) The Netherlands lifted the night-time curfew and allowed bars and restaurants to serve on outdoor terraces—with a maximum of two guests per table between noon and 6 p.m. Shops could again welcome more customers, and individuals were allowed to receive two guests instead of one per 24-h period.
- (8) Poland announced the reopening of shopping centres and museums as of 4 May 2021, with hotels due to reopen on 8 May 2021 and bars and restaurants on

15 May 2021. Domestic service was expected to resume as of 29 May 2021, when theatres and cinemas would also be able to reopen.

- (9) Portugal, which at the beginning of 2021 had experienced the largest increase in cases in Europe, entered the final phase of its relaxation on 1 May 2021, when restaurants and bars were again allowed to remain open until 10.30 p.m. and all sports were allowed to resume. Major outdoor and indoor events were also allowed, albeit with capacity restrictions. Moreover, the reopening of the border with Spain was announced. With 23% of the population vaccinated at least once, schools, shopping centres, non-essential services and restaurants had already been reopening since March 2021.
- (10) Spain aimed to end the national state of emergency on 9 May 2021, by which time its autonomous regions—responsible for implementing the Covid-19 containment restrictions—started ending many measures.

2.5 Covid-19 Response in the United States

2.5.1 The Early Days

On 21 January 2020, an inhabitant of Washington State was reported to be the first person in the United States having contracted Covid-19, after returning from Wuhan on 15 January 2020. The case was by the CDC reported to have been discovered quickly thanks to "overnight polymerase chain reaction testing". The CDC reacted by deploying a team to help investigate what had happened, including a potential use of contact tracing.⁶²⁴

The CDC also issued a press release on 21 January 2020 that mentioned the following⁶²⁵:

The Centers for Disease Control and Prevention (CDC) today confirmed the first case of 2019 Novel Coronavirus (2019-nCoV) in the United States in the state of Washington. The patient recently returned from Wuhan, China, where an outbreak of pneumonia caused by this novel coronavirus has been ongoing since December 2019. While originally thought to be spreading from animal-to-person, there are growing indications that limited person-to-person spread is happening. It's unclear how easily this virus is spreading between people.

The patient from Washington with confirmed 2019-nCoV infection returned to the United States from Wuhan on January 15, 2020. The patient sought care at a medical facility in the state of Washington, where the patient was treated for the illness. Based on the patient's travel history and symptoms, healthcare professionals suspected this new coronavirus. A clinical specimen was collected and sent to CDC overnight, where laboratory testing yesterday confirmed the diagnosis via CDC's Real time Reverse Transcription-Polymerase Chain Reaction (RT-PCR) test.

⁶²⁴AJMC Staff (2021).

⁶²⁵CDC (2020).

Less than 2 weeks later, on 3 February 2020, the Trump administration declared a "public health emergency" due to the Covid-19 outbreak on American soil. This announcement came only 3 days after the WHO itself had declared Covid-19 a "global health emergency" (with at the time over 9800 confirmed contamination cases of the Covid-19 virus, and over 200 Covid-19 related deaths on a global scale).⁶²⁶

On 13 March 2020, President Donald Trump declared the new "Covid-19" coronavirus a "national emergency". This decision came with a releasing of billions of dollars in federal funds in order to combat the spread of the disease.⁶²⁷ On the same date, the Trump administration issued a blanket travel ban for non-Americans who had visited one or more of the 26 European countries in the 14 days prior to their date of arrival in the United States. Those travelling from the United Kingdom and the Republic of Ireland were exempt.⁶²⁸

2.5.2 President Donald Trump's Many Political Shenanigans in (Not) Dealing with the Covid-19 Pandemic

The Covid-19 pandemic became, from the outset, yet another excuse for a lot of political frivolity from the part of US President Donald Trump, who saw the challenges posed by Covid-19 more as an opportunity to bolster his political constituency than as a challenge to develop a responsible strategy to deal with it.

According to Krugman, it initially appeared that President Donald Trump's mishandling of the emerging Covid-19 crisis was essentially "willful neglect", i.e. that Trump failed to understand the seriousness of the threat because he did not want to hear about it, in this manner abstaining from action that could have prevented the death of thousands of Americans.⁶²⁹ This probably helps to explain why President Donald Trump first reacted to the Covid-19 progression by calling it a "hoax", before shortly thereafter claiming, also inaccurately, that the United States had already completely contained the Covid-19 disease.⁶³⁰

However, it quickly became apparent that President Donald Trump's initial negligence in responding to the threat posed by Covid-19 was not simply recklessness, in that, already in early February 2020, Trump had been fully aware of the characteristics of Covid-19^{.631} From this, it follows that, from the early outset,

⁶²⁶AJMC Staff (2021).

⁶²⁷ AJMC Staff (2021).

⁶²⁸ AJMC Staff (2021).

⁶²⁹Krugman (2020e).

⁶³⁰Milman (2020).

⁶³¹Krugman (2020e).

President Trump began to deliberately diminish a disease that he knew was both deadly and easy to spread.⁶³²

Throughout the Covid-19 crisis, credible sources have speculated that President Trump wanted to downplay the health crisis for fear that untoward news would hurt the US economy in general, and the US stock markets more specifically.⁶³³

However, Paul Krugman's assessment of President Trump's (initial) response to the Covid-19 crisis is much less willing to accept the existence of such noble motivations⁶³⁴:

The bottom line is that it's wrong to say that Trump mishandled Covid-19, that his response was incompetent. No, it wasn't it was immoral, bordering on criminal.

According to Saad-Filho, the US reaction was, in this extreme way, determined by⁶³⁵:

Donald Trump's narcissism, crude electoral calculations and dysfunctional administration engaged in successive scrapes against China, the WHO, journalists, civil servants, state governors and assorted politicians in order to distract attention from the President's imbecility, callousness and disregard for "the Other.

Looking at how US Republican politicians more in general reacted to the onset of the Covid-19 pandemic in their respective home states, one can but see a great deal of "scientific denial". According to Paul Krugman, some US Republicans in this regard even went "full Trump": (1) questioning the usefulness of face masks, and (2) both encouraging and initiating potential super-spraying events (many of which have been organized, or initiated, by President Donald Trump himself).⁶³⁶

Trump's toxic relationship with and interaction with Dr. Anthony Fauci, one of America's leading infectious disease experts,⁶³⁷ also illustrates President Donald Trump's aversion to science. In an interview with the New York Times after Donald Trump left office, Dr. Fauci explained that his time of advising President Donald Trump's coronavirus response team was complicated by Trump's tendency to listen

⁶³²Krugman (2020e).

⁶³³Krugman (2020e).

⁶³⁴Krugman (2020e).

⁶³⁵ Saad-Filho (2020).

⁶³⁶ Krugman (2020b).

One such event, the "Sturgis Motorcycle Rally" in August 2020 (at a time when the Trump administration was well aware that Covid-19 was both deadly and easy to spread), which drew nearly half a million people to the state of South Dakota, is even assumed to have played a key role in triggering the viral outbreak across the United States (Cf. Krugman (2020b).)

⁶³⁷For almost 40 years, Dr. Anthony S. Fauci has held two positions: one as a consultant, and the other as a manager. Fauci held, more precisely, the following two positions: (1) director of the National Institute of Allergy and Infectious Diseases, and (2) advisor to seven presidents, from Ronald Reagan to Joseph R. Biden Jr. In the latter capacity, Fauci was usually called upon as soon as a health crisis loomed in order to brief the administration, address the World Health Organisation, testify before Congress, and/or meet with the media. (Cf. McNeill (2021).)

to the advice of his unqualified friends,⁶³⁸ rather than the one of qualified experts, as well as by his aversion to being contradicted or challenged.⁶³⁹

Paul Krugman, however, blames not only President Donald Trump's disastrous leadership and aversion to science for America's adverse reaction to Covid-19, but also Ayn Rand—or, more generally, what he describes as "libertarianism gone wrong, a misunderstanding of what freedom is".⁶⁴⁰

To fully appreciate the implications of this statement, the importance of Ayn Rand in developing the philosophical backbone of neoliberal ideology cannot be overemphasised.

Ayn Rand is the author of several novels, such as "Atlas Shrugged", but she also wrote non-fiction works, which she claimed to be philosophical in nature. Through her books "The Virtue of Selfishness"⁶⁴¹ and "Capitalism: The Unknown Ideal", ⁶⁴² Rand has in particular attempted to elevate selfishness and self-determination to the highest moral values. Thus, when comparing Rand's writings to earlier philosophical and religious systems, such as Christianity, Rand's works have contributed strongly to a reversal of values that still permeates neoliberal politics and economics to this very day.⁶⁴³ It is not surprising that Rand was also one of the strongest

⁶³⁸ According to Fauci, as quoted by Wade, in addition to downplaying the seriousness of Covid-19, President Trump tended to believe everything his business contacts told him about possible treatments for the virus. "He was taking just as seriously their opinion - based on no data, just an anecdote - that something might actually be important," Fauci told the Times. "It wasn't just about hydroxychloroquine, but a variety of alternative medicine-type approaches. It was always, 'Some guy called me, one of my friends from blah, blah, blah.' That's when my anxiety started to escalate." (Cf. Wade (2021).)

⁶³⁹Porterfield (2021).

In the same interview, Fauci also explained how he had to continually publicly correct some of the president's statements. In response, President Trump often attacked Fauci for contradicting his views in public and for conveying the terrible reality of the Covid-19 epidemic in the country. Fauci told the New York Times that he was often concerned that US policy on the Covid-19 outbreak was not going in the right direction, with his concerns centring on continued anecdotal situations, downplaying and the president surrounding himself with people saying things that make no scientific sense. Fauci told the NYT. "We were saying things like, 'This is an epidemic. Infectious diseases run their own course unless something is done to intervene'. And then [Trump] would get up and start saying, 'It's going to go away, it's magic, it's going to go away'." While Fauci and Trump had a strained relationship during Trump's final year in office due to their differences on how to respond to Covid-19, Fauci told the NYT that he was not worried about being fired. "I didn't think he was going to fire me at all. It was just, you know, Donald Trump being Donald Trump," Fauci reported (Cf. Porterfield (2021).)

⁶⁴⁰Krugman (2020b). Cf., furthermore, Krugman (2020f).

⁶⁴¹Rand (1992), p. 173.

⁶⁴²Rand (2008); cf., furthermore, Rand (1982), p. 27 a.f., where Rand argued that altruism serves as a tool for the rationalisation of all sorts of abuses, ranging from mass killings in Soviet Russia, to legalised looting in the welfare state.

 $^{^{643}}$ See, e.g., Rand (1982), p. 27, where Rand criticised, among other things, what she calls "the legalised looting of the welfare state". Cf., furthermore, Rand (1982), p. 83, where Rand describes altruism as "the poison of death in the blood of Western civilization".

advocates of the doctrine of "voluntary association" as the sole principle that should determine private relationships.⁶⁴⁴

A first example of the negative impact of Ayn Rand's neoliberal and semiphilosophical thinking on politics and economic policy (as indicated by Paul Krugman), is the strong influence Rand has had in the past on a wide variety of American policy makers. A notable example has been Alan Greenspan, the longest serving former chairman of the US Federal Reserve (1987–2006). Greenspan's monetary policy (and consequently the monetary climate he created of "too easy money creation", based on "too easy credit") was strongly influenced by Rand, who in this manner indirectly contributed to the severe financial and economic crisis of 2007–2008. Rand's famous novel "Atlas Shrugged" also has many politicians among its admirers, including former vice-presidential candidate Paul Ryan, who is known to have cited Rand's novel as one of his main inspirations for entering politics, and to have even distributed copies of Rand's books to his interns. In all of this, Rand herself seems to have been well aware of her enormous influence on many (American) policymakers, where she has, e.g., spoken of the three A's who determined the history of philosophy, namely Aristotle, St. Augustine and herself ...⁶⁴⁵

And so, once again, in 2020, the way Republican policymakers across the United States would deal with Covid-19 was based on Rand's libertarian rhetoric amounting to a lot of idle rhetoric about "freedom" and "personal responsibility," all central themes in the works of Ayn Rand and the likes. Even politicians still willing to say that people should wear face masks and avoid indoor gatherings were reluctant to use their political influence to impose rules to this effect, insisting that it should rather remain a matter of individual choice.⁶⁴⁶

Notwithstanding the above, Paul Krugman does not believe that opposition to the Covid-19 containment measures on libertarian grounds has merely been the result of a deeply rooted cultural phenomenon.⁶⁴⁷ For him, the anti-mask agitation was not just about (individual) freedom, or individualism, or culture, but rather was a method of cultivating and "expressing political allegiance", driven by President Donald Trump and his allies themselves.⁶⁴⁸ Responding to the question of why make a partisan issue out of what should be a simple public health policy, Paul Krugman expressed his belief that the obvious answer has been that face mask refusal was just

⁶⁴⁴Cf. Rand (2008), p. 11; Rand (1992), p. 114.

⁶⁴⁵Cf. Byttebier (2017), pp. 178–179.

⁶⁴⁶Krugman (2020b).

Krugman pointed out that the scepticism about face mask wearing was not only at odds with what almost every outside expert had said, but was also in direct conflict with what Trump's own health officials—for example Robert Redfield, Trump's appointee as head of the Centers for Disease Control and Prevention—were saying. E.g., only a few hours elapsed between Redfield's statement in congressional testimony that face masks are "the most important and powerful public health tool we have" to fight the pandemic, and Trump's statement that "there are many problems with masks." (Cf. Krugman (2020c).)

⁶⁴⁷ Krugman (2020c).

⁶⁴⁸Krugman (2020c).

one of many efforts by an amoral politician to salvage his then troubled presidential campaign.⁶⁴⁹

All the while, Trump's policy (or lack of it) was in total denial that controlling a pandemic primarily required individuals to change their behaviour—in the case of Covid-19 by wearing face masks and refraining from hanging out in indoor public spaces.⁶⁵⁰

All (scientific) knowledge was soon completely denied when, shortly after the initial outbreak of the Covid-19 pandemic in the late spring of 2020, the Trump administration (and its allies in other countries around the world) pushed for a rapid reopening of the economy, deliberately ignoring the warnings of epidemiologists and other experts. This was coupled with a continued and pathological opposition to obvious precautions such as the wearing of face masks, with ongoing discussions about freedom rights to justify the refusal to wear them (even inciting real culture wars which, not only in the United States, but also on the European continent, have continued ever since).⁶⁵¹According to Krugman, as far as wearing masks reminded people that the Covid-19 pandemic was still ongoing, President Trump's opposition to the practice also wanted the American people to forget this inconvenient fact.⁶⁵²

Republican politicians have also tried to mitigate the Covid-19 crisis by ceasing to release Covid-19 contamination and death figures and by simply stopping Covid-19 testing. This (criminal) strategy was, e.g., deployed by Florida in late April 2020. At that time, state officials simply stopped publishing the list of Covid-19 related deaths compiled by Florida's medical examiners, which had sometimes revealed a higher number of Covid-19 related deaths than published by the state. This withholding of information came at a time when the number of Covid-19 deaths in Florida was on the rise and when state officials were in discussions about when and how to reopen their economy.⁶⁵³

One of Krugman's other points has been that the willingness to reopen the economy as early as the beginning of May 2020 did not reflect a considered assessment of the "risks and rewards". Instead, it was to be seen as an exercise in "magical thinking". President Trump and conservatives, in general, seemed to believe that if they pretended that Covid-19 was not a permanent threat, it would somehow (magically) disappear, or at least that people would forget about it. Hence Trump's war on face masks, which helped limit the pandemic, but which, even in an explicitly visual way, constantly reminded people that the Covid-19 virus was still around.⁶⁵⁴

⁶⁴⁹Krugman (2020c).

⁶⁵⁰Krugman (2020b).

⁶⁵¹Krugman (2020a).

⁶⁵² Krugman (2020f).

⁶⁵³McGrory and Wollington (2020). Cf., furthermore, Reich (2020).

⁶⁵⁴Krugman (2020g).

Robert Reich made the following overall assessment of Trump's intention in May 2020 to reopen the economy at the expense of public health⁶⁵⁵:

The first responsibility of a president is to keep the public safe. But Donald Trump couldn't care less. He was slow to respond to the threat, then he lied about it, then made it hard for states – especially those with Democratic governors – to get the equipment they need.

Now he's trying to force the economy to reopen in order to boost his electoral chances this November, and he's selling out Americans' health to seal the deal. This is beyond contemptible.

Paul Krugman, moreover, shared his view that, when looking at the failure to contain the Covid-19 pandemic in the United States, it is remarkable how "top-down" everything has been. E.g., the protests against the containment measures were not spontaneous and popular affairs. Instead, many of these were called for or organised and coordinated by conservative political activists, some even with close ties to the Trump administration itself, and in many cases funded in part by rightwing billionaires. Moreover, the rush to reopen in Republican states was less a response to popular demand, than a case of Republican governors following the lead of President Donald Trump. The main driving force behind the economic reopening was the Trump administration's desire to achieve significant job gains by November 2020, so that it could boast about its economic successes during the presidential election campaign.⁶⁵⁶

One of the most surprising things in all of this, still according to Paul Krugman, is that President Donald Trump and his allies did not seem to have thought through what to do if the overwhelming expert opinion was right, when their gamble to ignore the Covid-19 pandemic would appear not to work.⁶⁵⁷

And so, under this Republican leadership, the United States was preparing for disaster.

2.5.3 America's Withdrawal from the WHO

Before outlining the disastrous situation resulting from the Trump administration's handling of Covid-19 during the March-December 2020 period (as supported by the policies of various Republican governors in red states), it is worth mentioning that, on 29 May 2020, President Donald Trump pulled another unexpected stunt when, in the midst of the worst pandemic the world had faced in over a century, he publicly announced that the United States would withdraw from the WHO, the only international organisation dealing with international health crises such as pandemics. This

⁶⁵⁵Reich (2020).

⁶⁵⁶Krugman (2020f).

⁶⁵⁷ Krugman (2020a).

unexpected move was thought to be a wild attempt to look for a scapegoat for blaming the Covid-19 crisis.

According to Sridhar and King, at the time, the WHO had already undertaken several attempts to address the Covid-19 pandemic. (Cf. Sect. 1.1.1.) After China had reported the outbreak of Covid-19 on its territory to the WHO country office on 31 December 2019, the WHO had immediately published a bulletin to warn of the new disease. While new data were emerging, the WHO had also helped develop test kits that could be sent to areas of the world without laboratory capacity. The WHO also made attempts to encourage the sharing of data from China, so that other countries could learn from the Chinese experience. Furthermore, on 30 January 2020, the WHO had declared Covid-19 a public health emergency of international concern, a strong warning that the Covid-19 virus was on its way, and that countries should have started preparing.⁶⁵⁸

By 24 February 2020, the WHO mission to China announced its findings on the epidemiology of Covid-19 and China's response. At the same time, the WHO sent a clear message to prioritise the following measures and strategies for fighting the disease: (1) testing, (2) contact tracing, (3) isolation of identified carriers and their (traced) contacts, (4) physical removal, if necessary (including quarantine measures), (5) protection of health care workers by, at least, providing them with adequate protective equipment, and (6) increasing hospital capacity.⁶⁵⁹

All these measures did, however, not correspond well to the Trump administration's views on how to (not) handle the Covid-19 crisis. Moreover, from the outset of the Covid-19 pandemic, President Donald Trump had been highly sceptical of the way the WHO had cooperated with China, and of the WHO's assessment of how China had handled the Covid-19 pandemic. These factors, ultimately, triggered President Trump's decision to withdraw from the WHO.⁶⁶⁰

At the time, the United States was, obviously, one of the largest contributors of "extra-budgetary funds", which accounted for 80% of the WHO's total budget. Although other organisations, such as the Bill and Melinda Gates Foundation and the European Commission, were also major contributors to institutions such as the WHO, the financial gap left by the US withdrawal would have been difficult to fill.⁶⁶¹

On 7 July 2020, the same day the United States had reported three million Covid-19 infections, it began its effective withdrawal from the WHO. The Trump administration also notified the UN of its decision. However, the withdrawal was not to take effect until 2021, and would then be reversed by President Joe Biden.⁶⁶²

⁶⁵⁸ Sridhar and King (2020).

⁶⁵⁹Sridhar and King (2020).

⁶⁶⁰Sridhar and King (2020).

⁶⁶¹Sridhar and King (2020).

⁶⁶²AJMC Staff (2021) and Melilo (2020).

2.5.4 Practical Handling of the Covid-19 Crisis in the United States by the Trump Administration

2.5.4.1 The Missing First Six Weeks

According to Pilkington and McCarthy, the occurrences on 20 January 2020 are in many ways central for understanding what went wrong in the United States at the outbreak of the Covid-19 pandemic. According to these authors, 20 January 2020 was the day on which a 35-year-old man living in Washington State had just come back from a visit to his family in Wuhan (China) and was diagnosed as the first man living in the United States with the Covid-19 disease.⁶⁶³ (Cf. already Sect. 2.5.1.) At the same day, the first case of Covid-19 was also detected in South Korea. According to Pilkington and McCarthy, the confluence was striking, but that was where all other similarities between the two countries ended. In the 2 months afterwards, the response of the United States and South Korea to Covid-19, could not have been more opposite.⁶⁶⁴ South Korea was reported to have acted in a quick and determinant manner in order to detect, isolate and virtually eliminate the Covid-19 virus on its territory, and, in doing so, largely succeeded in containing the Covid-19 crisis. In this manner, South Korea did what many other Asian countries have done as well (cf. Sect. 2.4.2.4.3.). By contrast, in the words of Pilkington and McCarthy, the United States, in the best neoliberal tradition of "laissez-faire, laissez-passer", "dithered and procrastinated", quickly became "mired in chaos and confusion", and got "distracted by the individual whims of its leader", soon to be faced with a health crisis of catastrophic proportions.⁶⁶⁵ The United States, moreover, in essence did what many other Western countries managed to do, more precisely giving the Covid-19 virus all opportunity to spread over their territories, which makes the difference in reaction between Asian and Western countries all the more striking. (Cf. Sect. 2.4.2.4.)

According to Terhune et al., within a week after the confirmation of the first cases in each of the two countries, South Korea's authorities had urged 20 private enterprises to ask them to develop a test for the Covid-19 virus as soon as possible. Only a week later, the first of these diagnostic tests was approved and went into action, which allowed South Korea to quickly identify Covid-19 contaminated persons who could then be quarantined in order to contaminate the Covid-19 virus. According to the same authors, after about 357,896 tests, the country had to a bigger or lesser extent contained (the first wave of) the Covid-19 outbreak on its territory. By Friday 27 March 2020, a mere 91 new cases of Covid-19 had been detected among a total population of more than 50 million people.⁶⁶⁶

⁶⁶³Pilkington and McCarthy (2020).

⁶⁶⁴Pilkington and McCarthy (2020).

⁶⁶⁵Pilkington and McCarthy (2020).

⁶⁶⁶Terhune et al. (2020).

The story, while probably more exciting to tell, did not go so well in the United States. Two days after Washington state had been confronted with its first Covid-19 case, US President Donald Trump, in the best neoliberal tradition of laissez-faire, laissez-passer, boasted on CNBC that the United States had the virus totally under control, that there was only one case of "someone from China", and that everything would turn out fine. A week later, the Wall Street Journal published an opinion piece from the hand of two former senior health policy officials in the Trump administration, Luciana Borio and Scott Gottlieb, under the headline "Act Now to Prevent an American Epidemic". The two authors of said opinion piece described a scenario of what needed to be done instantly in order to prevent a massive public health disaster. This boiled down to one basic piece of advice: Cooperate with private market players to develop a "rapid, easy-to-use diagnostic test"-or, phrased differently, follow the example of what South Korea had been doing. However, it was not until February 29, 2020, more than a month after the abovementioned opinion piece had been published, and by then nearly 6 weeks after the first case of Covid-19 had been confirmed in the United States, that the Trump administration would finally start to take this advice seriously. By that date, US laboratories and hospitals were finally given the permission to start conducting their own Covid-19 tests. Afterwards, things went surprisingly fast: By 28 March 2020, a total of Covid-19 contamination 86,012 cases had been confirmed in the United States, gradually putting the country at the top of the global Covid-19 pandemic rankings, even though on the other side of the Atlantic, the EU and its Member States, besides the United Kingdom, were doing their utter best to ensure that Covid-19 was as rapidly spreading throughout Europe as well (cf. Sect. 2.4.).⁶⁶⁷ Of the 86,012 (official) cases of Covid-19 as of 28 March 2020, more than a quarter were reported to be in New York City, with very high numbers in New Orleans as well. On a national scale, 1301 people had died because of Covid-19. Most worryingly, the curve of infection and death was still rising steeply, with no sign of a flattening of the curves that ultimately had spared South Korea.⁶⁶⁸

Pilkington and McCarthy have argued that the four to six missing weeks serve as a warning of the potentially disastrous effects of failing political leadership.⁶⁶⁹ Ron Klain, who had led the battle against the Ebola virus back in 2014, was reported of having declared during a Georgetown University panel at the time, that the response of the United States towards the outbreak of the Covid-19 virus on its territory was bound to set the worst example on how to react to a pandemic. Klain, moreover, was reported of having expressed his belief that the response deployed by the Trump administration had been "a fiasco of incredible proportions".⁶⁷⁰

Pilkington and McCarthy similarly quoted Jeremy Konyndyk, who had led the United States' response to various disasters of international proportion in the period

⁶⁶⁷Pilkington and McCarthy (2020).

⁶⁶⁸Pilkington and McCarthy (2020).

⁶⁶⁹Pilkington and McCarthy (2020).

⁶⁷⁰Pilkington and McCarthy (2020).

between 2013 and 2017, of having shared his viewpoint that the response to Covid-19 by the Trump administration to the outbreak of Covid-19 was "one of the greatest failures of basic governance and leadership in modern times".⁶⁷¹ According to Konyndyk's analysis as quoted by Pilkington and McCarthy, the Trump administration had been in possession of all the known facts about Covid-19 by the end of January 2020 needed for acting in a more responsible manner. Instead, Trump repeatedly responded by (1) downplaying the seriousness of the Covid-19 threat, (2) putting the blame on China for what he started referring to as the "China virus", and (3) continuing to falsely insist that the partial travel bans that he had resorted do with regard to travelling to and from China and Europe were all that was needed to deal with the Covid-19 pandemic.⁶⁷²

Pilkington and McCarthy, furthermore, quoted William Schaffner, an infectious disease specialist at Vanderbilt University Medical Centre, in whose viewpoint the complete lack of immediate, massive testing largely failed to adequately address the Covid-19 threat, as it did not allow the United States to define the extent of the spread of the Covid-19 virus within its borders.⁶⁷³

As there had at the time been hardly test kits available, the US CDC had initially kept a tight rein on testing. This had basically created a huge bottleneck. This testing disaster had at the same time been one of the first signs that the Trump administration was faltering, as the health emergency because of Covid-19 gained momentum all over the United States (see also Sect. 5.2.2.6.).⁶⁷⁴

The Trump administration continued its remarkable early efforts to combat Covid-19 by creating a "Special Coronavirus Task Force" on 29 January 2020. Trump, however, immediately handed the post of presiding this Task Force to Vice President Mike Pence. Pence, in his own turn, quickly named Deborah Birx as "coronavirus response coordinator". Shortly after, another federal emergency agency named "Fema" began to take over key policy domains of dealing with the pandemic. And to add to all this confusion, Jared Kushner, the president's son-in-law, created a shadow team that to an increasing intent made it look like it was in lead. As a result, according to Pilkington and McCarthy, there was no central point of responsibility, while no one seemed to want to claim ownership of the problem.⁶⁷⁵

To make things even worse, amidst all this organisational chaos, the day-to-day responses for dealing with the Covid-19 crisis often came directly from Donald Trump himself, albeit via social media only. With, according to Pilkington and McCarthy, more concerned about the impact of the Covid-19 pandemic on the New York Stock Exchange, the US President consistently, and in full accordance to the neoliberal principle "laissez-faire, laissez-passer", downplayed the scale of the

⁶⁷¹Pilkington and McCarthy (2020).

⁶⁷²Pilkington and McCarthy (2020).

⁶⁷³Pilkington and McCarthy (2020) and Terhune et al. (2020).

⁶⁷⁴Pilkington and McCarthy (2020).

⁶⁷⁵Pilkington and McCarthy (2020).

crisis. E.g., on 30 January 2020, on the date that the WHO had declared Covid-19 a global emergency (cf. Sect. 1.1.1.), Trump had tweeted the following⁶⁷⁶:

We only have five people. Hopefully, everything's going to be great.

On 24 February 2020, Trump made a new false claim that the Covid-19 crisis was largely under control in the United States. However, on 25 February 2020, Nancy Messonnier, the CDC's top respiratory disease official, decided to tell the American people the truth by warning that the impact of Covid-19 on daily life could become severe. Still according to Pilkington and McCarthy, President Trump was reportedly so enraged by Mrs. Messonner's action, and especially by the impact of her message on the stock exchange prices, that he immediately called Messonner's boss, Health and Human Services Secretary Alex Azar, to confront him about the matter.⁶⁷⁷

And so it was: In the wake of this initial "testing (and tracing) disaster", there came a "personal protective equipment (PPE) disaster", soon to be followed by a "hospital bed disaster" (especially with regard to ICU-beds), and then by a "ventilator disaster"—all of which US hospitals faced huge shortages of while there were no federal or state plans in place to help to procure them. (Cf., furthermore, Sect. 5.3. 2.2.)

The solution to these shortages that the US President came up with mid-March 2020 may very well be as historic as any of his other early responses to the Covid-19 crisis, and can certainly be seen as one of the textbook responses of neoliberal thinking. In a tweet message that will, purportedly, stand alongside 20 January 2020 as one of the most telling actions in Covid-19 history, Trump was reported of having formulated the following advice⁶⁷⁸:

Respirators, ventilators, all of the equipment - try getting it yourselves.

By 27 March 2020, the Trump administration finally managed to provide 400 ventilators to New York hospitals. However, about 30,000 were needed. Meanwhile, US hospitals did their best to manage the flood of hospitalizations with severe Covid-19 symptoms while lacking the most basic equipment and material to both fight the Covid-19 disease as to protect their medical staff from getting contaminated themselves.⁶⁷⁹

We shall return to this in Chap. 5.

⁶⁷⁶Pilkington and McCarthy (2020).

⁶⁷⁷Pilkington and McCarthy (2020).

⁶⁷⁸Pilkington and McCarthy (2020).

⁶⁷⁹Pilkington and McCarthy (2020).

2.5.4.2 March 2020 to April 2020: On Proclaiming Covid-19 a Hoax, Advising the Use of Hydroxychloroquine, Disinfectant, and UV Light, and Saying It Will All Go Magically Away

2.5.4.2.1 Overview of the Trump Administration's Health Policy of March 2020

Because of President Donald Trump's idiosyncratic approach to the Covid-19 pandemic, it would soon hit the United States extremely hard. Due to Trump's policy decisions (or lack thereof) in the first few weeks of Covid-19's presence on American soil, the United States would soon have the highest number of Covid-19 contamination cases and Covid-19 related deaths in the world.⁶⁸⁰

This was all the more dramatic because the resurgence of Covid-19 was both entirely predictable and had, moreover, also been effectively predicted by many US virologists and other experts.⁶⁸¹ Indeed, as soon as the US President Donald Trump had in early May 2020 declared that the United States would "transition to greatness"—referring to a hasty and premature reopening of the American economy despite a still-creeping pandemic—epidemiologists had rightly warned that this would trigger a new wave of Covid-19 infections.⁶⁸² Similar warnings from economists, such as Paul Krugman and Joseph Stiglitz, that a relaxation of social distancing and containment measures could lead to a brief period of job growth, but that these gains would be short-lived, as a premature reopening of the economy would ultimately fail in economic terms as well, were similarly completely ignored.⁶⁸³

On 16 March 2020, President Donald Trump, moreover, began referring to Covid-19 as the "China virus" which led to an increase in anti-Asian hashtags on social media and a rise in hate crimes that has not stopped since.⁶⁸⁴

One of the remarkable consequences of President Donald Trump's aversion to science has, furthermore, been that, very soon after Covid-19 arrived in the United States, a debate was launched around the Western world about some of Covid-19's alternative medical treatments, such as the use of the malaria drug "hydroxychloroquine". (Cf. Sect. 2.5.4.2.2 and Sect. 9.3.2.10.) Unfortunately, this debate also diverted much of the attention from more effective methods of dealing with the Covid-19 crisis, such as NPI's (e.g., face masking wearing and hygiene and social distancing measures). The assessment, since, has been that Trump's utter disregard for science that emerged from this advice—as well as from cuts to global and national health programmes and public health agencies—severely hampered the

⁶⁸⁰Krugman (2020a).

⁶⁸¹ Krugman (2020d).

⁶⁸²Krugman (2020d).

⁶⁸³Krugman (2020d). Cf., furthermore, Reich (2020).

⁶⁸⁴Reja (2021).

response to the Covid-19 pandemic, causing tens of thousands of unnecessary deaths (as well as having jeopardised advances against HIV and other diseases).⁶⁸⁵

On the same date, CMS—in full: "the Centres for Medicare and Medicaid Services"—expanded its so-called "telehealth rules". This expansion allowed for the use of telehealth procedures during the Covid-19 pandemic, especially in order to protect elderly patients from becoming exposed to the Covid-19 virus. This relaxation allowed Medicare to cover telehealth medical visits in the same manner as regular in-person visits.⁶⁸⁶

Just two days later, on 19 March 2020, California became the first state to issue a stay-at-home order. This required all Californian residents to remain in their homes, except to get to an essential job, or to make essential purchases. The order also required health systems to give priority to the sickest people.⁶⁸⁷

But a week later, on 26 March 2020, the US Senate passed the "Coronavirus Aid, Relief, and Economic Security (CARES) Act", which provided USD 2 trillion in aid to hospitals, small businesses, states, and local governments, as well as eliminating the Medicare sequester from 1 May to 31 December 2020.⁶⁸⁸ Shortly thereafter, the US House of Representatives approved the CARES Act, with soon thereafter Trump signing it into law.⁶⁸⁹ We shall come back to this later (cf. Sect. 4.4.2.).

2.5.4.2.2 The Political Debate on Hydroxychloroquine

Meanwhile, President Trump had not forgotten about hydroxychloroquine, which caused the FDA on 30 March 2020 to issue a so-called "emergency use authorization" (EUA) for "hydroxychloroquine sulphate and chloroquine phosphate products", to be donated to the Strategic National Stockpile and hospitals in order to treat patients infected with Covid-19.⁶⁹⁰

On April 8, 2020, President Donald Trump posed the question "What do you have to lose?" when he touted the malaria drug "hydroxychloroquine" and the related drug "chloroquine" as possible treatments for Covid-19. Combined with an antibiotic, azithromycin, this drug cocktail was recommended as an early candidate to avoid hospitalisation or death due to Covid-19. The US President Trump's promotion of this cocktail, despite known cardiac risks for some patients, soon prompted the American Heart Association, the American College of Cardiology

⁶⁸⁵Woolhandler et al. (2021), p. 705.

On 17 March 2020, the University of Minnesota had launched a clinical trial to determine whether hydroxychloroquine could prevent a person exposed to Covid-19 from becoming ill or reduce the severity of the infection. The trial was limited to people at high risk of exposure and initially aimed to recruit 1500 people. (Cf. AJMC Staff (2021).)

⁶⁸⁶ AJMC Staff (2021).

⁶⁸⁷AJMC Staff (2021).

⁶⁸⁸ AJMC Staff (2021).

⁶⁸⁹ AJMC Staff (2021).

⁶⁹⁰ AJMC Staff (2021).

and the Heart Rhythm Society to jointly warn that these drugs were not suitable for everyone.⁶⁹¹ (Cf., furthermore, Sect. 9.3.2.10.)

The marketing authorization (EUA) for hydroxychloroquine was afterwards to be cancelled (except for patients participating in clinical trials) approximately two and a half months later, on 15 June 2020, following reports of heart rhythm disturbances in some patients.⁶⁹²

Incidentally, the advice to use hydroxychloroquine as a drug for treating Covid-19 was not the only strange medical advice from the part of President Donald Trump. On 23 April 2020, the US president even more surprised the attendants to a press conference, when he suggested that people could be injected with a disinfectant to cure a Covid-19 infection. At the press conference, the US President had dealt with new government research into how the Covid-19 virus reacts to different temperatures, climates and surfaces, adding his own, following comment⁶⁹³:

And then I see the disinfectant, where it knocks it out in a minute. One minute! And is there a way we can do something like that, by injection inside or almost a cleaning. Because you see it gets in the lungs and it does a tremendous number on the lungs. So it would be interesting to check that. So, that, you're going to have to use medical doctors with. But it sounds interesting to me.

The US President also came up with the idea of treating Covid-19 patients with ultraviolet (UV) light in order to remove the Covid-19 contamination. The US President had, reportedly, asked Bill Bryan, then Under Secretary of Homeland Security for Science and Technology, the following questions⁶⁹⁴:

So I asked Bill a question that probably some of you are thinking of, if you're totally into that world, which I find to be very interesting. So, supposing we hit the body with a tremendous – whether it's ultraviolet or just very powerful light – and I think you said that that hasn't been checked, but you're going to test it.

(...)

And then I said, supposing you brought the light inside the body, which you can do either through the skin or in some other way, and I think you said you're going to test that too. It sounds interesting.

While Dr. Deborah Birx, the at the time coordinator of the Trump administration's Covid-19 task force response, had remained silent when the US president had made all of these curious statements, soon afterwards social media erupted in outrage against the US president. E.g., several doctors began to warn the American public against consuming or injecting disinfectant, or using UV light, and a major manufacturer of household cleaners explicitly urged users not to inject its products into their bodies. Doctors also pointed out that UV light is "a type of invisible radiation

⁶⁹¹AJMC Staff (2021).

⁶⁹² AJMC Staff (2021).

⁶⁹³Smith (2020b).

⁶⁹⁴Smith (2020b).

that can penetrate and damage skin cells", and that "overexposure can cause skin cancer".⁶⁹⁵

2.5.4.3 May 2020 to June 2020: Reopening the Economy, While Facing Rising Figures

After Trump had first, briefly, played with the idea of reopening the US economy in time for Easter Sunday 2020, the Trump administration then began issuing broad guidelines on "how people could return to work, church, restaurants and other places". This plan of the Trump administration to reopen the economy was based on the concept of "trigger criteria", whereby states or metropolitan areas would have to reach benchmark criteria in reducing the number of Covid-19 contamination cases and Covid-19 related deaths, before being allowed to take a next, specific step towards reopening.⁶⁹⁶ (Cf., furthermore, Sect. 7.10.)

On 12 May 2020, Dr. Anthony Fauci, MD, testified before the US Senate that the then officially published US death toll of 80,000 was, most likely, underestimated. Dr. Fauci also warned against the relaxation of containment measures. Dr. Fauci, moreover, announced that he was "cautiously optimistic" that a Covid-19 vaccine would be effective and could already be achieved within 1 or 2 years.⁶⁹⁷

On May 28, 2020, the CDC declared that the surpassing of 100,000 deaths was a "sobering development and a heart-breaking reminder of the terrible toll of this unprecedented pandemic". At the same time, the CDC urged Americans to continue adherence to local and state containment and sanatory measures, such as (1) social distancing, (2) good hand hygiene, and (3) face mask wearing in public.⁶⁹⁸ Around the same time, a "Statista survey" conducted from 23 March 2020 to 31 May 2020 found that US adults were consistently less satisfied with their government's response to Covid-19 than e.g., their German and British counterparts.⁶⁹⁹

Less than 2 weeks later, on 10 June 2020, the number of confirmed cases of Covid-19 in the United States reached the number of two million, while new contamination cases continued to rise in 20 states.⁷⁰⁰ A study published in the journal "Science Translation Medicine" on 22 June 2020 even suggested that 80% of Americans who had been dealing with influenza-like symptoms in March 2020, had in fact been infected with Covid-19. According to this research, if a third of these patients had sought testing for Covid-19, this could have accounted for 8.7 million Covid-19 contamination cases.⁷⁰¹

⁶⁹⁵Smith (2020b).

⁶⁹⁶ AJMC Staff (2021).

⁶⁹⁷AJMC Staff (2021) and Melilo (2020).

⁶⁹⁸AJMC Staff (2021) and Melilo (2020).

⁶⁹⁹Elflein (2021).

⁷⁰⁰AJMC Staff (2021) and Melilo (2020).

⁷⁰¹AJMC Staff (2021) and Melilo (2020).

On 30 June 2020, in an appearance before the US Senate Committee on Health, Education, Labor and Pensions, Dr. Fauci warned that while the daily number of new contamination Covid-19 cases in the United States was around 40,000 at the time, that number could soon reach 100,000 new contamination cases per day, given the trajectory of the Covid-19 epidemic that was then prevalent.⁷⁰²

2.5.4.4 Summer 2020: New Signs of Trouble

On 2 July 2020, in light of a growing number of contamination cases across the United States, several states, including California and Indiana, announced that they were postponing, or cancelling, plans to reopen their economies. On the same date, New Mexico extended an existing public health emergency order until 15 July 2020, and also introduced a USD 100 fine for those failing to comply with the face mask wearing requirement.⁷⁰³

In May 2020, the states with the highest Covid-19 contamination numbers among non-elderly adults without insurance, were Florida, Texas, Oklahoma, Mississippi, North Carolina, South Carolina, and Georgia. As of 12 July 2020, these states also reported the highest number of new Covid-19 contamination cases per 100,000 people.⁷⁰⁴

On 16 July 2020, the United States reported a record of 75,600 new contamination cases of Covid-19 in a single day, thus breaking a record that had only been a week earlier.⁷⁰⁵

While still only a presidential candidate, Joe Biden called on 13 August 2020 for all US governors to require their citizens to wear masks whenever they were to go out in public until November 2020. Biden also announced that that he would make this practice mandatory if elected. At that time, there were 165,000 American Covid-19 related deaths. It was, furthermore, estimated that a face mask wearing requirement would save 40,000 lives during the months to follow.⁷⁰⁶

On 28 August 2020, it was, furthermore, made public that a 25-year-old man from Nevada had been reinfected with Covid-19 in May 2020, after having before recovered from a mild case of Covid-19 in April 2020. This was the first reported case of Covid-19 reinfection in the United States. The second such reinfection occurrence resulted in a much more severe case, requiring hospitalization and oxygen. A full review of this case was published in "The Lancet Infectious Disease Journal" in October 2020.⁷⁰⁷

⁷⁰²AJMC Staff (2021).

⁷⁰³AJMC Staff (2021) and Melilo (2020).

⁷⁰⁴AJMC Staff (2021).

⁷⁰⁵AJMC Staff (2021).

⁷⁰⁶AJMC Staff (2021).

⁷⁰⁷AJMC Staff (2021).

2.5.4.5 August 2020: The Sturgis Motorcycle Rally

It is incomprehensible, to say the least, that an event of such magnitude as the "Sturgis Motorcycle Rally", with participants from every possible region of the United States, could still be taking place in mid-August 2020, when the Covid-19 pandemic was raging around the world, and the United States itself ranked as one of the hardest hit countries on Earth.⁷⁰⁸ As a result, during the summer of 2020, the Sturgis motorbike rally became a major spreading event (comparable to the return of tourists from the Ischgl ski resort in Europe; cf. Sect. 2.4.1.2.).

Dave et al. have described the policy decisions that resulted in The Sturgis Motorcycle Rally becoming one of America's main spreading events in detail. Their description of the events has largely been used for the explanation in this section. First, the absence of containment measures in South Dakota at the time, amongst which a lack of rules containing a maximum crowd limit and of a face mask requirement, had made it impossible for the city of Sturgis to prevent the Sturgis Motorcycle Rally to begin with. Second, when the Sturgis City Council had consulted with the South Dakota state government about its ability to restrict, or revoke, camping permits with regard to nearby campgrounds where most of the rally attendees would be staying, this request had simply been denied. As a result, in April 2020, the Sturgis City Manager and City Council reached the conclusion that it was unavoidable that people would travel to Sturgis in large numbers, even in case the rally would have been cancelled. In light of this insight, the City Council decided to allow the event to go through, while only imposing some minimal requirements. Third, although the city did its best to take precautions, these were not commensurate given the size of the event, the number of people attending and the wide variety of activities, both in numbers as in nature, that had been announced. E.g., in order to prepare for the arrival of people who would be attending the festival, the city of Sturgis had taken the decision that all Rally workers and emergency staff had to be tested for Covid-19 on a daily basis. The city moreover resorted to a variety of other preventive measures, such as: (1) stockpiling personal protective equipment (PPE), (2) donating such PPE to local businesses that needed it, (3) disinfecting restrooms and pavements, and (4) making hand sanitizer dispensers available in all public areas of the city. In addition, the city increased hospital availability, with a mandate being issued to expand local ICUs with an additional 500 ICU beds to be available within 48 h, if needed. The city also announced that, after the rally, access to low-cost testing would be made available to all local residents and business owners. But no similar testing and tracing or containment measures were taken (or even contemplated) with regard to the influx of visitors coming from all over the United States.⁷⁰⁹

According to Dave et al., the Sturgis Motorcycle Rally was eventually held from 7 to 16 August 2020, thus lasting for 10 days, with pre-rally events already starting on 3 August 2020. The estimated number of participants was 462,182. The Rally

⁷⁰⁸Firestone et al. (2020).

⁷⁰⁹Dave et al. (2020).

included the following events and activities: (1) motorcycle rides and races (including drag racing, motocross and motorbike racing), (2) motorbike shows, (3) poker tournaments, (4) boxing matches, (5) exhibits, (6) contests, (7) all kinds of vendors (including tattoo artists, people selling Rally merchandise, motorbike washes, and sales of clothing), and (8) musical events (including concerts, disc jockeys, and dancers). Over 30 entertainment groups were reported to perform or organise events over the time period of the festival. These venues were, moreover, held both indoors and outdoors. Most of these events and activities were located in Meade County, but also included bars on Main Street in Sturgis. There were, moreover, campgrounds that were made available outside the city limits, such as the "Buffalo Chip". As of 3 August 2020, Buffalo Chip had also hosted dozens of events which took place every day throughout 16 August 2020. One of the highlights of these performances was a headlining performance by the band "Smash Mouth". Face mask wearing was imposed on the backstage crew during the concerts. However, concert attendees were only required to have a face mask in their possession upon entering the premises. Bars and restaurants were open during the entire time of the events, with a possibility of consuming or dining indoors. Some owners even announced that they remained open for 24 h per day. Liquor shops reported an increase in sales in Sturgis up 27% compared to the previous year. This may have been representative of a less risk-averse participant crowd, given that attendance was, moreover, down 7.5% compared to the previous year, indicating that fewer people had still managed to consume more alcohol.⁷¹⁰

By the end of the Rally, public health officials expressed their concerns about the likely contamination effects of the Rally, not only in and around Sturgis itself, but also in the residential counties of those who had attended the event and then went back home afterwards.⁷¹¹

Dave et al., subsequently, found that the Sturgis rally had indeed led to a spread of Covid-19 cases. This had, moreover, been the case both on a local level, as well as in the home counties of people who had attended the Sturgis rally and had then travelled back home afterwards. For the state of South Dakota as a whole, it appeared from the research of Dave et al. that the Sturgis event had increased Covid-19 contamination cases from 3.6 to 3.9 cases per 1000 population as of 2 September 2020. This represented an increase of over 35% from the 9.7 cases per 1000 people in South Dakota, on 31 July 2020. In addition, the spread of infection was even felt on a national level, depending on the influx of visitors from each state who had attended the event. Dave et al., e.g., found that outside the state of South Dakota itself, US counties with relatively large numbers of visitors to the Rally would be experiencing much larger increases in Covid-19 contamination cases than US counties with no visitors. Measured after about 2 weeks after the Rally had ended, the case rate for these US counties from which many visitors had attended the Rally, had increased from 6.4% to 12.5%. According to said researchers, these estimates

⁷¹⁰Dave et al. (2020).

⁷¹¹Dave et al. (2020).

indicated a total of 112,195 to 263,708 additional cases in these US counties because of a large number of their population having attended the Sturgis Motorcycle Rally. When adding the number of new cases in South Dakota itself because of the Rally, the total number of cases amounted between 115,283 and 266,796. In addition, it appeared from the research of Dave et al. that US counties with the highest number of Sturgis attendees, had witnessed an increase of Covid-19 contamination cases from 6.4 to 12.5% after the Sturgis event, compared to US counties from where there had been no visitors to the Rally. Dave et al., furthermore, made an estimation of the total health cost: from this, it appeared that The Sturgis Motorbike Rally had generated substantial public health costs, ranging between USD 3.8 to USD 8.7 billion.⁷¹²

During the period August-September 2020, the MDH-short for "the Minnesota Department of Health"-made its own investigation of the outbreak of Covid-19 contamination cases to be associated with The Sturgis Motorcycle Rally, especially among Minnesota residents. From this research, it appeared that there were 51 primary Covid-19 contamination cases directly associated with the event. There were, moreover, a further 35 secondary or tertiary Covid-19 contamination cases identified among family members, social and occupational contacts. This brought the total of Covid-19 contamination cases to 86 cases. Moreover, four of these patients had to be hospitalised, and one these had died because of Covid-19. According to this same research, approximately one-third (34%) of the 87 Minnesota counties had at least experienced one primary, secondary or tertiary Covid-19 contamination case associated with The Sturgis Motorcycle Rally. Genomic sequencing, furthermore, confirmed these associations with the Rally. According to Fireston, these results were of great importance in the subsequent recommendations regarding containment measures, such as: (1) face mask wearing, (2) maintaining physical distance, (3) reduction of event attendance, (4) isolation of confirmed Covid-19 patients, and (5) quarantine of close contacts. In addition, although this study did not measure the impact of The Sturgis Motorcycle Rally on residents of all other states, the findings of the study still demonstrated the need for consistent mitigation measures across all US states.⁷¹³

2.5.4.6 September 2020: Some New Insights and Measures

On 14 September 2020, the Trump administration announced that it would end the Covid-19 screenings that had begun at some US airports as of January 2020. (Cf. Sect. 2.5.1.) Previously, in March 2020, flights from high-risk countries, such as China, Iran and much of Europe, had been diverted to 15 designated airports in order to have testing performed more efficiently, but from 14 September 2020 on,

⁷¹²Dave et al. (2020).

⁷¹³Cf. Firestone et al. (2020).

these flights would no longer be diverted, with all passenger screening announced to be stopped.⁷¹⁴

According to a study published in "The Morbidity and Mortality Weekly Report" on 15 September 2020, it appeared that people testing positive for Covid-19 were 2.4 times more likely to have shortly before been out. In this study, restaurants that had been taken into consideration included restaurants with terraces, as well as restaurants with outdoor seating and indoor seating. In addition, this contamination likelihood was found to be almost 4 times higher for participants who had been to a bar or pub. Most of the participants (71%) to the study had, moreover, claimed to have worn face masks in the 2 weeks prior to their diagnosis of Covid-19.⁷¹⁵

During September 2020, Midwestern states saw a dramatic increase in Covid-19 cases. South Dakota alone witnessed a 166% contamination increase, while 10 other states reported record 1-day increases as well. The annual Sturgis Motorbike Rally (which has been discussed in the previous Sect. 2.5.4.5.), but also school and university reopenings and Labor Day weekend festivities have all been cited as links between contamination cases.⁷¹⁶

2.5.4.7 October 2020: The US President and First Lady Catch Covid-19

On 2 October 2020, US President Donald Trump made the surprising announcement that he and First Lady Melania Trump had both tested positive for Covid-19. After initially experiencing only mild symptoms of the Covid-19 disease, Trump was then taken to the "Walter Reed National Military Medical Centre", allegedly "out of an abundance of caution" (in the words of press secretary Kayleigh McEnany).⁷¹⁷ However, it would become clear much later that Trump's symptoms had in fact been much more serious than initially reported.⁷¹⁸ During his hospital stay, President Trump's treatment was reported to have consisted of Regeneron's experimental antibody cocktail "remdesivir" and "dexamethasone",⁷¹⁹ an at the time still

⁷¹⁴AJMC Staff (2021).

⁷¹⁵AJMC Staff (2021).

⁷¹⁶AJMC Staff (2021).

⁷¹⁷AJMC Staff (2021).

⁷¹⁸Reimann (2021).

In February 2021, it was reported that (then former) US President Donald Trump's Covid-19 infection in October 2020 had been far worse than the President and his aides had said at the time, and that officials at the time even had feared that Trump's condition was so bad before he left the White House that he might have needed to be put on a ventilator during his hospitalization. It, furthermore, emerged that Trump's blood oxygen levels had been dangerously low and that he had suffered a pneumonia-related lung complication called "pulmonary infiltrates" (a problem related to a "hyperinflammatory phase" that typically occurs in the later stages of a Covid-19 infection) (cf. Reimann (2021)).

⁷¹⁹AJMC Staff (2021).

experimental life-saving treatment that was not available to the average person.⁷²⁰ (Cf., furthermore, Sect. 9.3.2.6.) After a stay of 3 days, US President Trump was discharged from the hospital. After his return to the White House, The US President would continue to receive treatment for Covid-19, while his health situation was further monitored.⁷²¹

After his return from hospital, President Trump tweeted a video saying "don't be afraid of Covid-19" and "don't let it get the best of you", although his usually frantic tweets had diminished considerably during his hospitalization. President Trump's severe Covid-19 infection also had little or no impact on the president's precautions, or lack thereof, in preventing the spread of Covid-19. He afterwards continued to regularly gather thousands of mostly unmasked supporters in rallies across the country right up until election day.⁷²²

2.5.4.8 New England Journal of Medicine Editorial Interim Evaluation

On 8 October 2020, in an editorial that was published in The New England Journal of Medicine (NEJM), entitled "Dying in a Leadership Vacuum", 34 editors of the Journal publicly denounced the Trump administration's response to the Covid-19 pandemic, stating that US leaders had "taken a crisis and turned it into a tragedy".⁷²³ Given the importance of this statement in assessing what went wrong in the United States, some of its most relevant parts have been quoted below⁷²⁴:

Covid-19 has created a crisis throughout the world. This crisis has produced a test of leadership. With no good options to combat a novel pathogen, countries were forced to make hard choices about how to respond. Here in the United States, our leaders have failed that test. They have taken a crisis and turned it into a tragedy.

The magnitude of this failure is astonishing. According to the Johns Hopkins Centre for Systems Science and Engineering, the United States leads the world in Covid-19 cases and in deaths due to the disease, far exceeding the numbers in much larger countries, such as China. The death rate in this country is more than double that of Canada, exceeds that of Japan, a country with a vulnerable and elderly population, by a factor of almost fifty, and even dwarfs the rates in lower-middle-income countries, such as Vietnam, by a factor of almost two thousand. Covid-19 is an overwhelming challenge, and many factors contribute to its severity. But the one we can control is how we behave. And in the United States we have consistently behaved poorly.

(...)

Why has the United States managed this pandemic so badly? We have failed at almost every step. We had ample warning, but when the disease first arrived, we were incapable of testing effectively and couldn't provide even the most basic personal protective equipment to

⁷²⁰Cohen (2020b).

⁷²¹Cohen (2020b).

⁷²² Reimann (2021).

⁷²³AJMC Staff (2021).

⁷²⁴NEJM Editorial (2020).

healthcare workers and the general public. And we continue to be way behind the curve in testing. While the absolute numbers of tests have increased substantially, the more useful metric is the number of tests performed per infected person, a rate that puts us far down the international list, below such places as Kazakhstan, Zimbabwe, and Ethiopia, countries that cannot boast the biomedical infrastructure or the manufacturing capacity that we have. Moreover, a lack of emphasis on developing capacity has meant that US test results are often long delayed, rendering the results useless for disease control.

Although we tend to focus on technology, most of the interventions that have large effects are not complicated. The United States instituted quarantine and isolation measures late and inconsistently, often without any effort to enforce them, after the disease had spread substantially in many communities. Our rules on social distancing have in many places been lackadaisical at best, with loosening of restrictions long before adequate disease control had been achieved. And in much of the country, people simply don't wear masks, largely because our leaders have stated outright that masks are political tools rather than effective infection control measures. The government has appropriately invested heavily in vaccine development, but its rhetoric has politicized the development process and led to growing public distrust.

The United States came into this crisis with enormous advantages. Along with tremendous manufacturing capacity, we have a biomedical research system that is the envy of the world. We have enormous expertise in public health, health policy, and basic biology and have consistently been able to turn that expertise into new therapies and preventive measures. And much of that national expertise resides in government institutions. Yet our leaders have largely chosen to ignore and even denigrate experts.

The response of our nation's leaders has been consistently inadequate. The federal government has largely abandoned disease control to the states. Governors have varied in their responses, not so much by party as by competence. But whatever their competence, governors do not have the tools that Washington controls. Instead of using those tools, the federal government has undermined them. The Centers for Disease Control and Prevention, which was the world's leading disease response organization, has been eviscerated and has suffered dramatic testing and policy failures. The National Institutes of Health have played a key role in vaccine development but have been excluded from much crucial government decision making. And the Food and Drug Administration has been shamefully politicized, appearing to respond to pressure from the administration rather than scientific evidence. Our current leaders have undercut trust in science and in government, causing damage that will certainly outlast them. Instead of relying on expertise, the administration has turned to uninformed "opinion leaders" and charlatans who obscure the truth and facilitate the promulgation of outright lies.

(...)

Anyone else who recklessly squandered lives and money in this way would be suffering legal consequences. Our leaders have largely claimed immunity for their actions. But this election gives us the power to render judgment. Reasonable people will certainly disagree about the many political positions taken by candidates. But truth is neither liberal nor conservative. When it comes to the response to the largest public health crisis of our time, our current political leaders have demonstrated that they are dangerously incompetent. We should not abet them and enable the deaths of thousands more Americans by allowing them to keep their jobs.

2.5.4.9 October 2020 to December 2020: Rising Number of Cases and Deaths

On the same date—October 8, 2020—that the aforementioned editorial in the "New England Journal of Medicine" gave a grim assessment of the Trump administration's handling of the Covid-19 crisis, 39 states reported that they were experiencing an increase in Covid-19 contamination cases. Nine states reported to have set 7-day infection records, with Wisconsin and Hawaii also reporting a record number of Covid-19 related deaths over a 7-day period.⁷²⁵

According to a poll released on the same date (i.e., 8 October 2020) by "Gallup-West Health", albeit conducted before President Trump's Covid-19 diagnosis, it appeared that more Americans had confidence in presidential candidate Joe Biden to lead the United States for dealing with the Covid-19 pandemic. From this poll, it was noted that Biden had the support of 52% of the voting public on this matter, compared to 39% of the voters reaming alleged to Trump, with the rest of the surveyed people still being undecided.⁷²⁶

By the same date, information was made available about the number of people that had been infected by the Covid-19 virus upon having attended Supreme Court Justice Amy Coney Barrett's graduation ceremony in the Rose Garden that took place on 3 October 2020. This number was reported to have increased to 34. It was also reported that, amongst these affected, there had been several White House staff members.⁷²⁷

On 15 October 2020, the United States reported 60,000 new contamination cases of Covid-19, a number that had not been seen since early August 2020. The number of cases had increased nationwide, with 44 states even having reported more Covid-19 contamination cases than in mid-September 2020. More rural states had been experiencing even higher numbers of Covid-19 contamination cases and Covid-19 related deaths than during the first wave of the Covid-19 pandemic that had occurred during the spring of 2020.⁷²⁸

On 4 November 2020, the United States was reported to have reached an ominous milestone with 100,000 new contamination cases of Covid-19 reported in a single day for the first time. This unprecedented spike in Covid-19 cases was, moreover, attributed to a shortage of N95 face masks in healthcare facilities all over the country, although the production of such masks had been increased. Healthcare workers reportedly continued to ration and reuse face masks with no end in sight.⁷²⁹

By 9 November 2020, President-elect Biden announced the names of the science, medicine and public health experts who would serve on his in-between Covid-19 advisory board upon taking presidential office.⁷³⁰

⁷²⁵ AJMC Staff (2021).

⁷²⁶AJMC Staff (2021).

⁷²⁷AJMC Staff (2021).

⁷²⁸AJMC Staff (2021).

⁷²⁹AJMC Staff (2021).

⁷³⁰AJMC Staff (2021).

On November 20, 2020, the CDC urged Americans to stay home for Thanksgiving. By then, Covid-19-related contamination cases and hospitalizations were skyrocketing. The CDC, hence, recommended that people would avoid mingling with people who had not been residing in their homes during the preceding 14 days. With the number of contamination cases in the United States having surpassed 11 million, CDC officials were increasingly concerned that the situation could even worsen over the holiday season.⁷³¹

On 29 December 2020, a new variant of the Covid-19 virus (strain B.1.1.7), discovered shortly before in the United Kingdom and known as the UK variant (cf. Sect. 1.1.2.), was detected in the United States as well. The contaminated person concerned a man from Colorado in his twenties who had no previous travel history. Scientists said that they were concerned, albeit not surprised, as viruses are known to mutate.⁷³²

Be this as it may, by the end of 2020, the United States had surpassed the threshold of 20 million Covid-19 infections and over 346,000 Covid-19 related deaths. Globally, contamination cases had reached 83,832,334 and 1,824,590 deaths.⁷³³

By the end of May 2020, many states had begun to lift containment restrictions and to reopen their doors to boost their economies, despite warnings from virologists (and even economists) that it was still too early. As a result, the number of new daily contamination cases began to rise again in July 2020, and by December 2020, the United States reported the highest number of new daily Covid-19 cases in the country since the start of the pandemic. This was largely attributed to the policies of the Trump administration, with many pointing to conflicting statements from the White House regarding the severity of the Covid-19 pandemic and a general lack of leadership and direction.⁷³⁴

During the months December 2020 and January 2021, there were two additional factors that would have a significant further impact on the course of the Covid-19 pandemic in the United Nations. First, from December 2020, there was the start of successful Covid-19 vaccinations from the outset, as in the course of 2020, the Trump administration had ensured that contracts were signed with Covid-19 vaccine developers that guaranteed the United States priority on delivery of Covid-19 vaccines over other countries. Such contracts were concluded with, amongst others, vaccine developers BioNTech-Pfizer and Moderna. As a result, from December 2020 onwards, the United States was able to start vaccinating its population at a rapid speed, in contrast to other regions, including the EU, which, due to less favourable contractual arrangements, barely received deliveries of these Covid-19 vaccines. A second important factor was the inauguration of Joe Biden as the new President of the United States on 20 January 2021, ending the ambivalent

⁷³¹AJMC Staff (2021).

⁷³²AJMC Staff (2021).

⁷³³AJMC Staff (2021).

⁷³⁴Elflein (2021).

countermeasures policy of the previous US President, Donald Trump, with the Biden administration, most definitively, opting for a policy aligned with scientific findings, including in the area of non-pharmaceutical interventions (NPI's). Both of these factors implied that the Covid-19 pandemic in the United States would (or could) be gradually brought under control. As a result, on 10 March 2021, at a White House press briefing, it was reported that the most recent CDC data indicated a downward trend, with a new 7-day average of "only" 56,000 cases per day. New hospital Covid-19 admissions also declined compared to the previous weeks (with an average of "only" 4900 Covid-19 patients admitted per day in the preceding week). In addition, while deaths hovered around 2000 per day during previous weeks, the 7-day average prior to 10 March 2021 fell to "only" 1600 Covid-19 related deaths per day.

2.5.5 Assessment of the Trump Administration's Policy on Covid-19

According to an article that appeared in "The Lancet Commission on Public Policy and Health", US President Donald Trump's term in office has brought nothing but misfortune to the United States and to the entire world. In 2020 alone, Donald Trump was said (1) not only to have accelerated the spread of Covid-19 in the United States, but, moreover, to (2) have deserted the WHO when the world needed this organization the most, and in the meantime to (3) have responded to largely peaceful protests against racist policing by stirring up hatred and unleashing the military force, as well as the vigilante violence he then mobilised for an insurgency.⁷³⁶

During a CNN documentary broadcast on 28 March 2021, Dr. Deborah Birx, coordinator of the "White House Coronavirus Task Force" under the Trump administration, declared that the "vast majority" of the nearly 550,000 Covid-19 deaths in the United States could have been avoided if only Donald Trump and the Trump administration had acted earlier, and in accordance with scientific advise and with more conviction.⁷³⁷ To back up this statement, Dr. Birx referred to an October 2020 study by the "National Centre for Disaster Preparedness" at Columbia University's "Earth Institute", which had found that 84% of US deaths could have been avoided with an earlier shutdown.⁷³⁸ The Columbia researchers had, more precisely, built a model to look at Covid-19 transmission rates between 15 March 2020 and 3 May 2020—and determined that if the United States had shut down but 2 weeks earlier, 84% of the Covid-19 related deaths at that time would have been prevented.⁷³⁹

⁷³⁵The White House Briefing Room (2021).

⁷³⁶Woolhandler et al. (2021), p. 706.

⁷³⁷Redlener et al. (2020), Reston (2021) and Earth Institute (2020).

⁷³⁸Cf. Redlener et al. (2020). Cf., furthermore, Luscombe (2021) and Earth Institute (2020).

⁷³⁹Reston (2021).

In the same research, the Columbia University researchers had compared the number of deaths in the United States and its policy response to six similar highincome countries: South Korea, Japan, Germany, Australia, France and Canada. According to the researchers' report, entitled "130,000 - 210,000 Avoidable COVID-19 Deaths - and Counting - in the U.S.", between 130,000 and 210,000 Covid-19 related deaths in the United States could have simply been prevented if the Trump administration would only have quickly and effectively implemented a consistent public health response to the threat posed by the Covid-19 virus. The same report also suggests that if the United States would have followed similar policies and protocols as some other countries, such as (1) providing sufficient testing capacity, (2) adopting early containment measures, (3) issuing a national face mask wearing mandate, and (4) providing federal guidance on physical and social distancing, it could have prevented at least 130,000, and potentially as many as 210,000 Covid-19 related deaths. The report concluded that the death rate from Covid-19 had been disproportionately high in the United States compared to other countries, because of bad public policy, even when the average age of the population and obesity were taken into account.740

The United States thus has been reported to have the ninth highest proportional mortality rate in the world, with on average some 66 deaths per 100,000 population. The United States ranked only behind Peru, Belgium, Bolivia, Brazil, Ecuador, Chile, Spain and Mexico in these statistics.⁷⁴¹

As shown below, Fig. 2.8 (developed by Redlener, Sachs and Hansen), the US death rate per 100,000 population was 50 times that of Japan, and more than twice that of Canada. Although both the United States and South Korea had their first confirmed case of Covid-19 on 20 January 2020, South Korea had been able to immediately implement an aggressive diagnostic testing and tracking strategy and to isolate infected patients and quarantine their traced contacts, so that the proportional mortality rate had been 78 times lower than in the United States.⁷⁴² Figure 2.8 gives an overview of the number of Covid-19 deaths in these countries per 100,000 inhabitants, in the period from March until May 2020.

According to the Columbia University report, the discrepancy in Covid-19 contamination and fatalities between the seven nations investigated it in its study could likely be explained by the slow and disorganized response by the Trump administration in both the early days of the Covid-19 pandemic and afterwards. South Korea, which had reported its first Covid-19 contamination case on the same day as the United States had, by contrast, quickly enacted stringent measures to fight the Covid-19 virus that attributed to a low mortality rate among its population. (Cf. Sect. 2.4.2.4.3.) Still according to the report, the US death toll stood apart from nearly all high-income nations. From this data, it was deducted that a significant number of lives would likely have been spared if the Trump administration had acted

⁷⁴⁰Redlener et al. (2020) and Reston (2021).

⁷⁴¹Redlener et al. (2020).

⁷⁴²Redlener et al. (2020).

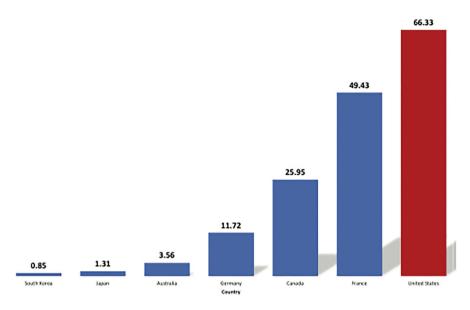


Fig. 2.8 Deaths per 100,000 (March to May 2020) [Source: Redlener et al. (2020)]

more on the advice of scientists and health experts. The researchers calculated that if the United States had followed the policies and protocols of⁷⁴³:

- (1) Australia, there might have been as few as 11,699 deaths, sparing 206,018 American lives.
- (2) Canada, there might have been as few as 85,192 US deaths, saving as many as 132,525 lives.
- (3) France, there might have been 162,240 US deaths, saving as many as 55,477 lives.
- (4) Germany, there might have been as few as 38,457 US deaths, saving as many as 179,260 lives.
- (5) Japan, there might have been as few as 4315 US deaths, with 213,402 deaths avoidable.
- (6) South Korea, there might have been just 2799 US deaths—only 1.2% of the actual US death toll at the time, saving as many as 214,918 lives.

In addition to the international comparison to calculate the avoidable death toll, the Columbia University report also made an early attempt to dissect the "collateral damage" that these Covid-19 tragedies had on American families. It thus noted emerging data on long-term health impacts of Covid-19 infections, increasing

⁷⁴³Earth Institute (2020).

statistics on children left without parents, and bereavement rates among families of the deceased.⁷⁴⁴

During the abovementioned press conference of March 28, 2021, Dr. Birx, more generally, pointed to the Trump administration's overall failure to learn from or respond quickly to the first wave of Covid-19 infections that had swept the country in early spring 2020. According to Birx, while regarding the first wave of the Covid-19 pandemic on American soil, the Trump administration may still have had an excuse, all of the death that have occurred after the first wave of the Covid-19 pandemic should have been mitigated or decreased substantially.⁷⁴⁵

To summarize, Trump was criticized for (1) downplaying the seriousness of the virus; (2) making numerous false claims, including that its effects were no worse than the flu; (3) having predicted that Covid-19 would "just disappear"; (4) referring to it in racist terms; (5) pressing for cities and states to reopen throughout the early summer of 2020, as a second wave of the pandemic pushed the death toll higher; (6) ridiculing the wearing of face masks, and (7) having made outlandish claims, such as suggesting injecting disinfectant into the body could be a legitimate Covid-19 treatment, which experts slammed at the time as dangerous.⁷⁴⁶

2.5.6 Situation in the United States Early-March 2021

Since the outbreak of Covid-19, until early March 2021, the United States had performed over 348 million tests, purportedly the most of any country in the world. The number of infections was still rising dramatically during the first week of March, 2021, and the United States was reported to have had more confirmed contamination cases and Covid-19 related deaths than any other country in the world. All 50 states of the United States were reported to have been affected, with California reporting the highest number of Covid-19 related deaths and the highest number of Covid-19 contamination cases in the United States. By the end of March 2021, it was estimated that over 90% of the American population was still under some kind of stay-at-home order. To further prevent the spread of the Covid-19 virus, most states continued to keep bars and restaurants closed, to still forbid public events, and to still maintain a ban large gatherings.⁷⁴⁷

Table 2.6 gives an overview of the number of US Covid-19 cases and deaths by state on 4 March 2021.

⁷⁴⁴Redlener et al. (2020) and Earth Institute (2020).

⁷⁴⁵Luscombe (2021). Cf., furthermore, Reston (2021).

⁷⁴⁶Luscombe (2021). Cf., furthermore, Reston (2021).

⁷⁴⁷Elflein (2021).

2.5.7 The Third Wave of the Covid-19 Pandemic in the United States

By April 10, 2021, there were ominous signs of a new wave of Covid-19 infections building in the US Midwest, even as vaccinations continued to gather pace across the country (cf. Sect. 9.4.2.).⁷⁴⁸ The fresh wave of Covid-19 cases even clouded optimism spurred by the speedy Covid-19 vaccines rollout.⁷⁴⁹

In Michigan, hospitalizations soared, and intensive care beds were being rapidly filled. An average of 7226 cases a day had been confirmed in the state during the preceding week, approaching record highs seen in November 2020. Michigan's public health system was overwhelmed, sounded the warning of the state's top medical official, Joneigh Khaldun.⁷⁵⁰ The new surge of Covid-19 cases even prompted Governor Gretchen Whitmer to urge people to restrict activities and to keep wearing face masks, and for schools to keep halting in-person learning.⁷⁵¹

Covid-19 was also making a resurgence, albeit to a lesser degree, in Minnesota, where cases also had jumped since March 2021. On 9 April 2021, 2659 new infections were reported, the most in a single day since January 2021. Governor Tim Walz was reported saying that he was not planning new restrictions, while calling on the federal government to speed up Covid-19 vaccine delivery.⁷⁵²

Illinois reported 4004 new cases on 9 April 2021, also the highest number since January 2021, with the number of seriously sick people in hospital rising.⁷⁵³

Public health experts blamed the rise in cases on the spread of the highly infectious Covid-19 virus variant B.117, which had first been identified in the United Kingdom, along with the relaxation of Covid-19 restrictions in the wake of dropping cases and the uptake of vaccines.⁷⁵⁴ According to the CDC, the B.1.1.7 variant had become the most common source of new infections in the United States. The agency also announced that it was attempting to track the spread of the variant to help states clamp down on its spread.⁷⁵⁵

Of particular concern was that, by the end of April 2021, children got to an increasing extent affected by Covid-19. E.g., in Colorado, children made up for more than 25% of all new Covid-19 contamination cases, which was attributed to the spread of more-contagious variants of the Covid-19 virus and by the reactivation of

⁷⁵²Milman (2021).

⁷⁴⁸Milman (2021).

⁷⁴⁹Milman (2021).

⁷⁵⁰Milman (2021).

⁷⁵¹Milman (2021).

⁷⁵³Milman (2021).

⁷⁵⁴Milman (2021).

⁷⁵⁵Milman (2021).

State	7-day average known cases	7-day average known deaths	Known cases	Deaths
AK	124	2	56,717	289
AL	996	37	498,085	10,095
AR	808	5	323,791	5436
AZ	940	41	821,109	16,185
CA	4019	294	3,488,468	53,048
CO	1192	7	433,025	5980
СТ	763	11	284,500	7693
DC	127	3	41,014	1024
DE	416	5	87,643	1440
FL	5419	129	1,930,232	31,390
GA	1744	68	824,825	15,464
HI	49	1	27,699	441
IA	501	14	338,268	5537
ID	284	4	172,587	1877
IL	1720	37	1,193,269	20,671
IN	763	24	667,941	12,665
KS	298	13	297,620	4832
KY	985	23	408,465	4732
LA	692	17	432,554	9686
MA	1287	45	554,630	16,296
MD	757	13	384,765	7870
ME	159	1	45,231	707
MI	1389	22	652,595	16,592
MN	792	10	487,378	6521
MO	351	36	479,548	8154
MS	478	22	296,154	6765
MT	155	4	100,534	1376
NC	2152	38	868,056	11,403
ND	80	1	100,191	1449
NE	259	4	200,266	2087
NH	231	2	76,182	1178
NJ	3377	49	802,553	23,491
NM	298	14	186,163	3769
NV	340	10	289,878	4901
NY	7322	111	1,657,777	47,758
OH	924	31	968,874	17,351
OK	641	33	426,643	4535
OR	301	11	156,675	2284
PA	2636	51	941,447	24,223
RI	343	8	120,820	2503
SC	1431	31	521,563	8662
SD	156	3	113,065	1896

Table 2.6US Covid-19 cases & deaths by State on 4 March 2021 [Source: USAFACTS (2021);data update of March 5, 2021, as accessed on 6 March 2021]

(continued)

State	7-day average known cases	7-day average known deaths	Known cases	Deaths
TN	1208	25	779,453	11,507
TX	7269	228	2,673,059	43,860
UT	555	11	373,319	1966
VA	1475	199	581,560	9361
VT	121	0	15,686	207
WA	777	13	343,091	5034
WI	674	11	619,945	6473
WV	268	3	132,698	2309
WY	69	2	54,685	684

Table 2.6 (continued)

physical school activities.⁷⁵⁶ Among the further reasons for these high numbers among children were, besides highly transmissible variants, the lack of Covid-19 vaccination available for children, as well as loosened Covid-19 restrictions. Colorado, furthermore, had reported the presence of four variants. Moreover, according to the Centers for Disease Control and Prevention, data indicated that 49% of the confirmed Covid-19 contamination cases, regardless of age, were to be attributed to the B.1.1.7 variant of the Covid-19 virus. Moreover, due to the reopening of schools, children in the state had resumed physical classes at the beginning of the 2020 academic year, though in most cases based upon face mask wearing and physical and social distant requirements. There had also been a lot of after-school activities occurring. According to a report by the American Academy of Pediatrics and the Children's Hospital Association, during the last week of April 2021, Colorado reported 210 active Covid-19 outbreaks in schools, the highest number since 2 December 2020 when there had been only 211. Covid-19 outbreaks had dropped in January 2021, to again increase during the months of March and April 2021. Since the outbreak of the Covid-19 pandemic and until 29 April 2021, 847 children and young people under 19 had been hospitalized, while 13 of them had died. The fact that children were at the time not yet eligible for a Covid-19 vaccine was indicated as another reason behind the spread (to the extent that, by 5 May 2021, no authorized Covid-19 vaccine was available for those younger than 16).⁷⁵⁷

It was, moreover, not only in Colorado where children and young people were, to an increasing extent, contaminated with the Covid-19 virus. According to the American Academy of Pediatrics, as well as the already above-quoted Children's Hospital Association report, by 5 May 2021, children all over the United States made up 22% of recent Covid-19 cases. Especially during the months of March and April 2021, there had been a substantial increase of the number of Covid-19 contamination

 $^{^{756}}$ Children between the ages 0–19 were reported to account for 26.4% of all Covid-19 contamination cases reported with regard to the week of April 25, according to data provided by the state of Colorado. Overall, children made up 16.57% of all contamination cases in the state since the beginning of the Covid-19 pandemic. (Cf. Lenthang (2021).)

⁷⁵⁷Lenthang (2021).

cases of children and young people. There were, more precisely, about 72,000 new contamination cases of children reported for the period from 22 April to 29 April 2021, which accounted to a 4% increase in the cumulative number of child Covid-19 contamination cases compared to the 2 weeks prior. Counting back to the start of the Covid-19 pandemic, over 3.78 million children had been infected with the Covid-19 virus, which amounted to about 13.8% of all nation-wide reported Covid-19 contamination cases.⁷⁵⁸ Still, severe illness due to Covid-19 remained rare among children, although experts worried that the Covid-19 virus might be of harm to the long-term physical health of contaminated children, as well as causing severe emotional and mental health effects.⁷⁵⁹

Table 2.7 gives of summary of the child case data in the United States from 16 April 2020 until 29 April 2021.

2.5.8 Tragedy in the US Prisons

According to Olla, for many Americans who were imprisoned during the Covid-19 pandemic, the situation soon became a true disaster.⁷⁶⁰

On 17 April 2021, The Guardian reported how, briefly before, namely on 4 April 2021, the prisoners of the St. Louis jail had started an uprising. According to The Guardian, it concerned the second major uprising at the St. Louis jail within the time frame of a year.⁷⁶¹ One of the many problems that the jail was facing was that a lot of the inmates were in pre-trial detention only since shortly before the beginning of the Covid-19 pandemic, while because of Covid-19, there had been a lot of trial suspensions. One of the main demands of the protesters was that court dates would be set soon. The protesting prisoners also demanded for a more humane treatment in light of the Covid-19 pandemic. It had, e.g., appeared that many of the prisoners felt isolated from their families and worried over the fact that the prison had taken no effective precaution measures for preventing the spread of the Covid-19 virus within the jail premises.⁷⁶²

The uprise the St. Louis jail was, moreover, far from a unique case. Already shortly after the Covid-19 outbreak, similar outbreaks in jails across the country had been occurring for protesting similar situations. According to Olla, the United States should have seen the situation created by the Covid-19 pandemic as a chance to review its jailing policy, especially given the fact that in the United States, the jails

⁷⁵⁸Still according to the Children's Hospital Association report, data pulled from 24 states and New York City indicated that children accounted for between 0.1% to 1.9% of all child Covid-19 contamination cases leading to hospitalization. (Cf. Lenthang (2021).)

⁷⁵⁹Cf. American Academy of Pediatrics (2021). Cf., furthermore, Lenthang (2021).

⁷⁶⁰Olla (2021).

⁷⁶¹Olla (2021).

⁷⁶²Olla (2021).

	Number of	Cumulative		Percent	Cases per
_	locations	total cases (all	Cumulative	children of	100,000
Date	reporting age	ages)	child cases	total cases	children
4/29/21	49 states, NYC, DC, PR and GU	27,320,708	3,782,724	13.8%	5025.8
4/22/21	49 states, NYC, DC, PR and GU	27,001,107	3,711,075	13.7%	4930.6
4/15/21	49 states, NYC, DC, PR, and GU	26,617,913	3,631,189	13.6%	4824.4
4/8/21	49 states, NYC, DC, PR, and GU	26,188,186	3,542,692	13.5%	4706.8
4/1/21	49 states, NYC, DC, PR, and GU^{Υ}	25,798,537	3,469,500	13.4%	4609.6
3/25/21	49 states, NYC, DC, PR, and GU	25,446,361	3,405,638	13.4%	4524.8
3/18/21	49 states, NYC, DC, PR, and GU	25,111,012	3,341,608	13.3%	4439.7
3/11/21	49 states, NYC, DC, PR, and GU	24,806,402	3,284,531	13.2%	4363.8
3/4/21	49 states, NYC, DC, PR, and GU	24,487,634	3,231,836	13.2%	4293.8
2/25/21	49 states, NYC, DC, PR, and GU	24,134,958	3,168,274	13.1%	4209.4
2/18/21	49 states, NYC, DC, PR, and GU	23,726,925	3,104,010	13.1%	4124.0
2/11/21	49 states, NYC, DC, PR, and GU	23,284,471	3,033,370	13.0%	4030.2
2/4/21	49 states, NYC, DC, PR, and GU	22,697,315	2,934,292	12.9%	3898.5
1/28/21	49 states, NYC, DC, PR, and GU	21,963,445	2,816,775	12.8%	3742.4
1/21/21	49 states, NYC, DC, PR, and GU	21,036,194	2,676,612	12.7%	3556.2
1/14/21	49 states, NYC, DC, PR, and GU	19,918,714	2,511,132	12.6%	3336.3
1/7/21	49 states, NYC, DC, PR, and GU	18,463,319	2,299,666	12.5%	3055.4
12/31/20	49 states, NYC, DC, PR, and GU	17,137,295	2,128,587	12.4%	2828.1
12/24/20	49 states, NYC, DC, PR, and GU	16,125,324	2000.681	12.4%	2658.1
12/17/20	49 states, NYC, DC, PR, and GU	14,766,831	1,821,746	12.3%	2420.4
12/10/20	49 states, NYC, DC, PR, and GU	13,462,337	1,639,728	12.2%	2178.6

 Table 2.7
 Summary of child case data from 4/16/20 to 4/29/21 [Source: American Academy of Pediatrics (2021)]

(continued)

	Number of	Cumulative	Cumulation	Percent	Cases per
Date	locations reporting age	total cases (all ages)	Cumulative child cases	children of total cases	100,000 children
12/3/20	49 states, NYC,	12,167,620	1,460,905	12.0%	1941.0
1213120	DC, PR, and GU	12,107,020	1,100,705	12.070	17-11.0
11/26/20	49 states, NYC, DC, PR, and GU	11,184,900	1,337,217	12.0%	1776.6
11/19/20	49 states, NYC, DC, PR, and GU	10,060,749	1,183,609	11.8%	1572.6
11/12/20	49 states, NYC, DC, PR, and GU	9,037,991	1,039,464	11.5%	1381.0
11/5/20	49 states, NYC, DC, PR, and GU	8,236,710	927,518	11.3%	1232.3
10/29/20	49 states, NYC, DC, PR, and GU	7,669,038	853,635	11.1%	1134.1
10/22/20	49 states, NYC, DC, PR, and GU	7,207,186	792,188	11.0%	1052.5
10/15/20	49 states, NYC, DC, PR, and GU	6,837,527	741,891	10.9%	985.7
10/8/20	49 states, NYC, DC, PR, and GU	6,505,390	697,633	10.7%	926.9
10/1/20	49 states, NYC, DC, PR, and GU	6,231,564	657,572	10.6%	873.7
9/24/20	49 states, NYC, DC, PR, and GU	5,965,268	624,890	10.5%	828.5
9/17/20	49 states, NYC, DC, PR, and GU	5,721,402	587,948	10.3%	779.5
9/10/20	49 states, NYC, DC, PR, and GU	5,493,006	549,432	10.0%	728.5
9/3/20	49 states, NYC, DC, PR, and GU	5,265,157	513,415	9.8%	680.3
8/20/20	49 states, NYC, DC, PR, and GU	5,018,113	476,439	9.5%	631.3
8/27/20	49 states, NYC, DC, PR, and GU	4,766,825	442,785	9.3%	583.2
8/13/20	49 states, NYC, DC, PR, and GU	4,486,830	406,109	9.1%	538.1
8/6/20	49 states, NYC, DC, PR, and GU	4,159,947	380,174	9.1%	500.7
7/30/20	49 states, NYC, DC, PR, and GU	3,835,573	338,982	8.8%	446.5
7/23/20	49 states, NYC, DC, PR, and GU	3,416,630	288,287	8.4%	379.7
7/16/20	49 states, NYC, DC, PR, and GU	3,042,413	241,904	8.0%	318.6
7/9/20	49 states, NYC, DC, PR, and GU	2,651,066	200,184	7.6%	263.7

Table 2.7 (continued)

(continued)

	Number of locations	Cumulative total cases (all	Cumulative	Percent children of	Cases per 100,000
Date	reporting age	ages)	child cases	total cases	children
7/2/20	49 states, NYC, DC, PR, and GU	2,335,060	165,845	7.1%	218.4
6/25/20	49 states, NYC, DC, PR, and GU	2,073,387	138,213	6.7%	182.0
6/18/20	49 states, NYC, DC, PR, and GU	1,885,905	116,176	6.2%	153.0
6/11/20	49 states, NYC, DC, PR, and GU	1,750,240	98,246	5.6%	129.4
6/4/20	49 states, NYC, DC, PR, and GU	1,623,334	84,016	5.2%	110.7
5/28/20	47 states, NYC, DC, PR, and GU	1,425,154	66,513	4.7%	91.5
5/21/20	47 states, NYC, DC, PR, and GU	1,288,305	54,031	4.2%	74.4
5/14/20	47 states, NYC, DC, PR, and GU	1,159,407	42,370	3.7%	58.3
5/7/20	46 states, NYC, DC, PR, and GU	1,010,112	32,568	3.2%	45.0
4/30/20	47 states, NYC, DC, and PR	849,615	23,096	2.7%	31.8
4/23/20	48 states, NYC, DC, PR, and GU	710,953	15,911	2.2%	21.2
4/16/20	46 states, NYC, and DC	456,923	9259	2.0%	13.3

Table 2.7 (continued)

were at the time overcrowded with people from immigrant backgrounds, poor people, and Black Americans.⁷⁶³

However, no such thing happened. In contrast, the Covid-19 outbreak in the American jails turned into what has been referred to as a murderous happening. While, due to the disastrous public policy of the Trump administration, the Covid-19 pandemic in general hit the United States very hard, the situation appeared to be the worst for those who had been incarcerated in jail at the time of the outbreak. More in particular, due to the cramped and unsanitary settings in many of the American jails, these had appeared to be ideal for transmitting the Covid-19 disease.⁷⁶⁴ In many cases,

⁷⁶³Olla (2021).

⁷⁶⁴LaGesse (2021). Cf., furthermore, Olla (2021).

According to a New York Times report, 34% of the American prisoners contracted the Covid-19 virus during the Covid-19 pandemic. This was more than three times the average rate among the general American population. According to this same report, each day, an average of seven prisoners behind US bars died because of Covid-19 during the Covid-19 pandemic. The report also makes mention of similar situations in the American immigration detention centres, with reference to the example of one such centre located in Virginia that experienced a nearly 100%

there were no or no sufficient Covid-19 containment measures in place. E.g., social distancing was in most cases impossible and Covid-19 tests were not available. At a policy level, there was also no willingness or interest for dealing with the matter.⁷⁶⁵

According to Olla, many of the American prisoners were simply left to die because, according to the value scales of Capitalist America, they were simply too deprived to be deemed worthy of having resources spend for their survival during a pandemic. From another report by the University of Texas referred to by Olla, it indeed appeared that 80% of the prisoners in Texas county jails who died because of Covid-19 were simply poor.⁷⁶⁶

It is, hence, in the further opinion of Olla, no surprise that already briefly after the outbreak of the Covid-19 pandemic, the protests and uprising in the Americans prisons started. On a more political level, a memo by "Data for Progress" reported that the majority of the American voters initially started to support the demands for a more humane treatment by the protesting prisoners. This implied that, contrary to conservative propaganda, support to the American protesters was not an unpopular leftist policy, but a truly humanitarian demand that most Americans supported.⁷⁶⁷ However, while initially several local and state governments seemed to be willing to comply with some of the demands made by the protesters and supporting public health officials, this did not lead to concrete results, implying a loss of momentum for changing the dramatic situation in the American prisons. From a February 2021

⁷⁶⁵LaGesse (2021) and Olla (2021).

⁷⁶⁶Cf. Deitch et al. (2020). Cf., furthermore, Demsas (2020).

⁷⁶⁷Olla (2021).

Covid-19 contamination rate. (Cf. LaGesse (2021).) According to Olla, the true number of Covid-19 contamination cases and Covid-19 related deaths may even be higher, as there were no accurate data available, and, moreover, prison and immigration centres kept facing difficulties with deploying testing. Many of these inmates who got contaminated by Covid-19 and/or died from the Covid-19 disease, such as the 3800 prisoners who contracted the Covid-19 virus at the Fresno, California, county jail, had, moreover, never gone to trial. (Cf. Olla (2021).)

LaGesse reported on the following situations in prisons (cf. LaGesse (2021)): "The virus shot through many institutions, leaving inmates desperate for ways to avoid getting sick. At Pickaway Correctional Institution in Ohio, which housed about 1900 inmates, they tried to turn bedsheets into tents to separate themselves; four in five inmates were infected anyway. At an immigration detention center in Farmville, Va., nearly every detainee — 339 in all — was infected. And at the Fresno County Jailin California, where most inmates are held on charges for which they have not yet been convicted, more than 3800 were sickened". (LaGesse (2021).)

Olla illustrates this assumption, furthermore, as follows: "Many inmates, like the 3800 who were infected at the Fresno, California, county jail, have not yet been to trial. This was the case for Preston Chaney, a 64-year-old Black man who died in a Texas jail because he couldn't afford \$100 bail. In effect, he died because he was too poor to be deemed worthy of survival during a pandemic. According to a report by the University of Texas, 80% of those who died in Texas county jails were in a similar position to Chaney and those who rose up in St Louis – trapped in a box awaiting trials that they may not live long enough to see. And there are also cases such as Bruce Norris, a 69-year-old Black man in Pennsylvania who was in the process of receiving parole after serving nearly 45 years in prison. He died of Covid before the governor could officially sign off on his release". (Olla (2021).)

article by Rebecca Buckwalter-Poza and Sean McElwee,⁷⁶⁸ published in "The Appeal", it even appeared that there soon occurred a return to the pre-Covid-19 pandemic norm⁷⁶⁹:

Florida's Broward county, which reduced its jail population early in the pandemic to under 3,000 "for the first time in decades", now has about 3,500 people incarcerated – putting its jails at nearly 80% full. Even more dire are the situations in Texas's Harris County, which has jailed more than 9,000 people and has just twenty-five beds left, and California's Los Angeles County, where more people are being held before trial for longer than this time last year, before the pandemic.

When after the presidential elections, the newly elected American president Joe Biden made it one of his main policies to go through with the US Covid-19 vaccination campaign at rapid speed, people in prisons were not considered as a primary group. Moreover, Biden did not commit to stopping the Trump-era policy of massively imprisoning low-level offenders belonging to the deprived groups of society.⁷⁷⁰

As Olla concluded her remarkable contribution⁷⁷¹:

The United States, from Biden's executive office down to the municipal level, must commit to releasing and providing care for as many people as possible – whether they be in jails, prisons or the concentration camps we've created for immigrants fleeing political realities created by US foreign policy. Prisons and jails have always served as warehouses in which our country can hide away the societal crimes of racism and poverty. The uprising at the St Louis City Justice Center was necessary and justified. It was a wake-up call and reminder that there is a hidden pandemic in the United States: our addiction to incarceration, which has led the supposed land of the free to become the home of the largest prison system on the planet. That sickness far predates Covid-19.

2.6 Conclusions

Arguably, one of the greatest lessons of the Covid-19 pandemic has been that, besides doing all that is in one's power to conduct a "prevention policy"—an approach that had been completely lacking in both the United States and in most European countries—an "elimination strategy"—as e.g., deployed by Taiwan, next to several other Asian countries, and New Zealand—is the optimal response for a moderate to severe pandemic. The strategy provides a vivid example of how protecting public health, including the safety of all members of society, also protects the economy, when compared with "mitigation" or "suppression" strategies—these

⁷⁶⁸Buckwalter-Poza and McElwee (2021).

⁷⁶⁹Olla (2021).

⁷⁷⁰Olla (2021).

⁷⁷¹Olla (2021).

having been deployed by most European countries, with all known disastrous consequences.⁷⁷²

According to Baker et al., a successful elimination approach however requires decisive science-backed government action and outstanding communication to create the social license needed for an effective response.⁷⁷³

One of the major difficulties in fighting the Covid-19 pandemic has been that compliance with scientific advice in many cases clashed with some of the basic principles of neoliberal ideology—especially the principle of the primacy of economic interests over all other (societal) interests, including public health⁷⁷⁴—which helps explaining that, especially in neoliberal jurisdictions, a policy was pursued that in many cases ignored scientific advice (in some cases even explicitly trivializing it). A simple comparison between the countries in which scientific advice was very faithfully followed, e.g., in Taiwan and, from a certain point in time, in New Zealand (cf. Sect. 2.4.2.4.), with countries in which neoliberal leaders—sometimes even leaning towards populism—did not make much attempts to hide their aversion to science, especially the United States (under US President Donald Trump) and Brazil (under President Jair Bolsonaro), already speaks volumes in this regard. This leads to the finding that the Covid-19 pandemic has not just been due to the "SARS-CoV-2"-virus itself, but also to the poor policy response of many (Western) governments, especially those pursuing a strong neoliberal course.⁷⁷⁵

⁷⁷²Baker et al. (2021).

⁷⁷³Baker et al. (2021).

⁷⁷⁴Cf. on this furthermore, Byttebier (2017), pp. 184–219; Byttebier (2018), pp. 144–146.

⁷⁷⁵This disrespect of scientific advice has not only been detrimental in countries as the United States, Brazil, the United Kingdom and several EU member states, but, as of March 2021, especially also in India. According to Ghoshal and Das, a forum of scientific advisers set up by the Indian government in December 2020 had already warned Indian officials in early March 2021 of a new and more contagious variant of the Covid-19 virus taking hold in the country. Despite this warning, the Indian, federal government did not seek to impose major restrictions to stop the spread of the Covid-19 virus. Then, shortly after, millions of largely unmasked people attended traditional, religious festivals, as well as political rallies that were organised by Prime Minister Narendra Modi, leaders of the ruling Bharatiya Janata Party and opposition politicians. Tens of thousands of farmers, meanwhile, continued to camp on the edge of New Delhi protesting Modi's agricultural policy changes. As a result of all this, by the end of April 2021, India-the world's second-most populous country—was struggling to contain a second wave of Covid-19 infections much more severe than the first wave it had endured in 2020, which some scientists said was being accelerated by both a new, "Indian" variant of the Covid-19 virus and the UK variant. India reported 386,452 new cases by Friday 30 April 2021, which was, moreover, a global record. The said warning about the new variant in early March 2021 had been issued by the Indian SARS-CoV-2 Genetics Consortium, or "INSACOG". The warning had been conveyed to a top official who reports directly to the prime minister. NSACOG had been set up as a forum of scientific advisers by the government in late December 2020, specifically to detect genomic variants of the Covid-19 virus that might threaten public health. INSACOG brought together ten national laboratories capable of studying virus variants. INSACOG researchers had first detected B.1.617, shortly after known as the "Indian variant" of the Covid-19 virus, as early as February 2021. INSACOG shared its findings with the health ministry's National Centre for Disease Control (NCDC) before 10 March 2020, warning that infections could quickly increase in parts of the country. The findings were then passed on to the

At a technical level, this Chap. 2, furthermore, has shown that Covid-19 transmission is mainly through airborne spread indoors, often from pre-symptomatic people. This highlights the value of face mask use and good ventilation, next to avoiding indoor activities with a multitude of people, while the risk from contaminated surfaces may have been overemphasized (especially during the first months of the Covid-19 pandemic). The Covid-19 virus, moreover, shows large "transmission heterogeneity" (only about 20% of infected cases are responsible for most of the transmission; so-called "super spreaders"), further underlining the importance of preventing super-spreading events.⁷⁷⁶

Baker et al. gave an overview of the most important key challenges that especially New Zealand will be facing the coming years. However, these recommendations can easily be generalized as best practice recommendations which may be useful for all countries. In the approach of Baker et al., countries, hence, face seven key challenges over the next years to weather the Covid-19 pandemic—and, by extensions, similar epidemics, or pandemics—and deliver a valuable and lasting public health legacy⁷⁷⁷:

(1) Improving border biosecurity: Preventing the (re-)introduction of Covid-19 virus—or similar viruses yet still unknown—into one's country remains the single most important short- to medium-term challenge to sustained elimination of a given virus. There are obvious benefits in taking a highly systematic approach to this process by considering the entire journey of travellers: from their week prior to departure, their flight in (during which they can become infected), a 2-week stay in MIQ facilities (where they can again become infected), and the period after leaving MIQ, when they remain at elevated risk

Indian health ministry. Around that same date, INSACOG began to prepare a draft media statement for the health ministry. A version of that draft set out the forum's findings: the new Indian variant had two significant mutations to the portion of the Covid-19 virus that attaches to human cells, and it had been traced in 15-20% of samples from Maharashtra, India's worst-affected state. The draft statement also said that the mutations, called E484Q and L452R, were of "high concern." It said "there is data of E484Q mutant viruses escaping highly neutralising antibodies in cultures, and there is data that L452R mutation was responsible for both increased transmissibility and immune escape." In other words, essentially, this meant that mutated versions of the virus could more easily enter a human cell and counter a person's immune response to it. The health ministry made the findings public about 2 weeks later, on 24 March 2021, when it issued a statement to the media that however did not include the words "high concern." The statement said only that more problematic variants required following measures already underway-increased testing and quarantine. The government then took no steps to prevent gatherings that might hasten the spread of the new variant, as new infections quadrupled by 1 April 2021, from a month earlier. E.g., Modi, some of his top lieutenants, and dozens of other politicians, including opposition figures, held rallies across the country for local elections throughout March 2021 and into April 2021. The government also allowed the weeks-long Kumbh Mela religious festival, attended by millions of Hindus, to proceed from mid-March. Meanwhile, tens of thousands of farmers were allowed to remain camped on the outskirts of the capital New Delhi to protest against new agriculture laws. (Cf. Ghoshal and Das (2021).)

⁷⁷⁶Baker et al. (2021).

⁷⁷⁷Baker et al. (2021).

of being infectious. The goal of having no infected people arriving in one's country, should become increasingly realistic. This should allow for the careful introduction of quarantine-free travel with other parts of the world that have also achieved elimination. Investing in purpose-built but versatile quarantine facilities at or near airports may offer important short- and long-term benefits.

- (2) Enhancing outbreak detection and management: For the near future, countries will need to maintain and enhance their systems for rapid detection and control of Covid-19 outbreaks—or considering warnings about other, near-future virus-related threats: outbreaks of similar viruses—as a backup measure for border failures. Promising enhancements include: the use of daily saliva testing of border workers and wastewater testing to detect community transmission sooner, as well as continuing improvements to contact tracing. The use of Covid-19 tracer apps (or, by extension, apps that trace other viruses as well) is still underdeveloped in most countries. An obvious improvement would be to make the use of such apps mandatory, e.g., when entering high-risk venues (nightclubs, indoor bars and restaurants, gyms, churches, entertainment venues ...) and by MIQ workers and recently returned travellers.
- (3) Simple and transparent methods of communicating measures of fighting Covid-19 (or similar, other viruses): Countries may benefit highly from the experience of New Zealand's four phases-alert level system. (Cf. Sect. 2.4.2.4.1.) The advantages of such a clear, simple, and transparent system are obvious, certainly for those living in a country such as Belgium, where Covid-19 measures have been changing every so many weeks (or even days) and even have a tradition of being conflicting among the layers of competent authorities—federal, communal, regional, provincial and local—making it impossible for the average citizen to keep track. By comparison, a system based upon threat level categories such as the one deployed by New Zealand is far simpler and clearer, practically eliminating the risk of not being able to keep track any changes in applicable measures.
- (4) Crowd and event control systems: There, obviously, needs to be a greater focus on limiting crowding in high-risk indoor environments, promoting face mask use (which is effective at reducing transmission) and using more geographically targeted and less disruptive "circuit-breaker lockdowns", and all this as soon as possible upon detection of a possible virus-related threat. The way Taiwan responded once it found out about a possible viral threat in China, has in this regard been exemplary. (Cf. Sect. 2.4.2.4.1.)
- (5) Delivering vaccinations more effectively and equitably: The matter of Covid-19 vaccines and vaccination campaigns shall be dealt with in Chap. 9 in more detail. Suffice here to mention that vaccination strategies should never follow the example of the early phase of the EU vaccination Covid-19 campaign (cf. Sect. 9.4.3.), but should prioritize effective border control, protect the most vulnerable and promote health equity. Achieving high coverage will depend on social engagement, community networks, and high-quality, comprehensive information systems such as an upgraded national immunization register (au lieu, as has been the case in Europe: on lying, twisting information,

withholding information, and even threatening people having doubts about a given vaccine...).

- (6) Establishing an effective public health agency: The Covid-19 pandemic provides a vivid illustration of the need to invest in effective public health infrastructure (as has also been pointed out, on numerous occasions, by the WHO and/or by WHO officials). A dedicated national agency is needed everywhere to create the critical mass of expertise in strategy and delivery. Such agency has been missing at the start of the Covid-10 pandemic in most countries, while the one Western country that had such efficient, abroad institutions, namely the United States, had managed to castrate them just before the Covid-19 outbreak (cf. Sect. 5.2. 2.6.). The presence of such an agency has, e.g., been a key feature in the highly effective Covid-19 response of Taiwan. The existence of such an agency may provide the critical mass needed to put disease prevention and preparedness at the core of government fields of interest.
- (7) Establishing optimal emergency decision-making processes: Countries such as Taiwan having such processes, benefited highly from them in their fight against Covid-19, as, more in general, from having a government that values scientific advice and is concerned with general well-being. Unfortunately, these are all qualities which have been low to inexistent on the agendas of many neoliberal governments all over the world.

One of the greatest legacies from the Covid-19 pandemic could be to institutionalize an improved set of processes for decision-making in emergencies that do more to foster learning, innovation, continuous quality improvement and transparency, next to a willingness to learn from countries that know better. Key changes could be:

- (a) Political processes that enable highly informed debate and scrutiny, while aiming for cross-party support of key response strategies (such as an ongoing epidemic response committee of parliamentarians).
- (b) Advisory processes that ensure high-level, multidisciplinary science input into the all-of-government response (e.g., the formation of a Covid-19 or virus-science council).
- (c) A well-resourced research and development strategy to ensure an elevated level of scientific evidence to shape the response and its evaluation.
- (d) Commitment to, and a timetable for, an official inquiry to assess a pandemic response and drive wider system improvements.

It should be clear from the foregoing that a fundamental change of course is imminent, one that calls for the replacement of the (neoliberal) myopic public policy of prioritizing economic interests, at the expense of all possible other interests—ranging from tracking health, to care for the environment—that inherently results from the dictates of economic neoliberalism, with a policy that again puts the common good, alongside care for the planet, first.

References

We have already urged the need for such a fundamental change in direction in our previous writings.⁷⁷⁸

In addition to the need to work towards a fairer socio-economic order (than has ever been possible under the dictates of economic neoliberalism) and care for the planet (particularly in view of climate change policy), Covid-19 has added a new, pressing reason for this already existing necessity, namely, to work towards a serious health policy focused on prevention. Whereas a planned approach is simply incompatible with the neoliberal dogmas that the government should interfere as little as possible with socio-economic themes, including health policy, but should leave these as much as possible to the dictatorship of the free markets, a small first step in the right direction could be for neoliberal governments all over the world to start abandoning "the laissez-faire, laissez-passer" axiom, and instead gradually taking responsibility for the interests of their entire populations, instead of just prioritizing the interests of the rich.

We shall come back to this in the following chapters.

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⁷⁷⁸Cf. e.g., Byttebier (2017), pp. 303–337. Cf., furthermore, Byttebier (2018), pp. 213–278, and Byttebier (2019), pp. 181–217.

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Chapter 3 Monetary Response to and Financial Implications of Covid-19



3.1 Monetary Response to Covid-19 in General

In the decade leading up to the outbreak of the Covid-19 pandemic, largely as a result of the severe financial crisis of 2007–2008 and the way countries and their monetary authorities responded to it, the major advanced economies were exposed to disinflationary pressures that had paved the way for an extended period of persistently low inflation. This had in many jurisdictions led central banks to keep their key interest rates close to zero, or even negative in some cases.¹

As a result of these low interest rates, the scope for further interest rate cuts had gradually diminished, which then had led many central banks to resort to a range of so-called "unconventional" monetary tools. These include "forward guidance", as well as various "balance sheet expansion measures" (usually referred to as "quantitative easing"), which aim to increase the degree of monetary expansion,² but which at the same time come very close to monetary financing.

Both the monetary authorities and a number of academics studying their behaviour believe that these unconventional measures have proven to be effective in responding to situations where conventional monetary policy had seen interest rates approaching their lower bound, implying that the margin for conducting an interest based monetary policy had become as good as inexistent (except for applying negative interests which central banks were not keen in doing). As a result, following the financial crisis of 2007–2008, the abovementioned unconventional monetary measures had become part of the monetary policy toolbox in what has been called the "new normal" for monetary policy,³ particularly at the level of the US Federal Reserve, the ESCB (EU) and the Bank of England.

¹Aguilar et al. (2020), p. 9.

²Aguilar et al. (2020), p. 9.

³Aguilar et al. (2020), p. 9.

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K. Byttebier, *Covid-19 and Capitalism*, Economic and Financial Law & Policy – Shifting Insights & Values 7, https://doi.org/10.1007/978-3-030-92901-5_3

In some economies, such as the United Kingdom and the United States, there had already been some degree of interest rate normalisation prior to the Covid-19 epidemic. In the euro area, on the other hand, interest rates were by then still at historically low levels.⁴ This latter fact can be explained by the fact that, following the severe financial crisis of 2008, several EU Member States, including Greece, Italy, Spain ... had been faced with severe financial difficulties that had put enormous pressure on the European Monetary System and the European System of Central Banks (ESCB), while these countries were themselves subject to severe austerity policies (cf. also Chap. 4.).

While monetary policy can help societies cope with temporary liquidity constraints—as happened during the 2008–2009 financial crisis, which Stiglitz referred to as the "Great Recession"—it cannot solve solvency problems, nor can it stimulate the economy further when interest rates are already close to zero.⁵ This could only happen if the monetary systems started to finance government activities directly, which in the EU they have been unwilling to do so far (because of a set of rules that are referred to as a "ban on monetary financing"). We shall come back to this issue later (cf. Chap. 11).

However, as a result of the Covid-19 pandemic, and in particular the severe containment measures that many countries around the world resorted to, many of these countries began their struggle with the economic consequences of Covid-19. Because of Covid-19, both advanced and developing economies fell back into recession which had not happened since the financial crisis of 2007–2008. According to Benmelech and Tzur-Ilan, already by April 2020, the world economy was projected to have contracted sharply by -3% in 2020, which implied a 6.3% decline from a pre-Covid-19 projection.⁶

Both governments (based upon fiscal policy measures to be further dealt with in Chap. 4.) and central banks (based upon monetary policy measures) responded to the Covid-19 pandemic and the economic crisis it brought along. This led to a deployment of fiscal and monetary tools on a scale that the world had never seen before. These policies were, moreover, advocated by global economic institutions such as the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD).⁷

However, from the outset of the Covid-19 pandemic, countries have been limited in their use of these fiscal and monetary tools. As noted, many high-income countries entered the Covid-19 crisis with interest rates that were already historically low. Similarly, their public debt levels were already very high (and in some countries

⁴Aguilar et al. (2020), p. 9.

⁵Stiglitz (2020a). Also Stiglitz (2020b).

⁶Benmelech and Tzur-Ilan (2020).

⁷Benmelech and Tzur-Ilan (2020).

extremely high), which had gotten even worse in the aftermath of the financial crisis of 2008.⁸

In this context, monetary institutions were faced with the challenge of assisting the economies of their countries which, by February 2020, had begun to suffer severely from the Covid-19 pandemic.

The monetary authorities in a wide variety of countries-in particular the ECB and the US FED—have done this by deploying special central bank programmes of "temporary debt assumption". According to Blakeley, it is even more important to understand what these imply for the economy than to understand the legal and/or technical details of each of these programmes which are extensive. The economic meaning of these programmes basically comes down to the fact that the governments of the jurisdictions concerned (in the United States through the US FED, and in the euro area through the ECB) demonstrated their willingness to support the debts of American, respectively European, consumers, companies and states, in order to prevent bankruptcies and/or to place a floor under falling asset prices (amongst which especially the market prices of financial assets). According to Blakely, this may at first glance seem like a positive sequence of short-term measures, as few would argue that the US FED, respectively the ECB, should simply have allowed consumer, corporate, state and municipal bankruptcies to happen. But according to the same author, this "new monetary (and fiscal) approach" at the same time revealed something profound about the nature of modern capitalism. As more corporate bankruptcies lie ahead, particularly in vulnerable sectors such as retail, the state is signalling that whatever debt has been accumulated during a period of upswing and whatever use it this has been put to in the past—when a crisis hits, the corporate world will be bailed out.9 The implications of this message-which had already been sent by many central banks around the world during and in the aftermath of the financial crisis of 2008—are profound. The message sent out in 2020–2021 has, moreover, remained consistent with the message that had been sent during the 2008 financial crisis, albeit with a much broader scope. The message was that the risks of running a good business have been "socialised", while the gains still remain private. As of March 2020, virtually all private companies in the United States and the EU thus became public(ly financed) companies, with shareholders and corporate executives protected, while the taxpaying public pays the price.¹⁰ According to Blakeley, the result of such a policy of infinite quantitative easing can only have been to continuously drive up (financial) asset prices at the expense of tax money, thus further exacerbating wealth inequality.¹¹ But in truth, piling new debt on top of old

⁸Benmelech and Tzur-Ilan (2020). For example, at the end of 2019, gross marketable debt of central governments was estimated at 72.6% of GDP for all OECD countries. (Cf. Benmelech and Tzur-Ilan (2020).)

⁹Blakeley (2020), p. xiv.

¹⁰Blakeley (2020), p. xiv.

¹¹Blakeley (2020), pp. xiv-xv.

unpayable debt—the same recipe that has been used during and after the 2008 financial crisis—will most likely only postpone the inevitable accountability.¹²

3.2 Monetary Response by the European Monetary Union

3.2.1 General

3.2.1.1 Background of the ECB Monetary Policy from 2008 Until 2020

The Covid-19 epidemic in the euro area has caused a double-dip crisis, more in particular a health crisis and an economic crisis. Both crises were, moreover, unprecedented in recent history. In response, the European economic authorities reacted strongly. According to Aguilar et al., the ECB in particular played a crucial role in the initial tightening of the financial conditions triggered by the Covid-19 pandemic in order to prevent the crisis from having a more serious impact on the real economy.¹³

Prior to the Covid-19 pandemic, the prospect of continuing a monetary policy based on persistently low interest and inflation rates had already implied a significant challenge to the conduct of monetary policy.¹⁴ Nevertheless, based on information from pre-pandemic yield curves, European financial markets expected the prevailing short-term interest rates to remain at levels significantly below their pre-2008 financial crisis-average values for some more years to come,¹⁵ especially given the high borrowing needs of various EU Member States that had suffered severely from the impact of the 2008 financial crisis.

The emergence of the Covid-19 virus in the euro area thus occurred against a backdrop of low inflation, and significant monetary stimulus, in particular (1) "quantitative easing" measures, with (2) key interest rates at historically low levels, (3) substantial new net asset purchases under the APP programme, and (4) a fixed schedule for long-term liquidity tenders under the TLTRO III programme.¹⁶

Notwithstanding this monetary climate, the ECB still responded quickly to the Covid-19 crisis, notably by resorting even more to "non-market conform" measures.¹⁷

As a result, a trend in EU monetary policy which had already started during and after the 2008 financial crisis, has been perpetuated, implying that for more than 12 years in a row, the EMU has been pursuing a monetary policy that may no longer

¹²Blakeley (2020), p. xv.

¹³Aguilar et al. (2020), p. 8.

¹⁴Aguilar et al. (2020), p. 9.

¹⁵Aguilar et al. (2020), p. 10.

¹⁶Aguilar et al. (2020), p. 12.

¹⁷Aguilar et al. (2020), p. 13.

be entirely in line with the neoliberal premises that the founding fathers of the 1992 Maastricht Treaty had in mind at the time. One of the most striking measures, which has not been entirely consistent with neoliberal monetary policy, was undoubtedly the prolonged maintenance of low, zero and/or negative interest rates, although the continued easing of the conditions under which financial institutions—and thus indirectly their various client-borrowers—had access to such "cheap" ECB credit may at the same time provide some indication that the EMU appears to have opened the door to a slightly more social monetary policy (albeit through the back door of monetary emergency measures and mainly to the benefit of the rich class of entrepreneurs).

Shortly after the first wave of the Covid-19 epidemic had reached the European continent, the ECB Governing Council, once more in its recent history, resorted to a broad arsenal of (new) monetary policy measures to deal with the economic fallout that resulted from this "first wave" of the Covid-19 pandemic. This occurred at several regular meetings of the ECB Governing Council that took place on 12 March 2020, 30 April 2020, and 4 June 2020, as well as at an extraordinary meeting that took place on 18 March 2020.¹⁸

As explained earlier (cf. Sects. 2.3 and 2.4.), in the fall and winter of 2020, countries of the euro area, moreover, experienced a severe second wave of the Covid-19 pandemic, with many countries again resorting to strict lockdown and other containment measures. On 10 December 2020, the Governing Council of the CBE recalibrated the ECB's monetary policy instruments in order to deal with the economic fallout from this second wave of the Covid-19 pandemic. The so-called "December 2020 Eurosystem staff macroeconomic projections for the euro area" at the time projected a headline inflation at 0.2% for 2020, at 1% for 2021, at 1.1% for 2022, and at 1.4% for 2023.¹⁹

As a result of these Covid-19 response monetary measures the ECB resorted to between 6 March 2020 and 29 January 2021, the Eurosystem's balance sheet increased by no less than 50% (i.e., by EUR 2300 billion).²⁰

The severity of the Covid-19 crisis also forced the ECB to shift to temporarily put its reform plans to be contained in a "monetary policy strategy review" on hold. This monetary policy review had initially been announced for the end of 2020. However, because of Covid-19, the ECB Governing Council decided to postpone this review until mid-2021.²¹

¹⁸Rakic (2021), p. 1.

¹⁹Rakic (2021), p. 1.

²⁰Rakic (2021), p. 1.

²¹Rakic (2021), p. 1.

In December 2019, the ECB had seen several reasons to start thinking about a review of the current monetary policy "in the context of structural changes in economies". In 2008, the countries of the euro area had experienced the worst financial and economic crisis, not only since the creation of the euro itself (in 1999), but also since the last 80 years, i.e. dating back to World War II and its aftermath. This at the time had a fundamental impact on the way monetary policy has been conducted ever since. By December 2019, the ECB, therefore, considered that the time was ripe

3.2.1.2 A Legal Discussion

On the road to implementing a monetary policy for dealing with the Covid-19 crisis, there was also a notable legal setback caused by the German Federal Constitutional Court, which touched on the question of whether or not some of the ("new") monetary policy instruments that had been deployed by the ESCB in recent years, contradicted the prohibition on monetary financing contained in EU law.

On 5 May 2020, this Court handed down a judgement which rejected a complaint that the "Public Sector Purchase Programme" (PSPP) effectively circumvents Article 123 of the Treaty on the Functioning of the European Union, which is the main instrument that prohibits monetary financing.

However, departing from an assessment by the EU Court of Justice, the German Constitutional Court had initially found that the Governing Council's decisions on the PSPP "lacked sufficient considerations of proportionality" and "amounted to an overreach of the ECB's powers".²² After a transitional period of up to 3 months, and in the absence of a decision by the ECB Governing Council demonstrating "in a comprehensible and substantiated manner that the monetary policy objectives pursued by the PSPP [were] not disproportionate to the economic and fiscal policy effects resulting from the programme", the Bundesbank would have been unable to further participate in the PSPP as a result of this court decision. The Bundesbank would, moreover, have been required to sell the bonds it already had purchased and held in its portfolio. Although this initial decision of Germany's constitutional court did not directly concern the monetary policy measures taken in response to the Covid-19 crisis itself, there could nevertheless have been implications for the PSPP

to re-examine both the responsiveness and effectiveness of its monetary policy measures, in a new context, in order to shed some more light on when which instruments had to be used in an environment that was said to be characterized by "secular stagnation", or "with recurring financial crises or economic recessions". In a 19 December 2019 policy paper commissioned by the European Parliament's "Committee on Economic and Monetary Affairs" (or, in short: ECON Committee), Blot et al. shared some initial thoughts on these issues, under reference to a wide variety of academic and policy documents. This paper comes highly recommended (cf. Blot et al. (2019), especially p. 12).

²²Cf. Bundesverfassungsgericht (2020).

The complainants had argued that the PSPP, amongst other things, violated the prohibition of monetary financing laid down in Article 123 TFEU. In its initial judgment, the Second Senate of the Federal Constitutional Court ("Bundesverfassungsgericht") had upheld several of the constitutional complaints against the ECB's "Public Sector Procurement Programme" (PSPP). The Court had found that "the Federal Government and the German Bundestag violated the rights of the plaintiffs under Art. 38(1) first sentence in conjunction with Art. 20(1) and (2), and Art. 79(3) of the Basic Law (Grundgesetz—GG) by refraining from taking measures challenging that the ECB, in its decisions on the adoption and implementation of the PSPP, neither assessed nor justified that the measures provided for in those decisions satisfied the principle of proportionality". However, in an earlier judgment of 11 December 2018 (cf. Judgment of the Court (Grand Chamber) of 11 December 2018, Weiss and Others, C-493/17, EU:C:2018:1000), the Court of Justice of the European Union (CJEU) had taken a different position in response to a request for a preliminary ruling.

On Article 123(1) TFEU, cf., furthermore, Tober (2015). p. 215.

section of the ECB's Covid-19 asset purchase programme, as well as with regard to other Covid-19 monetary measures. More legal challenges were feared, either in Germany or in other euro area countries.²³

Immediately after the publication of this initial court decision, the Governing Council of the ECB publicly stated that it had taken note of the German Constitutional Court's ruling, and in particular that²⁴:

The Governing Council remains fully committed to doing everything necessary within its mandate to ensure that inflation rises to levels consistent with its medium-term aim and that the monetary policy action taken in pursuit of the objective of maintaining price stability is transmitted to all parts of the economy and to all jurisdictions of the euro area.

The reaction of the ECB Governing Council was followed shortly afterwards by a statement of the President of the European Commission, Ursula von der Leyen,²⁵ and by a press release stemming from the EU Court of Justice. The ECB Governing Council then decided to comply with a disclosure request regarding several non-public documents relating to the PSPP, which were handed over to the Bundesbank. These documents were then made available to the German "Bundestag", which eventually reached the conclusion that the requirements which had been pointed out by the German Federal Constitutional Court had actually been met.²⁶

It is not easy to assess to what extent the final decision of the German Bundestag was not rather taken on the basis of political considerations, in particular an unwillingness to further endanger the stability of the euro area in the midst of a huge health crisis, rather than on the basis of a thorough legal assessment of the issue that was at hand (and which we shall readdress in Chap. 11.). In the end, Germany may not have wanted to take the risk of provoking a euro crisis, especially after the EU had just been faced with the Brexit debacle, and at a time when it was barely (or not at all) able to cope with the worst global health crisis in its existence.

3.2.2 Interest Rate Policy

As the ECB's key interest rates were already close to zero before the Covid-19 outbreak, there was not much room for the European monetary institutions to use this policy tool during the Covid-19 pandemic. With an economic recession looming, it was, furthermore, difficult to imagine what could still have been done in this area, unless key interest rates would have been positioned at negative rates. Faced with a serious health crisis, with all the negative economic consequences that this implied, the European monetary institutions clearly did not dare to make the latter choice.

²³Rakic (2021), p. 3.

²⁴Rakic (2021), p. 3.

²⁵Cf. European Commission (2020).

²⁶Rakic (2021), p. 3.

However, this did not prevent them from making extensive use of their other monetary arsenal (which we shall examine in the following subsections).

The meetings of the CBE Governing Council between March and December 2020, therefore, left the key interest rates for the euro area unchanged. These were as follows²⁷:

- (1) Main refinancing operations (MROs): 0.00% (as of March 2016).
- (2) Marginal lending facility: 0.25% (as of March 2016); and
- (3) Deposit facility: -0.50% (as of September 2019).

The ECB's forward guidance with regard to its key interest rates also remained unchanged (as articulated in the ECB Governing Council's decision of September 2019).²⁸

3.2.3 Deploying Monetary Tools in Response to the Covid-19 Outbreak

3.2.3.1 Refinancing Operations

3.2.3.1.1 General

The main measures the ECB resorted to as of early March 2020 in response to the Covid-19 crisis, focused on its "asset purchase programmes" (namely "APP" and "PEPP") and its "longer-term refinancing operations" (namely "LTROS", "TLTRO IIIs" and "PELTROS"). According to Aguilar et al., the measures the ECB resorted to had a threefold objective²⁹:

- (1) to ensure that the ECB's overall monetary policy stance would remain sufficiently accommodative;
- (2) to support the stabilisation of the financial markets in order to preserve the monetary policy transmission mechanism; and
- (3) to provide ample liquidity, in particular to maintain the flow of bank lending.

3.2.3.1.2 Longer-Term Refinancing Operations (LTROs)

The abbreviation "LTRO" refers to "Longer-Term Refinancing Operations".

It concerns a monetary instrument that is used by the European Central Bank (ECB) to lend money, at very low interest rates, to banks operating in the euro area.

²⁷Rakic (2021), p. 1.

²⁸Rakic (2021), p. 1.

²⁹Aguilar et al. (2020), p. 13.

Such longer-term refinancing operations generally show the following characteristics: (1) they involve injecting low-interest funds into euro area banks; (2) sovereign debt serves as collateral for the loans; (3) the loans are offered on a monthly basis, and (4) the loans are usually repaid in a time frame of 3 months, 6 months or 1 year.

In some cases, the ECB has also used longer-term refinancing operations with an even longer repayment duration, such as a 3-year refinancing operation that was launched in December 2011.³⁰

Long-term refinancing operations have basically been designed to have a dual impact: (1) increased bank liquidity and (2) lower sovereign debt yields.

These Longer-term refinancing operations are, on a legal-technical level, initiated via a standard auction mechanism. Upon announcing such an auction, the ECB itself determines the amount of liquidity that will be auctioned. The ECB at the same time asks commercial banks to express both their interest and conditions. The interest rates under which the loans will then be handed out, may be determined either in a "fixed rate tender" or in a "variable rate tender". Basically, the mechanism triggers commercial banks bidding against each other to access the (somehow "limited" amount of) liquidity made available by the ECB.³¹

LTROs have, in particular, become popular since the financial crisis of 2008. Before the financial crisis of 2008, the longest running such LTRO tender that had been offered by the ECB, had been for only 3 months. These former LTROs had, moreover, amounted to only EUR 45 billion (or about 20% of the total liquidity at the time provided by the ECB). As the financial crisis of 2008 further evolved, LTROs were handed out for both longer periods and larger amounts.³²

On 12 March 2020, in its initial response to the outbreak of the Covid-19 crisis, the Governing Council of the ECB made the decision to issue supplementary LTROs, on a temporary basis, in a full allotment procedure and at a fixed rate. The reason for this decision was to immediately provide additional liquidity to commercial banks, which could, moreover, act as a safety net in the event of further deteriorating money market conditions.³³

In total thirteen such supplementary LTROs have been held between 18 March 2020 and 10 June 2020. These all matured on 24 June 2020, and together provided EUR 388.9 billion of additional liquidity to the euro area financial system.³⁴

³⁰Kuepper (2021).

³¹Kuepper (2021).

³²Kuepper (2021).

³³Rakic (2021), p. 5.

³⁴Rakic (2021), p. 5.

3.2.3.1.3 Targeted Longer-Term Refinancing Operations (TLTROs)

Since 2014, the ECB has announced so-called "Targeted Longer Term Refinancing Operations"—or TLTROs, TLTROs II and TLTROs III—with as overall purpose to further stimulate market liquidity.³⁵ TLTROs are considered as unconventional monetary measures.³⁶

Within the Eurosystem, "Targeted Longer Term Refinancing Operations" or "TLTROs" are basically operations that provide long-term funding to credit institutions. They are based on the following logic: (1) By providing banks with long-term funding at attractive conditions, (2) they ensure favourable borrowing conditions to commercial banks, (3) thus stimulating the latter themselves to lend to the real economy. As a result, TLTROs are deemed instrumental in reinforcing the transmission of the monetary policy. TLTROs are in this way seen as an "accommodative monetary policy stance" which was resorted to by the ECB in order to reinforce the transmission of the monetary policy, by increasing both the capability and the incentive for commercial banks to lend to the real economy.³⁷ The mechanism was especially designed in light of the fact that commercial banks had become more reluctant to lend out money to third parties themselves, given the deteriorated economic climate and the credit risk such loans to third parties brought along.

In recent monetary history, a first round of TLTROs (comprising a total of eight operations) was announced on 5 June 2014, a second round (= referred to as "TLTROs II") on 10 March 2016, and a third round (= referred to as "TLTROs III") on 7 March 2019.³⁸

Under the first sequence of TLTROs—or TLTROs (I)—commercial banks that had met the lending targets of preceding operations, were allowed to borrow more in the subsequent operations, while those that had not done so, were asked to repay their TLTRO I loans earlier.³⁹ Through this, it was ensured that commercial banks were sufficiently incentivized to actually participate in the transmission of the monetary policy to the real economy by effectively granting loans to other economic agents.

In 2016, the second round of TLTROs—or TLTROs II—were launched. TLTROs II consisted of (only) four operations. This time, the incentives to make actual use of the financial means that were provided through the TLTROs II, were rather designed as "rewards" than as "penalties". This implied that lower interest rates were applicable to commercial banks whose net lending managed to exceed the agreed upon benchmark.⁴⁰

³⁵Kuepper (2021).

³⁶Rakic (2021), p. 6.

³⁷European Central Bank (2021a).

³⁸European Central Bank (2021a).

³⁹Rakic (2021), p. 6.

⁴⁰Rakic (2021), p. 6.

The TLTROS III were decided upon during the ECB Governing Council meeting of 7 March 2019, to be announced shortly afterwards.⁴¹ At that time, it was announced that a new series of TLTROS III would be launched, starting in September 2019 and ending in March 2021. Each of the operations under TLTROS III would have a maturity of 2 years and would be aimed at ensuring favourable bank lending conditions with regard to loans of commercial banks to third parties and, through this, at contributing to a smooth transmission of monetary policy.⁴²

The further operational details on TLTROs III were then unveiled on 6 June 2019. $^{\rm 43}$

The TLTROs III showed the following characteristics:

- (1) TLROs III consisted of a series of seven operations.
- (2) Each operation had a maturity of 3 years, starting in September 2019 at a quarterly frequency.
- (3) The borrowing rates of each of the operations were to be 50 basis points below the average interest rate of the deposit facility over the period from 24 June 2020 to 23 June 2022, and in each case as low as the average interest rate of the deposit facility over the remaining life of the respective TLTRO III.⁴⁴
- (4) Eligible loans to third parties were those granted to non-financial corporations and households in the euro area (including non-profit institutions serving households), however with the exclusion of mortgage loans to households.
- (5) In order to determine the baseline, commercial banks were assessed on the basis of the net eligible loans they had handed out during the period from 1 April 2018 to 31 March 2019. When eligible, net lending was positive or zero, and the benchmark was set to zero. Where it was negative, the benchmark was set at the level of the net eligible loan during that period.⁴⁵

As part of a further monetary policy package that was adopted on 12 September 2019, the terms of the TLTRO III were even more relaxed, with interest rates being

⁴¹European Central Bank (2019a).

During the meeting of the Governing Council of the ECB of 7 March 2019, it was also decided that the interest rate with regard to the main refinancing operations, as well as the interest rates on the marginal lending facility and the deposit facility, would remain unchanged at 0.00%, 0.25% and 0.40% respectively. At the same meeting, it was also decided that the Eurosystem's lending operations would continue to be conducted as "fixed rate tenders", with full allotment, for as long as needed and at least until the end of the reserve maintenance period starting in March 2021. (Cf. European Central Bank (2019a).)

⁴²European Central Bank (2019a).

Under these TLTRO-IIIs, counterparties were allowed to borrow up to 30% of the outstanding eligible loans as of 28 February 2019 at a rate indexed to the interest rate on the main refinancing operations during the life of each operation. Like the TLTRO programme already underway at the time, TLTRO-III had built-in incentives to keep credit conditions favourable. (European Central Bank (2019a).)

⁴³Rakic (2021), p. 6. Cf., furthermore, European Central Bank (2019b).

⁴⁴European Central Bank (2019c).

⁴⁵Rakic (2021), p. 6.

further reduced. These changes were then applied to a first TLTRO III operation that was to settle on 25 September 2019, as well as to a second operation that was to settle on 18 December 2019.⁴⁶

In response to the Covid-19 crisis, during the latter part of Q1 2020, the ECB felt the need to adopt a first set of expansionary measures on 12 March 2020.⁴⁷ In accordance with this decision, the terms and conditions of TLTROS III were eased, including a temporary reduction in the applicable interest rates (which were lowered to -0.75%). These more flexible term and conditions applied to all outstanding operations during the period from June 2020 to June 2021.⁴⁸ However, in response to the gradual deterioration of the economic situation due to the Covid-19 pandemic, the terms and conditions of the TLTROS III were further improved at the ECB's General Council meeting on 30 April 2020,⁴⁹ and again on 10 December 2020.⁵⁰

Already in its decision of 12 March 2020, the ECB decided to apply significantly more favourable terms and conditions to all TLTRO III operations between June 2020 and June 2021. This decision was specifically intended to encourage bank lending to the groups of economic agents most affected by the spread of Covid-19, in particular, on one side, small and medium-sized enterprises (SMEs) and, on the other side, the self-employed. A further consideration was that both these categories of economic players are, even in normal times, more dependent on bank lending (while it is, traditionally, very difficult, if not impossible, for these to obtain financing on the financial markets).⁵¹

Second, the ECB, furthermore, decided to issue a new long-term instrument, namely the "Pandemic emergency longer-term refinancing operations" or "PELTROs". The ECB hereby anticipated that additional operations would be needed for some commercial banks beyond June 2020. This insight made the ECB launch the new PELTROs⁵² on 30 April 2020, to afterwards extend them on 10 December 2020.⁵³ We shall deal with these PELTROs in the following subsection (cf. Sect. 3.2.3.1.4.)

During its meeting of 30 April 2020, the ECB General Council decided upon the relaxation of the operating terms and conditions with regard to the TLTROs III as

⁴⁶European Central Bank (2019d).

⁴⁷Aguilar et al. (2020), p. 13.

⁴⁸Rakic (2021), p. 6.

⁴⁹Aguilar et al. (2020), p. 13.

⁵⁰For further details, cf. European Central Bank (2019e).

⁵¹Aguilar et al. (2020), p. 13. For further technical details, cf. European Central Bank (2020a).

⁵²The abbreviation "PELTRO" refers to "pandemic emergency longer-term refinancing operations". PELTROs have been designed during the Covid-19 pandemic itself to provide liquidity support to the euro area financial system and to help preserve the smooth functioning of money markets, by offering a safety net after the expiry of the LTROs that had been conducted since March 2020. Counterparties participating in LTROs became able to benefit from collateral easing measures that were put in place until the end of September 2021. The PELTROs were announced by the ECB Governing Council on 7 and 23 April 2020. (Cf., furthermore, European Central Bank (2020b).)

⁵³Aguilar et al. (2020), p. 13.

well. One such relaxation measure implied the bringing forward of the start of the benchmark lending period by 1 month (to 1 March 2020). Another relaxation measure concerned reducing the applicable interest rates (to -1%), with regard to the period from June 2020 until June 2021.⁵⁴

In its further decision of 10 December 2020, as part of its further recalibration of the monetary policy instruments deployed to address the ongoing Covid-19 pandemic, the ECB Governing Council decided to extend the support granted through TLTROs III. One of the new elements that was decided upon implied that the period during which commercial banks meeting the lending benchmarks could obtain the maximum interest rate cut, was extended by one more year, until June 2022. Furthermore, the ECB decided to add three new TLTRO III operations, namely in June, September and December 2021, respectively.⁵⁵

Based on the extension that was decided upon on 10 December 2020, four additional PELTROs were to be offered on a quarterly basis during 2021. Each of these would have a duration of approximately 1 year. The first of these quarterly PELTROs of 2021 was announced for 23 March 2021.⁵⁶

3.2.3.1.4 Pandemic Emergency Longer-Term Refinancing Operations (PELTROs)

On 30 April 2020 the Governing Council of the ECB decided to conduct seven additional refinancing operations. These had the following characteristics: (1) they were against a fixed rate; (2) they were to be fully allocated; (3) they concerned non-targeted refinancing operations to be issued between May and December 2020; and (4) they had their maturity staggered between July and September 2021 (in line with the maturity of the applicable collateral easing measures).⁵⁷ Their applicable interest rate was then set at 25 basis points below the rate of the main refinancing operation.⁵⁸

These operations got known under the name "Pandemic emergency longer-term refinancing operations", or abbreviated "PELTROS. These PELTROS were particularly intended to provide liquidity support to the euro area financial system and to help preserve the smooth functioning of money markets by providing an effective safety net after the expiry of the bridge longer-term refinancing operations (LTROs)

⁵⁸Rakic (2021), p. 9.

⁵⁴Rakic (2021), p. 6.

⁵⁵Rakic (2021), p. 6.

⁵⁶European Central Bank (2020c).

⁵⁷Rakic (2021), p. 9.

Cf., furthermore, European Central Bank (2020d).

Cf., furthermore, European Central Bank (2020d).

that had been conducted in March 2020 by way of an immediate response to the outbreak of the Covid-19 pandemic.⁵⁹

One of the main further characteristics of the PELTROs was that their counterparties would be able to benefit from the collateral easing measures in place until the end of September 2021. This was announced by the ECB Governing Council on 7 April 2020 and on 23 April 2020. It was then also announced that the PELTROs would be conducted as fixed rate tenders and with full allotment, and that they would, moreover, be offered on very accommodating terms. The first of these PELTROs was ultimately announced for 19 May 2020, allotted on 20 May 2020 and settled on 21 May 2020.⁶⁰

On 10 December 2020, the Governing Council reached the decision to issue four additional PELTROs for 2021, each with a maturity of 1 year.⁶¹

3.2.3.2 Quantitative Easing

3.2.3.2.1 General

Previous decisions of the ECB Governing Council had provided substantial, additional monetary stimulus through the ECB's so-called "asset purchase programmes".

For instance, on 12 September 2019, the decision had been reached to conduct monthly net purchases of eligible assets for an amount of EUR 20 billion under the so-called "asset purchase programme" (abbreviated: "APP"). This measure was since then supplemented by an approval of purchases of assets for a further amount of EUR 120 billion which was to be used by the end of 2020. In addition, a new "Pandemic Emergency Purchasing Programme", or abbreviated "PEPP" was introduced. This programme was then, subsequently, increased to EUR 1.85 trillion, while intended to extinguish by March 2022.⁶²

Both these measures aimed to improve financing conditions on the financial markets by allowing for the decrease of the interest rates on government and corporate bonds.⁶³

⁵⁹https://www.ecb.europa.eu/press/pr/date/2020/html/ecb.pr200430_1~477f400e39.en.html.

⁶⁰https://www.ecb.europa.eu/press/pr/date/2020/html/ecb.pr200430_1~477f400e39.en.html.

⁶¹Rakic (2021), p. 9. Cf., furthermore, European Central Bank (2020e). Cf., furthermore, European Central Bank (2020f) and European Central Bank (2020g).

⁶²Rakic (2021), p. 2. Cf., furthermore, Aguilar et al. (2020), p. 13.

⁶³Aguilar et al. (2020), p. 13.

3.2.3.2.2 Asset Purchase Programme (APP)

The ECB's basic "asset purchase programme" (APP)⁶⁴ is, in general, part of a set of unconventional monetary policy measures that include targeted longer-term refinancing operations. The APP was first launched in mid-2014, with as double purpose: (1) to support the monetary policy transmission mechanism, and (2) to provide an amount of policy accommodation needed to ensure price stability.⁶⁵

Between October 2014 and December 2018, the Eurosystem made several net purchases of financial instruments under one or more of these "asset purchase programmes". Between January 2019 and October 2019, the Eurosystem, moreover, reinvested in full the principal payments it had received with regard to maturing securities already held in its APP portfolios.⁶⁶

On 12 September 2019, the ECB Governing Council made the decision that net purchases were to be restarted under the asset purchase programme (APP) at a monthly rate of EUR 20 billion, and starting on 1 November 2019.⁶⁷

3.2.3.2.3 Use of the APP During the Covid-19 Pandemic

Already on 12 March 2020, the ECB Governing Council took a Covid-19 early response measure of increasing the existing envelope for net purchases under the APP, with an amount of EUR 120 billion to be used by the end of 2020.⁶⁸ As with the PEPP (cf. Sect. 3.2.3.2.4.), an emphasis was put on flexibility, based on "temporary fluctuations in the distribution of purchase flows both across asset classes and across countries". All purchases continued to be guided by the so-called ECB's long-term capital key.⁶⁹

In the period from March 2020 until January 2021, the Eurosystem made net purchases for an amount of EUR 333.2 billion under the APP.⁷⁰

⁶⁹Rakic (2021), p. 5.

The Eurosystem would also continue to reinvest the principal payments of already matured APP assets (cf. Rakic (2021), p. 5): "Reinvestments of the principal payments from maturing securities purchased under the APP will continue, in full, for an extended period of time past the date when the Governing Council starts raising the key ECB interest rates, and in any case for as long as necessary

⁶⁴Cf., furthermore, Aguilar et al. (2020), p. 13.

⁶⁵Aguilar et al. (2020), p. 13.

⁶⁶European Central Bank (2018).

⁶⁷Aguilar et al. (2020), p. 13.

⁶⁸Rakic (2021), p. 5.

⁷⁰Rakic (2021), p. 5.

Beyond the additional envelope, the Governing Council maintained the September 2019 formulation of the forward guidance on the APP (cf. Rakic (2021), p. 5): "The Governing Council continues to expect monthly net asset purchases under the APP to run for as long as necessary to reinforce the accommodative impact of its policy rates, and to end shortly before it starts raising the key ECB interest rates". (Rakic (2021), p. 5.)

3.2.3.2.4 Pandemic Emergency Purchasing Programme (PEPP)

By 18 March 2020, the outlook of the euro area economy had deteriorated considerably. This was partly due to the announcement of severe lockdowns and other containment measures in several countries. A further factor of importance was a sharp rise in interest rates on sovereign and corporate debt. This rise was, moreover, very uneven across countries. It was, e.g., much more pronounced in countries such as Italy and Spain, as these countries had been the hardest hit by the Covid-19 pandemic, and because their fiscal position had already been less comfortable at the beginning of the Covid-19 crisis.⁷¹

According to Aguilar et al., within the euro area, the sovereign yields—i.e., the interest rates against which governments can borrow—of each of the EU Member States play a central role in the transmission of monetary policy to the real economy. Obviously, sovereign yields are of great importance for the financing costs of countries and their governments themselves. However, sovereign yields are also considered to be a key benchmark for determining the capital market financing costs of financial institutions: when e.g., the interest rates on government bonds increase, the financing cost for financial institutions borrowing on the financial markets also increases. In their own turn, such increased costs of funding raised by commercial banks themselves are reflected in the costs of bank lending towards third parties. This implies that sovereign yields, ultimately, may affect the interest rates on bank loans in an indirect manner. As explained before, especially SMEs, the self-employed and households are heavily dependent on such bank loans, implying that all of these may be severely affected by rising sovereign yields.⁷²

In view of this situation, on its extraordinary meeting of 18 March 2020, the Governing Council the ECB announced the so-called "Pandemic Emergency Purchase Programme" (in short "PEPP") with as aim to support the issuers of a variety of financial instruments by help keeping the interest rates on these low.

In essence, the same categories of both public sector and corporate sector financial assets were to be purchased under this PEPP as under the pre-existing, more traditional APP. One of the main differences between the APP and the PEPP has, however, been that, under the PEPP, purchases were to be made in a much more flexible manner. This, e.g., concerned the fact that fluctuations in their allocation were allowed, not only over time, but also between jurisdictions, as well as between asset classes. In this way, the ECB intended to avoid financial fragmentation, to the extent that the latter could impede or hamper the transmission of its monetary policy to the financial conditions of further loans in some euro area countries.⁷³

to maintain favourable liquidity conditions and an ample degree of monetary accommodation". (Rakic (2021), p. 5.)

⁷¹Aguilar et al. (2020), p. 13.

⁷²Aguilar et al. (2020), p. 13.

⁷³Aguilar et al. (2020), p. 13.

The planned asset purchases, also known as "quantitative easing" or, in short "QE", were specifically intended to support economic growth across the euro area, and, moreover, to help return inflation to levels below, but close to, 2%.⁷⁴

The PEPP was initially implemented with an envelope amounting to EUR 750 billion, set until the end of 2020.⁷⁵ However, already on 4 June 2020, it was decided to increase this initial envelope to EUR 1350 billion until at least the end of June 2021. It was, furthermore, at the same time announced that, as had been the case under the APP itself, maturing principal payments on financial instruments that had in the past been purchased under the PEPP, would be reinvested until at least the end of 2022.⁷⁶

On 10 December 2020, the Governing Council of the ECB took a decision to further increase the PEPP envelope by an additional amount of EUR 500 billion, to a new total of EUR 1850 billion. Moreover, the horizon for net purchases under the PEPP was, similarly, extended to at least the end of March 2022. The reinvestment period for maturing principal repayments under the PEPP was also extended to at least the end of 2023. The Governing Council also made the announcement that it would continue to make net purchases under the PEPP, until it would be of the opinion that the Covid-19 crisis was over.⁷⁷

Both the PEPP, as well as new purchases under the more traditional APP, were intended to significantly increase the portfolio of the Eurosystem's financial assets acquired under its purchase programmes.⁷⁸ The PEPP, more in particular, significantly eased the conditions for such financial assets purchases, in this manner also easing the overall financial conditions in the euro area. As had been the intention, especially sovereign debt yields significantly decreased upon the announcement of the PEPP.⁷⁹

Already by early September 2020, net purchases of both public sector and corporate sector financial assets under the PEPP had reached a total amount of EUR 497 billion since it had been first launched at the end of March 2020. This amounted to 37% of the total amount planned. On said date, Spanish public sector bond purchases accounted for around 12.9% (or around EUR 46 billion) of the total public sector bond purchases under PEPP of all euro area countries considered together. This was slightly more than the corresponding capital key (of 11.92%) (according to preliminary ECB data of the end of July 2020).⁸⁰

In the period from March 2020 until January 2021, the Eurosystem was said to have purchased EUR 810 billion of eligible financial assets under the PEPP.⁸¹

⁷⁴European Central Bank (2021b).

⁷⁵Rakic (2021), p. 3.

⁷⁶Aguilar et al. (2020), p. 13; Rakic (2021), p. 3.

⁷⁷European Central Bank (2020h). Cf., furthermore, Rakic (2021), p. 3.

⁷⁸Aguilar et al. (2020), p. 13.

⁷⁹Aguilar et al. (2020), p. 13.

⁸⁰Aguilar et al. (2020), p. 13.

⁸¹Rakic (2021), p. 3.

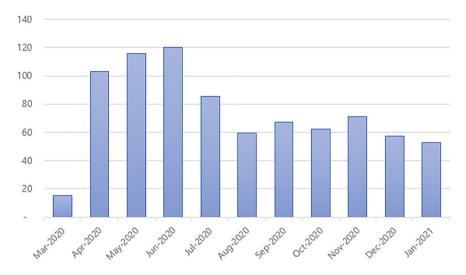


Fig. 3.1 PEPP: net asset purchases by month, March 2020–January 2021 (EUR billion) [Source: Rakic (2021), p. 3]

Figure 3.1 gives a representation of the PEPP net asset purchases by month, from March 2020 until January 2021 (in EUR billion).

It is no surprise that the public sector component of the PEPP purchases was by far the most important: during the abovementioned period from March 2020 until January 2021, it was, more precisely, reported to amount to EUR 768 billion (or 94.8% of total purchases). By January 2021, the most significant deviations from the capital key were reported with regard to Italy (for +2.1%) and France (for -1.7%). However, dating back to the beginning of PEPP purchases in March 2020, this kind of deviations from the capital key were reported to have been gradually decreasing across the board.⁸²

The private sector component of PEPP net purchases was considerably less important and amounted to only EUR 42 billion during the abovementioned period from March 2020 until January 2021.⁸³

According to the ECB's so-called "fifth bi-monthly breakdown of holdings under the Pandemic Emergency Purchase Programme (PEPP)" which more specifically covered the period from December 2020 through January 2021, the ECB made net purchases of EUR 110.2 billion (book value) of bonds under the PEPP, taking the total by the end of January 2021, to the already mentioned figure of EUR 810 billion (i.e., the sum of EUR 768 billion in government bond assets and EUR 42 billion in private sector assets), which accounted for 60% of the total envelope of EUR 1350 billion of purchases targeted under the Programme. January 2021 had

⁸²Rakic (2021), p. 3.

⁸³Rakic (2021), p. 4.

accounted for the lowest full-monthly purchase rate since the PEPP had launched (with an amount of "only" EUR 53 billion). Purchases of public sector bonds accounted for EUR 116.3 billion with regard to the period between December 2020 and January 2021, compared to EUR 140.2 billion for the period October–November 2020, EUR 126.8 billion for the period August–September 2020, EUR 198.2 billion for the period June–July 2020, and EUR 186.6 billion for the period March–May 2020, taking the total cumulative net purchases to the already above-mentioned amount of EUR 768.1 billion. Purchases remained heavily concentrated in government bonds issued by Germany (EUR 28.1 billion), France (EUR 21.8billion), and Italy (EUR 18.1 billion).⁸⁴

3.2.3.3 Corporate Sector Purchase Programme (CSPP)

At the above-mentioned extraordinary meeting of the Governing Council of the ECB on 18 March 2020, it was decided to include so-called "non-financial commercial paper" in the range of assets eligible under the "Corporate Sector Purchase Programme" (CSPP). At the same time, this CSPP was intended to apply to purchases made under the PEPP.⁸⁵

The aim of this measure was to ease tensions in the money market (targeted at enterprises with no access to the financial markets).⁸⁶

Such (non-financial) commercial paper may be defined as short-term debt security which is commonly used by (smaller) enterprises (in order to meet short-term liabilities).⁸⁷

Already before, certain specific types of commercial paper had been eligible for purchases under the CSPP since its launch in March 2016.⁸⁸ However, until March

⁸⁴Hill (2021b), pp. 2–3.

⁸⁵Rakic (2021), p. 5.

⁸⁶Cf., furthermore, Rakic (2021), p. 5.

⁸⁷In order to qualify for purchase under the CSPP, debt instruments must have either (i) an initial maturity of 365/366 days or less and a minimum remaining maturity of 28 days at the time they are bought, or (ii) an initial maturity of 367 days or more, a minimum remaining maturity of 6 months and a maximum remaining maturity of less than 31 years (i.e. purchases of securities with a remaining maturity of 30 years and 364 days are possible) at the time they are bought. The upper limit is in line with that applied to the public sector purchase programme (PSPP). The lower limit ensures that assets issued by small and medium-sized corporations are also part of the universe of eligible debt instruments. (Cf. European Central Bank (2021c).) Moreover, for a debt instrument to be eligible for purchase under the CSPP, the issuer should not be a credit institution or have any parent undertaking (as defined in Article 4(15) of the Regulation (EU) No 575/2013) which is a credit institution (as defined in Article 2(14) of Guideline ECB/2014/60). Insurers that fulfil these criteria are eligible issuers. (Cf. European Central Bank (2021d).)

⁸⁸The announcement in 2016 of the extension of the ECB's "Asset Purchases Programme" (APP) to include investment-grade euro-denominated bonds issued by non-bank corporations established in the euro area had significant implications for European corporate bond markets, both primary and secondary, impacting investors, dealers, and issuers. The initial "Corporate Sector Purchase

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2020, only commercial paper with a remaining maturity exceeding 6 months was eligible for such CSPP purchases. This was to be changed as part of the ECB Governing Council decision of 18 March 2020, when it was decided to extend the maturity range of such non-financial commercial paper eligible for purchases under the CSPP.⁸⁹

The Eurosystem started the purchases of this wider range of CSPP-eligible non-financial commercial paper on 27 March 2020.⁹⁰

By January 2021, the total net cumulative purchases of such non-financial commercial paper under the CSPP amounted to EUR 255.3 billion. Of these, EUR 54.8 billion, or 21%, had been "primary market" purchases, while EUR 200.6 billion, or 79%, had been secondary market purchases. Including the EUR 22.3 billion purchases of (eligible) corporate bonds under the PEPP (cf. Sect. 3.2.3.2.4.), this took the total net cumulative purchases of bonds issued by "enterprises" to EUR 277.6 billion.⁹¹

According to Hill, the ICMA estimated the presence of a universe of CSPP eligible bonds by the end of January 2021 amounting to a nominal value of EUR 1091 billion. If this figure is correct, this implies that 25% of all eligible bonds were being held under the ECB purchase programs (which then was indirectly financing a quarter of all loans made available in the euro area). Based on the 70% upper limit for purchases of individual ISINs, this also implied that purchases were at 36% of capacity, leaving an available pool of slightly less than EUR 500 billion for further purchases.⁹²

3.2.4 EMU Collateral Framework

3.2.4.1 Origin and Original Scope

The so-called "Eurosystem Collateral Framework" (abbreviated: "ESCF") is said to play a crucial role in the implementation of the monetary policy in the euro area.⁹³

Article 18 of the Statute of the European System of Central Banks (ESCB) and of the European Central Bank (ECB) stipulates as follows:

18.1. In order to achieve the objectives of the ESCB and to carry out its tasks, the ECB and the national central banks may:

Programme" (CSPP) ended in December 2018, with the ECB maintaining holdings of a book value close to EUR 180 billion. In September 2019, the ECB announced that it would be restarting its APP from November 2019, including the resumption of the CSPP. In March 2020, in response to the Covid-19 pandemic, the ECB announced further temporary measures. (Cf. Hill (2021a).) ⁸⁹European Central Bank (2021e).

⁹⁰European Central Bank (2021e).

 $^{^{91}}$ Hill (2021a).

⁹²Hill (2021a).

⁹³Rakic (2021), p. 10.

- operate in the financial markets by buying and selling outright (spot and forward) or under repurchase agreement and by lending or borrowing claims and marketable instruments, whether in euro or other currencies, as well as precious metals;

- conduct credit operations with credit institutions and other market participants, with lending being based on adequate collateral.

18.2. The ECB shall establish general principles for open market and credit operations carried out by itself or the national central banks, including for the announcement of conditions under which they stand ready to enter into such transactions.

This implies that credit accorded to credit institutions may, in principle, only be granted against adequate collateral. The way the Eurosystem deals with this collateral is based on a so-called "general" and "temporary" framework.⁹⁴ One of the basic legal documents in this regard is the Guideline (EU) 2015/510 of the European Central Bank of 19 December 2014, and more specifically the Part 4 of this Guideline, with Article 58.2. of the Guideline stating in general that:

[i]n order to participate in Eurosystem credit operations, counterparties shall provide the Eurosystem with assets that are eligible as collateral for such operations. Given that Eurosystem credit operations include intraday credit, collateral provided by counterparties in respect of intraday credit shall also comply with the eligibility criteria laid down in this Guideline, as outlined in Guideline ECB/2012/27.

The ESCB itself had already been conceived before 1 January 1999, when the euro was introduced. 95

According to Bindseil et al., the ESCB then evolved over the following years through a series of ongoing adaptations implemented in 2005, 2009–2010 and 2011-2012.⁹⁶

When the ESCB had initially been conceived, it was considered that the ECB would implement the euro area monetary policy mainly through credit operations. These credit operations would basically be offered, on a regular basis, to a wide range of counterparties, especially credit institutions, and would also be rather large.⁹⁷ However, following the financial crisis of 2008, the monetary instruments resorted to by the ESCB, and hence also its collateral framework, had to undergo drastic changes.⁹⁸ This was reflected in the adaptations of the ESCB in 2008 and in 2011–2012. These adaptations resulted in an expansion of the collateral framework in order ensure that sufficient collateral for the monetary framework still to function, remained available. This expansion took several forms, including⁹⁹:

(1) A relaxation of the "minimum credit quality requirements".

⁹⁴Rakic (2021), p. 10.

⁹⁵Bindseil et al. (2017), p. 19.

⁹⁶Rakic (2021), p. 10.

⁹⁷Bindseil et al. (2017), p. 19.

⁹⁸Rakic (2021), p. 10.

⁹⁹Bindseil et al. (2017), p. 24.

This relaxation was intended to include the full investment-grade credit quality, instead of only the top end. This was said to reflect the weakening of the average rating of euro area issuers.

(2) A relaxation of requirements and risk control measures for so-called "simpler ABS", i.e., asset-backed securities.

This relaxation was reported to be made with a view of increasing transparency in the form of ABS loan data.

(3) The acceptance of "additional types of credit claims" (ACCs) in some euro area countries.

The most specific element of this easing down of the EMU collateral framework is believed to concern the so-called "additional credit claims" (ACCs). More precisely, in December 2011, the Governing Council of the ECB announced that the national central banks of the euro area countries would, henceforth, albeit on a temporary basis only, be allowed to accept such ACCs as collateral. The eligible ACCs were, furthermore, subjected to specific national credit claim eligibility criteria and risk control measures that differed from the general collateral framework. The national eligibility criteria for these ACCs were then first approved on 9 February 2012. On 7 June 2019, the ACCs frameworks were extended until the maturity date of the last TLTRO III operation in March 2024.¹⁰⁰

3.2.4.2 Adaptation to the EMU Collateral Framework due to Covid-19

As one of the early response measures to the Covid-19 crisis, on 18 March 2020, the Governing Council of the ECB announced its decision to include claims related to the financing of the corporate sector in the ACC framework.¹⁰¹ The scope of eligible ACCs was thereto expanded to include claims related to the financing of the corporate sector. This decision was made in order to ensure that the counterparties to such claims would still be able to continue to make full use of the Eurosystem's refinancing operations.¹⁰²

On 7 April 2020, the Governing Council of the ECB, subsequently, adopted a so-called "temporary collateral easing package". This measure was especially aimed at facilitating the availability of eligible collateral for Eurosystem counterparties, in order to lower the threshold for participating in certain liquidity-providing operations, such as TLTROS III.¹⁰³ This package was, moreover, intended to complement other refinancing measures that had already before been announced by the ECB as

¹⁰⁰Rakic (2021), p. 10.

¹⁰¹Rakic (2021), p. 10.

¹⁰²European Central Bank (2020i).

¹⁰³Cf. Decision (EU) 2020/506 of the European Central Bank of 7 April 2020 amending Guideline (EU) 2015/510 on the implementation of the Eurosystem monetary policy framework and Guideline (EU) 2016/65 on valuation haircuts applied in the implementation of the Eurosystem monetary policy framework (ECB/2020/20), http://data.europa.eu/eli/dec/2020/506/oj.

part of its efforts for fighting the economic effects of Covid-19, such as LTROs and PEPP-operations. Together, these measures were aimed at supporting the supply of bank loans to households and enterprises, in particular by easing the conditions under which these credits were to be accepted as collateral under monetary refinancing operations. At the same time, the Eurosystem increased its risk tolerance in order to support lending under its refinancing operation programmes even further, in particular by consistently lowering the so-called "haircuts on collateral" (referring to the difference between the (perceived) value of the collateral, and the amount for which it is accepted by the refinancing party) for all assets concerned.¹⁰⁴

The main objective of these measures was, obviously, to increase the ability of commercial banks to apply for funds under the Eurosystem's refinancing operations (more precisely MROs, LTROs, TLTROs III, and PELTROs). This in turn led to supporting commercial banks' own lending to enterprises and households, inter alia, by easing the conditions under which credit claims were to be accepted as collateral for the purposes of said refinancing operations.¹⁰⁵

From a more technical perspective, the ECB first reduced the "haircuts on collateral" by a fixed factor amounting to 20%.¹⁰⁶ This adjustment was an important part of the "collateral relaxation measures". It was at the same time aimed at maintaining a sufficient and consistent level of protection for all types of eligible collateral, albeit at a temporarily lowered level.¹⁰⁷

Second, the Governing Council adopted the following temporary easing-down measures¹⁰⁸:

(1) A lowering of the level of the "non-uniform minimum size threshold" for domestic credit claims to EUR 0 (from EUR 25,000 before).

This measure was taken in order to facilitate the mobilisation of loans to small legal entities as eligible collateral.

(2) An increase from 2.5% to 10% with regard to the maximum share of unsecured debt securities, issued by a single other banking group, as part of a credit institution's collateral pool.

This measure was intended to allow counterparties to benefit from a larger share of these assets.

(3) A waiver of the minimum credit standard for marketable debt instruments issued by Greece and intended to be accepted as collateral in Eurosystem credit operations.¹⁰⁹

Third, the Governing Council of the ECB decided on a package of measures aimed at increased bank financing by the ECB against collateral consisting of loans

¹⁰⁴Cf., furthermore, Aguilar et al. (2020), p. 17; Rakic (2021), p. 10.

¹⁰⁵Aguilar et al. (2020), p. 17.

¹⁰⁶Aguilar et al. (2020), p. 17.

¹⁰⁷European Central Bank (2020j).

¹⁰⁸European Central Bank (2020j).

¹⁰⁹Aguilar et al. (2020), p. 17.

to enterprises and households. This was, as mentioned above, to be achieved by expanding the use of credit claims as collateral, in particular through the potential extension of ACC-facilities.¹¹⁰

In this respect, the Governing Council of the ECB temporarily extended the ACC frameworks by¹¹¹:

- (1) Adapting the collateral requirements to include state and public sector guaranteed loans to enterprises, SMEs, the self-employed and households under the ACC frameworks. This measure was at the same time intended to provide liquidity for loans benefiting from the new guarantee schemes adopted in the euro area Member States in response to the Covid-19 pandemic.
- (2) Broadening the scope of acceptable credit assessment systems to be used within the context of ACC frameworks, e.g., by facilitating the acceptance of bank credit assessments from supervisor-approved internal rating systems.
- (3) Reducing reporting requirements under the ACC framework, in order to allow counterparties to benefit from the softened ACC frameworks even before the necessary reporting infrastructure was put in place.

All of these measures, to the extent that they were issued on a so-called "temporary basis" only, were intended to remain in force "for the duration of the Covid-19 crisis" and were linked to the duration of the underlying refinancing operations.¹¹²

It was, moreover, announced that the temporary measures would be reassessed before the end of 2020. At the latter time, it would, furthermore, be evaluated whether it would be necessary to extend some of these measures, all of this in light of the overall aim of ensuring that the participation of the Eurosystem's counterparties in the ECB's liquidity-providing programmes would not be affected.¹¹³

On 22 April 2020, the Governing Council of the ECB, furthermore, adopted one more easing measure. In light of the uncertain economic climate, this measure concerned the insulation of the availability of eligible collateral from possible downgrades. It was, more precisely, decided that assets that complied with the "minimum credit quality requirements" in order to be eligible as collateral on the date of 7 April 2020 (which at least implied equivalency to BBB-, with the exception of ABSs-collateral) would continue to remain eligible in the event of a later downgrade, provided that their rating would at least remain at, or above, BB. ABS eligibility under the general framework (implying a rating equivalent to A-) was to be similarly grandfathered as long as their rating would remain at, or above, a rating equivalent to BB+.¹¹⁴

¹¹⁰European Central Bank (2020j).

¹¹¹European Central Bank (2020j).

¹¹²European Central Bank (2020j). Cf., furthermore, Rakic (2021).

¹¹³European Central Bank (2020j). Cf., furthermore, Rakic (2021).

¹¹⁴European Central Bank (2020k); Rakic (2021), pp. 10–11.

On 10 December 2020 the ECB Governing Council effectively decided to extend the duration of the collateral easing package that it had adopted in April 2020. This was still justified in light of the overall purpose to allow commercial banks to make full use of the Eurosystem's liquidity and/or refinancing operations.¹¹⁵

3.2.5 Currency Repo and Swap Lines

Swap lines may be defined as agreements between central banks in which they agree upon the exchange of currencies in order to maintain the liquidity of foreign currencies when markets are distorted.¹¹⁶

As regards the dollar-euro relationship, the need for such agreements became particularly pronounced following the 2008 global financial crisis. In that period, the ECB first entered into several bilateral swap arrangements with the central banks of a number of other jurisdictions. Furthermore, by October 2013, the Bank of Canada, the Bank of England, the Bank of Japan, the ECB, the US Federal Reserve and the Swiss National Bank reached a multilateral agreement to replace the pre-existing temporary bilateral liquidity swap lines by so-called (mutual) "standing arrangements".¹¹⁷ The new standing arrangements were aimed at forming a network of bilateral swap lines between said six central banks. These arrangement were to provide liquidity to each of the concerned jurisdictions in either one of the five other currencies outside of that jurisdiction, provided that the two central banks involved (the one in need of the foreign currency, and the other the issuer of that currency) would be of the opinion that market conditions warranted such an exchange action of their currencies. The standing arrangements were also intended to serve as a prudent liquidity backstop.¹¹⁸

On 15 March 2020, in light of the Covid-19 crisis, the same six central banks jointly decided to improve the provision of USD liquidity at a global level through their existing standing arrangements, by resorting to the following measures: (a) lowering the price of USD swap transactions (at the USD overnight index swap rate + 25 basis points), and (b) adding weekly USD transactions with a maturity of 84 days (in addition to the existing weekly transactions, with a maturity of 1 week only).¹¹⁹ On 20 March 2020, these arrangements were further reinforced by changing the frequency of the existing 1-week maturity operations from a weekly basis, to a daily basis. At the same time, the new 84-day maturity operations were

¹¹⁵Rakic (2021), p. 11. Cf., furthermore, European Central Bank (2020h).

¹¹⁶Rakic (2021), p. 11.

¹¹⁷Rakic (2021), p. 11.

¹¹⁸https://www.ecb.europa.eu/press/pr/date/2013/html/pr131031.en.html.

¹¹⁹Rakic (2021), p. 11. Cf., furthermore, European Central Bank (2020l).

continued.¹²⁰ Said daily operations started on Monday, 23 March 2020, to be continued until at least the end of April 2020.¹²¹ As of 1 July 2020, the frequency of the 1-week trades was decreased from daily, to three times a week.¹²² From 1 September 2020 on, the frequency was again further reduced from three times a week, to only once a week.¹²³

In turn, the ECB committed to provide euro liquidity to a number of central banks in its geographical vicinity, by means of both temporary bilateral repo lines and swaps.¹²⁴

On 25 June 2020, the ECB established the so-called "Eurosystem repo facility" for central banks (abbreviated as: "EUREP"). EUREP was established in order to complement the existing swap and reverse repo lines. Under this facility, the ECB could provide euro liquidity to non-euro area central banks against collateral. This collateral was to consist of marketable euro-denominated debt instruments, issued by either euro area governments or supranational institutions.¹²⁵ This facility was announced to be available until June 2021. While this facility was made available to a wide range of non-euro area central banks, it was compared to a traditional, bi-lateral repo line, more expensive, with moreover the range of the collateral involved being more limited.¹²⁶

On 10 December 2020, in view of the economic fallout from the so-called second wave of the Covid-19 pandemic, the Governing Council of the ECB decided to extend EUREP, as well as all other temporary swap and repo lines until March 2022.¹²⁷

Cf., furthermore, Rakic (2021), p. 11.

¹²⁰Rakic (2021), p. 11.

Cf., furthermore, European Central Bank (2020m).

¹²¹European Central Bank (2020m).

¹²²European Central Bank (2020n).

Cf., furthermore, Rakic (2021), p. 11.

¹²³European Central Bank (2020o).

¹²⁴Rakic (2021), p. 11.

Repurchase agreements are used to provide euro liquidity to non-euro area central banks in exchange for euro-denominated collateral. Swap lines are used by the ECB to exchange euros for other currencies. (Cf. Rakic (2021), p. 11.)

¹²⁵ By providing euro liquidity to a wide range of non-euro area central banks in times of crisis, EUREP is said to reduce the risks associated with liquidation episodes of euro-denominated assets and the spread of market failures from other economies to the euro area, including through effects on global confidence. EUREP has, therefore, been indicated as "a backstop facility", which implies that its pricing is chosen to make it attractive only under adverse market conditions. (Cf. European Central Bank (2020p).)

¹²⁶Rakic (2021), p. 12.

¹²⁷Rakic (2021), p. 12.

3.2.6 Evaluation

According to calculations made by Hans-Werner Sinn, professor of economics at the University of Munich and president of the IFO Institute for Economic Research, from the start of the 2008 financial crisis until January of 2021, the net asset purchases of the ECB and the national central banks that form the eurozone system, have totalled the amazing sum of EUR 3.8 trillion. Of this amount, the lion's share, estimated at over EUR 3 trillion, comprised financial instruments issued by state and quasi-governmental bodies.¹²⁸

According to Sinn, for obvious reasons, political resistance to any reversal of these asset purchases has become so great that it may be assumed that such a reversal is not likely to take place in the near future, if ever. Indeed, given the magnitude of the amounts of the portfolio of assets that the E(S)CB has acquired under its several asset purchase programmes, any such sales would most likely destroy the market value of these assets, thereby forcing banks, which still have many similar assets on their books as well, to book huge depreciation losses, and which could completely ruin the credit worth of the issuing entities.¹²⁹ Still according to Sinn, should such an unwinding begin, the bubbles created by the ECB's zero-interest-rate policy (which account for a large share of banks' equity capital today) would likely burst, triggering a wave of bankruptcies.¹³⁰

Moreover, the EU Mediterranean member countries, whose debt has reached exorbitant levels as a result of the subsequent crises of 2008 and of 2020–2021, would most likely face enormous difficulties in taking on new debt and rolling over their existing liabilities. From this point of view, the eurozone system would be exposed as lacking any real brake on inflation when it matters.¹³¹

According to Sinn, the huge hordes of base money that banks have started to hold under the new monetary climate in their central bank accounts (especially after having transferred other financial assets to the E(S)CB) are not even covered by M1 to M3 monetary aggregates anymore. In this respect, the latter aggregates themselves no longer adequately reflect the actual risk of inflation, which is already more than obvious from the monetary base itself.¹³²

Sinn thus made the assessment that if the euro area economy were finally to recover and fiscal stimulus turbocharges would eventually pent-up demand (implying that the huge accumulated savings from the recent past would be used for spending), a lot of bank credit could suddenly start emerging based upon this (implicit) central bank money. Price growth could then begin to accelerate, and the

¹²⁹Sinn (2021).

¹²⁸Sinn (2021).

¹³⁰Sinn (2021).

¹³¹Sinn (2021).

¹³²Sinn (2021).

ECB would then have an extremely tough time curbing it, without still having a functioning inflation brake. 133

A further factor to take into consideration is that the cash-holding coefficient in the economy, amounted in January 2021 to an incredible 43% in the eurozone, almost double of 24% recorded in the United States (and there, even so, considered as being "high"). Since the financial crisis of 2008, the monetary base in the eurozone has risen to about 3.5 times the level that was once sufficient for transactional purposes; in the United States, it has risen to double its previous level. Accordingly, of the total central-bank monetary base of EUR 5 trillion recorded by the ECB in January 2021, close to three-quarters (72%), or EUR 3.6 trillion, was a mere overhang of money that was not really needed for transactions.¹³⁴

In any case very striking is the great multiplicity and variety of monetary instruments that the ESCB has developed to combat the Covid-19 crisis. The question here is whether the high degree of complexity has not at the same time created much intransparency.

Either way, European monetary policy is increasingly characterized by a number of shifts that the founding fathers of the EMU would probably have viewed with suspicion. Traditional monetary rigor has been replaced by a policy of quantitative easing, whereby the ESCB started to refinance, under very flexible conditions, an increasing number of categories of issuers of debt instruments, ranging from private market players—in addition to banks themselves, in an indirect manner also large corporations—next to states. To the extent that banks themselves can more easily discharge their third-party debt obligations to the ESCB in exchange for new liquidity, lending to all possible counterparties, and therefore (at least ultimately) money creation itself, has become increasingly easy.

It should be kept in mind that both this quantitative easing policy of lending at increasingly relaxed conditions has been going since before the Covid-19 pandemic itself, posing the underlying question whether this policy has indeed become the "new monetary reality". This may, moreover, create two main monetary risks, namely on the one hand the risk of a new inflationary crisis (due to an excess of money creation, under the conditions described by Sinn, as referred to above), but on the other hand also the risk of monetary reality becoming increasingly disconnected from the underlying economic reality, to the extent that it is not only the financial markets themselves that may have facilitated a new bubble, but this time the monetary authorities as well (or at the very least have they actively cooperated in it). The elephant(s) in the room is what will happen if the underlying operations have to be scaled back without similar quantitative easing programmes remaining active and what will happen if the positions between the ECB and commercial banks will be actually used for granting further loans, or if consumers will start spending their savings.

¹³³Sinn (2021).

¹³⁴Sinn (2021).

A more fundamental question is whether such a prolonged quantitative easing policy does not come awfully close to a system of monetary financing, until now a doomsday scenario that Euro economists shudder to see. To the extent that this could be the case, the door is now further ajar than in the aftermath of the financial crisis of 2008 to an alternative money creation system in which money creation on behalf of states (but also on behalf of a variety of economic players) could start happening in a direct manner and without an intermediary role for credit institutions, in accordance with wat we have argued in some of our earlier writings.¹³⁵ We shall readdress this latter question in Chap. 11.

3.3 United States

3.3.1 General

In the United States, monetary policy rests with the (US) Federal Reserve—also known as the "FED"—which acts under a mandate from the American Congress to ensure (1) maximum employment, and (2) price stability.¹³⁶

In the words of Powell and Wessel, the Covid-19 crisis in the United States—with its resulting business closures, event cancellations and work-from-home policies triggered a "deep economic downturn of uncertain duration".¹³⁷ Against a backdrop of significant uncertainty about both the trajectory and the duration of the Covid-19 pandemic and its to be expected impact on the global and American economies, empirical evidence soon suggested that the economic activity in the United States had already started to slow significantly by the end of Q1 2020. In addition to people that fell ill with Covid-19, many others had to undergo mandatory containment and social distancing measures that, inevitably, disrupted economic activity. These circumstances, in turn, led households and businesses to consume and spend less, particularly on non-essential goods and services.¹³⁸ Moreover, unemployment rose more than proportionately to the severity of these declines in both productivity and demand.¹³⁹

The FED soon responded by deploying a wide range of monetary measures aimed at limiting the economic damage of the Covid-19 pandemic, including up to USD 2.3 trillion in loans to support market players (both households and enterprises-employers), the financial markets, and governments, both on the federal and the state level.¹⁴⁰

¹³⁵Cf. Byttebier (2017), Chapters 4 and 5.

¹³⁶Powell and Wessel (2020).

¹³⁷Cheng et al. (2021).

¹³⁸Cúrdia (2020), p. 2.

¹³⁹Cúrdia (2020), p. 2.

¹⁴⁰Cheng et al. (2021).

On 27 August 2020, the FED issued an updated policy statement, entitled "Statement on Longer-Run Goals and Monetary Policy Strategy".¹⁴¹ This statement was intended to give the American Congress, as well as the general public and the financial markets, an idea of how the FED would further interpret the mandate given to it by Congress "to pursue maximum employment and price stability", and on the monetary framework it would deploy in making its monetary policy decisions in order to address the Covid-19 pandemic, both with regard to short-term interest rates, as with regard to the other monetary policy instruments at its disposal. The FED also announced its intention to review this policy statement every 5 years.¹⁴²

Earlier, the FED had stated that its definition of price stability was to aim for inflation of 2%, as indicated by the so-called "Personal Consumption Expenditures price index".¹⁴³ The FED had, moreover, described this objective as "symmetric". This implied that the FED was concerned about both inflation below and above this target.¹⁴⁴ In the 2020 updated policy statement, the FED, however, stated that¹⁴⁵:

[i]n order to anchor longer- term inflation expectations at this level, the Committee seeks to achieve inflation that averages 2 percent over time, and therefore judges that, following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time.

According to Powell and Wessel, this strategy has been described as a "flexible form of average inflation targeting" to which FED officials also referred to as "FAIT".¹⁴⁶

3.3.2 Interest Rate Policy and Forward Guidance

By way of an early response to the outbreak of the Covid-19 pandemic, the FED reduced its own target for the "federal funds rate". The term "federal funds rate" in the United States refers to the rate that banks pay to borrow overnight from each

¹⁴¹ Cf. Board of Governors of the Federal Reserve System (2020q). This statement had initially been issued on 24 January 2012 and has since then been updated on 29 January 2019, and then again on 27 August 2020.

¹⁴²Powell and Wessel (2020).

Cf. Board of Governors of the Federal Reserve System (2020q), under its Point 7: "The Committee intends to reaffirm and review these principles and to make adjustments as appropriate at its annual organizational meeting each January, and to undertake roughly every five years a thorough public review of its monetary policy strategy, tools, and communication practices". (Board of Governors of the Federal Reserve System (2020q), n° 7.)

¹⁴³The "Personal Consumption Expenditures Price Index" is announced on the following website: https://www.bea.gov/data/personal-consumption-expenditures-price-index (last accessed on May 15, 2021).

¹⁴⁴Powell and Wessel (2020).

¹⁴⁵Board of Governors of the Federal Reserve System (2020q), under its Point 4.

¹⁴⁶Powell and Wessel (2020).

other on the so-called interbank market. The FED's target for these federal funds rate was reduced by a total of 1.5 percentage points as of 3 March 2020, bringing it down to a range of 0% to 0.25% by 15 March 2020.¹⁴⁷

On the same date, the FED started again to offer "forward guidance", resorting to a monetary tool that had been perfected during the financial crisis of 2007–2008. This forward guidance especially concerned the future path of the FED's key interest rate. It was thereby announced that this key interest rate would be kept low until labour market conditions would have returned to levels consistent with the FED's assessment of maximum employment and inflation reaching 2% and being on track to be moderately above 2% during some time.¹⁴⁸

This forward guidance would later be updated again in September 2020, in order to reflect the FED's new monetary policy.¹⁴⁹

In theory, the FED could have even gone a step further by lowering interest rates below zero. While the central banks of several other territories indeed moved to such negative rates, the FED stated that it was unlikely that it would do so itself.¹⁵⁰

3.3.3 Measures to Support Financial Markets

3.3.3.1 General

In response to the Covid-19 crisis, the FED resorted to one of the key tools it had also used in response to the financial crisis of 2007–2008 and that consisted of buying massive amounts of financial instruments of a wide variety of issuers.¹⁵¹

As a result of the Covid-19 crisis, the markets for treasury securities and mortgage-backed securities soon became dysfunctional. The FED aimed to restore the proper functioning of these markets by pumping massive amounts of USD into them, with the overall aim of ensuring that credit would start to flow again.¹⁵²

As early as 15 March 2020, the FED announced that, over the next few months, it would purchase at least USD 500 billion in treasury securities, and USD 200 billion in government-backed mortgage-backed securities. By 23 March 2020, the FED effectively started making "open-ended" purchases. This implied that the FED

¹⁴⁷Cheng et al. (2021); Cúrdia (2020), p. 2.

The "federal funds rate" obviously serves as a benchmark for other short-term rates, and also affects longer-term rates. This measure was, therefore, intended to reduce the cost of borrowing on mortgages, car loans, home equity loans and other loans, while however at the same time decreasing interest income for savers. (Cf. Cheng et al. (2021).)

¹⁴⁸Board of Governors of the Federal Reserve System (2020a). Cf., furthermore, Cheng et al. (2021).

¹⁴⁹Cheng et al. (2021).

¹⁵⁰Cheng et al. (2021).

¹⁵¹Cheng et al. (2021).

¹⁵²Cheng et al. (2021).

started buying securities in the quantities necessary to support, on one side, the smooth functioning of the markets and, on the other side, the effective transmission of its monetary policy to the general financial circumstances. As a result of these early purchases of both treasury and mortgage-backed securities, market functioning improved, with the FED already starting to reduce its purchases through the months of April and May 2020.¹⁵³ However, on 10 June 2020, the FED (department of New York) made a new announcement that it was about to end its tapering and that it would, start again to buy at least USD 80 billion per month in treasury securities and USD 40 billion in residential and commercial mortgage-backed securities.¹⁵⁴

In the period from mid-March until the beginning of December 2020, due to these purchases, the FED's securities holdings increased from USD 3.9 trillion, to USD 6.6 trillion.¹⁵⁵

3.3.3.2 Primary Dealer Credit Facility (PDCF)

On 18 March 2020, the FED announced the implementation of the Primary Dealer Credit Facility" (abbreviated as "PDCF"). This (again) concerned a programme that

¹⁵⁵Cheng et al. (2021).

¹⁵³Cheng et al. (2021).

¹⁵⁴It was explained in a special statement of the Federal Reserve Bank of New York, entitled "Statement Regarding Treasury Securities, Agency Mortgage-Backed Securities, and Agency Commercial Mortgage-Backed Securities Operation" that, effective on June 11, 2020, the Federal Open Market Committee (FOMC) had directed the Federal Reserve Bank of New York's Open Market Trading Desk (= also referred to as "the Desk") to (again) increase what was referred to as "System Open Market Account (= abbreviated "SOMA") holdings" of (1) Treasury securities, (2) agency mortgage-backed securities (= abbreviated "MBS"), and (3) agency commercial mortgage-backed securities (= abbreviated "CMBS"). These purchases were announced with the intent to, on one side, support the well-functioning of the markets for these securities, and, on the other side, to thereby promote the efficient transmission of the FED's monetary policy to general financial conditions. (Cf. Federal Reserve Bank of New York (2020a).)

In accordance with this directive, the Desk planned to continue to increase its SOMA holdings of Treasury securities at a rate equivalent to about USD 80 billion per month. Treasury purchases were hereby to be made on a monthly basis, beginning in mid-June 2020 and running through mid-July 2020, and were to cover a wide range of maturities and types of securities. Similarly, the Desk planned to continue to increase SOMA holdings of agency MBS at a rate equivalent to about USD 40 billion per month. Purchases of agency MBS were also to be made on a monthly basis, starting in the period from mid-June 2020 to mid-July 2020. Total purchases during this monthly period were expected to amount to approximately USD 96 billion, including approximately USD 56 billion of purchases based on reinvesting principal payments from existing SOMA holdings of agency debt and agency MBS expected to be received during June 2020. Purchases of agency MBS was announced to generally continue to focus on recently generated coupons in 30-year and 15-year fixed rate agency MBS in the To-Be-Announced (TBA) market. In addition, the Desk planned to continue to increase its SOMA holdings of agency CMBS by transacting approximately USD 250 million to USD 500 million on a weekly basis. These purchases would also include reinvestment of principal payments on agency CMBS already held by SOMA. (Cf. Federal Reserve Bank of New York (2020a).)

had emerged from the global financial crisis of 2007–2008, and that was intended to support the credit needs of American households and enterprises.¹⁵⁶

This programme became again available on 20 March 2020 and was, more in particular, designed to provide low interest loans (with as last applied interest rate 0.25%), for up to 90 days, to 24 large financial institutions qualifying as "primary dealers". The aim of these loans was to keep credit markets functioning at a time when, on one side, both institutions and individuals were inclined to avoid risky assets and hoard liquidity, and, on the other side, dealers themselves were facing obstacles in financing the growing stocks of securities they could accumulate by trading.¹⁵⁷

In order to rekindle the PDCF, the FED had first to obtain approval from the Secretary of the Treasury who, under section 13(3) of the Federal Reserve Act, could invoke emergency lending authority. At the time the PDCF reopened in March 2020, the FED announced that the facility would remain open "for at least six months, or longer if conditions warrant." On November 28, 2020, the FED board reached the decision to extend the expiration date of the PDCF until March 31, 2021.¹⁵⁸

3.3.3.3 Money Market Mutual Fund Liquidity Facility (MMLF)

On 18 March 2020, the FED decided to rekindle yet another of the crisis-era facilities, namely the "Money Market Mutual Fund Liquidity Facility" (= abbreviated as "MMLF").¹⁵⁹

At the beginning of the Covid-19 outbreak, investors had withdrawn in large amounts from so-called "money market funds". In order to cope with these huge outflows, said funds had in turn started to sell securities from their own portfolios, but the turmoil in the financial markets made such selling difficult, even though the securities were considered of high quality and had very short maturity dates which, in normal circumstances, should have been an easy sell.¹⁶⁰

To address this situation, the FED decided to revive the MMFF. It was intended that the facility would help money market funds meet redemption requests by

¹⁵⁶Board of Governors of the Federal Reserve System (2020b).

¹⁵⁷Board of Governors of the Federal Reserve System (2020b).

In accordance with the "Term Sheet for Primary Dealer Credit Facility" (PDCF), version effective November 20, 2020 (cf. https://www.federalreserve.gov/newsevents/pressreleases/files/ monetary20201130a3.pdf), only New York Fed primary dealers were allowed to participate in the PDCF. Eligible collateral for pledging under the PDCF included all collateral eligible for pledging in open market operations (OMOs), plus investment grade corporate debt, international agency securities, commercial paper, municipal securities, mortgage-backed and asset-backed securities, and equity securities. Securities denominated in foreign currencies were not currently eligible for pledging under the PDCF. Collateral that is not priced by the clearing bank was also not eligible for pledging under the PDCF.

¹⁵⁸Cheng et al. (2021). Cf., furthermore, Board of Governors of the Federal Reserve System (2020c).

¹⁵⁹Cheng et al. (2021).

¹⁶⁰Cheng et al. (2021).

households and other investors, thereby improving the overall functioning of the markets, as well as the provision of credit to the economy in general. The FED again invoked section 13 (3) of the Federal Reserve Act, in order to obtain the necessary permission from the Treasury. The Treasury provided USD 10 billion from its "Exchange Stabilization Fund" to cover potential losses".¹⁶¹

On 30 November 2020, the FED announced an extension of the MMFF until 31 March 2021.¹⁶²

3.3.3.4 Repo Market Policy

In response to Covid-18, the FED significantly expanded the scope of its so-called "repo-operations" with the intent to channel liquidity to the money markets. Since then, the FED has essentially been offering an unlimited amount of money through this mechanism.¹⁶³

The repo market allows firms to borrow and lend cash and securities on a shortterm basis. Transactions on this market happen usually overnight. The repo market allows financial institutions owning a lot of securities (such as banks, broker-dealers, hedge funds . . .) to borrow cheaply, and market players holding on to a lot of cash (e.g., money market mutual funds) to earn a small return on that cash by lending it out to the former category of market players without much risk, as the securities owned by said former category of market players, often US Treasury securities, serve as collateral for the loans. The repo market is, in this manner, based on the principle that financial institutions do normally not want to hold on to cash as it does not generate interest, making it in turn an "expensive" investment.¹⁶⁴

¹⁶¹Cheng et al. (2021).

Under the terms of the "Money Market Mutual Fund Liquidity Facility" (https://www. federalreserve.gov/newsevents/pressreleases/files/monetary20200318a1.pdf), all US depository institutions, US bank holding companies (= US-incorporated parent companies or their US brokerage subsidiaries), and US branches and agencies of foreign banks may borrow under the Facility. A fund must have identified itself as a prime money market fund in "Item A.10" of the Securities and Exchange Commission's Form N-MFP. Collateral eligible for pledging under the Facility must, moreover, be of one of the following types: (1) US Treasuries and Fully Guaranteed Agencies; (2) Securities issued by US government sponsored entities; (3) Securities issued by US government sponsored entities; (4) Asset-backed commercial paper issued by a US issuer and that is rated, at the time of purchase from the Fund or pledge to the Reserve Bank, at least A1, F1, or P1, by at least two major rating agencies or, if rated by only one major rating agency, rated in the highest category by that agency; or (5) unsecured commercial paper issued by a US issuer that is rated, at the time of purchase from the Fund or pledged to the Reserve Bank, at least A1, F1 or P1 by at least two major rating agencies or, if rated by only one major rating agency, rated in the highest category by that agency; or (5) unsecured commercial paper issued by a US issuer that is rated, at the time of purchase from the Fund or pledged to the Reserve Bank, at least A1, F1 or P1 by at least two major rating agencies or, if rated by only one major rating agency, rated in the highest category by that agency.

¹⁶²Board of Governors of the Federal Reserve System (2020d).

¹⁶³Cheng et al. (2021).

¹⁶⁴ Another example may concern hedge funds that hold a lot of assets, but that may be in need of money to finance day-to-day transactions, so they borrow from money market funds holding on to a

Repurchase and reverse repurchase agreements in which one of the counterparties is the Federal Reserve itself, have long been an important component of the FED's monetary policy.¹⁶⁵ When the FED itself buys securities from a seller who at the same time legally commits to repurchase them, the FED basically (temporarily) injects reserves¹⁶⁶ into the financial system. Conversely, when the FED sells securities under a repurchase obligation, it (temporarily) removes reserves from the system.¹⁶⁷

During and in the aftermath of the financial crisis of 2008, and again during the Covid-19 crisis, participating in such repo-operations has, as said, become an important monetary policy tool.¹⁶⁸ Because of Covid-19, the FED would again, by resorting to this monetary tool, greatly expand the scope of its "repo operations" with as main purpose the channelling of liquidity to the money markets. The FED's repo facilities have, for instance, made vast sums of liquidity available to primary market dealers in exchange for Treasury and other government-backed securities. Moreover, before the Covid-19 pandemic hit the markets, the FED was offering repooperations of a short-term nature, thus making USD 100 billion of cash available in overnight repo-operations, and USD 20 billion of cash in 2-week repo operations. In response to the Covid-19 outbreak, the FED stepped up these repo-operations on 9 March 2020, by starting to offer USD 175 billion in overnight repos, and USD 45 billion in 2-week repos.¹⁶⁹ Then, on 12 March 2020, the day on which the WHO proclaimed the Covid-19 crisis a pandemic (cf. Sect. 1.1.1.), the FED announced an even bigger expansion. It, more precisely, started offering, on a weekly basis, repo-operations at much longer terms: USD 500 billion for 1-month repos, and USD 500 billion for 3-month repos. On 17 March 2020, at least for a while, the FED also significantly increased the overnight repos it offered to an amount of USD 500 billion. The FED justified its expansion policy under the argument that the liquidity injections accomplished through these repo-operations

lot of liquidity which in their own turn can earn a small return without taking much risk. (Cf. Cheng and Wessel (2020).)

¹⁶⁵Board of Governors of the Federal Reserve System (2014).

In the "Principles and Plans for Policy Normalization" announced on September 17, 2014, the Federal Open Market Committee (FOMC) indicated that it intended to make use of the overnight repurchase agreement facility (ONRRP), when needed, as an additional policy tool to help control the federal funds rate and, more specifically, to help keep it within the target range set by the FOMC itself (cf. Sect. 3.3.2.). The Committee, moreover, stated that it would use the ONRRP facility only to the extent necessary and that it would phase it out when it was no longer needed to help control the federal funds rate.

¹⁶⁶Reserves can be defined as the amounts of cash that banks hold, either under the form of currency in their vaults or on deposit with the FED. The FED sets a minimum level of reserves; anything above the minimum is called "excess reserves". Banks can and often do lend their excess reserves in the repo market. (Cf. Cheng and Wessel (2020).)

¹⁶⁷Cheng and Wessel (2020).

¹⁶⁸Cheng and Wessel (2020). Cf., furthermore, Ng and Wessel (2018).

¹⁶⁹Cheng and Wessel (2020).

were intended to respond to the very unusual disruptions in Treasury funding markets because of the Covid-19 outbreak.¹⁷⁰

As a result, according to Cheng and Wessel, the FED became willing to lend what was essentially an unlimited amount of money to the markets.¹⁷¹

The FED would, furthermore, extend this facility until 31 March 2021.¹⁷²

3.3.4 Loans to Banks

The American monetary policy has traditionally been less based upon a lending activity from the central bank to commercial banks, a practice that is far more common in Europe, where this is classically referred to as the "lender of last resort"-function of the central bank. In the United States, the technique is better known under the term (borrowing at the) "discount window" or "discount window loans".

Central bank loans to commercial banks essentially serve to support the liquidity and stability of the commercial banking system, as well as the effective transmission of monetary policy to the commercial banking system. Central bank loans to commercial banks serve a range of functions, namely: (1) they provide easy access to funding; (2) they may help deposit-taking institutions (i.e., deposit banks) to manage their liquidity risks effectively, e.g., by ensuring that deposit holders can withdraw their deposits, when needed, and (3) they may assist commercial banks in avoiding to resort to actions that would have negative consequences for their customers, such as withholding credit in times of market stress. In this way, the "discount window" also supports the steady flow of sufficient credit to households and enterprises. Providing liquidity in this manner has, moreover, been indicated as one of the original objectives of the FED (besides of other central banks around the world).¹⁷³

By means of an early Covid-19 response measure, already on 15 March 2020, the FED announced changes to its discount window policy, hence to its policy on granting loans to commercial banks. Said changes included the following¹⁷⁴:

¹⁷⁰Cheng and Wessel (2020).

¹⁷¹Cheng and Wessel (2020).

¹⁷²Cheng et al. (2021).

¹⁷³Board of Governors of the Federal Reserve System (2020e).

Much of the legal framework governing lending to depository institutions is contained in section 10B of the Federal Reserve Act. The general policies governing discount window lending are set forth in Federal Reserve Regulation A. (Cf., furthermore, Board of Governors of the Federal Reserve System (2020e).)

¹⁷⁴Board of Governors of the Federal Reserve System (2020e).

- (1) Reducing the gap between the "primary credit rate" and the general level of "overnight interest rates", in order to encourage deposit-taking institutions to use the discount window more actively in order to meet unforeseen funding needs.
- (2) Providing discount window credit for periods of up to 90 days, repayable in advance and, if desired so by the borrowing institution, renewable on a daily basis.

These changes took effect on 16 March 2020 and were to remain in force until the FED's Board of Directors would decide otherwise.¹⁷⁵

On the same date (15 March 2020), the FED, moreover, lowered the interest rate it charges banks for lending through its discount window by 2 percentage points, from 2.25% to 0.25%, a rate that was lower than the one that had been resorted to during the financial crisis of 2007–2008.¹⁷⁶

The rate cut (which, according to David Goldman, was decided upon much faster than expected) was especially intended to avoid the kind of "credit crunch" and financial market turmoil that had occurred on the last occasion that the FED had decided to cut interest rates "all the way to the bottom", namely during the 2007–2008 global financial crisis.¹⁷⁷

While the loans affected by this measure are usually "overnight"—meaning that they are taken out at the end of a day and are repaid on the next morning—the FED decided to extend these conditions to loans up to 90 days.¹⁷⁸

In such lending operations, commercial banks, moreover, typically provide a wide selection of collateral (such as securities, claims resulting from other loans . . .) to the FED in exchange for cash. This, in combination with the usual short-term of the loans, per definition implies that the FED does not take much risk when granting such loans. Fort the borrowers, the cash allows to continue to operate without meeting liquidity problems. The most basic of the implications of window discount loans is, hence, that depositors can continue to withdraw deposits (in cash) and banks can keep on granting new loans to third parties.¹⁷⁹

Nevertheless, American commercial banks are far more reluctant to borrow at the discount window than, e.g., their European counterparts, mostly out of fear that if the news that they have borrowed at the window discount were to spread, markets and other market players could be inclined to consider this as an indication that they are in trouble.¹⁸⁰ In order to counter this stigma and to thus ensure the usefulness of

¹⁷⁵Board of Governors of the Federal Reserve System (2020e).

¹⁷⁶Cheng et al. (2021).

¹⁷⁷Goldman (2020).

¹⁷⁸Cheng et al. (2021).

¹⁷⁹Cheng et al. (2021).

¹⁸⁰Cf. Haltom (2011): "Yet banks aren't always willing to take the Fed up on this offer. During the recent financial crisis, for example, the Fed did everything it could to encourage bank borrowing, from easing lending terms to publicly urging banks to take loans if needed. But borrowing remained low in late 2007 despite severe liquidity shortages in the financial system. A common explanation for the reluctance of banks to borrow from the Fed is a "stigma" attached to the discount window.

resorting to such window discount loans in the fight against the economic effects of Covid-19, in mid-March 2020, eight major US banks agreed to borrow at the discount window "not out of panic but to remove the public stigma of doing so in case the economic fallout of the coronavirus gets worse".¹⁸¹

By means of a further response to the Covid-19 crisis, the FED also encouraged commercial banks—both the "largest banks" (on 1 April 2020)¹⁸² as the "community banks" (on 6 April 2020)¹⁸³—to tap into their regulatory capital and liquidity buffers, in order to increase their lending during the period of crisis. To put this in perspective, one has to bear in mind that reforms that had been put in place after the 2008 financial crisis had required banks to hold extra capital in order to absorb losses and, in this manner, to avoid the need for future bailouts. But it was at the same time understood that these additional capital buffers could be used during an economic downturn to boost lending, which the FED started encouraging as a further means of dealing with the Covid-19 crisis. This implied technical changes to the FEDS TLAC (= "total loss-absorbing capacity") requirements, also known as "TLAC buffer requirements".¹⁸⁴

The FED also loosened its "bank reserve requirements"—referring to the percentage of deposits that a bank must hold as reserves to meet liquidity demands in case depositors make withdrawals—although this loosening was deemed largely unnecessary, as banks were holding to far more reserves than the reserve requirements prescribed anyhow.

On 8 April 2020, the FED even relaxed a set of specific growth restrictions that had been previously imposed on Wells Fargo. These growth restrictions had been part of an enforcement action by which the FED had responded to widespread consumer protection violations from the part of Wells Fargo. By relaxing these sanctions, Wells Fargo could start increasing its own participation in some of the FED's lending programs for small and medium-sized businesses. The change was, however, intended only to allow Wells Fargo to make additional loans available to small businesses under the so-called "Federal Reserve's Paycheck Protection Program", or abbreviated: PPP, and the (at the time still forthcoming) "Main Street

This stigma is based on the notion that only a bank in financial trouble would go to the Fed over other, cheaper sources of funds. Banks are believed to fear that regulators, investors, or other banks will assume the worst if the bank is discovered to have borrowed from the Fed. There can be perfectly benign reasons for accessing the discount window: a bank that receives a large withdrawal too late in the day to locate a private lender, for example. The problem is that such stigma, if present, may hamper the Fed's ability to provide liquidity in a crisis". (Haltom (2011).)

¹⁸¹Hoffman and Benoit (2020). Cf., furthermore, Cheng et al. (2021).

¹⁸²Board of Governors of the Federal Reserve System (2020f).

¹⁸³Board of Governors of the Federal Reserve System (2020g). This decision was based on section 4012 of the Coronavirus Relief and Economic Security Act, which required federal banking regulatory agencies to temporarily lower the leverage ratio of community banks to 8%.

¹⁸⁴To preserve their capital, the big banks also suspended their share buybacks. (Cf. Cheng et al. (2021). Cf., furthermore, Board of Governors of the Federal Reserve System (2020h).)

Lending Program". By contrast, the changes did not otherwise alter the enforcement action resorted to by the FED Board in February 2018 against Wells Fargo.¹⁸⁵

3.3.5 Quantitative Easing

Before the global financial crisis of 2008, the FED operated in what has been referred to as a "scarce reserves" framework. Within such a framework, commercial banks try to hold on to just a minimum amount of (cash) reserves needed for meeting their financial obligations, and borrow on the federal funds market when they are a little short of cash and lend when they hold on to a little too much. The FED itself operates in such a scarce reserves framework by targeting the interest rate on such a market and by adding, or emptying, reserves when it wants to move these federal funds interest rates.¹⁸⁶

However, in the aftermath of the financial crisis of 2008, notably between 2008 and 2014, the FED started to engage in what is known as "quantitative easing" (abbreviated "QE") in order to stimulate the economy.¹⁸⁷

Within the logic of "quantitative easing", the FED basically injects reserves to the market by buying securities, thereby significantly increasing both its balance sheet's holdings of assets, as well as the supply of reserves in the banking system.¹⁸⁸

There is some discussion of the reserves that QE injects in the markets consist of newly created money or are based on existing money (more precisely on a surplus of household savings that the commercial banks park on the deposit facility accounts they hold with the central bank). We shall readdress this question in Chap. 11.

Be this as it may, when the FED started resorting to QE, its pre-crisis monetary framework was basically no longer working. Instead the FED moved to a "plentiful reserves" framework, with the deployment of new tools, such as the Interest on Excess Reserves (IOER) and the (Interest on) Overnight Reverse Repos (ONRRP), two interest rates that the FED sets itself in order to help controlling its key short-term interest rate.¹⁸⁹

Quantitative easing in the period 2008–2014 significantly increased the asset side of the FED's balance sheet, as the latter bought bonds, mortgages and other assets in quasi-unlimited quantities. The FED's liabilities—mainly to commercial banks— which expressed the price of the QE purchase transactions, obviously, increased by the same amounts and by 2017 stood at over USD 4 trillion.¹⁹⁰

¹⁸⁵Cf., furthermore, Board of Governors of the Federal Reserve System (2020i). Cf., furthermore, Cheng et al. (2021).

¹⁸⁶Cheng and Wessel (2020).

¹⁸⁷Cheng and Wessel (2020).

¹⁸⁸Cheng and Wessel (2020).

¹⁸⁹Cheng and Wessel (2020).

¹⁹⁰Brock (2021).

The basic purpose of the QE purchases during the period from 2008 until 2014 was for commercial banks to lend and invest those reserves to third parties and/or in financial instruments issued by such third parties, in order to stimulate overall economic growth. However, what has actually happened was that commercial banks kept much of the injected reserves for themselves as "excess reserves". At its pre-Covid-19 peak, US commercial banks were reported to hold USD 2.7 trillion in such excess reserves, which was indicated as an unintended result of the FED's quantitative easing programme.¹⁹¹

Yet, according to Cheng and Wessel, when the FED stopped its QE asset purchase programme in 2014, the supply of excess reserves in the banking system, obviously, began to shrink. When the FED then started to reduce its balance sheet as of 2017, these excess reserves fell even faster.¹⁹²

On 30 January 2019, the FED's Board of Governments Federal released a press release in which it was said that the FED's Open Market Committee (the FED's main policy committee) had confirmed that it¹⁹³:

intends to continue to implement monetary policy in a regime in which an ample supply of reserves ensures that control over the level of the federal funds rate and other short-term interest rates is exercised primarily through the setting of the Federal Reserve's administered rates, and in which active management of the supply of reserves is not required.

According to Brock, most economists are of the opinion that the FED's QE programme helped save the economy of the United States (and potentially the global economy as well) after the 2008 financial crisis. However, the extent of its role in the subsequent recovery of the American economy has at the same time been indicated as "impossible to quantify".¹⁹⁴

On 15 March 2020, the FED decided to rekindle its former QE policy, by announcing its intention to implement up to USD 700 billion in asset purchases as a Covid-19 emergency response measure aimed at providing additional liquidity to the American financial system. This decision was especially made in response to the massive economic and market turmoil caused by the rapid spread of the Covid-19 virus on the American territory, and the subsequent economic downturn this had entailed. Subsequent actions would, however, soon extend this initially limited QE action indefinitely.¹⁹⁵ Already on 23 March 2021, the QE policy was thus further extended, which will be explored hereafter in some more detail. (Cf. Sect. 3.3.6.)

¹⁹¹Brock (2021).

¹⁹²Cheng and Wessel (2020).

¹⁹³Cf. Board of Governors of the Federal Reserve System (2020r). Cf., furthermore, Cheng and Wessel (2020).

¹⁹⁴Brock (2021), who has also pointed out that other central banks have tried to deploy quantitative easing as a means of combating recession and deflation in their countries, with equally inconclusive results.

¹⁹⁵Brock (2021).

3.3.6 Support Measures for Corporations and Businesses

3.3.6.1 Primary and Secondary Market Corporate Credit Facilities

In what has been considered an important step beyond its pre-Covid-19 crisis programmes that focused primarily on the functioning of financial markets, on 23 March 2020, the FED established two new facilities to directly support highly rated American companies without a securities or similar financial market listing.¹⁹⁶

On 23 March 2020, the FED created the "Primary Market Corporate Credit Facility" (PMCCF). This programme targeted primary market dealings, by allowing the FED to lend directly to companies by either purchasing new bond issues or by granting loans to them. Under these loans, borrowers were allowed to defer payment of both interest and principal during at least the first 6 months, which gave them access to cash that allowed for the payment of employees and suppliers. During these 6 months period, borrowers were, however, not allowed to pay dividends or buy back shares.¹⁹⁷

The programme was already terminated by the end of 2020: As of 31 December 2020, the PMCCF was no longer authorised to purchase eligible assets.¹⁹⁸

Also on 23 March 2020, the FED created the (new) Secondary Market Corporate Credit Facility (SMCCF). Under this programme, which targeted secondary market positions, the FED was authorised to purchase existing corporate bonds, as well as

¹⁹⁶Cheng et al. (2021).

¹⁹⁷Cf. Board of Governors of the Federal Reserve System (2020j). Cf., furthermore, Cheng et al. (2021).

According to the "Primary Market Corporate Credit Facility Fact Sheet" (as in effect on 28 July 2020) (cf. Federal Reserve (2020a)), the Primary Market Corporate Credit Facility was intended to serve as a safety net for corporate debt issued by eligible issuers. Under the Facility, the Federal Reserve Bank of New York (the "Reserve Bank") could commit to lend to a special purpose vehicle (the "SPV") on a recourse basis. The SPV could then: (1) purchase qualified bonds as a single investor in a bond issue; and (2) purchase portions of syndicated loans or bonds at issue. The Reserve Bank was thus guaranteed by all the assets of the SPV. The Treasury Department itself was authorised to make a USD 75 billion equity investment in the SPV to support both the Facility and the Secondary Market Corporate Credit Facility ("SMCCF"). The Facility was authorised to purchase "eligible corporate bonds" as a single investor in a bond issue. The eligible corporate bonds had to meet each of the following criteria at the time of the Facility's purchase of the bond: (1) be issued by an eligible issuer, and (2) have a maturity of 4 years or less. The Facility was also authorised to purchase portions of syndicated loans or bonds of eligible issuers at the time of issue. Eligible syndicated loans and bonds were expected to meet each of the following criteria at the time of purchase by the Facility: (1) be issued by an eligible issuer, and (2) have a maturity of 4 years or less. The Facility was, however, not permitted to purchase more than 25% of a syndicated loan or bond issue. (Cf. Federal Reserve (2020a).)

¹⁹⁸Federal Reserve Bank of New York (2020b).

exchange-traded funds investing in such high-quality corporate bonds.¹⁹⁹ This programme was also terminated by 31 December 2020.

According to the FED, the two facilities together provided companies with access to credit, so that they would be better suited to maintain their business operations and capacity during the period of disruption caused by the Covid-19 pandemic.²⁰⁰

After initially supporting USD 100 billion of new financing through these facilities, the FED then announced a massive expansion of the programmes on 9 April 2020, the facilities since then being authorised to support up to USD 750 billion of corporate debt.²⁰¹

As had also been the case for some of the other monetary facilities and programmes developed in response to Covid-19, the FED invoked section 13 (3) of the Federal Reserve Act in order to have the two facilities installed. Both facilities got approval from the US Treasury, which, moreover, provided USD 75 billion from its "Exchange Stabilisation Fund" for covering potential losses.²⁰²

²⁰¹Cheng et al. (2021).

¹⁹⁹Cf. Board of Governors of the Federal Reserve System (2020k). Cf., furthermore, Cheng et al. (2021).

According to the "Secondary Market Corporate Credit Facility" Fact Sheet (in the version effective as of 28 July 2020), under the Secondary Market Corporate Credit Facility, the Federal Reserve Bank of New York ("Reserve Bank") was authorized to lend on a recourse basis to a special purpose vehicle ("SPV") that would purchase corporate debt issued by eligible issuers in the secondary market. The SPV was itself mandated to purchase on the secondary market: (1) eligible individual corporate bonds; (2) portfolios of eligible corporate bonds in the form of exchange-traded funds ("ETFs"): and (3) portfolios of eligible corporate bonds that track a broad market index. The Reserve Bank was guaranteed by all assets of the SPV. The Treasury Department was authorised to make a USD 75 billion equity investment in the SPV to support both the Facility and the Primary Market Corporate Credit Facility ("PMCCF"). The Facility was authorised to purchase individual corporate bonds that, at the time of purchase by the Facility: (1) were issued by an eligible issuer; (2) had a remaining maturity of 5 years or less; and (3) were sold to the Facility by an eligible seller. The Facility was also authorised to purchase US-listed ETFs, the investment objective of which is to provide broad exposure to the US corporate bond market. The Facility was furthermore authorised to purchase individual corporate bonds to create a corporate bond portfolio based on a broad and diversified market index of US corporate bonds. Eligible broad market index bonds were defined as bonds that, at the time of purchase: (1) were issued by an issuer that was created or organised in the United States, or under the laws of the United States; (2) were issued by an issuer that met the credit rating requirements for eligible individual corporate bonds; (3) were issued by an issuer that was not an insured depository institution, a depository institution holding company, or a subsidiary of a depository institution holding company, as those terms are defined in the Dodd-Frank Act; and (4) had a remaining maturity of 5 years or less. (Cf. Board of Governors of the Federal Reserve System (2020k).)

²⁰⁰Cheng et al. (2021).

²⁰²Cheng et al. (2021).

In general, the US Treasury Secretary can only spend money that has been appropriated by the US Congress. But with the approval of the US President, the Secretary has considerable leeway to use money from the 'Exchange Stabilization Fund' (ESF) which Congress created as part of the "Gold Reserve Act" in 1934. This act established the ESF as a reserve to stabilise the US dollar in the event of turbulence in foreign currency markets after the US abandoned the gold standard. But over time, the Treasury has used it mainly to lend to other economies on the verge of default—for

However, despite the FED's objections, Treasury Secretary Steven Mnuchin decided that the final purchases of bonds and loans under the corporate credit facilities would take place by 31 December 2020. The bonds and loans that were purchased before would still be funded by the FED beyond December 31, 2020, until they were sold or matured.²⁰³

3.3.6.2 Commercial Paper Funding Facility (CPFF)

At the beginning of 2021, "commercial paper" in the United States represented a USD 1.2 trillion market, on which companies issued unsecured short-term debt to money market funds, and others, in order to finance their daily operations.²⁰⁴

Commercial paper typically consists of short-term promissory notes that may be used to directly finance a wide range of economic activities, in this manner providing credit and funds for the operational needs of a wide variety of businesses and municipalities.²⁰⁵

As has already been explained before, the spread of Covid-19 disrupted economic activity throughout the United States. This also affected the commercial paper market. One of the main, immediate effects of Covid-19 on this market was that investors became reluctant to still invest in such commercial paper. Because of this, interest rates on longer-term commercial paper (e.g., those with a 3-month maturity) decreased to levels which had not been seen since the financial crisis of 2008. It was increasingly feared that companies would no longer be able to issue new commercial paper with a maturity of more than 1 week. This would severely impact their refinancing risk and reduce the ability of the commercial paper market to support their business operations.²⁰⁶

In response to these concerns, based on section 13(3) of the Federal Reserve Act, and after, moreover, having obtained the prior approval of the Secretary of the US Treasury, the Board of Governors of the FED gave the Federal Reserve Bank of New York the authorisation to establish the CPFF²⁰⁷ or, in its entirety, the "Commercial Paper Funding Facility". The CPFF became effective on 30 November

example, to stabilise Mexican public debt during the 1994 peso crisis. As amended in the late 1970s, the law provides that "the Secretary...with the approval of the President, may deal in gold, foreign currency, and other credit instruments and securities." At the end of February 2020, the ESF held \$93.7 billion in US dollars, euros, Japanese yen and special drawing rights. From time to time, and even during the Covid-19 crisis, some members of Congress have proposed limiting the Treasury Secretary's ability to tap into what they call a "slush fund." (Cf. Belz and Wessel (2020).) ²⁰³Cheng et al. (2021).

²⁰⁴Cheng et al. (2021).

²⁰⁵Federal Reserve Bank of New York (2020c).

²⁰⁶Federal Reserve Bank of New York (2020c).

²⁰⁷Federal Reserve Bank of New York (2020c).

2020.²⁰⁸ According to Verlaine, it was in essence another 2008 financial crisis era programme that was reinstated in times of Covid-19.²⁰⁹

The objective of the CPFF was, as noted, to improve the liquidity of the commercial paper market. This effect was to be accomplished, on one side, by increasing the availability of term commercial paper funding to issuers, and, on the other side, by providing greater assurance to both issuers and private investors that companies and municipalities would be able to roll over their maturing commercial paper. At the same time, the CPFF aimed to encourage investors to recommit to term loans in the commercial paper market. By ensuring that the commercial paper market would continue to function properly, especially in times of stress, the FED also reckoned that it could rekindle with the providing of credit to support families, businesses and employers throughout the economy.²¹⁰

On the basis of the CPFF, the FED was essentially allowed to buy commercial paper itself, or, in other words, to lend directly to companies for up to 3 months, at an interest rate between 1 and 2 percentage points above the prevailing overnight lending rates.²¹¹

According to the FED²¹²:

By eliminating much of the risk that eligible issuers will not be able to repay investors by rolling over their maturing commercial paper obligations, this facility should encourage investors to engage in term lending once again in the commercial paper market. An improved commercial paper market will enhance the ability of businesses to maintain employment and investment as the nation deals with the coronavirus outbreak.

As with the other monetary facilities that were not aimed at providing or supporting bank loans, the FED had to invoke section 13(3) in order to receive the prior approval from the US Treasury, which itself placed USD 10 billion in the CPFF to cover any losses. The Commercial Paper Funding Facility was (originally) due to expire on 31 March 2021.²¹³

3.3.7 Main Street Lending Program (and Similar Programs)

The FED's "Main Street Lending Program" was announced on April 9, 2020. However, is has since then been expanded and extended to more potential borrowers. The Main Street Lending Program was initially intended to support businesses which were too large to get support under the "Small Business Administration's Paycheck Protection Program" (PPP) while at the same time

²⁰⁸Federal Reserve Bank of New York (2020c).

²⁰⁹Verlaine (2020).

²¹⁰Federal Reserve Bank of New York (2020c). Cf., furthermore, Verlaine (2020).

²¹¹Verlaine (2020). Cf., furthermore, Cheng et al. (2021).

²¹²Cheng et al. (2021).

²¹³Cheng et al. (2021).

being too small to resort under the FED's own two corporate credit facilities²¹⁴ (the latter having been explained before under Sect. 3.3.6.1.). The Main Street Lending Program has ended on 8 January 2021.²¹⁵

The programme was implemented through five facilities²¹⁶:

- (1) The New Main Street Loan Facility (MSNLF).
- (2) The Main Street Priority Loan Facility (MSPLF).
- (3) The Main Street Expanded Loan Facility (EMSLF).
- (4) The Nonprofit Organization New Loan Facility (NONLF), and
- (5) The Nonprofit Organization Expanded Loan Facility (NOELF).

Through three of these five programmes—namely the MSNLF,²¹⁷ the EMSLF²¹⁸ and the MSPLF²¹⁹—the FED aimed to finance up to USD 600 billion in loans over a period of 5 years.²²⁰

Companies with up to 15,000 employees, or with up to USD 5 billion in annual revenues, were eligible for participating under these programmes. As part of some further changes to the programmes announced in June 2020,²²¹ the FED decided to lower the minimum loan size for both MSNLF loans and MSPLF loans. The FED also decided to increase the maximum for all facilities and to extend the repayment periods. Lenders were, moreover, under an obligation to retain 5% of the loans.²²² Under said programmes, borrowers were, moreover, subjected to restrictions with regard to share buybacks, dividends and executive compensation.²²³

As has been the case for several of the other facilities, the FED invoked section 13 (3) of the Federal Reserve Act in order to obtain prior approval for establishing the facility. This approval from the US Treasury was granted, with the US Treasury

²¹⁴Board of Governors of the Federal Reserve System (2020l).

²¹⁵Board of Governors of the Federal Reserve System (2020l).

²¹⁶Board of Governors of the Federal Reserve System (2020l).

²¹⁷For the text of the Main Street New Lending Facility Term Sheet (effective 8 June 2020), cf. https://www.federalreserve.gov/newsevents/pressreleases/files/monetary20200608a1.pdf) (accessed May 15, 2021).

²¹⁸Federal Reserve (2020b).

²¹⁹Federal Reserve (2020b).

²²⁰Cheng et al. (2021).

²²¹Board of Governors of the Federal Reserve System (2020m).

The changes included (cf. Board of Governors of the Federal Reserve System (2020m)): "• Lowering the minimum loan amount for certain loans from USD 500,000 to USD 250,000. • Increasing the maximum loan amount for all facilities. • Increasing the duration of each loan option from four to five years. • Extending the repayment period for all loans by delaying principal payments for two years, rather than one year; and • Increasing the Reserve Bank's participation to 95% for all loans".

²²²Cheng et al. (2021).

²²³Cheng et al. (2021).

moreover, through the CARES Act, placing USD 75 billion in the three abovementioned Main Street programmes in order to cover losses.²²⁴

On 17 July 2020, the FED decided to extend the Main Street Lending Program to non-profit organisations, such as hospitals, schools and social service organisations, under the condition that these had been in good financial health before the Covid-19 pandemic. By way of further conditions, these borrowers had to have at least ten employees and endowments of no more than USD 3 billion, amongst others. Loans were granted for 5 years, with principal payments deferred during the first 2 years. As with business loans accorded under the Main Street Lending Program, lenders had to retain 5% of the loans. This extension of the Main Street programme also lapsed, together with the rest of the facility, on 31 December 2020.²²⁵

3.3.8 Paycheck Protection Program Liquidity Facility

On 16 April 2020, the FED announced the "Paycheck Protection Program Liquidity Facility". This facility was installed in order to facilitate PPP lending. Under this program, commercial banks (besides other eligible borrowers) granting loans to small businesses, were themselves allowed to borrow from said facility by using the PPP loans as collateral.²²⁶

Pursuant to the "Paycheck Protection Program Liquidity Facility Term Sheet" (in its version of 8 March 2021), the Paycheck Protection Program Liquidity Facility got authorised under section 13(3) of the Federal Reserve Act.²²⁷ The facility was afterwards extended until 31 March 2021.²²⁸

Table 3.1 gives an overview of the outstanding loans of the FED on 20 January 2021.

²²⁴Cheng et al. (2021).

²²⁵Cf. Board of Governors of the Federal Reserve System (2020n). Cf., furthermore, Cheng et al. (2021).

On said date, US Treasury Secretary Mnuchin, again over the objections of the FED itself, decided that the Main Street Lending Facility would stop accepting loan bids on 14 December 2020, as it had to make its last purchases by 31 December 2020. (Cf., furthermore, Cheng et al. (2021).) ²²⁶Cf. Board of Governors of the Federal Reserve System (2020o). Cf., furthermore, Cheng et al. (2021).

²²⁷Eligible lenders were all lenders allowed to grant PPP loans. Only PPP loans guaranteed by the Small Business Administration ("SBA") were eligible to serve as collateral under the Facility. An Eligible Borrower was, furthermore, allowed to pledge the SBA-guaranteed PPP Loans it had originated or purchased. (Cf. Board of Governors of the Federal Reserve System (2020o).)

²²⁸Board of Governors of the Federal Reserve System (2020o). Cf., furthermore, Cheng et al. (2021).

	Maximum amount authorized (\$ billions)	Total loans outstanding (\$ billions)	Updated
Commercial Paper Funding Facility	-	0.0	20-Jan
Main Street Lending Program	600	16.6	20-Jan
Money Market Mutual Fund Liquidity Facility	-	1.9	20-Jan
Municipal Liquidity Facility	500	6.3	20-Jan
Paycheck Protection Program Liquidity Facility	659	47.4	20-Jan
Primary Dealer Credit Facility	-	0.5	20-Jan
Corporate Credit Facility	750	14.1	20-Jan
Term Asset-Backed Securities Loan Facility	100	3.7	20-Jan

 Table 3.1
 Outstanding loans of the FED (Federal Reserve 13(3) Facilities) on 20 January 2021

 [Source: Cheng et al. (2021)]

3.3.9 Further Support to Households and Consumers

On 23 March 2020, the FED re-launched another financial crisis of 2008-era facility, namely the "Term Asset-Backed Securities Loan Facility" (TALF).²²⁹ Through the TALF, the FED was able to support lending to households, consumers and small businesses. The mechanism worked by issuing loans to eligible borrowers, such as commercial banks, based upon using (re-existing) asset-backed securities (ABS) as collateral. The collateral for these securities could have been made up by a broad variety of loans, such as: auto loans, student loans, credit card loans, equipment loans, floor plan loans, insurance premium finance loans, loans guaranteed by the Small Business Administration (SBA), residential mortgage servicing advances, or commercial mortgage loans.²³⁰

Surpassing the preceding 2008 financial crisis-era programme, the FED drastically expanded eligible collateral to include existing commercial mortgage-backed securities, as well as newly issued collateralised loan obligations of the highest quality. Similar to the corporate loan support programmes (cf. Sect. 3.3.6.1.), the TALF was initially intended to only support up to USD 100 billion of new credit. In order to revive the programme, the FED had to again invoke section 13 (3) of the Federal Reserve Act in order to get prior US Treasury approval. The US Treasury allocated USD 10 billion from the Exchange Stabilization Fund. Without obtaining a further extension, the facility had to stop making purchases on 31 December 2020, again on the orders of US Treasury Secretary Mnuchin.²³¹

 ²²⁹Cheng et al. (2021); Bernanke and Yellen (2020). Cf., furthermore, Federal Reserve (2020c).
 ²³⁰Kolakowski (2021).

²³¹Cheng et al. (2021). Cf., furthermore, Bernanke and Yellen (2020).

3.3.10 Supporting State and Municipal Borrowing

During the financial crisis of 2007–2008, the FED had refused to grant monetary support to the benefit of municipal and state borrowing, believing at the time that supporting states and municipalities financially was the responsibility of the presidential administration and the US Congress.²³²

As an immediate impact of Covid-19, already by March 2020, the US municipal bond market was facing enormous stress, with state and local governments finding it increasingly difficult to borrow at a time when they were increasingly in need of money in their struggle against Covid-19.²³³

Investors reacted by withdrawing from various municipal mutual funds. According to Schüle and Sheiner, during the week ending on 18 March 2020, investors were reported to have withdrawn a record amount of USD 2 billion from said market, good for nearly 2.5% of all assets, with an additional amount of USD 13.7 billion withdrawn during the week to follow. Between 9 and 20 March 2020, state and local governments, moreover, managed to place only about USD 6 billion of the total amount of USD 16 billion of bonds they had wanted to issue during this period. These withdrawals and failed placements resulted in sharp increases in the interest rates that borrowers on this market had to pay for placing new loans. During the period from 9 March 2020 until 24 March 2020, the so-called "Municipal Market Data yield" (abbreviated "MMD yield")-which is in essence a measure for municipal bond yields developed by "Thomson Reuters" and commonly used as one of the main price indicators for state and local bonds-was reported to have risen by about 2 percentage points, which obviously meant a significant increase for this market. As a result, at a time when the borrowers on this market (such as states, municipalities, and other local governments) were already under enormous stress because of the Covid-19 epidemic itself and, moreover, in need of huge additional financial resources in order to fight the Covid-19 pandemic, they now also started facing increasing difficulties borrowing on the market. But this was not the only problem for these borrowers. In addition, a decision which had been made by the US Treasury to extend the deadline for collecting federal taxes from 15 April 2020 to 15 July 2020, had as a result that state and local governments would have had to wait an additional 3 months for their share in the tax revenues. These combining factors threatened to create a huge cash shortage. This implied that municipalities (and other local governments) who were no longer able to borrow on the market, were under threat to have to cut on their service providing. The city of Cincinnati, e.g., at the time was forced to lay off 20% of its employees.²³⁴

Already on Friday 20 March 2020, the FED started accepting short-term municipal bonds purchased from mutual funds as collateral for loans to commercial banks under the newly re-launched "Money Market Mutual Fund" (abbreviated: MMLF).

²³²Cheng et al. (2021).

²³³Schüle and Sheiner (2020). Cf., furthermore, Cheng et al. (2021).

²³⁴ Schüle and Sheiner (2020).

Three days later, on Monday 23 March 2020, the FED started accepting an even wider range of municipal bonds as collateral for loans under both the MMLF and the "Commercial Paper Funding Facility".²³⁵

By accepting these short-term municipal bonds as collateral for loans granted to commercial banks, the FED made it easier for these banks to convert municipal bonds into cash. This made such municipal bonds more attractive to hold which added to the credit worthiness of the issuers of said bonds (namely states, municipalities and other local authorities). The FED's emergency actions quickly attained the desired effect. Already in the period from 23 March 2020 until 30 March 2020, the MMD yield fell by about one percentage point.²³⁶

Shortly before, the so-called CARES Act²³⁷ had been passed by the 116th US Congress, then to be signed into law by US President Donald Trump on 27 March 2020. This Act was one of the main laws issued under Trump in order to deal with the economic fallout from the Covid-19 pandemic. (For further details, cf. Sect. 4. 4.2.) Perceived as unprecedented in both its size and scope, the CARES Act (at the time) involved the largest economic stimulus package in the American history. It was said to amount to USD 2.2 trillion, or $\pm 10\%$ of the total American GDP, in federal support measures. With this incredible amount, the CARES Act had managed to break the record set by the USD 831 billion stimulus act that had been passed in 2009, as part of the Obama administration response to the Great Recession (that had originated from the financial crisis of 2007–2008).²³⁸

Amongst many other programmes and support measures, the CARES Act included an amount of USD 454 billion to cover the FED's losses on loans to be made directly to businesses, states and municipalities, as well as an amount of USD 150 billion in direct federal financial support to states and municipalities.²³⁹

It is thought that, already by giving the FED the possibility to launch its monetary support programmes, amongst which a programme for supporting the municipal bond market (i.e., the market(s) for bonds issued by states, municipalities and other local authorities), the CARES Act may have attributed to calming the municipal bond market.²⁴⁰

Shortly thereafter, the so-called "Municipal Liquidity Facility" was effectively created on 9 April 2020 "to help state and local governments better manage cash flow pressures in order to continue to serve households and businesses in their communities".²⁴¹

²³⁵Schüle and Sheiner (2020).

²³⁶Schüle and Sheiner (2020).

²³⁷US Congress (2020).

²³⁸Snell (2020), who also mentions that the law included several other elements to help people stay engaged in the economy (e.g., by providing direct money to many people, plus extended unemployment benefits and new rules for things like tax filing and pension contributions).

²³⁹Schüle and Sheiner (2020).

²⁴⁰Schüle and Sheiner (2020).

²⁴¹Board of Governors of the Federal Reserve System (2020p).

The FED again had to invoke section 13 (3) of the Federal Reserve Act in order to obtain the approval of the US Treasury. Based upon the CARES Act, the latter provided USD 35 billion to cover any potential losses made under the facility.

The facility was then effectively established to purchase up to USD 500 billion of short-term bonds directly from: (1) US states (including the District of Columbia), (2) US counties with populations of at least 500,000 inhabitants, and (3) US cities with populations of at least 250,000 inhabitants. Eligible state-level issuers were hereby allowed to make use of the proceeds from such bonds in order to support counties and cities.²⁴² In June 2020, Illinois became the first government entity to operate the facility. Since then, there has, strangely enough, not been much additional borrowing under the programme.²⁴³

On 27 April 2020 and 3 June 2020, the FED, furthermore, expanded the list of eligible borrowers.²⁴⁴ In addition, the FED expressed its intent to continue to closely monitor conditions on the primary and secondary markets for municipal bonds. The FED also made it clear that it would continue to assess whether additional monetary support measures would be needed in order to further help supporting the flow of credit and liquidity to state and local governments.²⁴⁵

In accordance with further changes announced in June 2020, the FED decided to allow governors of states with cities and counties which, considered on their own, fell below the population thresholds, to designate up to two localities to participate on a joint basis. Governors were also given the opportunity to designate two revenue bond issuers having another capacity—such as airports, toll facilities, utilities, public transport providers—to be eligible under the Municipal Liquidity Facility.²⁴⁶

The FED at the time intended to lend up to USD 500 billion to eligible government entities provided that these had investment grade credit ratings as of 8 April 2020, in exchange for bonds that would be directly linked to future tax revenues with maturities of less than 3 years.²⁴⁷

The New York Metropolitan Transportation Authority (MTA) was one of the few public authorities to have taken advantage of this expansion of the programme. In August 2020, the MTA, more precisely, borrowed USD 451 million from the facility.²⁴⁸ The New York MTA even obtained a second loan from the facility on

²⁴²Cheng et al. (2021).

²⁴³Board of Governors of the Federal Reserve System (2020p). Cf., furthermore, Cheng et al. (2021).

²⁴⁴Board of Governors of the Federal Reserve System (2020p). Cf., furthermore, Cheng et al. (2021).

²⁴⁵Cheng et al. (2021).

²⁴⁶Cheng et al. (2021).

²⁴⁷Cheng et al. (2021).

²⁴⁸ According to Albright and Moran, the Federal Reserve purchased USD 451 million in bonds sold by New York's Metropolitan Transportation Authority, making the troubled transportation agency the second to borrow under the central bank's USD 500 billion loan program for states and cities. The FED thereby charged a real interest cost of 1.92%, (a saving of over 85 basis points over public market levels). (Cf. Albright and Moran (2020).)

10 December 2020, then borrowing an additional USD 2.9 billion, before lending under the programme was stopped.²⁴⁹

The Municipal Liquidity Facility, ultimately, stopped making bonds purchases on 31 December 2020, when it lost US Treasury support on the decision of Secretary Mnuchin.²⁵⁰

Notwithstanding the above, the FED, moreover, used two of its others credit facilities for supporting the municipal bonds market. The FED thus expanded the eligible collateral for the "MMLF" (cf. Sect. 3.3.3.3.) to include highly rated municipal debt bonds, with maturities up to 12 months, as well as so-called "municipal variable-rate demand notes". The FED, furthermore, expanded the eligible collateral under the CPFF (cf. Sect. 3.3.6.2.). The latter expansion meant to include high-quality commercial paper, backed by tax-exempt government and municipal securities, as eligible collateral. These measures were taken to allow commercial banks to inject liquidity into the municipal debt market, where tensions remained present because of a lack of liquidity.²⁵¹

In the meantime, it remained unlikely that the FED would start purchasing government debt directly from the (or "a") government, as opposed to buying on the secondary market. Such a direct financing of the government, also referred to as "monetizing the debt", was not something that the central bank of the leading capitalist country on the planet seemed to have wanted to take into consideration, which the Bank of England, in a statement of 2 April 2020, was less reluctant in doing, at least for a short period (through its so-called "Ways and Means facility").²⁵²

3.3.11 US Money Markets Policy

Resorting to yet another tool that had been used during the Great Recession, the FED also began making US dollars available to other central banks, so that they could lend these to commercial banks in need of them. Under such "currency swap operations" the FED handed out US dollars to receive foreign currency in exchange, while charging interest on said swaps. As has already been explained before (cf. Sect. 3.2.5.), five foreign central banks in this regard entered into permanent swap line agreements with the FED. It concerned, more precisely, the central banks of Canada, England, the Eurozone, Japan and Switzerland. Under this joint

²⁴⁹Cheng et al. (2021).

²⁵⁰Cheng et al. (2021).

²⁵¹Cheng et al. (2021).

²⁵²Cheng et al. (2021).

On the UK Ways and Means facility, cf. Bank of England (2020). As a temporary measure, it was announced that the facility would provide a short-term source of additional liquidity to the government if needed to smooth its cash flows and support the orderly functioning of markets, during the period of Covid-19 disruption.

agreement, the FED, moreover, demonstrated a willingness to reduce the rate it charges on these swaps, while at the same time having agreed to prolong the maturity of these swaps. (Cf. Sect. 3.2.5.) The FED also extended its temporary bilateral swap agreements with the central banks of some other countries, notably Australia, Brazil, Denmark, Korea, Mexico, New Zealand, Norway, Singapore and Sweden. On 29 July 2020, the FED extended the latter series of temporary swaps until 31 March 2021.²⁵³

The FED also offered US dollars to central banks with which there had not been an established swap line agreed upon. The latter happened through a new reverse repo facility entitled "FIMA" (short for "foreign and international monetary authorities"). The FED, more precisely, intended to lend US dollars overnight to these central banks, using US Treasury debt as collateral. This facility as well was later extended, along with the temporary swap lines itself, until 31 March 2021.²⁵⁴

3.3.12 Evaluation of the FED's Covid-19 Policy

With its Covid-19 monetary response policy, the FED has, in essence, tried to ensure that, during the Covid-19 crisis, credit (and, hence, liquidity) would continue to flow to those in need, especially households and businesses. The FED, moreover, has wanted to prevent that the financial system would have further amplified the shock to the economy caused by the Covid-19 pandemic. The FED also aimed at containing the permanent damage to the economy, so that when the Covid-19 pandemic was finally to subside, the economy would be able to expand again and take up its role of providing goods and services in order to meet demand.²⁵⁵

Of particular importance for understanding the way the FED responded to the Covid-19 crisis, is that fact that, while in many countries outside the United States, most credit runs through commercial banks, in the United States, by contrast, much of the credit runs through the capital and financial markets. This fact, obviously, hemps explaining the great trouble the FED went through in its attempts to make capital and financial markets (as well as the parties active on these markets, besides the financial instruments issued or traded on these markets) function as smoothly as possible as well.²⁵⁶

As Don Kohn, former Vice Chairman of the Federal Reserve, has expressed this approach²⁵⁷:

The Treasury market in particular is the foundation for trading in many other securities markets in the US and around the world; if it's disrupted, the functioning of every market

²⁵³Cheng et al. (2021).

²⁵⁴Cheng et al. (2021).

²⁵⁵Cheng et al. (2021).

²⁵⁶Cheng et al. (2021).

²⁵⁷As quoted by Cheng et al. (2021).

will be impaired. The FED's purchase of securities is explicitly aimed at improving the functioning of the Treasury and MBS markets, where market liquidity had been well below par in recent days.

Another matter of concern has been that, when financial markets get congested, companies may still tend to draw on commercial banks' credit lines, which can lead commercial banks to either sell Treasury and other securities, or reduce other lending. The FED's Covid-19 response policy has, therefore, also been to provide unlimited liquidity to commercial banks, so that they remained able to meet credit drawdowns, and to immediately relieve any stress on their balance sheets.²⁵⁸

3.4 IMF

3.4.1 IMF Policy in General

The policy of the International Monetary Fund (in short: IMF) has undergone considerable changes over the years.

The initial focus of the IMF in the period following its establishment until 15 August 1971 was threefold, namely: (1) ensuring exchange rate stability between the currencies of the participating member countries; (2) a far-reaching system of monetary assistance to support member countries in meeting their treaty obligations; and (3) a system of monitoring and reporting.

The exchange rate stability mechanism, which was the mainstay of the IMF's existence during its first phase, involved Member States' obligation to keep fluctuations in their exchange rates between agreed parameters (with the US dollar as the anchor currency), if necessary, through central bank interventions, based upon purchases or sales of either one's own currency or of foreign exchange, on the exchange markets. The mechanism was, moreover, supported by a mutual convertibility of the currencies of the Member States, as well as by a convertibility of the dollar into gold (at least at the level of the central banks themselves). This IMF exchange rate stability mechanism worked very well for a long time, with as effect, among others, that during the period when the IMF exchange rate stability mechanism was in operation, countries managed to reduce their post-war debt burden significantly. This was also the period of the greatest wealth creation and of the most democratic wealth distribution that the (Western) world has ever known.²⁵⁹

When the United States began to experience disproportionate budgetary costs at the end of the 1960s, in particular due to the cost of financing the costly overseas war in Vietnam, it unilaterally decided on 15 August 1971 to terminate the exchange stability rate mechanism.

²⁵⁸Cheng et al. (2021).

²⁵⁹Byttebier (2001), pp. 93–94 and pp. 111–120.

From then on, the IMF exchange rate treaty obligations were reduced to a limited number of general obligations of proper currency exchange rate behaviour, while the IMF's focus shifted to its monetary assistance obligations and to its reporting and monitoring obligations. It was also during this period that the door was left ajar for an increasing neo-liberalisation of IMF policy itself and that, under neoliberal policy, global debt rose to astounding numbers.

All of this implied that, especially as of the 1980s, IMF policy in general, and its surveillance policy in particular, became increasingly subject to the doctrine(s) of economic neoliberalism (which has been captured by the notion "Washington consensus"). According to Stiglitz, this implied that the basic ideas of economic neoliberalism, such as the idea that free trade, open markets, privatisation, deregulation, free movement of both capital (= investment opportunities) and people (= (cheap) labour), as well as the reduction of public spending in order to increase the role of the private sector, are the best methods for conducting economic policy, increasingly appealed not only to the governments of many Western countries (especially those with the world's largest economies), but also to those of developing countries. However (and even more regretfully), this approach at the same time also started to rule the thinking of major international organisations, such as the IMF and the World Bank themselves.²⁶⁰

In his book "Globalization and its Discontents", Stiglitz has argued that IMF policies have since then to an increasing extent been based on "flawed neoliberal assumptions", as follows²⁶¹:

Behind the free market ideology there is a model, often attributed to Adam Smith, which argues that market forces—the profit motive—drive the economy to efficient outcomes *as if by an invisible hand*. One of the great achievements of modern economics is to show the sense in which, and the conditions under which, Smith's conclusion is correct. It turns out that these conditions are highly restrictive. Indeed, more recent advances in economic theory—ironically occurring precisely during the period of the most relentless pursuit of the Washington Consensus policies—have shown that whenever information is imperfect and markets incomplete, which is to say always, *and especially in* developing countries, then the invisible hand works most imperfectly. Significantly, there are desirable government interventions which, in principle, can improve upon the efficiency of the market. These restrictions on the conditions under which markets result in efficiency are important—many of the key activities of government can be understood as responses to the resulting market failures.

The Washington Consensus is, in essence, a set of ten, dogmatic economic policy prescriptions. These have at the same time been considered to be the best practices "standard" reform package promoted for developing countries in crisis and in need of monetary or financial support by the leading Washington, D.C.-based

²⁶⁰Martin (2016); Chomsky (1999), p. 19.

Stiglitz also pointed out that following the 2008 financial crisis, the "neoliberal euphoria" that had gripped the world since the 1980s, first at the academic level and then at the political level, has gradually disappeared, at least in the academic world. (Stiglitz (2003), pp. 73–74.) However, this does not imply—unfortunately—that at the political level, neoliberal politics has also disappeared, quite the contrary.

²⁶¹ Stiglitz (2003), pp. 73–74.

international organisations, such as the IMF itself and the World Bank, as well as by the US Treasury Department. The term "Washington consensus" is hereby believed to have been first used, in 1989, by the British economist John Williamson.²⁶² The ten best practices prescriptions concern economic policies in areas ranging from macroeconomic stabilisation, economic of free trade and investment, as well as the expansion of free market forces within domestic economies. These "ten" prescriptions are as follows²⁶³:

- (1) fiscal discipline;
- (2) reorientation of public spending priorities to areas that offer both high economic returns and the potential to improve income distribution, such as primary health care, primary education and infrastructure; such "reorientation" has, in essence, in most cases come down to downsizing public spending and subjecting public services to austerity;
- (3) tax reform (to reduce marginal rates and broaden the tax base, i.e., implying that the poor and middle classes got taxed more and the rich less);
- (4) interest rate liberalisation;
- (5) a competitive exchange rate;
- (6) trade liberalisation;
- (7) liberalisation of foreign direct investment flows;
- (8) privatisation;
- (9) deregulation (to remove barriers to entry and exit markets); and
- (10) guaranteeing and protecting property rights (especially intellectual property rights).

The specific policies of the IMF-and by extension the EMU-which have on many occasions been severely criticised by Stiglitz, include "fiscal austerity" (which is still one of the basic principles governing the fiscal policy of both the IMF and the EU, and hence of their member states that are unfortunate enough to have become dependent on financial support from the former), high interest rates (which, however, had to be largely abandoned in the aftermath of the 2008 financial crisis), trade and capital liberalisation, as well as the insistence on privatisation and commercialisation of entire sectors of economic life that were once part of the public sector. The latter aspect of EU and US fiscal policy has been one of the main reasons for the unfavourable outlook of the health care and nursing home sectors at the start of the Covid-19 pandemic. This will be explored in more detail in Chap. 5 (=hospitals) and Chap. 6 (= nursing homes) of this book. The emphasis on the free movement of capital and labour-not coincidentally two of the main principles contained in the European treaties²⁶⁴—has in its own turn been one of the factors that helped the spread of the Covid-19 virus (as will be illustrated in more detail in Sect. 7.11.1, with reference to the example of the meat processing market).

²⁶²Williamson (2002).

²⁶³Cf. Center for International Development at Harvard University (2017).

²⁶⁴Cf. Byttebier (2017), p. 5.

3.4.2 IMF Monitoring and Coordination

In the wake of the Covid-19 epidemic, countries around the world faced urgent and unprecedented balance of payments and financing needs, which, due to the fact that these elements are precisely the main conditions for obtaining IMF monetary support, created an immediate and, in the words of the IMF itself, "record demand" on IMF resources.²⁶⁵

In the beginning phase of the Covid-19 pandemic, the IMF responded to the Covid-19 outbreak by shifting work priorities to be able to address the most critical aspects of country needs, as efficiently as possible, amongst others by streamlining its procedures to speed up decision-making, and by assigning staff members to new missions where they were most needed.²⁶⁶

Based on its general lending capacity of USD 1 trillion at the time, between May 2019 and October 2020 (i.e., including a time period prior to the Covid-19 pandemic), the IMF approved about USD 165 billion in loans.

In further response to the Covid-19 crisis, the IMF-together with the World Bank and other partners, such as the Group of 20-also called on countries' creditors to temporarily suspend debt repayments in order to make it possible to provide much-needed monetary and financial support to the poorest countries. This initiative ultimately resulted in an official "bilateral debt moratorium", known as the "Debt Service Suspension Initiative". The intent of this moratorium was to save the poorest countries billions of dollars in debt payments, so that these countries would be able to spend this money on their health systems and for protecting their citizens against the impact of Covid-19.²⁶⁷ The initiative, which was agreed on 15 April 2020, covered 73 International Development Association (IDA) and UN Least Developed Countries (LDCs) that were in arrears with their debt service payments to the IMF and World Bank. Under the initiative, creditors committed to suspend debt service payments due between 1 May 2020 and 31 December 2020. New repayments were to begin in June 2022 and were to be phased, in over 3 years, in semi-annual instalments. The initiative was, moreover, considered to be "net present value (NPV) neutral" in that there was no reduction in the nominal amount of principal or interest, and that the contractual interest rate would be paid on the deferred amounts. Under the DSSI, private creditors were approached, but not required, to participate on comparable terms. Despite calls from the official sector and a coordination attempt at the level of the IMF itself, private creditors refused to participate in the DSSI (according to available information).²⁶⁸

²⁶⁵International Monetary Fund (2020a), p. 8.

²⁶⁶International Monetary Fund (2020a), p. 9.

²⁶⁷International Monetary Fund (2020a), p. 10.

²⁶⁸International Monetary Fund (2020f), p. 13.

The IIF produced terms of reference for private sector participation on a voluntary basis, but these were not used. The reasons for this were the lack of incentives on both the creditor and debtor sides. (Cf. International Monetary Fund (2020f), p. 13.)

Immediately upon the outbreak of Covid-19, the IMF also started to provide much-needed debt relief through the "Catastrophe Containment and Relief Trust" (CCRT).²⁶⁹

The IMF and World Bank also took the initiative of bringing together African leaders, bilateral partners and multilateral institutions in what was initially meant to be a "spring meeting" taking place in April 2020, and to be continued in October 2020. The intent of this initiative was to accelerate action to tackle Covid-19 in African countries. Multilateral organisations, including the United Nations (UN), pledged continued support, with bilateral partners reaffirming their continued commitment to the above-mentioned debt moratorium as of 1 May 2020. This moratorium has, furthermore, later been extended to October 2020.²⁷⁰

The IMF and the WHO (short for "World Health Organisation") also joined forces to explore how the two organisations could start cooperating in order to save both lives and the global economy. This had as a practical impact that, for the first time in the IMF's history, epidemiologists started contributing to economic analysis and forecasts.²⁷¹ Similarly, the IMF and the WTO (short for the "World Trade Organisation") jointly called for greater attention to the role of open trade policies—particularly with regard to food and medical supplies—in combating the Covid-19 virus, (re)ensuring employment, and boosting economic growth.²⁷²

The IMF also started coordinating with a number of "Regional Financing Arrangements", such as the "European Stability Mechanism" and the "Arab Monetary Fund".²⁷³ All of these supranational institutions, to a bigger or lesser extent, started to support their members by: (1) providing loans, (2) adjusting their policies and toolkits to accommodate the urgent nature of the Covid-19 crisis, and (3) providing policy and technical advice in order to help countries' authorities through the difficult economic period caused by Covid-19.²⁷⁴

At a more internal level, in response to the Covid-19 crisis, IMF staff members also adapted to new ways of working on a daily basis. E.g., the IMF's Board, management and staff were reported to move their activities from their boardrooms and their offices to their personal living rooms, kitchens, guest rooms and basements. All IMF work thus became virtual, from surveillance missions to loan negotiations, technical assistance and training.²⁷⁵

During the course of 2020, immediate and real-time policy advice and capacity building was reported of having been provided through means of virtual communication to over 160 countries, on topics ranging from cash and data management to economic policy and governance. The IMF has also pointed to the fact that more

²⁶⁹International Monetary Fund (2020a), p. 10.

²⁷⁰International Monetary Fund (2020a), pp. 10–11.

²⁷¹ International Monetary Fund (2020a), p. 12.

²⁷²International Monetary Fund (2020a), p. 12.

²⁷³International Monetary Fund (2020a), p. 12.

²⁷⁴International Monetary Fund (2020a), p. 12.

²⁷⁵International Monetary Fund (2020a), p. 12.

than 90% of countries that had been requesting pandemic-related emergency funding, at the same time were given capacity development support in the form of direct technical advice, practical tools and policy-oriented training.²⁷⁶

3.4.3 IMF's General Debt Policy

As noted earlier, in the aftermath of the 2008 financial crisis, persistently low interest rates in many monetary territories (such as, e.g., the euro area and the United States) had contributed to a build-up of global financial risks and historically high levels of both public and private debt in most countries.²⁷⁷ These debt vulnerabilities were to be further exacerbated by the Covid-19 pandemic itself, and even further by the Covid-19 containment and social distancing measures that many countries resorted to (cf. Chap. 2.), which in turn led even more to a significant increase in government debt and deficits, even far beyond to what had been experienced during the 2008 global financial crisis.²⁷⁸

When countries began their fight against the Covid-19 pandemic, they pledged to spend whatever it took to save lives, protect people from job and income loss, and save businesses from bankruptcy, while at the same time, in as much as (already) possible, supporting recovery.²⁷⁹ In addition, many monetary authorities themselves also started helping countries to combat the Covid-19 pandemic, through a wide variety of monetary response measures, almost all of which relaxed lending conditions, besides resorting to unconventional monetary support measures, including interest or quantitative easing measures.²⁸⁰

However, it was also feared that low interest rates policies (which may add to more debt) make borrowers more vulnerable when interest rates rise, while they at the same time generally erode banks' profits, which—under the logic of free market economies—may hamper commercial banks' ability and willingness to lend money to businesses that need it to survive or to grow.²⁸¹

The Covid-19 pandemic particularly affected many vulnerable low-income countries: many of these countries were already before the outbreak of the Covid-19 pandemic at high risk of debt distress. Economic shocks, such as a pandemic, can cripple their economies even more, e.g., by reversing financing flows, which may in turn even further complicate their ability to manage their debt. This is why the IMF, along with other partner institutions, began to assist these low-income countries even more with regard to their debt management and transparency practices. This

²⁷⁶International Monetary Fund (2020a), p. 12.

²⁷⁷Cf. Byttebier (2018), pp. 80–95.

²⁷⁸International Monetary Fund (2020a), p. 17.

²⁷⁹International Monetary Fund (2020a), p. 17.

²⁸⁰Cf., for the EU, Sect. 3.2 and, for the US, Sect. 3.3.

²⁸¹International Monetary Fund (2020a), p. 17.

assistance included technical support, particularly in the development and the publishing of strategies of debt management and debt reports.²⁸²

In addition, in view of the financing needs to achieve the UN Sustainable Development Goals, the IMF and World Bank (monitored by the Group of 20) committed to the development of operational guidelines for more sustainable lending practices. The IMF and the World Bank, furthermore, resorted to an overall assessment of the debt vulnerability of low-income economies.²⁸³

3.4.4 IMF Support Through Loans

3.4.4.1 General

Provided certain conditions are met, the IMF provides financial support to its member countries under the form of loans. The basic conditions in order for member states to be eligible for such financial support are that: (1) the member state is faced with actual, potential, or prospective balance of payments problems; (2) the support is aimed to help the member state with rebuilding their international reserves and/or restoring the general conditions for strong economic growth, and (3) the member state has to commit itself to look for solutions (in line with IMF policy) for correcting underlying problems.²⁸⁴ It should be noted that the actual conditions applying to a given support measure, may differ according to the type of support, whereby support conditionality will in principle get more severe the more a type of loan is part of a more exceptional support mechanism, and/or the more a member state is in danger of becoming (chronically) dependent on the IMF support. In the best of neoliberal traditions, the underlying idea is that resorting to IMF financial support should as much as possible be avoided and, in case when it has to be asked, it should only be granted as briefly as possible, and moreover be aimed at getting the member country back on its feet as soon as possible (allowing it to again take care of itself as soon as possible).

The IMF may also provide emergency funding. Needless to say that, by means of response to the Covid-19 pandemic, the IMF was faced with a need for massively increasing such emergency financing in order to help member countries cope with the pandemic.²⁸⁵

The IMF does however not grant loans or support for specific projects. In terms of the IMF treaty (usually referred to as the IMF-articles of agreement), IMF financing is intended to help member countries: (1) with resolving balance of payments problems, (2) with stabilising their economies, and (3) with restoring sustainable

²⁸²International Monetary Fund (2020a), p. 17.

²⁸³International Monetary Fund (2020a), p. 17.

²⁸⁴International Monetary Fund (2020a), p. 21.

²⁸⁵International Monetary Fund (2020a), p. 21.

economic growth. Under the IMF-articles of agreement, IMF financing can, however, also be provided in response to specific occurrences, such as natural disasters including pandemics. Finally, the IMF may also provide so-called "precautionary financing" which is aimed at preventing and insuring against future crises. The IMF has in this regard confirmed that it continues to improve on the tools available for such crisis prevention.²⁸⁶

Broadly speaking, the IMF provides two types of loans: (1) loans against so-called "non-concessional" interest rates, and (2) loans to low-income countries on "concessional" terms (especially with regard to interest rates, some of which may even be completely interest-free).²⁸⁷

On a more technical level, the IMF arsenal contains a wide variety of types of loans, which are purportedly tailored to different types of balance of payments problems or needs and, moreover, to the specific circumstances of the applying member country, as well as its particular needs for applying for a loan.²⁸⁸

The basic underlying policy approach is that any member country can access IMF resources under the "General Resources Account" (GRA) on non-concessional terms (as laid down, in principle, in Article 8 of the IMF-articles of agreement), but that the IMF may also provide financial support of a more concessional nature. During the Covid-19 pandemic, such concessional support, in principle, happened at zero interest rates until at least June 2021, under the so-called "Poverty Reduction and Growth Trust Fund" (PRGT). The latter had especially been tailored to meet the diversity and needs of so-called "low-income countries". Historically, for both emerging and advanced market economies in crisis, most IMF assistance has been provided through "Stand-By Arrangements" designed to address short-term or even potential balance of payments problems.²⁸⁹

One of the main practical differences between the types of support is that, taking the different countries' specific circumstances into consideration, under GRA-based support programmes, there is a general expectancy that the member country will be solving its BoP (= balance of payments) problems within the period foreseen in the

²⁸⁶International Monetary Fund (2020a), p. 32.

²⁸⁷International Monetary Fund (2020a), p. 32.

All loan facilities (ECF, RCF, SCF) are concessional. These facilities have different maturities and grace periods and were as of 15 May 2021 still mentioned as interest-free. In 2015, the interest rate on RCF financing was permanently set at zero in order to further strengthen support to PRGTeligible countries in fragile situations and those hit by natural disasters. CEF and SCF financing has a zero interest rate until at least June 2021, with a grace period of 5½ years and 4 years, respectively, and a final maturity of 10 years and 8 years, respectively. The grace period and final maturity for the RCF's repayments were 15 May 2021, referred to as the same as for the ECF, i.e. 5½ years and 10 years, respectively. The Fund reviews the level of interest rates on concessional facilities under the PRGT every 2 years, based on the PRGT interest rate mechanism, with the next review on 15 May 2021 expected to be completed by end-June 2021. (Cf. International Monetary Fund (2021m).)

²⁸⁸International Monetary Fund (2021d).

²⁸⁹International Monetary Fund (2021d).

programme, while under PRGT-programmes, the IMF usually shows a greater tolerance towards longer time frames for solving such BoP-problems.²⁹⁰

However, the IMF has many more specific programmes and facilities at its disposal. E.g., the "Stand-by Credit Facility" (SCF) serves a similar purpose for low-income countries. The "Extended Fund Facility" (EFF) and the corresponding "Extended Credit Facility" (ECF) for low-income countries have been developed as the IMF' main tools for medium-term support to countries facing "protracted"—i.e., for a longer duration—balance of payments problems. The use of these facilities had already increased significantly during and after the 2008 global financial crisis, reflecting the structural nature of some members' balance of payments problems that had resulted as a consequence of said financial crisis and its aftermath.²⁹¹

Furthermore, designed for helping to prevent, or mitigate, crises and build market confidence during periods of heightened risk, member countries with already strong economic policies in force, may also resort to the "Flexible Credit Line" (FCL), or to the "Precautionary and Liquidity Line" (PLL).²⁹²

Two other facilities have been designed for rapid assistance to countries with urgent balance of payments needs, e.g., such balance payment problems that have arisen because of (basic) commodity price shocks, natural disasters or domestic fragilities. In these cases, the member country may resort to the "Rapid Financing Instrument" (RFI), or, in case of a low-income country, to the corresponding "Rapid Credit Facility" (RCF).²⁹³

Through these programmes and facilities, the IMF responded to the Covid-19 pandemic based on its USD 1 trillion lending capacity. This led to the providing of loans under several of the lending instruments mentioned above.²⁹⁴

Between the (purported) "beginning" of the Covid-19 pandemic at the end of March 2020 and 15 September 2020, the IMF had already committed approximately USD 91 billion (or SDR 64 billion) to 80 member countries, including USD 30 billion in emergency financing (under the "RCF" and "RFI" facilities).²⁹⁵

By 4 March 2021, the total amount of IMF financial assistance to 85 countries amounted to USD 107.30723 billion (or SDR 77.66603 billion).²⁹⁶

The IMG's lending actions have, more precisely, focused on five tracks²⁹⁷:

(1) Emergency funding under the "RFI" and the "RCF"-facilities.

Both the "Rapid Credit Facility" (RCF) and the "Rapid Financing Facility" (RFF) make it possible to provide emergency assistance, without a need for the

²⁹⁰International Monetary Fund (2021d).

²⁹¹International Monetary Fund (2021d).

²⁹²International Monetary Fund (2021d).

²⁹³International Monetary Fund (2021d).

²⁹⁴International Monetary Fund (2020a), p. 36.

²⁹⁵International Monetary Fund (2020a), p. 36.

²⁹⁶International Monetary Fund (2021e) (accessed 10 March 2021).

²⁹⁷ International Monetary Fund (2020a), p. 36.

IMF member country to agree upon a so-called "full-fledged support programme".

Between March 2020 and 15 September 2020, the IMF responded to a record number of demands for emergency financing under the RFI and RCF, from in total 69 countries. The IMF thereby, temporarily, doubled the access limits to these emergency facilities, which allowed the IMF to meet immediate demands from this large number of member countries.

(2) Strengthening existing lending mechanisms:

In response to the Covid-19 outbreak, the IMF also decided to increase existing lending programmes, in order to meet new urgent needs because of Covid-19. This allowed for a response to the Covid-19 crisis in the context of an ongoing monetary and economic policy dialogue. As of 15 September 2020, the IMF had already approved requests for such increases by eight member countries.

(3) New loan arrangements (including precautionary terms):

Between March 2020 and 15 September 2020, the IMF granted its approval to demands for six new IMF-supported programmes originating from five countries. These were aimed at mitigating the socioeconomic impact of the Covid-19 crisis, while at the same time maintaining macroeconomic stability.

Moreover, Flexible Credit Lines (FCLs) were made available to three additional member countries with already very strong policy frameworks and economic performance. In all three cases, the authorities of the member countries concerned intended their respective support arrangements to be of a precautionary nature.

(4) Debt relief:

In March 2020, the IMF decided to strengthen the "Catastrophe Containment and Relief Trust" (CCRT). This was aimed at strengthening the possibility for providing grant debt relief to the poorest IMF member countries that had been affected by the Covid-19 pandemic.

Already by October 2020, there were 29 eligible member countries that had together received SDR 344 million in debt service relief in two six-month tranches. These had been approved by the Executive Board of the IMF during its meetings of 13 April 2020 and of 2 October 2020, respectively.

(5) Improving liquidity:

On 17 April 2020, in response to the Covid-19 outbreak, the IMF approved the creation of a "Short-Term Liquidity Line" (SLL). This SLL was aimed at further strengthening the global financial safety net. The SLL was thereto set up as a revolving safety net for IMF member countries with very strong socioeconomic policies and fundamentals that still required moderate short-term balance of payments support.

In response to the Covid-19 pandemic, the IMF also decided to temporarily streamline its internal decision-making processes in order to be able to respond more quickly to members' requests for emergency assistance because of the Covid-19 pandemic. This measure has been a huge success: in many cases, the IMF

managed to make funds available within but a few weeks upon having received the request for such emergency financing. In addition, the IMF also temporarily suspended the application of its more "high access procedures" for RCF requests.²⁹⁸

On 22 March 2021, the IMF Executive Board approved further extensions of the temporary adjustments to its lending frameworks made during the early months of the Covid-19 pandemic, which allowed for adequate access to IMF financing through emergency instruments, the General Resources Account (GRA), and the Poverty Reduction and Growth Trust (PRGT). The extension of these measures was believed to reflect the unique circumstances created by the Covid-19 pandemic and was intended to ensure that member countries would be able to continue to access IMF financing, both through IMF-supported programmes, and emergency financing for urgent balance of payments needs. As of 22 March 2021, 74 member countries, including 49 low-income countries, had received emergency financing through these instruments.²⁹⁹

The IMF Executive Board, furthermore, approved an extension of the increases in the annual and cumulative access limits that applied to the IMF's emergency financing instruments until the end of 2021, which was first introduced in April 2020, and then extended in October 2020.³⁰⁰

The Executive Board of the IMF also approved the extension to end-2021 of the increase in the annual access limit to the IMF's GRA, introduced in July 2020, as well as the increase in the annual and cumulative access limits for concessional lending under the PRGT until end-June 2021. The increase in access to PRGT financing, as an interim measure for a broader assessment of the IMF's approach to concessional financing, was considered of being a recognition that many low-income countries (LICs) had been particularly affected by the Covid-19 pandemic and had already borrowed significantly from the IMF. It was, therefore, felt that higher limits would provide flexibility for the poorest countries in the following months to avoid having to request support through the Fund's general resources on non-concessional terms.³⁰¹

Table 3.2 gives an overview of the IMF major non-concessional lending facilities (until 2020).

²⁹⁸International Monetary Fund (2020a), p. 36.

²⁹⁹International Monetary Fund (20211).

³⁰⁰International Monetary Fund (20211).

³⁰¹International Monetary Fund (20211).

Table 3.2 Table showing	showing the IMF ma	the IMF major non-concessional lending facilities [Source: International Monetary Fund (2020a), p. 36]	lending facilities [So	urce: International M	onetary Fund (2020a), p. 36]	
Credit facility (year adopted)	Purpose	Conditions	Phasing and monitoring	Access limits	Charges	Repayment schedule (years)	Instalments
Stand-By Arrangements (SBA) (1952)	Short- to medium- term assistance for countries with short-term balance of payments difficulties	Adopt policies that provide con- fidence that the member's balance of payments diffi- culties will be resolved within a reasonable period	Generally semian- mual purchases (disbursements) contingent on observance of performance criteria and other conditions	Annual: 145% of quota; due to the Covid-19 shock, this limit was temporarily increased to 245% of quota for 9 months through April 6, 2021 Cumulative: 435% of quota	Rate of charge plus surcharge (200 basis points on amounts above 187.5% of quota; additional 100 basis points when outstanding credit remains above 187.5% of quota for more than 36 months)	31/4-5	Quarterly
Extended Fund Facility (EFF) (1974) (Extended Arrangements)	Longer-term assistance to sup- port members' structural reforms to address long- term balance of payments difficulties	At approval, adopt up to a 4-year program, with a structural agenda and an annual detailed statement of policies for the subsequent 12 months	Quarterly or semi- annual purchases (disbursements) contingent on observance of performance criteria and other conditions	Annual: 145% of quota: due to the Covid-19 shock, this limit was temporarily increased to 245percent of quota for 9 months through April 6, 2021 Cumula- tive: 435% of quota	Rate of charge plus surcharge (200 basis points on amounts above 187.5% of quota; additional 100 basis points when outstanding credit remains above 187.5% of quota for more than 51 months)	41/2-10	Semiannual
Flexible Credit Line (FCL) (2009)	Flexible instru- ment in the credit tranches to address all bal- ance of payments	Very strong ex ante macroeco- nomic fundamen- tals, economic policy framework,	Approved access available up front throughout the arrangement period; 2-year	No present limit	Rate of charge plus surcharge (200 basis points on amounts above 187.5% of quota;	31/4-5	Quarterly

	Quarterly		(continued)
	31/45	Repurchase(s) due no later than 12 months after the purchase; repurchases reconstitute access up to the level approved	
additional 100 basis points when outstanding credit remains above 187.5% of quota for more than 36 months)	Rate of charge plus surcharge (200 basis points on amounts above 187.5% of quota; additional 100 basis points when outstanding credit remains above 187.5% of quota for more than 36 months)	The basic rate of charge plus sur- charge (200 basis points on credit outstanding above 187.5% of quota); SLL credit does not count toward time-based surcharges	
	125% of quota for 6 months; 250% of quota available on approval of 1- to 2-year arrange- ments; total of 500% of quota after 12 months of satisfactory progress	Up to 145% of quota; revolving access for a period of 12 months	
FCL arrange- ments are subject to a midterm review after 1 year	Large front- loaded access, subject to semian- nual reviews (for 1- to 2-year PLL)	Approved access available up front throughout the period of the arrangement and can be reconstituted through repurchase; num- ber of successor SLLs unrestricted as long as member continues to meet	
and policy track record	Sound policy frameworks, external position, and market access, including financial sector soundness	Very strong ex ante macroeco- nomic fundamen- tals, economic policy framework, and policy track record	
needs, potential or actual	Instrument for countries with sound economic fundamentals and policies	Liquidity back- stop in case of potential external shocks that gener- ate moderate bal- ance of payment needs	
	Precautionary and Liquidity Line (PLL) (2011)	Short-Term Liquidity Line (SLL) (2020)	

Credit facility			Phasing and			Repayment	
(year adopted) Purpose	Purpose	Conditions	monitoring	Access limits	Charges	schedule (years)	Instalments
			qualification				
	_						-
Rapid Financ-	Rapid financial	Efforts to solve		Annual: 50% of	Rate of charge	31/4-5	Quarterly
ing Instrument	assistance to all	balance of pay-	chases without the	quota (80% for	plus surcharge		
(RFI) (2011)	member countries	ments difficulties	need for full-	large natural	(200 basis points		
	facing an urgent	(may include prior	fledged program	disasters); tempo-	on amounts above		
	balance of pay-	actions)	or reviews	rarily increased to	187.5% of quota;		
	ments need			100% for	additional		
				9 months through	100 basis points		
				April 6, 2021	when outstanding		
				Cumulative:	credit remains		
				100% of quota	above 187.5% of		
				(133.33% for	quota for more		
				large natural	than 36 months)		
				disasters); tempo-			
				rarily increased to			
				150% for			
				9 months through			
				April 6, 2021			

 Table 3.2 (continued)

3.4.4.2 (Eased Conditions of Borrowing Under the IMF) Stand-By Arrangement (SBA)

The IMF financial support is based upon the insight that in any economic crisis situation, countries may be in need for financial support to help them deal with balance of payments problems.³⁰²

Since its creation in June 1952, the "Stand-by Arrangement" (SBA) has become the main lending instrument for both emerging and advanced countries.³⁰³

The SBA has been for the last time fundamentally updated on 24 March 2009. This was accompanied by a modernization of some of the IMF's other support tools, with as main purpose to make all of these support mechanisms more flexible and responsive for meeting the needs of the IMF member countries.³⁰⁴ As part of this 2009 modernisation, conditionality with regard to the IMF support systems was both streamlined and simplified; moreover, more funds were made available. The 2009 reforms also allowed for greater precautionary access.³⁰⁵

In principle, all IMF member countries are eligible for SBA-based support, provided that they face actual or potential external financing needs. Access to such SBA-support is, moreover, subject to IMF policies. It, however, at the same time appeared that SBA-support is more often demanded by middle-income countries (and, in the recent past, also by advanced member countries). The reason for this appears to be that "low-income (member) countries" (LICs) have access to a wide range of other support mechanisms on a concessional basis and tailored to their specific needs.³⁰⁶

SBA-based support allows for a flexible duration of actual support measures. The latter usually cover a period between 12 and 24 months, albeit the duration of the support measures may not exceed 36 months.³⁰⁷ Access to the financial resources of the IMF under the SBA is, moreover, guided by the following general conditions: (1) the member country's need for financing, (2) the member country's repayment capacity, and (3) the track record of the member country with regard to previous use of the IMF resources. Provided that these guidelines are respected, the IMF is

³⁰²International Monetary Fund (2021c).

³⁰³International Monetary Fund (2021c).

³⁰⁴This "upgrade" obviously took place in the aftermath of the severe financial crisis of 2008. The 2009 reforms, together with an expanded pool of loanable resources, were intended to enable the Fund to play a greater role in addressing the then ongoing consequences of the 2008 global financial crisis for the benefit of all IMF members. All aspects of the IMF's lending instruments and policies were assessed: existing General Resources Account facilities, the conditionality framework, access levels, fees and charges, and maturities. Complementary reforms of concessional lending instruments for low-income members were pursued in parallel. (Cf., furthermore, International Monetary Fund (2009).)

³⁰⁵International Monetary Fund (2021c).

³⁰⁶International Monetary Fund (2021c).

³⁰⁷International Monetary Fund (2021c).

flexible with regard to both the amounts to be lend, as well as the timing of disbursements. 308

Loans under the SBA may be based on four different types of access³⁰⁹:

(1) Normal SBA-access: The SBA is one of the several lending facilities under the IMF's so-called "General Resources Account" (GRA). Access to these GRA resources, at any moment in time, is subject to two main limits: (i.) an annual limit of 145% of the member country's quota being kept by the IMF in the member state's own currency in any 12-month period, and (ii.) a cumulative limit over the life of the arrangement of up to 435% of the member state's quota being kept in the member state's own currency, net of repayments.

Under Covid-19, said annual limit of 145% was raised to a limit of 245% of the member country's quota being kept in its own currency, and this until 6 April 2021.

- (2) Exceptional SBA-access: Any access beyond the two abovementioned "normal" limits may be decided on a case-by-case basis under the IMF's so-called Exceptional Access³¹⁰ policy.
- (3) Front-loaded SBA-access: financial support may be frontloaded when justified by the soundness of the country's policies, as well as by the nature of the member country's financing needs.
- (4) Rapid SBA-access: Approval of IMF loans under a SBA may be expedited through the "Emergency Financing Mechanism". This possibility had been resorted to a couple of times during the 2008 financial crisis.
- (5) Precautionary SBA-access: "High Access Precautionary Arrangements" (HAPAs) are available for member countries that, while experiencing exceptionally large potential financing needs, have no intention to draw for all of the approved amounts, but still want to retain this possibility as option to do so, if needed.

Repayments of resources borrowed under the SBA are subject to the following rules:

- (1) Such repayments of SBA-drawings are due within 3¹/₄ to 5 years of each of the actual disbursements of the ILF. This implies that each of the disbursements has to be repaid in eight equal quarterly instalments, starting 3¹/₄ years after the date of each disbursement.
- (2) The SBA-lending rate consists of: (i.) the market-determined "Special Drawing Rights (SDR) interest rate"—which in normal times has a minimum floor of 5 basis points—and a margin. On 15 May 2021, this margin amounted to 100 basis points. Together, this minimum floor and margin are referred to as the "base load rate of charge". And (ii.) surcharges, which are dependent upon

³⁰⁸International Monetary Fund (2021c).

³⁰⁹International Monetary Fund (2021c).

³¹⁰Cf. Article V, section 3(a), (b) and (c) of the IMF Articles of Agreement.

the amount and the duration of the outstanding credit. A surcharge of 200 basis points is due on the amount of outstanding credit exceeding 187.5% of the quota. If the credit remains above 187.5% of the quota after 3 years, this surcharge increases to 300 basis points.

The surcharge mechanism is, obviously, intended to discourage a large and prolonged use of IMF resources under the SBA.

(3) Resources taken up under all SBAs are, in addition, subject to a "commitment fee". This commitment fee is charged at the beginning of each 12-month-period. It is due on the amounts that could be drawn during the period of the arrangement (at a rate of 15 basis points for amounts committed up to 115% of quota, 30 basis points for amounts committed above 115% and up to 575% of quota, and 60 basis points for amounts above 575% of quota).

These fees are reimbursed on a pro rata basis if the amounts are actually used during the relevant period. Therefore, if the country borrows the full amount committed under an SBA, the commitment fee will be fully reimbursed. However, no repayment will be made under a precautionary stand-by arrangement where countries decide not to draw.³¹¹

3.4.4.3 (Eased Conditions of Borrowing Under the IMF) Extended Fund Facility (EFF)

Assistance under an "Extended Fund Facility" (EFF) can be resorted to when a member country faces serious medium-term balance of payments problems due to structural weaknesses that take time to address. In comparison to support which is provided under the "Stand-by Arrangement", assistance provided under an EFF is characterised by the two following characteristics: (1) a longer commitment to the programme, and (2) a longer repayment period.³¹² These characteristics are intended to ensure that member countries applying to EFF support will use the support to implement medium-term structural reforms.³¹³ The severe payment imbalances which merit support under the EFF may be due to structural impediments or to slow growth, and to an inherently weak balance of payments position.³¹⁴

EFF-drawings are generally not resorted to by means of a precautionary measure, e.g., in anticipation of a future balance of payments problem.³¹⁵

As the intended structural reforms, meant to address deep-seated weaknesses, often take time to implement and to lead to actual results, both the commitment to an EFF programme, and the repayment schedule, will cover longer periods than most of

³¹¹International Monetary Fund (2021c).

³¹²International Monetary Fund (2021g).

³¹³International Monetary Fund (2021g).

³¹⁴International Monetary Fund (2021g).

³¹⁵International Monetary Fund (2021g).

the other IMF arrangements.³¹⁶ Because of this, EFF-support is typically approved for 3-year periods, but may even be approved for periods of up to 4 years in order to allow for the implementation of the intended deep and lasting structural reforms.³¹⁷

The repayment schedule follows a similar logic. This implies that amounts drawn under an EFF, are be repaid over a period of $4\frac{1}{2}$ to 10 years, and to be made in twelve equal semi-annual instalments. By contrast, and as explained above (cf. Sect. 3.4.4.2.), credit taken under a SBA must be repaid over $3\frac{1}{4}$ -5 years.³¹⁸

When a country borrows funds (in a currency other than its own) from the IMF, it will in general be required to commit to policies intended to overcome its economic and structural problems. Under an EFF-loan, these commitments, which usually include specific conditions, will have to focus on structural reforms. These reforms will, moreover, have to address institutional or economic weaknesses, in addition to containing policies to accomplish macroeconomic stability. Be this as it may, the Executive Board of the IMF is committed to regularly assess the performance of the EFF and may adjust it when needed to reflect economic developments.³¹⁹

As with other IMF loans, the extent of borrowing under the EFF depends on the country's financing needs, its repayment capacity and its past use of IMF resources.³²⁰

There are several drawing methods possible with regard to the EFF³²¹:

- (1) Normal access: The EFF qualifies as one of the several lending facilities under the IMF's "General Resources Account" (GRA). This implies that the normal GRA-drawing limits apply.³²²
- (2) Exceptional access: Access beyond these normal limits may be decided upon on a case-by-case basis under the IMF's Exceptional Access Policy.

The resources made available under a EFF are, furthermore, subject to a commitment fee. This commitment fee is to be charged at the beginning of each 12 month-period, and is calculated on the amounts that could be drawn.³²³ As is the case with regard to the GRA in general, the commitment fees paid will be reimbursed if the amounts are effectively used during the period concerned,

³¹⁶International Monetary Fund (2021g).

³¹⁷International Monetary Fund (2021g).

³¹⁸International Monetary Fund (2021g).

³¹⁹International Monetary Fund (2021g).

³²⁰International Monetary Fund (2021g).

³²¹International Monetary Fund (2021g).

³²²International Monetary Fund (2021g).

As is the case for any access to GRA resources, this implies that the normal limit of 145% per year applies with regard to the member country's IMF quota (as part of the IMF's response to the Covid-19 crisis, temporarily having been increased to 245% of the IMF member country's quota until 6 April 2021), and a cumulative limit on the total outstanding loans over the life of the programme of 435% of the member country's quota, net of scheduled repayments. (Cf. International Monetary Fund (2021g).)

 $^{^{323}}$ This fee is 15 basis points, or 0.15 percentage points, for amounts up to 115% of quota; 30 basis points for amounts above 115% and up to 575% of quota; and 60 basis points for amounts above 575% of quota. (Cf. International Monetary Fund (2021g).)

implying that if a country will draw the full amount available under an EFF, the commitment fees will be fully reimbursed as well.³²⁴

The cost of the actual borrowing is (under normal circumstances) linked to the IMF's market-related interest rate, generally known as the "basic rate of charge". The latter itself is linked to the IMF's Special Drawing Rights (SDR) interest rate.³²⁵ Moreover, a further service charge of 50 basis points, or 0.5 percentage points, will be applied to each amount that is actually drawn.³²⁶

3.4.4.4 Rapid Credit Facility (RCF)

The RCF is aimed at providing (1) low-access, (2) rapid, (3) concessional, and (4) without-ex-post-conditionality, financial assistance to low-income countries ("LICs") facing urgent balance of payments need.³²⁷

The RCF was designed to provide support to LICs in a wide variety of extraordinary circumstances. These extraordinary circumstances include: shocks, natural disasters and emergencies resulting from fragility. The RCF is based upon the principle of not only providing financial support, but also political support, as well as help to catalyse foreign aid.³²⁸

Eligible for support under the RCF are member states that are eligible for the "Poverty Reduction and Growth Trust" (PRGF).³²⁹ A further condition to be eligible for RCF support is that the member state concerned must face an urgent balance of payments need. It is, moreover, required that a full economic support programme is either not necessary (e.g., in case the shock the member state undergoes is transitory and of limited nature) or not feasible (e.g., in case there are capacity constraints or national fragilities at play).³³⁰

The financial assistance that the IMF provides under the RCF happens in the form of a single loan disbursement. The fact that RCF financing happens in in the form of a single disbursement, does not imply that the support is not to be granted repeatedly. Repeated use of the RCF is possible provided that the balance of payments need which make the member country eligible for the RCF support was mainly caused by a sudden, exogenous shock or in case the member country demonstrates a track record of adequate macroeconomic policies. However, even in case of such a repeated use, there can be at most two disbursements per year.³³¹

The IMF determines access to RCF financing on a case-by-case basis. The IMF thereby has to consider the following elements: (1) the member country's balance of

³²⁴International Monetary Fund (2021g).

³²⁵International Monetary Fund (2021g).

³²⁶International Monetary Fund (2021g).

³²⁷International Monetary Fund (2021b).

³²⁸International Monetary Fund (2021b).

³²⁹Cf., furthermore, International Monetary Fund (2016).

³³⁰International Monetary Fund (2021b).

³³¹International Monetary Fund (2021b).

payments needs, (2) the soundness of the member country's macroeconomic policies, (3) the member country's capacity to reimburse the IMF, (4) the already pre-existing amount of outstanding IMF credit, and (5) the member country's past track record in using IMF credit. Moreover, RCF financing requires that the IMF would examine the characteristics and the magnitude of the underlying shocks for which RCF support is requested.³³²

The member state's access under both the regular and exogenous shocks windows is limited to 50% of the member country's quota per year, and 100% of the member state's quota on a cumulative basis, however with annual access under the regular window subject to a standard of 25% of the member state's quota.³³³ However, because of increased financial needs of various member countries caused by Covid-19, access limits under the exogenous shocks window were, on a temporary basis, raised from 50 to 100% of the member country's quota on a yearly basis, and from 100 to 150% of the member country's quota on a cumulative basis in the period from 6 April 2020 until 6 April 2021. By contrast, under the RCF's large-scale natural disaster window, access to financial support remained limited to 80% of the member country's quota on a yearly basis, and to 133.33% of the member state's quota on a cumulative basis. The latter form of access was, moreover, subject to an assessment that the disaster for which support was requested, had caused damage which represented at least 20% of the member country's GDP.³³⁴

Fund support under the RCF is not subjected to ex post conditionality or review. This does not exclude that prior actions are sometimes applied. However, economic policies supported under the RCF should, in general, aim to address the member country's underlying balance of payments difficulties, besides supporting the member country's poverty reduction and growth objectives.³³⁵

Funding granted under the RCF happens at a zero-interest rate, a grace period of $5\frac{1}{2}$ years and a final maturity of 10 years.³³⁶

3.4.4.5 Rapid Financing Instrument (RFI)

Unlike the RCF, which is only available to so-called lower-income countries (or, abbreviated, "LICs"), the Rapid Financing Instrument (RFI) aims to provide: (1) rapid financial assistance, which is (2) available to all IMF member countries, provided that (3) these face an urgent balance of payments need.³³⁷

The RFI has in the past been created as part of a broader reform which was aimed at making the IMF financial support more flexible for dealing with the IMF member countries' diverse needs. The RFI, moreover, aimed at replacing a wide range of

³³²International Monetary Fund (2021b).

³³³International Monetary Fund (2021b).

³³⁴International Monetary Fund (2021b).

³³⁵International Monetary Fund (2021b).

³³⁶International Monetary Fund (2021b).

³³⁷International Monetary Fund (2020c).

former "emergency assistance policy instruments", which explains why the Instrument may be resorted to in a wide range of circumstances. The RFI was thus created as a single, flexible and broad-coverage mechanism, in order to replace former of the IMF's policy instruments, such as the "Emergency Natural Disaster Assistance" (ENDA) and the "Emergency Post-Conflict Assistance" (EPCA).³³⁸

Under the abovementioned general condition (namely: a balance of payments need of an urgent nature), the RFI-mechanism allows the IMF to provide rapid, low-access financial assistance to its member countries, with as a further advantage that this does pose a need for a full-fledged programme. These urgent needs include, e.g., needs resulting from (1) commodity price shocks, (2) natural disasters, (3) conflict and post-conflict situations, and (4) fragility.³³⁹

RFI-support is, in principle, available to all IMF member countries. However, member countries who are at the same time eligible for financial support under the "Poverty Reduction and Growth Trust" (PRGT) are believed to be more likely resorting to support under the similar, albeit concessional "Rapid Credit Facility" (RCF). Another distinguishing feature of the RFI is, moreover, that it has been designed for dealing with situations where the member country's commitment to a full-fledged economic programme is neither necessary, nor feasible. Such a situation may occur when the shock that forms the reason for asking for RFI-support, is of a transitory and limited nature. This may, e.g., be the case when a member country's policy design or implementation capacity is limited, which in its own turn may occur due to the needs and fragilities of the member country's balance of payments.³⁴⁰

In order to meet the IMF member states' large and urgent financial needs that arose form Covid-19, the IMF decided to temporarily increase the access limits under the regular window of the RFI-instrument from 50 to 100% of the member country's quota on a yearly basis, and from 100 to 150% of the member country's quota on a cumulative basis, net of scheduled buybacks. These higher access limits initially only applied for a brief period of 6 months, more precisely from 6 April 2020 until 5 October 2020, but were later extended by the IMF Board.³⁴¹

The access limits under the large-scale natural disaster window of the RFI remained unchanged; these access limits, hence, continued to amount to 80% of the member country's quota on a yearly basis, and to 133.33% of the member country's quota on a cumulative basis. Access under this natural disaster window, moreover, remained only possible in cases where the damage incurred from the disaster had amounted to at least 20% of the member country's GDP, and provided that the member country's existing and future policies remained sufficiently robust to deal with the shock of the natural disaster.³⁴²

The level of access to the RFI in individual cases depends, moreover, on the following elements: (1) the member country's balance of payments needs, (2) the

³³⁸International Monetary Fund (2020c).

³³⁹International Monetary Fund (2020c).

³⁴⁰International Monetary Fund (2020c).

³⁴¹International Monetary Fund (2020c).

³⁴²International Monetary Fund (2020c).

member country's repayment capacity, (3) the member country's already outstanding credit to the IMF, and (4) the member country's track record with regard to using IMF resources in the past.³⁴³

The financial assistance that the IMF provides under the RFI is, furthermore, subject to the same funding conditions as the 'Flexible Credit Line'' (FCL), the ''Precautionary and Liquidity Line'' (PLL) and the ''Stand-by Arrangements'' (SBA). Financial assistance under the RFI is, moreover, expected to be reimbursed within a time frame from $3\frac{1}{4}$ to 5 years.³⁴⁴

Financial assistance under the RFI is provided without a need for the member state to commit to a full programme or to reviews. However, a member country requesting RFI assistance remains committed to cooperate with the IMF by making efforts to resolve its balance of payments difficulties and by describing the general economic policies it proposes to follow in order to deal with the problems for which the support has been requested. Prior actions may be required where warranted.³⁴⁵

Although RFI financing often happens under the form of a one-off purchase of currencies in order to meet an urgent balance of payments need of a limited duration, this does not imply that the instrument cannot be used repeatedly. Such a repeated use of RFI-resources over a 3-year period is possible, provided that the member country's balance of payments need has been primarily caused by an exogenous shock, or in case the member country has, prior to the support request, established a track record of adequate macroeconomic policies, including through an IMF staffmonitored programme.³⁴⁶

Similar to what happens under the RCF, besides granting emergency financial support under the RFI, the IMF can also provide technical assistance. Such technical assistance may be given in order to strengthen the member country's capacity to establish comprehensive macroeconomic policies. Areas of concern which can be put at the centre of attention under this technical support may include: (1) statistical capacity building, and (2) the establishment and organisation of fiscal, monetary and foreign exchange institutions in order to help establish capacity in the policy fields of taxation and public expenditure, payments, credit and foreign exchange operations.³⁴⁷

3.4.4.6 Short-Term Liquidity Line (SLL)

On 15 April 2020, the IMF announced a new measure for helping member countries dealing with the Covid-19 pandemic, which was called the "Short-term Liquidity Line" (SLL).³⁴⁸

³⁴³International Monetary Fund (2020c).

³⁴⁴International Monetary Fund (2020c).

³⁴⁵International Monetary Fund (2020c).

³⁴⁶International Monetary Fund (2020c).

³⁴⁷International Monetary Fund (2020c).

³⁴⁸Sawant (2020) and Mondovisione (2020).

The idea behind this measure was that IMF member countries with a sound policy framework, that were facing short-term liquidity shortages and balance of payments problems could apply for IMF loans. If granted, these loans would be extended for a period of 12 months. The special feature of this credit line, compared to its predecessors, is that it has "revolving access". This implies that it allows borrowing member countries to partially, or fully, repay the loans, and then reclaim them over the 1-year period for which the loans apply, in order to meet their short-term liquidity needs.³⁴⁹

The SLL was set up as a special facility and designed as a revolving safety net for member countries characterized by extraordinarily strong fundamentals and policies. It provides liquidity support to such member countries facing potential, moderate short-term balance of payments problems with regard to the member countries' capital account and reserve pressures, and which are due to volatility on the international capital markets. The SLL is, hereby, aimed to help the member countries in dealing with the impact of liquidity events and with minimizing the risk of shocks, in order to prevent the latter from developing into deeper crises and from spilling over to other countries. As such, the SLL was aimed to add to the IMF's existing lending toolkit and other components of the global financial safety net.³⁵⁰

The SLL was conceived as a special facility under the IMF's General Resources Account (GRA). It was designed to provide swap-type liquidity support, and contained several innovative features, amongst which revolving access. The characteristics of the SLL are as follows³⁵¹:

- (1) The SLL is conceived to address "potential, moderate, short-term balance of payments needs related to capital account pressures" that could originate from external events, rather than from "domestic" shocks. Access is limited to 145% the applying member country's quota (= which is the normal annual access limit under the GRA).³⁵²
- (2) Individual SLL agreements are in principle approved for a period of a year. However, successor SLL agreements may be granted for as long as a member country continues to meet with the requirements for obtaining support under the SLL and, more specifically, continues to show a particular balance of payments problem.
- (3) The SLL grants "revolving access". This feature allows for repeated purchases and redemptions (partial or in total), within and across SLL agreements.

³⁴⁹Sawant (2020) and Mondovisione (2020).

³⁵⁰International Monetary Fund (2021a). Cf., furthermore, Mondovisione (2020).

³⁵¹International Monetary Fund (2021a). Cf., furthermore, Mondovisione (2020).

³⁵²According to Mondovisione, the idea of renewable access up to 145% of the member country's quota is that this should provide cover against most of the repeated moderate shocks that the SLL is designed to address, and that the availability of successor arrangements, also subject to continued qualification and the presence of a special BoP need, should ensure that the SLL functions as a sufficiently reliable safety net. (Cf. Mondovisione (2020).)

Redemptions in this way replenish the member country's right to make new calls to the maximum approved access.

The SLL is moreover based on a special fee structure. This fee structure contains a non-repayable commitment fee of eight basis points (bps), besides a service fee of 21 bps.³⁵³

As noted, the SLL is intended for member countries having extraordinarily strong fundamentals and policy frameworks. It, moreover, is based on the same qualification criteria that applied to support under the "Flexible Credit Line" (or, abbreviated: "FCL"). The basic assessment elements in order to qualify for SLL support is whether the member country: (1) is characterized by extraordinarily strong economic fundamentals and policy frameworks at an institutional level; (2) conducts—and has a sustained track-record of conducting—extraordinarily strong policies; and (3) remains committed to maintaining these high standards of conduct in the future. These conditions, coming down to the fact that the member country must satisfy the same qualification criteria as under the FCL, are intended to facilitate the transition from the FCL to the SLL.³⁵⁴

3.4.4.7 Extended Credit Facility (ECF)

The Extended Credit Facility (ECF) is designed to provide financial assistance to member countries with so-called "protracted"—i.e., "prolonged"—balance of payments problems.³⁵⁵

The ECF was created as part of the "Poverty Reduction and Growth Trust" (PRGT). This happened under a broader reform to make financial support granted by the IMF, more flexible, as well as better equipped to respond to the diverse needs of low-income countries (LICs), including in crisis situations. The ECF is considered to be the IMF's main tool for providing medium-term financial support to said low-income countries.³⁵⁶

The ECF is, more in particular, conceived to support low-income countries' economic programmes aimed at moving towards a stable and sustainable macroeconomic position, consistent with poverty reduction and strong and sustainable growth. The further idea is that the ECF can also help such low-income countries to receive additional foreign aid.³⁵⁷ The basic requirement for eligibility under the ECF is that the member country applying for such support should be facing a protracted balance of payments problem. This condition implies that the underlying macroeconomic

³⁵³International Monetary Fund (2021a). Cf., furthermore, Mondovisione (2020).

³⁵⁴ International Monetary Fund (2021a). Cf., furthermore, Mondovisione (2020).

³⁵⁵International Monetary Fund (2020d).

³⁵⁶International Monetary Fund (2020d).

³⁵⁷International Monetary Fund (2020d).

imbalances that the applying member country is facing, are expected to extend over a medium to long term period.³⁵⁸

Support under an ECF arrangement may be granted for an initial period of 3–5 years, with an overall maximum of 5 years. However, after the expiry, cancellation or termination of a first ECF arrangement, the IMF may approve additional ECF arrangements. The IMF determines any concrete access to ECF financing on a case-by-case basis. The IMF will thereby, in accordance with the applying access standards, consider the following elements: (1) the member country's balance of payments needs, (2) the strength of the member country's economic program, (3) the ability of the member country to repay the IMF, (4) the amount of outstanding IMF credit the applying member country already has, and (5) the member country's track record in using and repaying IMF credit.³⁵⁹

Under the rules governing the PRGT, total access to PRGT concessional finance is limited to 100% of the member country's quota on a yearly basis, and total concessional credit outstanding for an amount of 300% of the member country's quota. These limits may be exceeded in exceptional circumstances. This is, however, subject to strict maximum caps, namely 133.33% of the member country's quota annually, and 400% of the member country's quota cumulatively. The IMF may, moreover, increase access during the course of an existing agreement, when necessary, however subject to the applicable limits.³⁶⁰

Although ECF access is of a concessional nature, it is still conditional on the applying member country agreeing to implement a set of policies that will help it move towards a stable and sustainable macroeconomic position over the medium term. The applying member state must thereto describe its commitments, including specific conditions, in a letter of intent that has to be provided to the IMF. The conditionality of the IMF programmes is said to be "streamlined" and to focus on policy actions that are considered essential for achieving the programme's objectives. An effort will be made to base the ECF support programmes on the applying member country's social objectives.³⁶¹

ECF financing comes at a zero interest rate until at least June 2021. A grace period of $5\frac{1}{2}$ years, and a final maturity of 10 years, applies. The level of the interest

³⁵⁸International Monetary Fund (2020d).

³⁵⁹International Monetary Fund (2020d).

³⁶⁰International Monetary Fund (2020d).

³⁶¹For more information on this conditionality, cf. International Monetary Fund (2020d).

For the ECF (as well as for SCF arrangements and policy support instruments with an initial duration of more than 2 years), a PRGT must be submitted to the IMF Board for the completion of the second and subsequent reviews. In cases where the member country has limited institutional capacity to meet the PRGT requirements before the second review of the ECF, such as in cases of fragility, the member country may request IMF Board approval for an extension. The PRGT must describe the member country's macroeconomic, structural and social policies in support of growth and poverty reduction, as well as the associated external financing needs and key sources of financing. (Cf., furthermore, International Monetary Fund (2020d).)

rates on concessional facilities under the PRGT is to be reviewed by the IMF every 2 years. 362

3.4.4.8 Flexible Credit Line (FCL)

The Flexible Credit Line (FCL) was created as part of the IMF's reforms with regard to lending to member countries who face liquidity shortages. One of the main objectives of the 2009 lending reforms was to reduce the stigma member countries fear when borrowing from the IMF. A further aim of these reforms was to encourage countries to seek assistance before a crisis they are facing may escalate. The Flexible Credit Line (FCL) was in this regard conceived to meet needs for crisis prevention and mitigation loans of member countries with extraordinarily strong policy frameworks and with a history of sound economic performance.³⁶³ The flexibility the FCL allows for was, moreover, intended to allow the IMF to respond to a wide range of member countries' specific needs.³⁶⁴

By 2 March 2021, five countries—Chile, Colombia, Mexico, Peru and Poland—had entered into FCL arrangements with the IMF.³⁶⁵

In order for a member country to be eligible for support under the FCL, it must have extraordinarily strong economic fundamentals, as well as a convincing policy track-record. The overall condition for applying for support under the FCL is, furthermore, that the member state must be facing potential or actual balance of payments pressures. The member country must also meet with the qualifying criteria described hereafter³⁶⁶:

- (1) A qualified member country has the option of drawing on a FCL credit line at any time within a predefined period, or to just consider it as a precautionary instrument.
- (2) The FCL aims at providing a qualified member country with substantial, immediate, and unconditional access to IMF resources, on the basis of sound public policy frameworks
- (3) The FCL functions as a revolving credit line, with an initial duration of 1 or 2 years.

Under a 2-year FCL arrangement, a review of the member state's policies by the Board of Directors of the IMF is to be carried out within a period of 12 months after the approval of the arrangement, in order for the member state to retain access to the IMF resources during the second year. This examination is intended to enable the IMF to evaluate the member state's continuous

³⁶²International Monetary Fund (2020d).

³⁶³International Monetary Fund (2021h).

³⁶⁴International Monetary Fund (2021h).

³⁶⁵International Monetary Fund (2021h).

³⁶⁶International Monetary Fund (2021h).

conformity to the qualification criteria to be assessed. If a country decides to draw on the credit line granted to it, repayments will subsequently have to be made over a period of $3\frac{1}{4}$ to 5 years.

(4) Access to IMF resources under a FCL arrangement is not capped. The IMF, moreover, assesses the need for resources on a case-by-case basis in accordance with the member state's actual or potential balance of payments needs.

The cost of obtaining a loan under the FCL is similar to that of borrowing under the IMF's more traditional instruments, namely the SBA and PLL.³⁶⁷

Access to the IMF resources on a precautionary basis is conditional on the payment of a yearly commitment fee on the amount that could be drawn during that annual period. This commitment fee is later repaid on a pro rata basis if the member state chooses to effectively draw on these resources during said period. The commitment fee rises according to the level of access that remains available during a period of 12-month (with 15 basis points for amounts committed up to 115% of the member country's quota, with 30 basis points for amounts committed between 115% and 575% of the member country's quota, and with 60 basis points for amounts that exceed 575% of the member state's quota).³⁶⁸

As with other IMF drawing arrangements, the lending rate charged on FCL drawings consists of: (1) a market-determined "SDR interest rate"—with a minimum floor of 5 basis points—and a margin, which on 15 May 2021 amounted to 100 basis points. The SDR interest rate and the additional margin are together referred to as the "basic rate of charge". And (2) surcharges which are dependent on the amount and duration of the outstanding credit. A surcharge of 200 basis points is due on the amount of outstanding credit exceeding 187.5% of the member state's quota. If the credit that has been drawn rises above 187.5% of the member state's quota after 3 years, said surcharge even increases to 300 basis points. Taken together, the level and duration surcharges are designed to discourage the member country to make a large and prolonged use of these IMF resources.³⁶⁹ Moreover, a service charge of 50 basis points is applied to each amount that is effectively drawn.³⁷⁰

At the centre of the process of evaluating if a member country will be granted access to the FCL, is an assessment made by the IMF, that the member country meets the following criteria³⁷¹:

- The member country is characterized by extraordinarily strong economic fundamentals, as well as policy frameworks of an institutional nature.
- The member country implements—and has a long track-record of successfully implementing—extraordinarily strong public policies.

³⁶⁷International Monetary Fund (2021h).

³⁶⁸International Monetary Fund (2021h).

³⁶⁹International Monetary Fund (2021h).

³⁷⁰International Monetary Fund (2021h).

³⁷¹International Monetary Fund (2021h).

• The member country demonstrates an ongoing commitment to maintain these policies in the future.

When the IMF grants access to the FCL, this at the same time demonstrates the IMF's confidence in the qualified member country's meeting with said set of criteria.³⁷²

The IMF has in this regard pointed to the existence of a (practical) set of indicators and thresholds that has been developed in order to improve the transparency and predictability of the qualification frameworks for accessing the FCL, while at the same time maintaining existing qualification standards.³⁷³ In addition to an overwhelmingly positive assessment of the member country's general public policies during its most recent so-called "Article IV consultation" (cf., furthermore, Sect. 3.4.5.2.), the further criteria with regard to the soundness of the overall monetary, fiscal and financial system of the applying country which are resorted to in order to assess a country's eligibility for a loan under the FCL are as follows³⁷⁴:

- (1) A sustainable external position.
- (2) The country's capital account position has to be dominated by private money flows.
- (3) Regular access by the sovereign to international capital markets on favourable terms.
- (4) When the FCL arrangement is resorted to as a precautionary measure, a reserve position that—despite possible pressures on the balance of payments that have led to applying for the IMF assistance in the first place—remains relatively comfortable.
- (5) Sound public finances, amongst which a sustainable public debt position.
- (6) Low and stable inflation that is situated within the framework of a sound monetary and exchange rate policy.
- (7) A sound financial system characterized by the absence of solvency problems that could pose a threat to systemic stability.
- (8) Deploying an effective supervision of the financial sector.
- (9) Integrity and transparency with regard to data.

3.4.4.9 Precautionary and Liquidity Line (PLL)

It has been recognized that the 2008 global financial crisis (and its aftermath) underlined the need for better and more effective global financial safety mechanisms, in order to help members deal with negative shocks (such as crises).³⁷⁵

³⁷²International Monetary Fund (2021h).

³⁷³International Monetary Fund (2021h).

³⁷⁴International Monetary Fund (2021h).

³⁷⁵International Monetary Fund (2021i).

Not surprisingly, there have been several changes to the IMF lending policy and instruments in the aftermath of the financial crisis of 2008. According to the IMF, one of the main objectives of these reforms has been to complement the IMF's traditional crisis resolution instruments with more adequate mechanisms for preventing (new) crises. This led to the implementation of the so-called "Precautionary and Liquidity Line" (PLL). This instrument was mainly developed to allow the IMF to deal, in a sufficiently flexible manner, with liquidity needs of eligible member countries. In general, the eligibility to the PLL implies that the applying member country is characterized by sound economic fundamentals, while however at the same time showing certain vulnerabilities that prevent it from resorting to the "Flexible Credit Line" (FCL).

The PLL's specific purpose is to provide financing to eligible member countries for dealing with actual or potential balance of payments needs of countries. The PLL is thereby conceived to serve as a safety net or to help resolve crises in a wide variety of situations. In assessing eligibility under the PLL, the IMF combines an ex ante qualification process of eligibility criteria, with targeted ex-post conditionality in order to be able to address possible remaining vulnerabilities that have been identified in the qualification assessment. A PLL qualification is, moreover, believed to give a strong signal that the IMF underwrites the strength of both the economic fundamentals and the specific policies of qualifying countries. This implies that, in such a manner, already the mere approval of a PLL application may help to build market confidence in the member country's policy plans.³⁷⁷

Actual PLL agreements can either have a (short) time frame of 6 months or a (relatively long) time frame of 1 to 2 years.³⁷⁸

The relatively short 6-month term is conceived to meet the actual or potential short-term balance of payments needs of eligible member countries. Access to this facility is subject to the condition that the member country can make credible and sufficient progress in addressing its vulnerabilities within this (short) 6-month period. A maximum of 125% of the applying member country's quota is (normally made) available upon approval of such PLL arrangement during a short time frame of 6 months only.³⁷⁹ Still, in case the applying member country is facing a larger actual or potential short-term balance of payments need that stems from an exogenous shock, including increased tension at a global or regional level, PPL access may be granted for a higher limit amounting to 250% of the member country's quota per PPL arrangement. This is at the same time the maximum ceiling for a member country's total access under 6-month PLL arrangements.³⁸⁰

However successive 6-month PLL arrangements may be granted to eligible member countries provided that: (1) a what has been referred to as a "cooling-off

³⁷⁶International Monetary Fund (2021i).

³⁷⁷International Monetary Fund (2021i).

³⁷⁸International Monetary Fund (2021i).

³⁷⁹International Monetary Fund (2021i).

³⁸⁰International Monetary Fund (2021i).

period" of at least 2 years has passed since the date on which the IMF granted the previous 6-month PLL arrangement, or (2) it appears that, because of exogenous shocks, the applying member country's balance of payments problems last longer than originally thought. The granting of such a successive PLL arrangement is, furthermore, subjected to the condition that the IMF cannot provide more than one additional 6-month PLL arrangement under these circumstances.³⁸¹

Member country's access to all these PLL arrangements is, moreover, subject to, on one side, specific PLL limits and caps, and, on the other side, common annual and cumulative access limits. With regard to the PLL arrangements with a duration of 1 to 2 years, PLL access is contained to 250% of the member country's quota for the first year, and to a total of 500% of the member country's quota for the whole duration of the arrangement. In such PLL arrangements with a duration of more than one year, amounts granted in the second year may, if needed, be brought forward to the first year through a technique called "rephasing". In order to make use of this possibility, the member country needs the prior approval by the IMF Board at a review.³⁸² Total access to PLL arrangements is, moreover, subject to a cumulative ceiling of 500% of the member country's quota, regardless of the duration of the PLL arrangement.³⁸³

Similar to a FCL qualification, a PLL qualification also signals the soundness of the fundamentals and policies of qualified member countries. The central element of the eligibility assessment is that the member country meets the following requirements³⁸⁴:

- (1) The member country has strong economic fundamentals and policy frameworks at an institutional level.
- (2) The member country manages to implement—and has a track-record of implementing—sound policies.
- (3) The member country is committed to maintain sound policies in the future.

Member countries that face any of the situations mentioned hereafter at the time of approval, may not make use of an assigned PLL arrangement: (1) the member country faces a sustained inability of accessing international capital markets; (2) the member country faces a need for significant adjustments at a macroeconomic or structural policy level (unless such an adjustment has already been initiated, in a believable manner, prior to the PLL approval); (3) the member country faces a public debt situation that is highly unlikely to be sustainable in the medium term; or (4) the member country faces widespread bank insolvencies.³⁸⁵

Member countries that start to make use of PLL arrangement, automatically commit to implement policies for reducing the remaining vulnerabilities that appear

³⁸¹International Monetary Fund (2021i).

³⁸²International Monetary Fund (2021i).

³⁸³International Monetary Fund (2021i).

³⁸⁴International Monetary Fund (2021i).

³⁸⁵International Monetary Fund (2021i).

from the PLL eligibility process, with targeted conditionality. This at the same time implies that once a member country has been found eligible for 1- to 2-year PLL arrangements, prior actions, structural targets and quantitative performance criteria may only be still resorted to if they are critical for the success of the programme. In such a case, a quantified macroeconomic framework, supported by indicative targets, will allow for the assessment of the member country's progress towards achieving the programme's objectives. Indeed, the 1- to 2-year PLL arrangements continue to be assessed by the Executive Board of the IMF through biannual reviews. In these biannual reviews, the IMF Executive Board assesses whether the member country remains on track to meet the programme's objectives. In case a member country has a genuine balance of payments problem at the time of entering a 1- to 2-year PLL arrangement, access is phased in through semi-annual disbursements, in line with the same review periodicity. In contrast, mere 6-month PLL arrangements themselves are not monitored through reviews. However, such short 6-month PLL arrangements may include prior actions in case these are deemed fundamental for the success of the PLL arrangements.³⁸⁶

To access IMF resources on a precautionary basis, a member country has to pay an annual commitment fee on the resources available for purchase during a 12-month period, which will subsequently be repaid, on a pro rata basis, if the member country chooses to use the resources during that period.³⁸⁷

Similar to other IMF drawing arrangements, the PLL actual borrowing rate consists of: (1) the market-determined SDR interest rate that has a minimum floor of 5 basis points, and a margin (by 15 May 2021 amounting to 100 basis points). Together the SDR interest rate and the margin are referred to as the "basic rate of charge". And (2) surcharges, which depend on the amounts and the duration of the outstanding credit. A surcharge of 200 basis points is to be paid on an amount of outstanding credit above 187.5% of the member country's quota. If the credit remains over 187.5% of the member country's quota after 3 years, this surcharge increases to 300 basis points. Together, the level and duration of the surcharges are conceived for discouraging a large and prolonged use of IMF resources under the PLL-line.³⁸⁸ In addition, each amount effectively drawn is subjected to a service charge amounting to 50 basis points.³⁸⁹

As of 11 February 2021, only three countries, namely the Republic of Northern Macedonia, Morocco and Panama, had made use of the PLL.³⁹⁰

³⁸⁶International Monetary Fund (2021i).

³⁸⁷International Monetary Fund (2021i).

The commitment fee increases with the level of access available over a 12-month period (15 basis points for amounts committed up to 115% of the member country's quota, 30 basis points on amounts committed between 115% and 575% of the member country's quota, and 60 basis points on amounts exceeding 575% of the member country's quota). (Cf. International Monetary Fund (2021i).)

³⁸⁸International Monetary Fund (2021i).

³⁸⁹International Monetary Fund (2021i).

³⁹⁰International Monetary Fund (2021i).

3.4.4.10 Standby Credit Facility (SCF)

The Standby Credit Facility (SCF) is aimed at providing financial assistance to low-income countries (LICs) that are facing short-term balance of payments needs.³⁹¹

The SCF was conceived in the context of the "Poverty Reduction and Growth Trust" (PRGT), as part of a wider restructuring operation of making the IMF's financial aid more flexible and responsive to the diverse needs of LICs.³⁹²

To be eligible for this SCF support, an LIC must meet the following requirements: (1) the member country must have achieved broadly sustainable macroeconomic positions, and (2) the member country is experiencing episodic and short-term financing and adjustment needs, such as those caused by shocks or crises. The SCF is hereby aimed at supporting member countries' economic programmes in order to achieve, maintain or restore a stable and sustainable macroeconomic position that is consistent with strong and sustainable growth as well, as with poverty reduction. The SCF is also aimed at providing policy support and at helping to catalyse foreign aid.³⁹³

The SCF is made available to countries eligible under the Poverty Reduction Trust (PRT). To qualify for SCF support, the LIC must, moreover, face a balance of payments need that should be resolved within two, and in any case up to 3 years. The overall intent of SCF support is to help the LIC to establish a sustainable macroeconomic position. Moreover, a member country with a potential but not (yet) immediate balance of payments need, may consider to apply for SCF financing as a precautionary measure without already resorting to it.³⁹⁴

An SCF arrangement can last between 12 and 36 months. As SCF arrangements are intended to meet short-term, episodic BoP needs, use of the SCF-facility is normally limited to 3 years over any 6-year period, assessed on a so-called "rolling basis", however with exceptions for SCF arrangements considered of being precautionary.³⁹⁵

Eligibility to SCF financing is determined upon compliance with the following set of requirements: (1) the applying member country's balance of payments needs, (2) the strength of the applying member country's economic programme, (3) the repayment capacity of the applying member country, (4) the amount of outstanding IMF credit of the applying member country, and (5) the applying member country's history of using and repaying IMF credit.³⁹⁶

Any form of access to concessional financing under the PRGT is normally limited, on an annual basis, to 100% of the applying member country's quota, and

³⁹¹International Monetary Fund (2020i).

³⁹²International Monetary Fund (2020i).

³⁹³International Monetary Fund (2020i).

³⁹⁴International Monetary Fund (2020i).

³⁹⁵International Monetary Fund (2020i).

³⁹⁶International Monetary Fund (2020i).

to 300% of said member country's quota on a cumulative basis. In exceptional circumstances, access may be higher, however with firm ceilings of 133.33% (annual) and 400% (cumulative) of the member country's quota.³⁹⁷

Under the SCF, the applying member country must agree to implement a set of policies that will help it in achieving a stable and sustainable macroeconomic position in the short term. The applying member country must describe this commitment, including specific conditions, in a letter of intent that has to be submitted to the IMF. SCF programmes must, thereby, be aligned with the applying member country's poverty reduction and growth objectives. In case of SCF arrangements with an initial duration of more than 2 years, the member country must draft a so-called "Poverty Reduction and Growth Strategy" (PRGS) which has to be available for the second and subsequent reviews.³⁹⁸

The following further conditions apply to funding under the SCF: (1) a zerointerest rate, (2) a so-called "grace period" with regard to repayments of 4 years, and (3) a final maturity of 8 years. In addition, an availability fee at 0.15%, on an annual basis, is charged on any undrawn portion of the available amount during each 6-month period. The IMF reviews the level of interest rates on the PRGT concessional facilities every 2 years, based on the PRGT interest rate mechanism.³⁹⁹

3.4.4.11 Catastrophe Containment and Relief Trust (CCRT)

The Catastrophe Containment and Relief Trust (CCRT) is aimed at enabling the IMF to provide debt relief grants to the poorest and most vulnerable member countries that have been affected by natural and/or public health disasters.⁴⁰⁰

Such debt service payment relief frees up additional resources to meet a member country's exceptional balance of payments needs that are caused by such disaster, and may be deployed for both containment and recovery purposes. The CCRT was stablished in February 2015 during the Ebola outbreak. It was modified in March 2020, in immediate response to the outbreak of the Covid-19 pandemic. CCRT grants are, moreover, intended to complement donor funding and IMF concessional lending through the PRGT.⁴⁰¹

The predecessor of the CCRT was the "Post-Disaster Debt Relief Trust Fund". In February 2015, in response to the outbreak of the Ebola crisis, the IMF decided to transform said "Post-Disaster Debt Relief Trust Fund" into the CCRT. It was at the

³⁹⁷International Monetary Fund (2020i).

³⁹⁸International Monetary Fund (2020i).

³⁹⁹International Monetary Fund (2020i).

⁴⁰⁰International Monetary Fund (2020b).

⁴⁰¹ International Monetary Fund (2020b).

same time decided to expand the range of situations covered by the IMF disaster assistance in order to ensure that it would include rapidly spreading epidemics.⁴⁰²

After the outbreak of Covid-19, in March 2020, the IMF resorted to adopting a series of reforms to the CCRT in order to allow for the provision of immediate debt service relief to the poorest and most vulnerable IMF member countries affected by the Covid-19 pandemic (but, by extension, by any future pandemic as well). As a result of these reforms, the CCRT can since then be used to provide financials means to pay debt service owed to the IMF by eligible low-income member countries, in cases that these are hit by the most catastrophic natural disasters or have to combat public health disasters, including epidemics or pandemics. Phrased differently, the CCRT debt relief mechanism has as purpose to free up resources in order to allow an eligible member country to deal with the exceptional balance of payments needs resulting from such a disaster, rather than having to allocate these resources to debt servicing.⁴⁰³

Eligibility for assistance under the CCRT is subject to the following requirements: (1) the applying member country must be eligible for concessional borrowing through the PRGT; (2) the per capita income of the applying member country must be below the International Development Association (IDA) operational threshold (which, as of 15 May 2021, amounted to USD 1185) or, for small states having a population of less than 1.5 million people, below the double of this IDA threshold (which, as of 15 May 2021, amounted to USD 2370).⁴⁰⁴

The CCRT has two drawing windows: (1) the "Catastrophe Containment window" that is intended to help contain public health disasters, and (2) the "Post-Catastrophic Relief window" that is intended to provide exceptional assistance to an eligible member country in the aftermath of a natural disaster. Besides serving different objectives, the two windows also have different qualification criteria, as well as different conditions of assistance.⁴⁰⁵

The CCRT was, upon its creation, initially funded by the balance of the former "Post-Catastrophe Debt Relief Trust", as well as by the at the time remaining funds from the "Multilateral Debt Relief Initiative".⁴⁰⁶

A first relief benefiting 25 eligible member countries was decided upon on 13 April 2020.⁴⁰⁷

⁴⁰²International Monetary Fund (2020b).

Previously, three Ebola-affected countries (Guinea, Liberia and Sierra Leone) had received almost USD 100 million in aid from this fund in February–March 2015. The preceding "Post-Disaster Debt Relief Trust Fund" had been used to provide assistance to Haiti in July 2010 of about USD 270 million, thereby effectively eliminating Haiti's at the time entire outstanding debt to the IMF. (Cf. International Monetary Fund (2020b).)

⁴⁰³ International Monetary Fund (2020b).

⁴⁰⁴International Monetary Fund (2020b).

⁴⁰⁵ International Monetary Fund (2020b).

⁴⁰⁶International Monetary Fund (2020b).

⁴⁰⁷International Monetary Fund (2020b).

By means of a further response to the Covid-19 pandemic, the IMF launched an urgent fundraising effort intended to raise debt service relief for a full 2-year period, as well as for future needs.⁴⁰⁸ In response, on 23 November 2020, the EU granted a contribution of EUR 183 million (equivalent to SDR 152 million or USD 217 million) to the CCRT.⁴⁰⁹

3.4.4.12 Overview in Some Tables

Tables 3.3, 3.4, 3.5, 3.6, 3.7, 3.8 and 3.9 provide an overview of IMF Executive Board-approved assistance since end-March 2020, under its various lending facilities and debt service relief financed by the CCRT.⁴¹⁰

Table 3.3 gives a combined overview.

Tables 3.4, 3.5, 3.6, 3.7, 3.8 and 3.9 appeared on the IMF website based on information available on 4 March 2021, almost a year after the WHO declared Covid-19 a pandemic on 11 March 2020.

An exception concerns Table 3.3 that was published on the IMF website based on information available on 28 February 2021.⁴¹¹

In total, as of 4 March 2021, the IMF had made about USD 250 billion, or one quarter of its USD 1 trillion lending capacity, available to its member countries.⁴¹²

As part of the Covid-19 rapid arrangements, borrowing countries committed to governance measures to promote the responsible and transparent use of these resources.⁴¹³

3.4.5 IMF Surveillance

3.4.5.1 General

When a country becomes a member of the IMF, it agrees to submit its economic and financial policies to the scrutiny of the international community as represented by the IMF. Such a member country also, in general, agrees to general obligations such as: (1) the pursuing of policies conducive to orderly economic growth and reasonable price stability, (2) the avoiding of manipulating exchange rates in order to gain an

⁴⁰⁸International Monetary Fund (2020b).

⁴⁰⁹Georgieva (2020). Cf., furthermore, https://ec.europa.eu/commission/presscorner/detail/en/ IP_20_2183.

⁴¹⁰Source: International Monetary Fund (2021e) (accessed 10 March 2021).

⁴¹¹Source: International Monetary Fund (2021f) (accessed 10 March 2021).

⁴¹²Source: International Monetary Fund (2021e) (accessed 10 March 2021).

⁴¹³Source: International Monetary Fund (2021e) (accessed 10 March 2021).

Table 3.3 Combined overview of IMF Financial Assistance as of 28 February 2021 (in thousandsof SDRs) [Source: International Monetary Fund (2021f) (as accessed on 10 March 2021)]

General Re	sources Accoun	t (GRA)			
Stand-By A	Arrangements (S	BA)			
Member	Date of arrangemer	nt Expiration ^a	Total amount agreed	Undrawn balance	IMF credit outstanding under GRA ^b
Armenia, Republic o	May f 17, 2019	May 16, 2022	308,800	77,144	328,217
Egypt	June 26, 2020	June 25, 2021	3,763,640	1,158,040	13,239,270
Honduras	July 15, 2019	November 14, 2021	258,127	34,972	223,155
Ukraine	June 09, 2020	December 08, 2021	3,600,000	2,100,000	7,496,235
Total			7,930,567	3,370,156	
Extended A	Arrangements (E	FF)			
Member	Date of arrangement	Expiration ^a	Total amount agreed	Undrawn balance	IMF credit outstanding under GRA ^b
Angola	December 07, 2018	December 06, 2021	3,213,400	1,070,200	2,143,200
Barbados	October 01, 2018	September 30, 2022	322,000	51,000	271,000
Ecuador	September 30, 2020	December 29, 2022	4,615,000	1,775,000	4,386,758
Equatorial Guinea	December 18, 2019	December 17, 2022	205,009	175,722	29,287
Ethiopia	December 20, 2019	December 19, 2022	751,750	661,540	390,910
Georgia	April 12, 2017	April 11, 2021	484,000	78,000	406,000
Jordan	March 25, 2020	March 24, 2024	926,370	720,510	716,136
Pakistan	July 03, 2019	October 02, 2022	4,268,000	3,224,000	5,192,500
Total		·	14,785,529	7,755,972	
Flexible Cr	edit Line (FCL)				
Member	Date of arrangement	Expiration ^a	Total amount agreed	Undrawn balance	IMF credit outstanding under GRA ^b
Chile	29 May 2020	May 28, 2022	17,443,000	17,443,000	0
Colombia	May 01, 2020	April 30, 2022	12,267,000	8,517,000	3,750,000
Mexico	November 22, 2019	November 21, 2021	44,563,500	44,563,500	0

(continued)

Table 3.3 (continued)

Flexible C	redit Li	ne (FCL)								
Member	Date arrang	of gement	Expira	ation ^a	Tota amo agre	unt	-	ndrawn lance	IN ur	AF credit outstanding ader GRA ^b
Peru	May 28, 20	020	May 27, 20)22	8,0	07,000	8	,007,000	0	
Total	1		1		82,2	80,500	78	,530,500		
Precaution	ary and	Liquidit	y Line	(PLL) ^c						
Member	Date of arrange		Expira	tion ^a	Total a agreed	amount		drawn ance		F credit outstanding ler GRA ^a
Panama	January 19, 202		Januar 18, 202	-	1,884,	000	1,88	84,000	376	5,800
Total					1,884,		1,88	84,000		
Rapid Fin	ancing I	nstrumer	t (RFI)	Outrig	ght Loa	ns ^b				
Member	Date arran	of gement	Expi	ration ^a	Tota agree	l amount ed	-	ndrawn lance		IF credit outstanding der GRA ^b
Guatemala	1 June 10, 2		NA		428,0	500	42	8,600	0	
Paraguay	Apri 21, 2	1	NA		201,4	400	20	1,400	0	
Total	21,2				630,0	000	63	0,000		
Poverty R	eductior	and Gro	wth Tr	ust (PF	RGT)				1	
Extended	Credit F	acility (E	ECF) ^d							
Dat		Date o	f			Total amount		Undraw	n	IMF credit outstanding under
Member			ement	Expir	ation ^a	agreed		balance		PRGFT ^b
	Afghanistan, Nover Islamic Republic 06, 20			May 05, 20	024	259,04	40	178,09	90	281,230
Central At Republic	frican	Decem 20, 20		Decei 19, 20		83,55	50	47,74	12	217,251
Congo, Re	epublic	July 11, 20	19	July 10, 20	022	324,00)0	291,60)0	32,642
Ethiopia		Decem 20, 20		Decer 19, 20		1,202,80	00	1,069,16	50	133,640
Gambia, T	The	March 23, 20		June 22, 20		55,00)0	30,00)0	62,009
Liberia		Decem 11, 20	ıber	Decer 10, 2	mber	155,00	00	104,00	00	204,366
Mali		Augus 28, 20	t	Augu 27, 20	st	139,95	50	59,95	50	423,168
Mauritania	a	Decem 06, 20	ıber	Marc 05, 20	h	136,16	50	16,56	50	231,840
Sao Tome Principe	&	Octobe 02, 20	er	Febru 01, 20	iary	14,80	00	951	4	18,574
Sierra Leo	ne	, =0		, _	-	124,44	10	77,77	75	353,151

(continued)

14.988

Poverty Re	duction	and Gro	owth Tr	ust (PR	GT)					
Extended C	redit Fa	cility (H	ECF) ^d							
Member		Date o arrang	•	Expira	tion ^a	Total amount agreed		Undraw balance	n	IMF credit outstanding under PRGFT ^b
		Noven 30, 20		June 29, 20	22					
Somalia		March 25, 20		March 24, 20		252,80	52	35,00)0	217,862
Total	Total					2,747,60)2	1,919,39) 1	
Standby Cr	edit Fac	ility (SC	CF)							
Member	Date of arrange	-	Expira	tion ^a	Total amou agree	int		drawn ance		IF credit outstanding der PRGFT ^a
Honduras	July		Noven	nber	129,0)63	14,	988	11	4,075

Table 3.3 (continued)

^aExpiration date for outright loans (RFI and RCF) reflects the date that the loan was drawn. Expiration dates for PRGT and GRA arrangements either reflect the set expiration date of the arrangement or a disbursement date of the last loan under the arrangement if the last disbursement takes place before the arrangement expiration

129.063

^bCredit Outstanding reflects the total credit outstanding for GRA or PRGT for a member. If a member has credit outstanding and multiple active commitments in the GRA or the PRGT, the total credit outstanding for that member will show under each active commitment

^cFormerly Precautionary Credit Line (PCL)

15, 2019

^dFormerly Poverty Reduction and Growth Facility (PRGF)

14.2021

unfair competitive advantage, and (3) the providing of the IMF with data on its economy.⁴¹⁴ The IMF itself conducts regular monitoring of the economies of its member states, which goes, moreover, accompanied by the associated provision of

Total

⁴¹⁴Cf. especially Article IV, section 1. General obligations of members, of the IMF Articles of Agreement: "section 1. General obligations of members. Recognizing that the essential purpose of the international monetary system is to provide a framework that facilitates the exchange of goods, services, and capital among countries, and that sustains sound economic growth, and that a principal objective is the continuing development of the orderly underlying conditions that are necessary for financial and economic stability, each member undertakes to collaborate with the Fund and other members to assure orderly exchange arrangements and to promote a stable system of exchange rates. In particular, each member shall: (i) endeavor to direct its economic and financial policies toward the objective of fostering orderly economic growth with reasonable price stability, with due regard to its circumstances. (ii) seek to promote stability by fostering orderly underlying economic and financial conditions and a monetary system that does not tend to produce erratic disruptions. (iii) avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members; and (iv) follow exchange policies compatible with the undertakings under this section".

Further general obligations of IMF member states are laid down in Article VIII of the IMF Articles of Agreement, e.g., its section 5 dealing with the "furnishing of information".

Country	Type of emergency financing	Amount approved in SDR	Amount approved in USD	Date of approval
Bangladesh	Rapid Credit Facility (RCF)	177.77 million	244 million	29 May 2020
	Rapid Financing Instrument (RFI)	355.53 million	488 million	
Maldives	Rapid Credit Facility (RCF)	21.2 million	28.9 million	April 22, 2020
Mongolia	Rapid Financing Instrument (RFI)	72.3 million	99 million	June 3, 2020
Myanmar	Rapid Financing Instrument (RFI)	172.3 million	237.7 million	June 26, 2020
	Rapid Credit Facility (RCF)	86.1 million	118.8 million	June 26, 2020
	Rapid Financing Instrument (RFI)	172.3 million	248.27 million	January 13, 2021
	Rapid Credit Facility (RCF)	86.1 million	124.13 million	January 13, 2021
Nepal	Rapid Credit Facility (RCF)	156.9 million	214 million	May 6, 2020
Papua New Guinea	Rapid Credit Facility (RCF)	263.2 million	363.6 million ³	June 9, 2020
Samoa	Rapid Credit Facility (RCF)	16.2 million	22.03 million	April 24, 2020
Solomon Islands	Rapid Credit Facility (RCF)	6.93 million	9.5 million	June 1, 2020
	Rapid Financing Instrument (RFI)	13.87 million	19 million]
Tonga	Rapid Credit Facility (RCF)	6.9 million	9.95 million	January 25, 2021
Total Amount Approved	-	1607.6 million	2226.88 million	-

 Table 3.4
 Overview of IMF Financial Assistance to Asian and Pacific countries as of 4 March 2021 [Source: International Monetary Fund (2021e) (as accessed on 10 March 2021)]

policy advice. The focus of this advice is to identify weaknesses that may cause or could lead to financial or economic instability. This process is generally known as (IMF-)surveillance.⁴¹⁵

The surveillance by the IMF concerns three main level: (1) country surveillance; (2) regional surveillance, and (3) global surveillance.

⁴¹⁵International Monetary Fund (2021k).

Country	Type of emergency financing	Amount approved in SDR	Amount approved in USD	Date of approval
Albania	Rapid Financing Instrument (RFI)	139.3 million	190.5 million	April 10, 2020
Bosnia and Herzegovina	Rapid Financing Instrument (RFI)	265.2 million	361 million	April 20, 2020
Kosovo	Rapid Financing Instrument (RFI)	41.3 million	56.5 million	April 10, 2020
Moldova, Republic of	Rapid Credit Facility (RCF)	57.5 million	78.4 million	April 17, 2020
	Rapid Financing Instrument (RFI)	115 million	156.7 million	
Montenegro	Rapid Financing Instrument (RFI)	60.5 million	83.7 million	June 24, 2020
North Macedonia, Republic of	Rapid Financing Instrument (RFI)	140.3 million	191.83 million	April 10, 2020
Ukraine	Stand-By Arrange- ment (SBA)	3600 million	5000 million	June 9, 2020
Total Amount Approved		4419.1 million	6118.63 million	

 Table 3.5
 Overview of IMF Financial Assistance to European countries as of 4 March 2021

 [Source: International Monetary Fund (2021e) (as accessed on 10 March 2021)]

3.4.5.2 Country Surveillance

3.4.5.2.1 General Characteristics

The country surveillance conducted by the IMF is an ongoing process which all of the IMF member countries have to endure. It culminates in regular (usually on a yearly basis), in-depth consultations with each and every individual member country. When needed, the IMF may also conduct interim discussions with the surveyed member countries. These consultations with individual member countries are generally known as "Article IV consultations", under reference to the fact that they are mandated by Article IV of the IMF Articles of Agreement.⁴¹⁶

What usually happens under an Article IV consultation, is that a team of IMF economists, pays a visit to the member country in order to assess said country's economic and financial developments, and to discuss the country's economic and financial policies. Such meetings are conducted with both government and central bank officials of the member country concerned. IMF missions may also meet with parliamentarians and representatives of the entrepreneurial world, of workers organisations, and of civil society in general.⁴¹⁷

⁴¹⁶International Monetary Fund (2021k).

⁴¹⁷International Monetary Fund (2021k).

Country	Type of emergency financing	Amount approved in SDR	Amount approved in USD	Date of approval
Afghanistan, Islamic	Rapid Credit Facility (RCF)	161.9 million	220 million	April 29, 2020
Republic of	Extended Credit Facility Arrangement (ECF)	259.04 million	370.00 million	November 6, 2020
Armenia, Republic of	Augmentation of SBA	128.8 million	175 million	May 18, 2020
Djibouti	Rapid Credit Facility (RCF)	31.8 million	43.4 million	May 8, 2020
Egypt, Arab Republic of	Rapid Financing Instru- ment (RFI)	2037.1 million	2772 million	May 11, 2020
	Stand-By Arrangement (SBA)	3763.64 million	5200.00 million	June 26, 2020
Georgia	Augmentation of Extended Fund Facility	273.6 million	375.60 million	May 1, 2020
Jordan	Rapid Financing Instru- ment (RFI)	291.55 million	396 million	May 20, 2020
	Extended Fund Facility (EFF)	926.37 million	1300.00 million	March 26, 2020
Kyrgyz Republic	Rapid Financing Instru- ment (RFI)	59.2 million	80.6 million	March 26, 2020
	Rapid Credit Facility (RCF)	29.6 million	40.3 million	March 26, 2020
	Rapid Financing Instru- ment (RFI)	59.2 million	80.7 million	May 8, 2020
	Rapid Credit Facility (RCF)	29.6 million	40.4 million	May 8, 2020
Mauritania, Islamic	Augmentation of ECF	20.24 million	28.70 million	September 2, 2020
Republic of	Rapid Credit Facility (RCF)	95.68 million	130 million	April 23, 2020
Pakistan	Rapid Financing Instru- ment (RFI)	1015.5 million	1386 million	April 16, 2020
Somalia	Extended Credit Facility (ECF) and the Extended Fund Facility (EFF)	292.4 million	395.55 million	March 25, 2020
Tajikistan, Republic of	Rapid Credit Facility (RCF)	139.2 million	189.50 million	May 6, 2020
Tunisia	Rapid Financing Instru- ment (RFI)	545.2 million	745 million	April 10, 2020
Uzbekistan, Republic of	Rapid Financing Instru- ment (RFI)	183.55 million	249.30 million	May 18, 2020
	Rapid Credit Facility (RCF)	92.05 million	125.03 million	May 18, 2020
Total Amount Approved	-	10,435.22 million	14,343.08 million	

 Table 3.6
 Overview of IMF Financial Assistance to countries of the Middle East and Central Asia as of 4 March 2021 [Source: International Monetary Fund (2021e) (as accessed on 10 March 2021)]

Country	Type of emergency financing	Amount approved in SDR	Amount approved in USD	Date of approval
Angola	Augmentation of EFF	540.4 million	765.66 million	September 16, 2020
Benin	Augmentation of ECF	76.01 million	103.3 million	May 15, 2020
	Rapid Credit Facility (RCF)	41.3 million	59.35 million	December 21, 2020
	Rapid Financ- ing Instrument (RFI)	82.54 million	118.61 million	December 21, 2020
Burkina Faso	Rapid Credit Facility (RCF)	84.28 million	115.3 million	April 14, 2020
Cabo Verde	Rapid Credit Facility (RCF)	23.7 million	32 million	April 22, 2020
Cameroon	Rapid Credit Facility (RCF)	165.6 million	226 million	May 4, 2020
	Rapid Credit Facility (RCF)	110.4 million	156 million	October 21, 2020
Central African Republic	Rapid Credit Facility (RCF)	27.85 million	38 million	April 20, 2020
Chad	Rapid Credit Facility (RCF)	49.07 million	68.49 million	July 22, 2020
	Rapid Credit Facility (RCF)	84.12 million	115.1 million	April 14, 2020
Comoros, Union of the	Rapid Credit Facility (RCF)	2.97 million	4.05 million	April 22, 2020
	Rapid Financ- ing Instrument (RFI)	5.93 million	8.08 million	April 22, 2020
Congo, Democratic Republic of the	Rapid Credit Facility (RCF)	266.5 million	363.27 million	April 22, 2020
Côte d'Ivoire	Rapid Credit Facility (RCF)	216.8 million	295.4 million	April 17, 2020
	Rapid Financ- ing Instrument (RFI)	433.6 million	590.8 million	
Eswatini, Kingdom of	Rapid Financ- ing Instrument (RFI)	78.5 million	110.4 million	July 29, 2020
Ethiopia, The Federal Democratic Republic of	Rapid Financ- ing Instrument (RFI)	300.7 million	411 million	April 30, 2020

Table 3.7 Overview of IMF Financial Assistance to countries of Sub-Saharan Africa as of 4 March2021 [Source: International Monetary Fund (2021e) (as accessed on 10 March 2021)]

(continued)

Country	Type of emergency financing	Amount approved in SDR	Amount approved in USD	Date of approval
Gabon	Rapid Financ- ing Instrument (RFI)	108 million	147 million	April 9, 2020
	Rapid Financ- ing Instrument (RFI)	108 million	152 million	July 31, 2020
Gambia, The	Rapid Credit Facility (RCF)	15.55 million	21.3 million	April 15, 2020
	Extended Credit Facility (ECF)	35 million	47.1 million	March 23, 2020
	Augmentation of ECF	20 million	28.8 million	January 15, 2021
Ghana	Rapid Credit Facility (RCF)	738 million	1000 million	April 13, 2020
Guinea	Rapid Credit Facility (RCF)	107.1 million	148 million	June 19, 2020
Guinea-Bissau	Rapid Credit Facility (RCF)	14.2 million	20.47 million	January 25, 2021
Kenya	Rapid Credit Facility (RCF)	542.8 million	739 million	May 6, 2020
Liberia	Rapid Credit Facility (RCF)	36.17 million	49.98 million	June 5, 2020
Lesotho	Rapid Financ- ing Instrument (RFI)	23.24 million	32.6 million	July 29, 2020
	Rapid Credit Facility (RCF)	11.66 million	16.5 million	July 29, 2020
Madagascar, Republic of	Rapid Credit Facility (RCF)	122.2 million	165.99 million	April 3, 2020
	Rapid Credit Facility (RCF)	122.2 million	171.9 million	July 30, 2020
Mali	Rapid Credit Facility (RCF)	146.67 million	200.41 million	April 30, 2020
Malawi	Rapid Credit Facility (RCF)	66.44million	91 million	May 1, 2020
	Rapid Credit Facility (RCF)	72.31 million	101.96 million	October 2, 2020
Mozambique, Repub- lic of	Rapid Credit Facility (RCF)	227.2 million	309 million	April 24, 2020
Niger	Rapid Credit Facility (RCF)	83.66 million	114.49 million	April 14, 2020
Nigeria	Rapid Financ- ing Instrument (RFI)	2454.5 million	3400 million	April 28, 2020

 Table 3.7 (continued)

(continued)

Country	Type of emergency financing	Amount approved in SDR	Amount approved in USD	Date of approval
Rwanda	Rapid Credit Facility (RCF)	80.1 million	111.06 million	June 11, 2020
	Rapid Credit Facility (RCF)	80.1 million	109.4 million	April 2, 2020
São Tomé and Príncipe, Democratic	Rapid Credit Facility (RCF)	9.03 million	12.29 million	April 21, 2020
Republic of	Augmentation of ECF	1.48 million	2.08 million	July 27, 2020
Senegal	Rapid Financ- ing Instrument (RFI)	215.73 million	294.7 million	April 13, 2020
	Rapid Credit Facility (RCF)	107.87 million	147.4 million	
Seychelles	Rapid Financ- ing Instrument (RFI)	22.9 million	31.23 million	May 8, 2020
Sierra Leone	Rapid Credit Facility (RCF)	103.7 million	143 million	June 3, 2020
South Africa	Rapid Financ- ing Instrument (RFI)	3051.2 million	4300 million	July 27, 2020
South Sudan	Rapid Credit Facility (RCF)	36.9 million	52.3 million	November 11, 2020
Togo	Augmentation of ECF	71.49 million	97.1 million	April 3, 2020
Uganda	Rapid Credit Facility (RCF)	361 million	491.5 million	May 6, 2020
Total Amount Approved	-	11,786.67 million	16,330.98 million	-

 Table 3.7 (continued)

The IMF team then reports the findings of its survey to the IMF management, and subsequently presents them for discussion to the Executive Board of the IMF. A summary of the IMF Board's findings is then submitted to the government of the country surveyed.⁴¹⁸

This country survey mechanism allows to feed the views on economic matters of the global community and to transmit the experience of international experts into national policies. Summaries of these discussions are, moreover, published in press releases, which are then posted on the IMF website, as are most of the country reports prepared by the IMF staff members as well.⁴¹⁹

⁴¹⁸International Monetary Fund (2021k).

⁴¹⁹International Monetary Fund (2021k).

Country	Type of emergency financing	Amount approved in SDR	Amount approved in USD	Date of approval
Bahamas, The	Rapid Financing Instrument (RFI)	182.4 million	250 million	June 1, 2020
Barbados	Augmentation of EFF	66 million	90.84 million 3	June 3, 2020
	Augmentation of EFF	48 million	69 million	December 9, 2020
Bolivia	Rapid Financing Instrument (RFI)	240.1 million	327 million	April 17, 2020
Chile	Flexible Credit Line (FCL)	17,443 million	23,930 million	29 May 2020
Colombia	Flexible Credit Line (FCL)	7849.6 million	10,748.30 million	May 1, 2020
	Augmentation of Flexible Credit Line (FCL)	4417.4 million	6200 million	September 25, 2020
Costa Rica	Rapid Financing Instrument (RFI)	369.4 million	508 million 3	April 29, 2020
	Extended Fund Facil- ity (EFF)	1237.49 million	1778 million	March 1, 2021
Dominica	Rapid Credit Facility (RCF)	10.28 million	14 million	April 28, 2020
Dominican Republic	Rapid Financing Instrument (RFI)	477.4 million	650 million	April 29, 2020
Ecuador	Rapid Financing Instrument (RFI)	469.7 million	643 million	May 1, 2020
	Extended Fund Facil- ity (EFF)	4615 million	6500 million	Septembe 30, 2020
El Salvador	Rapid Financing Instrument (RFI)	287.2 million	389 million	April 14, 2020
Grenada	Rapid Credit Facility (RCF)	16.4 million	22.4 million	April 28, 2020
Guatemala	Rapid Financing Instrument (RFI)	428.6 million	594 million	June 10, 2020
Haiti	Rapid Credit Facility (RCF)	81.9 million	111.6 million	April 17, 2020
Honduras	Augmentation of SBA and SCF	162.37 million	223 million	June 1, 2020
Jamaica	Augmentation of SBA and SCF	382.9 million	520 million	May 15, 2020
Nicaragua	Rapid Financing Instrument (RFI)	86.67 million	123.55 million	November 20, 2020
	Rapid Credit Facility (RCF)	43.33 million	61.77 million	
Panama	Rapid Financing Instrument (RFI)	376.8 million	515 million	April 15, 2020

Table 3.8 Overview of IMF Financial Assistance to countries of the Western Hemisphere as of 4 March 2021 [Source: International Monetary Fund (2021e) (as accessed on 10 March 2021)]

(continued)

Country	Type of emergency financing	Amount approved in SDR	Amount approved in USD	Date of approval
	Precautionary and Liquidity Line (PLL)	1884 million	2700 million	January 19, 2021
Paraguay	Rapid Financing Instrument (RFI)	201.4 million	274 million	April 21, 2020
Peru	Flexible Credit Line (FCL)	8007 million	11,000 million	May 28, 2020
St. Lucia	Rapid Credit Facility (RCF)	21.4 million	29.2 million	April 28, 2020
St. Vincent and the Grenadines	Rapid Credit Facility (RCF)	11.7 million	16 million	May 20, 2020
Total Amount Approved	-	49,417.44 million	68,287.66 million	-

Table 3.8 (continued)

3.4.5.2.2 The 2020 Article IV Report with Regard to the United States

With regard to the United States, the last country surveillance as of 15 May 2021 happened for the year 2020. The resulting Article IV report was then published on the website of the IMF on 10 August 2020.

According to the report, on 17 July 2020, the United States experienced an unprecedented socioeconomic shock because of the Covid-19 pandemic. The report especially points to the fact that, in order to preserve lives and support public health, the United States deemed it necessary to implement a widespread shutdown of the American economy in March 2020. Despite the United States already soon after, namely by the end of April 2020, decided on a gradual easing of restrictions and the lifting of stay-at-home orders, the resulting collateral economic damage was deemed to be enormous. Besides the fact that many Americans tragically lost their lives and many more had become seriously ill, there was also considerable economic collateral damage. By mid-July 2020, nearly 15 million Americans had lost their jobs. Moreover, many large and small businesses were facing severe financial difficulties, while the outlook for the near future was still extremely uncertain. It was at the time estimated that it would most likely take an extended period of time to repair the American economy and to bring economic activity back to pre-pandemic levels.⁴²⁰

According to the IMF report, especially the prospects for the poorest American households were particularly precarious. The IMF report in this regard holds that the economic costs of the Covid-19 crisis were borne disproportionately by the most poor and vulnerable members of the American society, a fact that highlighted the deep inequalities that have been plaguing the United States for a long period already. According to the report, the Covid-19 pandemic especially highlighted a wide variety of structural flaws in the US health care system. The report reached the

⁴²⁰International Monetary Fund (2020h), p. 1.

Table 3.9 Overview of Debt Service Relief from the Catastrophe Containment and Relief Trust (CCRT) as of 4 March 2021 [Source: International Monetary Fund (2021e) (as accessed on 10 March 2021)]

Country	Type of emergency financing	Amount approved in SDR	Amount approved in USD	Date of approval
Afghanistan, Islamic Republic of	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	2.40 million	3.28 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	2.40 million	3.38 million	October 2, 2020
Benin	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	7.43 million	10.17 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	6.37 million	8.98 million	October 2, 2020
Burkina Faso	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	8.74 million	11.96 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	10.30 million	14.52 million	October 2, 2020
Burundi	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	5.48 million	7.63 million	July 20, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	4.82 million	6.80 million	October 2, 2020
Central African Republic	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	2.96 million	4.05 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	2.92 million	4.12 million	October 2, 2020
Chad	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	2.00 million	2.82 million	October 2, 2020
Comoros, Union of the	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	0.97 million	1.33 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	0.81 million	1.14 million	October 2, 2020
Congo, Democratic Republic of the	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	14.85 million	20.32 million	April 13, 2020

(continued)

Country	Type of emergency financing	Amount approved in SDR	Amount approved in USD	Date of approval
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	9.90 million	13.96 million	October 2, 2020
Djibouti	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	1.69 million	2.3 million	May 8, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	1.69 million	2.38 million	October 2, 2020
Ethiopia, The Fed- eral Democratic Republic of	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	8.56 million	12 million	April 30, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	4.49 million	6.33 million	October 2, 2020
Gambia, The	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	2.10 million	2.87 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	2.10 million	2.96 million	October 2, 2020
Guinea	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	16.37 million	22.4 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	16.37 million	23.08 million	October 2, 2020
Guinea-Bissau	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	1.08 million	1.48 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	1.36 million	1.92 million	October 2, 2020
Haiti	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	4.10 million	5.61 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	3.98 million	5.61 million	October 2, 2020
Liberia	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	11.63 million	15.92 million	April 13, 2020

Table 3.9 (continued)

(continued)

Country	Type of emergency financing	Amount approved in SDR	Amount approved in USD	Date of approval
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	11.19 million	15.78 million	October 2, 2020
Madagascar, Repub- lic of	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	3.06 million	4.19 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	3.06 million	4.31 million	October 2, 2020
Malawi	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	7.20 million	9.85 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	7.20 million	10.15 million	October 2, 2020
Mali	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	7.30 million	9.99 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	7.50 million	10.58 million	October 30, 2020
Mozambique, Republic of	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	10.89 million	14.9 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	9.47 million	13.35 million	October 2, 2020
Nepal	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	2.85 million	3.9 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	3.57 million	5.03 million	October 2, 2020
Niger	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	5.64 million	7.72 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	5.64 million	7.95 million	October 2, 2020
Rwanda	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	8.01 million	10.96 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	12.02 million	16.95 million	October 2, 2020

Table 3.9 (continued)

(continued)

	Type of emergency	Amount approved in	Amount approved in	Date of
Country	financing	SDR	USD	approval
São Tomé and Príncipe, Democratic Republic of	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	0.11 million	0.15 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	0.17 million	0.24 million	October 2, 2020
Sierra Leone	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	13.36 million	18.28 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	12.22 million	17.23 million	October 2, 2020
Solomon Islands	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	0.06 million	0.08 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	0.07 million	0.10 million	October 2, 2020
Tajikistan, Republic of	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	7.83 million	10.72 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	5.22 million	7.36 million	October 2, 2020
Tanzania	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	10.28 million	14.3 million	June 10, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	8.29 million	11.69 million	October 2, 2020
Togo	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	3.74 million	5.12 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	2.31 million	3.26 million	October 2, 2020
Yemen, Republic of	Catastrophe Containment and Relief Trust (CCRT) 1st Tranche	14.44 million	19.76 million	April 13, 2020
	Catastrophe Containment and Relief Trust (CCRT) 2nd Tranche	10.96 million	15.45 million	October 2, 2020

Table 3.9 (continued)

conclusion that health care provision in the United States is fragmented, decentralised, mainly employer-based, overpriced, and leaving a significant share of low-income households without coverage. These have all been characteristics of the American health care system that added to the disastrous consequences of the Covid-19 pandemic. (Cf., furthermore, Sect. 5.2.2.) The IMF report also drew attention to the fact that the Covid-19 pandemic has in the United States created particularly severe strains on labour-intensive and face-to-face services (while these, already inherently, tend to employ mostly low-income workers). The report, in this regard, pointed to the high unemployment rates among low-income households. As this is also the group of people who have little to no savings, the report expressed its concern about an expectancy that poverty rates and other social tensions will most likely exceed those observed following the global financial crisis of 2008.⁴²¹

According to the IMF's assessment, at the same time, the United States eventually put a strong policy response to Covid-19 in place. According to the IMF report, US policymakers acted quickly and aggressively to protect both livelihoods and businesses and to mitigate the lasting economic costs of the Covid-19 pandemic. The IMF report especially refers to the unprecedented action taken by the American Federal Reserve, aimed at: (1) stimulating the economy, (2) supporting the well-functioning of both domestic and international financial markets, (3) promoting the flow of credit, hence of liquidity to all layers of society, and (4) strengthening a smooth transmission of monetary policy to the general society.⁴²² (Cf., furthermore, Sect. 3.3.)

The report continues by pointing to the fact that, at the same time, especially the federal authorities put a series of fiscal measures in place in order to: (1) help enterprises in general and small businesses more specifically, besides certain specific economic sectors (such as airlines), (2) increase resources for health care providing, (3) expand unemployment insurance, (4) create incentives for enterprises to retain employees, (5) transfer cash directly to households, and (6) provide financial resources to state, municipal and local governments.⁴²³ (Cf., furthermore, Sect. 4.4.)

Obviously, given what actually happened in the United States during the year 2020 (cf. Sect. 2.5.), the IMF's assessment may be somewhat biased. This is probably due to the fact that, as mentioned above (cf. Sect. 3.4.1.), the IMF's approach mainly focuses on economic matters and is not as much concerned about human suffering (such as a multitude of Covid-19 related deaths, in addition to many sick people).

According to the IMF report, additional policy efforts will most likely be needed in order to counter the long-term effects of the Covid-19 pandemic and to keep addressing a wide range of deeply rooted socioeconomic challenges that have been put in perspective because of the Covid-19 pandemic, and that are likely to continue to affect the United States for many more years to come. An important element in

⁴²¹International Monetary Fund (2020h), p. 1.

⁴²²International Monetary Fund (2020h), pp. 1–2.

⁴²³International Monetary Fund (2020h), pp. 1–2.

this regard is that, already prior to the Covid-19 pandemic, and even after a decade of economic expansion, the United States was increasingly facing troubled socioeconomic outcomes related to factors such as: poverty, inequality of opportunities, declining socioeconomic mobility, increasingly polarised income distribution, growing barriers to trade and foreign investment, and an unsustainable medium-term path of public debt. The IMF stressed the importance of putting policy solutions in place, not only to address the consequences of the Covid-19 pandemic itself, but also to⁴²⁴:

- (1) reshape systems of welfare distribution, education (ensuring equal access to education) and health care (in order to expand opportunities and reduce inequalities).
- (2) invest in infrastructure.
- (3) help to achieve more open, stable and transparent trade policies, supported by a strengthened international system, and,
- (4) in the medium term, reduce the public debt-to-GDP ratio.

In the IMF's view, achieving these multiple objectives would require a new set of fiscal measures in order to stimulate demand, increase health preparedness and support the most vulnerable. The United States was advised to use its little fiscal space for accelerating the exit from the contraction caused by Covid-19, as well as for improving its social safety nets in a sustainable way, and for facilitating a broader redesign of the US economy. The IMF report was also of the opinion that further efforts would be necessary to prepare for future health crises (or even for a resurgence of a new strain of the Covid-19 virus) and to ensure that those without medical insurance would obtain access to affordable, quality health care.⁴²⁵

3.4.5.3 Regional Surveillance

3.4.5.3.1 General

Regional surveillance involves the IMF's review of policies deployed by currency unions—notably (1) the Euro Area, (2) the West African Economic and Monetary Union, (3) the Central African Economic and Monetary Community, and (4) the Eastern Caribbean Currency Union. Such regional economic outlook reports are also prepared to examine economic developments and key policy issues in the following regions: Asia-Pacific, Europe, the Middle East and Central Asia, Sub-Saharan Africa and the Western Hemisphere.⁴²⁶

⁴²⁴International Monetary Fund (2020h), p. 2.

⁴²⁵International Monetary Fund (2020h), p. 2.

⁴²⁶International Monetary Fund (2021k).

3.4.5.3.2 The 2020 Article IV Report Concerning the Euro Area

The most recent regional surveillance of the euro area concerned the year 2020. The relevant report was more precisely issued on 18 December 2020. Obviously, one of the crucial issues of the 2020-euro area surveillance has been the Covid-19 pandemic, which, in the words of the IMF Executive Board, "has taken a significant human and economic toll"⁴²⁷ within the euro area.

According to the findings of the IMF, euro area real GDP declined sharply in the first half of 2020, though the unprecedented policy responses at the national and EU levels helped cushion the impact of the Covid-19 crisis—including by effectively limiting in-creases in unemployment and insolvencies—and supported a strong rebound in the third quarter of 2020.⁴²⁸ The IMF added to this that the "second wave" and—in its own words—"necessary measures to contain it" were to be expected to weigh on economic activity in the term to follow.⁴²⁹ With these harsh wordings, the IMF demonstrated its continued adherence to neoliberal thinking, with economic interests invariably being prioritized over other societal interests, such as public health and even human lives, which must all give way—always—to economic interests.

The IMF, furthermore, rightly observed that, "while rapid and widespread delivery of safe and effective vaccines would likely spur a faster recovery, a prolonged health crisis and slower recovery could depress investment and increase private and public sector vulnerabilities".⁴³⁰ According to the IMF's assessment, in such a downside scenario, significant labour market hysteresis could start to take place, next to increasing inequality and poverty. Taken together, these "scarring" effects could weigh heavily on the growth potential of the euro area.⁴³¹

In its further assessment of the impact of the Covid-19 pandemic within the euro area, the IMF staff pointed out that the EU key policy challenge would be to "continue countering the pandemic while facilitating a robust and inclusive recovery, including by addressing the health crisis, containing economic scarring, supporting resource reallocation and transformation to greener and more digital economies, and limiting the crisis's impact on inequality and poverty".⁴³² The

⁴²⁷ International Monetary Fund (2020e).

⁴²⁸The fact that this came at the price of inciting the second wave of the Covid-19 pandemic, which hit European countries extremely bad, is hardly acknowledged in the IMF report—at best it is minimized under reference to "unnecessary containment measures" which only have been a burden for the economy.

⁴²⁹International Monetary Fund (2020e).

⁴³⁰International Monetary Fund (2020e).

⁴³¹International Monetary Fund (2020e).

We need to keep these wordings in thought when we shall address the complete disaster of (the initial phase of) the EU vaccination campaign in Chap. 9 (cf. Sect. 9.4.).

⁴³²International Monetary Fund (2020g), p. 1.

IMF staff added to this that "(i)n a downside scenario, sizable further stimulus would be needed".⁴³³

Some main topics of concern to the IMF staff were the following⁴³⁴:

- (1) Fiscal policy: According to the IMF Staff assessment, fiscal policy within the euro area (for 2021) will have to be based on further providing broad-based financial support. However, once the Covid-19 pandemic will have calmed down, fiscal policy should again focus on managing the transition from necessary lifelines to facilitating a durable recovery, with as priorities investing in climate change mitigation and digitalization, while addressing likely increases in inequality and poverty. Over the medium term, fiscal policy should focus on sustainably boost growth, with a need for credible and carefully calibrated fiscal consolidation strategies in high-debt countries.
- (2) Monetary policy: According to the IMF Staff, additional monetary policy stimulus must support the recovery and facilitate a sustained increase in inflation.
- (3) Financial sector measures: Supportive financial sector measures should be maintained until the recovery is well underway, while capital and liquidity buffers should be rebuilt gradually to ensure banks' continued capacity to extend credit. Improving the EU's crisis resolution capabilities, completing the banking union, and further advancing the capital market union were also mentioned as key to further increasing euro area resilience.
- (4) Structural policies: Structural policies should focus on facilitating reallocation of resources to expanding firms and sectors, limiting scarring, and protecting the vulnerable (e.g., adjusting job retention schemes, strengthening social safety nets, promoting job search, enhancing training programs, and providing carefully targeted hiring subsidies).

Some further findings of this 2020 Article IV surveillance report shall be revisited in the next Chap. 4 (dealing with Covid-19 related issues of fiscal policy and state aids).

3.4.5.4 Global Surveillance

Global surveillance entails reviews by the Executive Board of the IMF of global economic trends and developments. The main of these reviews result in a wide variety of reports, such as (1) the World Economic Outlook reports (dealing with the overall economic situation of the world), (2) the Global Financial Stability Reports (covering developments, prospects, and policy issues in international financial markets), and (3) the Fiscal Monitor (dealing with the latest developments in public finance).

⁴³³International Monetary Fund (2020g), p. 1.

⁴³⁴International Monetary Fund (2020g), pp. 1–2.

All three groups of reports are published twice a year, with updates being provided on a quarterly basis. In addition, the Executive Board of the IMF holds more frequent informal discussions on a wide variety of topics dealing with world economic and market developments.⁴³⁵

3.5 Increase of Debt

3.5.1 Introduction

Already in the pre-Covid-19 pandemic era, both public and private debt were on the rise, thus illustrating how the capitalist money creating system (based upon banks granting credit), supported by neoliberal monetary (and fiscal) policy, does not allow any rational planning whatsoever. These vast amounts of credit, moreover, create an expectancy of ever more economic growth, as, within the logic of the capitalist system itself, all the created credit must be paid back out of economic activities.⁴³⁶ This raises the question how ever a more sustainable economic model will be achieved base upon such a monetary system.⁴³⁷

One of the biggest monetary challenges during pre Covid-19 times was, hence, how to reconcile these ever-growing mountains of debt with the intent of creating a more sustainable economic system, with as aim, amongst other things, of (1) countering climate change, in addition to (2) finding solutions to the numerous intergenerational injustices entailed by the capitalist money creation model (amongst which inequality and poverty).⁴³⁸

Regretfully, with the onset of the Covid-19 pandemic, these noble goals have largely been temporarily put on hold, while due to various economic factors, not in the least the vast amounts of new money that has been created because of monetary support measures, the Covid-19 pandemic would only further increase the already gigantic debt mountains.

⁴³⁵International Monetary Fund (2021k).

⁴³⁶Byttebier (2019), p. 95.

⁴³⁷On these questions, cf. Byttebier (2017, 2018, 2019).

⁴³⁸Cf. Streeck (2013), p. 47.

Streeck points out that the increase of public debt has been a direct consequence of applying neoliberal policy. (Streeck (2013), p. 51.)

3.5.2 Global Debt in General and Government Debt in Particular

3.5.2.1 Findings of the Institute of International Finance

According to the "Institute of International Finance's global debt monitor"-report of February 17, 2021, global debt soared to a new record high of USD 281 trillion in 2020: Coupled with a sharp pandemic-driven decline in government and corporate revenues, total private and public debt for the 61 countries in the IFF's sample rose by USD 24 trillion in 2020, making up over a quarter of the USD 88 trillion rise over the preceding decade. Debt outside the financial sector hit USD 214 trillion, up from USD 194 trillion in 2019.⁴³⁹ This brought the worldwide debt-to-GDP ratio at over 355%.⁴⁴⁰

The Institute of International Finance's global debt monitor estimated government support programs had accounted for half of this rise, while global firms, banks and households added USD 5.4 trillion, USD 3.9 trillion and USD 2.6 trillion respectively. This all implied that debt as a ratio of the world economic output—known as gross domestic product—surged by 35 percentage points to over 355% of GDP.⁴⁴¹

There was also little sign of a near-term stabilization.⁴⁴²

By comparison, according to the same Institute of International Finance, global debt had amounted to USD 247 trillion in Q2 2018 (or 317% of the then global debt-to-GDP ratio).⁴⁴³ Emerging market debt was then reported to account for USD 71 trillion (or 212% of EM GDP), around USD 4.8 trillion higher than its 2017 level, with China having accounted for over 80% of this increase.⁴⁴⁴ Global debt in Q2 2018 excluding the financial sector was reported to amount to USD 187 trillion.⁴⁴⁵

Still according to the same Institute of International Finance, in the course of 2020, global debt-to-GDP ratio had surged by 35 percentage points (%pts) to over 355% of GDP. This upswing was well beyond the rise seen during the 2008 global financial crisis. Back in 2008 and 2009, the increase in global debt ratio had remained "limited" to 10% and 15%, respectively.⁴⁴⁶

Further debt trajectories by the Institute of International Finance were expected to vary significantly among the difference countries, a principal factor being the Covid-19 vaccination rollouts. Indeed, the pace of vaccination as of December 2020 differed considerably across countries, and difficulty in vaccine rollout was expected

⁴³⁹Tiftik and Mahmood (2021).

⁴⁴⁰Jones (2021).

⁴⁴¹ Jones (2021).

⁴⁴² Jones (2021).

⁴⁴³Institute of International Finance (2018), p. 1. Cf., furthermore, Byttebier (2019), p. 82.

⁴⁴⁴Institute of International Finance (2018), p. 1. Cf., furthermore, Byttebier (2018), p. 82.

⁴⁴⁵Institute of International Finance (2018), p. 1. Cf., furthermore, Byttebier (2018), p. 82.

⁴⁴⁶Tiftik and Mahmood (2021) and Jones (2021).

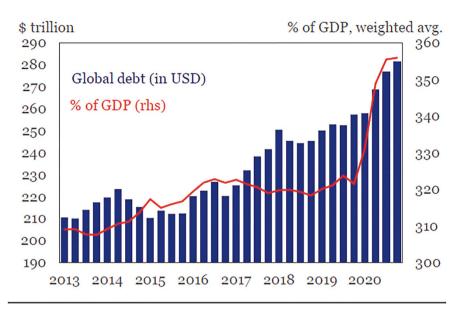


Fig. 3.2 Global debt surges from 2013–2020 [Source: Jones (2021), IIF, BIS, IMF and National Sources]

to delay economic recovery, prompting further debt accumulation. For highly indebted countries facing ongoing fiscal constraints, difficulty in accessing and distributing vaccines was thus especially expected to contribute to further debt strains, particularly in low-income countries.⁴⁴⁷ This is again something we shall have to keep in mind when we shall address the disaster of (the early months of) the EU Covid-19 vaccination campaign in Chap. 9 (Cf. Sect. 9.4.3.).

For 2020, government debt on average topped 105% of GDP—up from 88% in 2019. General government debt was hereby reported to account for more than half of the rise-up of the global debt, over USD 12 trillion in 2020 vs USD 4.3 trillion in 2019.⁴⁴⁸

This is illustrated in Fig. 3.2 which gives an overview of the global debt surges from 2013 until 2020.s

Unsurprisingly, mature markets saw the biggest increase in government debt (+ USD 10.7 trillion), as the fiscal response to the Covid-19 pandemic was constrained in most emerging markets. While some Covid-19 pandemic-related fiscal measures were expected to expire in 2021, budget deficits were nevertheless expected to remain well above Covid-19 pre-pandemic levels. The IFF itself

⁴⁴⁷Tiftik and Mahmood (2021).

⁴⁴⁸Tiftik and Mahmood (2021).

expected global government debt to increase by another USD 10 trillion in 2021, and to surpass USD 92 trillion by end-2021. The IFF, furthermore, indicated that, although sizeable budget deficits have been essential to tackle the Covid-19 crisis, finding the right exit strategy could be even more challenging than after the 2008/09 financial crisis. E.g., political, and social pressure could have as effect that it will limit governments' efforts to reduce deficits and debt. This may in turn jeopardize their ability to cope with future crises. According to the IFF, this may already soon constrain policy responses for mitigating the adverse impacts of societal problems, such as climate change and natural capital loss,⁴⁴⁹ implying that fighting the Covid-19 pandemic may be likely to exhaust countries too much to fight climate change (and similar matters) with an equal resilience.

According to the quoted IFF-report, debt rises were particularly sharp in Europe, with non-financial sector debt-to-GDP ratios in France, Spain, and Greece increasing some 50 percentage points. The rapid build-up was mostly driven by governments, particularly in Greece, Spain, Britain, and Canada. Switzerland was the only mature market economy in the IIF's 61-country analysis to record a decline in its debt ratio.⁴⁵⁰

Figure 3.3 gives an overview of the surge in debt-to-GDP ratios, in some countries, in 2020 (expressed in percentage points).

Among emerging markets, China saw the biggest rise in debt ratios excluding banks, followed by Turkey, Korea, and the United Arab Emirates. South Africa and India recorded the largest increases just in terms of government debt ratios.⁴⁵¹

3.5.2.2 Findings of Eurostat

According to Table 3.10, the combined public debt of the 27 EU member states in Q4 2018 amounted to EUR 10,746,928 million, in Q4 2019 to EUR 10,970,052 million, and in Q4 2020 to EUR 12,078,220 million.

This implies that while the rise in public debt from Q4 2018 to Q4 2019 was EUR 223,124 million, the rise in public debt from Q4 2019 to Q4 2020 was EUR 1,108,168 million. The latter is largely due to Covid-19.

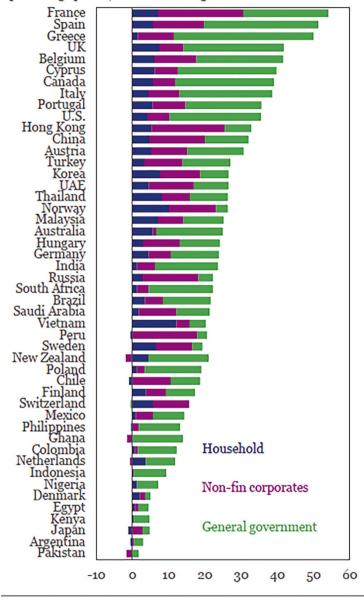
This is illustrated in Fig. 3.4^{452} and in Table 3.10. Figure 3.4 gives an overview of the public debt (as % GDP) in the Euro Area Member States in 2019 and 2021.

⁴⁴⁹Tiftik and Mahmood (2021) and Jones (2021).

⁴⁵⁰ Jones (2021).

⁴⁵¹ Jones (2021).

⁴⁵² "The EFB had also noted that: "In principle, the clause should be deactivated as soon as the severe economic downturn in the EU and the euro area comes to an end. However, there is no commonly accepted or agreed definition of a severe economic downturn. The Commission and the Council may hold different views. Also within the Council views may diverge considerably, especially if the economic impact of the Covid-19 crisis differs across countries: some may soon embark on an upturn, others may experience negative growth for longer". (As quoted in European Parliament (2021).]" [Commission Autumn 2020 Economic Forecast and European Parliament (2021).



percentage points, estimated change in debt ratios in 2020

Fig. 3.3 Surge in debt-to-GDP rations (percentage points, estimated change in debt ratios 2020) [Source: Jones (2021), IIF, BIS, IMF and National Sources]

Table 3.10 OUVERINGIN	LADIE 3.10 GOVERIFICENTIAL BLOSS GEOL OF EU THEINDER STATES IN MILLION EURO [SOUTCE: EUROSIA (2021D)]	SINDET STALES IN IMILION	curo loonice. Eurosia	[(11717)		
Country	2018-Q4	2019-Q4	2020-Q1	2020-Q2	2020-Q3	2020-Q4
Austria	285,318	281,451	289,113	315,795	300,216	315,160
Belgium	459,307	479,997	491,959	524,072	515,620	514,965
Bulgaria	12,492	12,277	12,401	12,916	15,339	15,187
Croatia	38,621	40,002	39,134	43,488	43,070	43,656
Cyprus	21,256	21,295	21,525	24,397	25,356	24,829
Czechia	67,431	69,139	69,159	84,698	79,790	82,045
Denmark	102,603	106,023	103,830	128,033	130,659	131,886
Estonia	2127	2497	2513	5091	5058	4953
Finland	139,564	143,858	155,164	163,844	159,127	164,266
France	2,314,902	2,413,172	2,437,926	2,637,618	2,673,838	2,650,116
Germany	2,074,126	2,091,734	2,103,218	2,272,296	2,344,818	2,325,463
Greece	334,721	334,277	329,616	333,838	337,661	341,023
Hungary	93,347	93,171	88,046	93,216	95,756	105,548
Ireland	205,901	213,118	213,937	226,097	227,515	218,158
Italy	2,380,982	2,441,293	2,433,601	2,531,072	2,585,087	2,573,386
Latvia	10,816	11,244	11,288	12,749	13,145	12,750
Lithuania	15,322	16,998	16,231	20,131	22,416	23,061
Luxembourg	12,583	12,557	14,197	15,058	16,491	15,942
Malta	5640	5641	5934	6642	6835	0969
Netherlands	405,773	395,094	403,141	441,535	441,151	434,931
Norway ^a	139,722	126,995	127,629	130,757	127,106	149,889
Poland	240,786	241,181	242,538	281,887	287,406	292,907
Portugal	249,261	252,455	254,790	259,894	267,040	270,492
Romania	70,874	75,881	83,183	88,536	92,565	102,531
Slovakia	44,383	45,138	46,400	54,868	55,142	55,181
Slovenia	32,238	32,396	33,386	36,885	36,712	37,429

Table 3.10 Governmental gross debt of EU member states in million euro [Source: Eurostat (2021b)]

Spain	1,173,350	1,203,821	1,224,520	1,291,013	1,308,186	1,345,570
Sweden	183,192	163,926	163,837	176,358	180,420	196,734
EU 27 countries	10,746,928	10,970,052	11,061,305	11,854,326	12,037,478	12,078,220
^a Not nart of FII						

Not part of EU

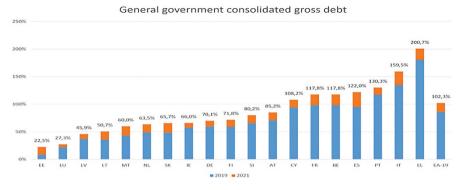


Fig. 3.4 Public debt (as % GDP) in Euro Area Member States in 2019 and 2021

Table 3.10 gives an overview of the governmental gross debt of the EU member states in million euro from 2018 until 2020.

3.5.2.3 Findings of the "World Debt Clock"

On 3 April 2021, the World debt $clock^{453}$ mentioned a global public debt (of all the countries in the world combined) of more than USD 79,853,127,000,000, -.

Table 3.11 gives a rough estimate, based upon figures that were at the time made public on the same website, of the global debt of all world countries combined during various years.

3.5.2.4 Assessment by the IMF

In a paper of April 20, 2021, that was made available on the IMF-blog,⁴⁵⁴ Marcos Chamon and Jonathan Ostry pointed to the fact that while during the Covid-19 pandemic, monetary and fiscal policy of a variety of countries got characterised by a combination of high public debt and low interest rates, this had already been the case for many advanced economies prior to the Covid-19 pandemic. The authors, moreover, expressed their concern that this could even become starker in the aftermath of the Covid-19 pandemic. According to these authors, the Covid-19 pandemic also caused a growing number of emerging market and developing economies to experience negative real rates—referring to the interest rate minus inflation—with regard

⁴⁵³ As appearing on https://commodity.com/data/debt-clock/. (Accessed on 3 April 2021, besides on the various previous dates mentioned in the table itself.

⁴⁵⁴Chamon and Ostry (2021).

Table 3.11 Total global,	Date	Amount (estimation) in USD trillion
public debt according to the "World Debt Clock"	December 15, 2014	60.793
WORLDEDI CIOCK	March 31, 2016	60.070
	October 21, 2016	62.066
	May 9, 2018	72.486
	End of 2018	73
	June 5, 2019	75.254
	December 17, 2020	79.073
	April 3, 2021	79.853

to government debt. According to said authors, this was partly due to the own policy of the IMF itself, which had urged countries to spend as much as they could in order to protect the vulnerable members of their societies and to counteract long-lasting damage to their economies. However, the IMP had at the same time stressed the importance to keep public spending well targeted. In the opinion of said authors, this was especially critical for emerging market and developing economies that started facing tighter constraints and associated fiscal risks, making it necessary to prioritize public spending even more.⁴⁵⁵

For said authors, the main matter is what will have to be done about the high levels of public debt in the aftermath of the Covid-19 pandemic. The IMF itself pointed to the fact that it would become necessary to fiscal anchors—referring to both rules and frameworks—for dealing with the effects of the historically low interest rates. Some suggested that in case borrowing costs would again move up, this would do be done only gradually in order to deal adequately with possible fallout.⁴⁵⁶

For Chamon and Ostry, two issues seemed salient⁴⁵⁷:

(1) First, the authors raised the issue whether it will remain possible to keep borrowing cheap for the entire horizon relevant for fiscal planning in the aftermath of the Covid-19 pandemic

In the own opinion of said two authors, the answer to this question is negative. While they point to arguments holding that negative growth-adjusted interest rates could be considered, the authors themselves highlighted the risks around such a benign future.⁴⁵⁸

⁴⁵⁵Chamon and Ostry (2021).

⁴⁵⁶Chamon and Ostry (2021).

⁴⁵⁷Chamon and Ostry (2021).

⁴⁵⁸According to said authors, history gives numerous episodes of what they refer to as "abrupt upticks in borrowing costs" once market expectations shift. This risk is especially relevant for emerging market and developing economies, where debt ratios are already high. At some point, debts may well need to be rolled over at higher rates. Limits to how much can be borrowed have not disappeared, and the need to stay well clear of them is even sharper in a world where interest rates and growth are uncertain. (Cf. Chamon and Ostry (2021).)

(2) Second, the authors raise the question whether it will suffice to resort to higher interest rates in a gradual manner only.

The answer of both authors to this second question was again negative: according to said authors, theory and history suggest that, when private financial markets start worrying that fiscal space may run out, they have a tendency to penalize countries quickly.

The authors, moreover, considered three alternative viewpoints⁴⁵⁹:

- (1) In a first scenario, interest rates could be kept low in advanced economies, even if this would imply that debt would continue to increase. In such a case, there would be per definition no need to worry about debt or steady (non-progressing) deficits. According to said authors, debt ratio would simply continue to rise but would eventually stabilize at a higher level. The question what is to happen once this higher level is obtained, however, remains unanswered.
- (2) In a second scenario, interest rates could be kept low at given debt levels, but they should not be kept low if debt were to still increase in a significant manner. According to the authors, it is likely that most G7 countries could continue to run a primary deficit close to 2% of GDP while still stabilizing their debt ratios. In this scenario, such countries would continue to enjoy a free lunch, under the condition that deficits remain below the debt (ratio)-stabilizing level.
- (3) In a third scenario, interest rates would be kept low but could be adjusted, probably even abruptly. In this scenario, the case could be made to take advantage of favourable conditions for reduce debt and rebuilding buffers.

However, still according to Chamon and Ostry, the more prudent baseline is the one that implies that borrowing costs will increase significantly, especially for emerging markets and developing economies. In such a scenario, the task for monetary authorities will become to determine the fiscal policy that is needed to anchor expectations in a riskier future. Advanced economies that still have ample fiscal space may in such a scenario not need to worry much, but those that have extremely high debt will need to take some anchoring insurance. Still according to both authors, emerging market and developing economies alike will in the aftermath of the Covid-19 pandemic most likely have to deal with more binding fiscal constraints and a need to adjust sooner (but again, not before the recovery would be firmed up).⁴⁶⁰

Of course, in our previous work,⁴⁶¹ we ourselves have proposed a total different approach for dealing with this matters, which we shall readdress in Chap. 11.

⁴⁵⁹Chamon and Ostry (2021).

⁴⁶⁰Chamon and Ostry (2021).

⁴⁶¹Cf. Byttebier (2017), Chapters 4 and 5.

3.5.2.5 Public Debt-to-GDP Ratio in the EU

In 2019, the general government debt-to-GDP ratio in the euro area reached an average of 80% of GDP in the euro area. This percentage amounted to 78% in 2019 (cf. Table 3.12).

The outbreak of the Covid-19 pandemic led to a severe economic situation and triggered the need for larger stimulus measures. As a result, the average debt-to-GDP ratio in the euro area got projected to jump by around 15%, to an average of nearly 102% for the year 2020. The European Commission, furthermore, expected debt-to-

	2018-Q4	2019-Q4	2020-Q1	2020-Q2	2020-Q3	2020-Q4
Country	(%)	(%)	(%)	(%)	(%)	(%)
Austria	74	71	73	82	79	84
Belgium	100	98	103	114	113	114
Bulgaria	22	20	20	21	25	25
Croatia	74	73	74	85	86	89
Cyprus	99	94	96	113	119	118
Czechia	32	30	33	40	38	38
Denmark	34	33	33	41	42	42
Estonia	8	8	9	19	19	18
Finland	60	60	64	69	67	69
France	98	98	101	114	116	116
Germany	62	60	61	67	70	70
Greece	186	181	181	191	200	206
Hungary	69	66	66	70	74	80
Ireland	63	57	59	63	62	60
Italy	134	135	138	150	155	156
Latvia	37	37	37	43	45	44
Lithuania	34	36	33	41	46	47
Luxembourg	21	22	22	24	26	25
Malta	45	42	43	50	53	54
Netherlands	52	49	50	55	55	55
Norway ^a	39	40	41	41	41	46
Poland	49	46	48	55	57	58
Portugal	122	117	119	126	131	134
Romania	35	35	37	41	43	47
Slovakia	50	48	50	60	61	61
Slovenia	70	66	69	78	78	81
Spain	97	96	99	110	114	120
Sweden	39	35	36	37	39	40
EU 27 countries	80	78	79	88	90	91

 Table 3.12
 Governmental gross debt in EU member states in percentage of gross domestic product (GDP) [Source: Eurostat (2021b)]

^a Not part of EU

GDP ratios to stabilize at extremely elevated levels over 2021 and 2022, assuming unchanged policies.⁴⁶² Still according to the European Commission, the key driver for the increase in the public debt-to-GDP ratio were primary deficits. The increase in the public debt-to-GDP ratio in 2020 was hereby believed to reflect the combined effects of a major deterioration of the member states' primary balances and the contraction they were suffering in GDP. These two elements together had a significant snowball effect of increasing debt. It was, however, expected that the average primary deficit would halve from 7.2% of GDP in 2020 to 3.4% in 2022. The high debt-to-GDP ratios in the euro area were, nevertheless, still expected to continue to be a drag on debt dynamics throughout 2021 and 2022, but the European Commission also believed that a favourable interest rate-growth differential could help to contain the projected increase.⁴⁶³

This is further illustrated in Table 3.12 which gives an overview of the governmental gross debt of the EU member states in percentage of the gross domestic product (GDP) from Q4 2018 until Q4 2020.

According to figures made available by Eurostat, at the end of Q3 2020, the euro area was still strongly impacted by policy responses to the Covid-19 containment measures which materialized in increased financing needs: the government debt to GDP ratio in the euro area stood at 97.3%, compared with 95.0% at the end of Q2 2020. Within the EU, the ratio increased from 87.7% to 89.8%. Compared with Q3 2019, the government debt to GDP ratio rose in both the euro area (from 85.8% to 97.3%) and the EU (from 79.2% to 89.8%). The increases were attributed to two factors: government debt increasing considerably, and GDP (and hence also tax income) decreasing.⁴⁶⁴

The highest ratios of government debt to GDP at the end of Q3 2020 were recorded in Greece (199.9%), Italy (154.2%), Portugal (130.8%), Cyprus (119.5%), France (116.5%), Spain (114.1%) and Belgium (113.2%), and the lowest in Estonia (18.5%), Bulgaria (25.3%) and Luxembourg (26.1%).⁴⁶⁵ Compared with Q2 2020, 20 Member States registered an increase in their debt to GDP ratio at the end of Q3 2020, and five a decrease, while the ratio remained stable in Estonia and The Netherlands. The largest increases in the ratio were observed in Greece (+8.5 percentage points—pp), Cyprus (+6.2 pp), Italy (+4.9 pp), Portugal (+4.8 pp), Lithuania (+4.6 pp) and Bulgaria (+4.0 pp). The decreases were recorded in Austria (-3.4 pp), Finland (-1.7 pp), Czechia (-1.5 pp), Belgium (-0.9 pp) and Ireland

⁴⁶²European Commission (2021), p. 13.

⁴⁶³European Commission (2021), p. 14.

Public debt was projected to increase substantially in all EU Member States in 2020, before expected to fall in around a third of the member states over the following 2 years. Still, in 2022, the debt ratio was forecast to remain above 150% of GDP in Greece and Italy, above 120% in Portugal and Spain, and above 100% in Belgium, Cyprus and France. Seven more euro-area countries forecasted their debt in 2022 to be over 60% of GDP (Austria, Slovenia, Germany, Finland, Slovakia, Ireland and the Netherlands). (Cf. European Commission (2021), p. 14.) ⁴⁶⁴Eurostat (2021a).

⁴⁶⁵Eurostat (2021a).

(-0.7 pp).⁴⁶⁶ However, compared with Q3 2019, all Member states registered an increase in their debt to GDP ratio at the end of Q3 2020 (when the full impact of Covid-19 containment measures was strongly felt). The largest increases in the ratio were recorded in Cyprus (+22.9 pp), Italy (+17.4 pp), Greece (+17.3 pp), Spain (+16.6 pp) and France (+16.5 pp).⁴⁶⁷

This is further illustrated in Table 3.13 which gives a representation of the percentage wise increase of the governmental gross debt in million euro by comparing 2020-Q4 with 2019-Q4, and 2019-Q4 with 2018-Q4.

3.5.3 Private Debt

3.5.3.1 Findings of the Institute of International Finance

According to the "Institute of International Finance's global debt monitor"-report of 17 February 2021, non-financial private sector debt (household and corporate) hit 165% of the global GDP in 2020, up from 124% in 2019. Still according to the IFF, supportive government measures, such as debt moratoria and loan guarantee programs—while much needed for fighting the Covid-19 pandemic—were reported to have pushed non-financial corporate debt some eight percentage points higher, to 100% of GDP. Firm level data, in addition, suggested that many large enterprises, particularly in the United States and Japan, made use of this additional borrowing capacity for building such buffers. Household debt throughout 2020 was reported to have increased by 4 %pts. to 65% of GDP, in part reflecting loan moratoria and the resilience of residential real estate markets to the Covid-19 pandemic.⁴⁶⁸

Still according to the quoted IFF-report, financial enterprises saw the largest annual jump in debt ratios in over a decade: debt in the financial sector was reported to have increased by over 5 %pts., to 86% of GDP in 2020. This has been the largest increase since 2007 and, moreover, the first annual rise since 2016.⁴⁶⁹

Mature markets have seen the biggest increases in debt ratios in 2020 (outside the financial sector). This increase was reported to have been particularly sharp in Europe, with non-financial sector debt-to-GDP ratios in France, Spain, and Greece having increased by some 50 %pts. The rapid debt build-up was in these countries mostly driven by national governments, which was in particular the case in Greece, Spain, the United Kingdom, and Canada. According to the IFF-report, Switzerland was the only mature market economy in the IFF sample that recorded a modest decline in the government-to-debt ratio. Balance sheet vulnerabilities in the

⁴⁶⁶Eurostat (2021a).

⁴⁶⁷Eurostat (2021a).

⁴⁶⁸Tiftik and Mahmood (2021).

⁴⁶⁹Tiftik and Mahmood (2021).

Country	2019-Q4/2018-Q4 (%)	2020-Q4/2019-Q4 (%)
Austria	99	112
Belgium	105	107
Bulgaria	98	124
Croatia	104	109
Cyprus	100	117
Czechia	103	119
Denmark	103	124
Estonia	117	198
Finland	103	114
France	104	110
Germany	101	111
Greece	100	102
Hungary	100	113
Ireland	104	102
Italy	103	105
Latvia	104	113
Lithuania	111	136
Luxembourg	100	127
Malta	100	123
Netherlands	97	110
Norway ^a	91	118
Poland	100	121
Portugal	101	107
Romania	107	135
Slovakia	102	122
Slovenia	100	116
Spain	103	112
Sweden	89	120
EU 27 countries	102	110

Table 3.13 Percentage wise increase of the governmental gross debt in million euro comparing2020-Q4 with 2019-Q4, and 2019-Q4 with 2018-Q4 [Own calculations, based upon: Eurostat(2021b)]

^a Not part of EU

non-financial enterprise sector were also reported to have increased significantly across many countries, particularly in France.⁴⁷⁰

Among emerging markets, China witnessed the biggest increase in debt ratios (ex-financials), followed by Turkey, Korea, and the UAE. South Africa and India recorded the largest increases in government-to-debt ratios, while the run-up in corporate debt was reported to have been the largest in Peru and Russia. Still

⁴⁷⁰Tiftik and Mahmood (2021).

according to the IFF-report, emerging market FX debt was reported to have remained broadly stable at USD 8.6 trillion in 2020, as sharp losses in EM currencies reduced enterprises' incentives to borrow in foreign currency. Debt build-up was relatively limited across frontier markets and low-income countries, in part reflecting the limited fiscal space in these territories to support enterprises and private households.⁴⁷¹

According to the IFF, a phenomenon referred to as "corporate zombification" occurred in 2020. This phenomenon implied that, as global recovery gathered pace, governments were expected to be developing exit strategies from the exceptional fiscal support measures they had resorted to for fighting Covid-19. E.g., by the end of 2020, it appeared that support measures such as government guarantees, and debt moratoria had been successful in preventing a surge in business bankruptcies. As a result, the decline in the number of enterprises that filed for insolvency was extraordinarily low across many European countries, though China and Turkey were reported to have seen some an increase.⁴⁷²

However, it was feared that the premature withdrawal of supportive government measures in the aftermath of the Covid-19 pandemic could still lead to a surge in bankruptcies and make a new wave of non-performing loans necessary, with financial stability implications for the banking sector. Sustained reliance on government support could pose systemic risks to financial system as well. In the assessment of the IFF, a prolonged period of loan guarantees—coupled with sustained low interest rates—could encourage still more debt accumulation by the weakest and most indebted corporates.⁴⁷³

3.5.3.2 Findings of Eurostat

According to Eurostat, one of the important legacies of the Covid-19 pandemic will be an immense increase of the global public and private debt.⁴⁷⁴

Faced with an exceptional occurrence as a global pandemic, which at the time of the Eurostat-assessment had been going on for more than a year already, the rise in debt was expected to be exceptional: in size, speed, and scope.⁴⁷⁵

Eurostat expected the public sector to absorb the biggest part of the global debt increase, both due to its ability to borrow more and under better conditions (e.g., at lower interest rates and for longer maturities).⁴⁷⁶ During the Covid-19 pandemic, the need for this increase of public debt has, however, been extremely sudden. E.g., it has been estimated that the surge in debt for Italy and Spain during a single year

⁴⁷¹Tiftik and Mahmood (2021).

⁴⁷²Tiftik and Mahmood (2021).

⁴⁷³Tiftik and Mahmood (2021).

⁴⁷⁴Salmeron and Garcia-Arenas (2021), p. 29.

⁴⁷⁵Salmeron and Garcia-Arenas (2021), p. 29.

⁴⁷⁶Salmeron and Garcia-Arenas (2021), p. 29.

(2020) has been equivalent to 25% of GDP, whereas it had taken 5 and 3 years, respectively to accumulate a similar increase of public debt in the aftermath of the 2007–2008 financial crisis.⁴⁷⁷

This increase in public debt was in the opinion of Eurostat expected to occur in both advanced and emerging economies. Although the increases were expected to be somewhat smaller for emerging economies, the situation of the latter group of countries still remained particularly delicate due to a variety of factors, such as: they had less fiscal margin to play with; they are in general more dependent on foreign financing and international support, and they are more vulnerable to debt crises to begin with.⁴⁷⁸

While the increase in public debt during the year 2020 has mainly occurred in countries that already in pre-Covid-19 times were deeply indebted, Eurostat pointed to the fact that households have, generally speaking, been starting from much lower levels of debt than in the run-up to the 2007–2008 financial crisis. Eurostat also pointed to the fact that the picture with regard to corporate debt was in some countries more mixed.⁴⁷⁹

In addition, in emerging economies, there has in some countries been a sharp increase in corporate debt in China which more than tripled since 2008.⁴⁸⁰

With regard to advanced economies, information was only later available because in this group of countries, the impact of the Covid-19 outbreak was concentrated in Q2 2020.⁴⁸¹ Nevertheless, from early data from the United States, there appeared an increase in corporate debt and a relative normality among the debt situation of households: between January and June 2020, non-financial corporate debt rose by 9.4% (around double the total increase registered in 2019), while household indebtedness remained much more stable (+1.9%, a figure similar to that registered in the

⁴⁷⁷Salmeron and Garcia-Arenas (2021), p. 29.

⁴⁷⁸Therefore, the debt relief programs launched by the G-20, the IMF and other international agencies are particularly important. (Cf. Salmeron and Garcia-Arenas (2021), p. 29.)

⁴⁷⁹Salmeron and Garcia-Arenas (2021), p. 29.

In the period between the "two crises" (namely the financial crisis of 2007–2008, respectively the Covid-19 crisis of 2020–2021), enterprises had clearly reduced their levels of debt in countries such as Spain, Italy and Portugal, while in the United States and Germany, the levels of debt had remained moderate, and in France, high. Despite this, new vulnerabilities emerged as a result of the Covid-19 crisis, such as the deterioration in the quality of corporate debt in the United States, especially due to the relatively large number of enterprises at risk of becoming "fallen angels" (= referring to enterprises whose debt is apparently investment grade but could become speculative grade with only a small downgrading of their credit rating) and the growth of debt among enterprises that already had high levels of debt to begin with. (Cf. Salmeron and Garcia-Arenas (2021), p. 29.)

⁴⁸⁰Salmeron and Garcia-Arenas (2021), pp. 29–30.

China has been indicated as one of the first countries for which data were available to assess the initial impact of the Covid-19 crisis on private debt, and it appears to be very significant: while household indebtedness barely increased by 2% of GDP in Q1 2020, non-financial corporate debt surged by 10%, bringing it close to the high points of 2015 and 2016 that caused much concern the time. (Cf. Salmeron and Garcia-Arenas (2021), p. 30.)

⁴⁸¹Salmeron and Garcia-Arenas (2021), p. 30.

same period in 2019).⁴⁸² While the biggest part of the increase in debt was considered most likely to occur in the public sector in light of the large arsenal of economic measures resorted to for combatting the Covid-19 crisis, the possible improvement in household balance sheets was more likely expected to be temporary.⁴⁸³

3.6 Conclusions

It is clear that after the two severe crises of the past decade and a half—particularly the severe financial crisis of 2008 (and its aftermath), and the Covid-19 crisis of 2020–2021—the monetary systems of many Western countries have been stretched beyond their capacity.

According to Stiglitz, in the United States, the US FED has played an active role in countering the economic effects of the Covid-19 pandemic, which resulted in a broad range of monetary interventions (cf. Sect. 3.3.). This brought Stiglitz to the following general assessment⁴⁸⁴:

In the US, the Federal Reserve has taken an active role in countering the economic effects of the pandemic, with a broad range of interventions providing liquidity to markets that seemed at the point of becoming dysfunctional, lending to a wide array of firms, and supporting sagging bond prices, even for junk bonds. While, as in Europe, there is a charade that the central bank does not lend money directly to the government, it is clear that that is precisely what has been happening. The Fed's balance sheet has expanded enormously, increasing in a few weeks as much as it did during the years of the financial crisis.

While the mandate of the ECB is markedly different from the Fed's – its focus is supposed to be on inflation, which is not yet a problem – its actions are similar, though its balance sheet has not expanded anywhere near the extent to which the Fed's has. The narrowness of the ECB's mandate has been questioned, as the problem of high inflation, paramount at the time of ECB's founding, has faded and as other macroeconomic problems have moved to the centre. It's now clear that ensuring low inflation and low debt and deficits is neither necessary nor sufficient for ensuring stability or growth.

With circumscribed EU budgets, the ECB plays a critical role in sustaining EU-wide economic growth. But as we have already noted, under current circumstances, the ECB's ability to do that is limited, especially with interest rates already near to zero.

But there is, in the opinion of Stiglitz, one more disturbing aspect of both the American and EU interventions: it is in effect bailing out, once again, the private

⁴⁸²Salmeron and Garcia-Arenas (2021), p. 30.

According to these authors, when these data are disaggregated, it is clear that Covid-19 measures such as moratoriums on loans (especially mortgages) and public guarantees for credit lines have prevented a strain on household and corporate balance sheets. It, moreover, appeared that the average US household improved its financial safety net because of the aid received led to precautionary savings and because of a recovery in financial asset prices. (Cf. Salmeron and Garcia-Arenas (2021), p. 30.)

⁴⁸³Salmeron and Garcia-Arenas (2021), p. 30.

⁴⁸⁴Stiglitz (2020c), p. 17.

sector for reckless decisions, especially concerning the size of their indebtedness (that had been build up in the past). For Stiglitz, such bailouts create a moral hazard: enterprises can more and more assume that even if they recklessly resort to excessive debt, they can count on public bailouts sparing them from any consequences.⁴⁸⁵

In Chap. 11, we shall assess what this implies for the future of the Western world, at the same time readdressing some findings of our previous research in which it has been held that the time is more than ripe for looking for alternative approaches to the prevailing, neoliberal monetary (and fiscal policy) order—and, hence, for an alternative socioeconomic system that could be built upon such a new monetary order.

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⁴⁸⁵Stiglitz (2020c), p. 18.

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Chapter 4 Fiscal Policy and State Aids



4.1 General

The outbreak of the Covid-19 pandemic posed the most severe global public health crisis in more than a century, which in turn triggered a severe economic crisis. (Cf. Chap. 1.)

Already in Chap. 2, we explained how the EU, the EU Member States, and the United States lost precious time—more or less 6 weeks—between the first signs of Covid-19's presence on their territory, and the firing up to start taking measures. But by then, it was too late: Covid-19 was so widely distributed that there was not much else to do than go into full lockdown.

Moreover, the EU, the EU Member States, and the United States were completely unprepared for a coronavirus-related pandemic. E.g., in none of these jurisdictions was there protection or testing equipment available, which implied that it was impossible to pursue an elimination policy, based on active testing, detection and contact tracing, coupled with the immediate wearing of masks by the entire population, such as in, e.g., Taiwan. (Cf. Sect. 2.4.2.4.1.)

As a result, most EU countries and the United States had to go into lockdown sometime between early and mid-March 2020, be it in many cases with great reluctance from both governments and heads of government, as well as from a large part of an unwilling population. (Cf. Sects. 2.3, 2.4 and 2.5.)

With these lockdowns however, the economies of these countries largely came to a standstill, for which neoliberal economies are by no means prepared. There was, moreover, little willingness to maintain lockdowns for a long time, which in turn caused neoliberal countries to suffer interrupted periods of mitigation and botched reopening—with all its disastrous consequences, notably hundreds of thousands of deaths (cf. Chap. 2.).

As a result, the Western world was soon in two crises, namely (1) a health crisis due to the Covid-19 pandemic itself, and (2) an economic crisis—which would even degenerate into a true recession—due to the poor policy reactions to the health crisis.

In turn, this prompted the Western world to provide massive (financial) support measures, initially to the corporate world, but by and by to the general population as well.

According to estimates by the EU Commission, fiscal response to the Covid-19 pandemic on a global scale amounted to about EUR 6 trillion of direct budget support for the year 2020 (which was almost 7.5% of global GDP). Most of this support came from the G20 countries and was reported to be more than double the amount of similar support that had been provided in response to the 2008 global financial crisis and its aftermath. This budget support was believed to have mitigated the impact of the Covid-19 pandemic at both the levels of production and consumption, while at the same time having resulted in an increase in public deficits and public debt.¹

Global public debt was estimated to have reached 98% of global GDP by the end of 2020. This figure was up from 84% of GDP based on projections that had been made with regard to 2020, just before the outbreak of the Covid-19 pandemic. To put some figures (and the underlying scale of values) in perspective: additional spending in the health care sector in response of Covid-19 had in 2020 come near to EUR 800 billion, while direct budgetary support to both households and enterprises amounted to almost EUR 5 trillion.² The latter especially concerned liquidity support measures to both enterprises and households, such as risk capital injections, loans, (financial) asset purchases, debt assumptions, and guarantees, to the tune of about EUR 5 trillion (about 6% of global GDP).³ According to the EU Commission, a possible future impact of these contingent liabilities on public debt and deficit was still (at least in part) dependent on the extent to which these amounts and guarantees would be effectively drawn upon by the private sector, as well as on the extent to which they would be invoked or recalled.⁴ The European Commission, furthermore, underlined some other elements for evaluating member country's specific fiscal responses, such as: a sufficient access to affordable financing (e.g., on the financial markets⁵), the size of the welfare state, as well as the available policy space. E.g., countries with wider safety nets could extend existing measures and rely more on automatic stabilisers already in place when deploying their policy response. By contrast, countries with more limited safety nets, had to resort to a more discretionary fiscal response. E.g., already during Q1 2020, the United States managed to pass

¹European Commission (2021b), p. 3.

On this (public) debt increase in 2020, cf., furthermore, Sect. 3.5.

²European Commission (2021b), p. 3.

³European Commission (2021b), pp. 3–4.

⁴European Commission (2021b), p. 4.

⁵European Commission (2021b), p. 4.

In general, developed economies were reported being able to borrow more cheaply than others, and thus being able to finance larger support packages as well. While advanced economies were said to spend on average about 24% of their GDP on fiscal measures, this contrasted with a mere 6% in emerging markets, and less than 2% in low-income countries. (Cf. European Commission (2021b), p. 4.)

budget measures amounting to almost 17% of GDP, containing liquidity support amounting to 2.4% of GDP, while an additional USD 1.9 trillion package (of about 10% of the GDP) was debated upon—and eventually approved—in the US Congress.⁶ (Cf., furthermore, Sect. 4.4.) In a context of a far more constrained monetary policy, Japan still managed to resort to a relatively large budget stance: around 15.5% of GDP in direct budget support, containing more than 28% of GDP in liquidity support. In 2020, China was reported to have provided budget support of about 41% of its GDP, containing liquidity support of more than 1% of its GDP. With regard to the United Kingdom, budget support and liquidity support each amounted to more than 16% of GDP.⁷

It was, finally, also perceived that the relative share of health sector measures reflected both the epidemiological situation, as well as the pre-existing conditions in the health sector, with total public spending on health for 2020 ranging from 0.1% of GDP in China, to over 5% of GDP in the United Kingdom.⁸

We shall look more closely at some of these fiscal support actions in this chapter.

4.2 Fiscal Policy and State Aids in the EU, the Euro Area and Their Respective Member States

4.2.1 Introduction

Soon after the Covid-19 pandemic broke out on their territory (cf. Sects. 2.3 and 2.4.), EU Member States were faced with the dual challenge of (1) on one side, addressing the public health emergency caused by Covid-19 itself, and (2) on the other side, supporting their economies that had been severely damaged by both the Covid-19 pandemic and the public health measures deployed to combat it. The quick response governments resorted to may be due to the fact that the economies of many EU countries were already, or still, overloaded before the Covid-19 pandemic struck, especially in the wake of the financial crisis of 2008 and its aftermath.⁹

In general, among the early Covid-19 fiscal measures that were resorted to for supporting the economy, governments around the world very quickly intervened (1) to delay repayment of consumer loans and credit card payments, (2) to guarantee bank loans to small businesses, and (3) to pump virtually unlimited liquidity into their domestic business sectors.¹⁰

Each of these early measures, as well as their more profound variants that would follow throughout the rest of 2020, were based on the assumption that businesses

⁶European Commission (2021b), p. 4.

⁷European Commission (2021b), p. 4.

⁸European Commission (2021b), p. 4.

⁹Cf. Byttebier (2019), pp. 80-84; Byttebier (2021), pp. 61-79.

¹⁰Cf. Byttebier (2019), pp. 80–84; Byttebier (2021), pp. 61–79.

and households would, eventually, be obliged and able to repay these loans, which, according to Blakely, would in its own turn raise a new concern that if the world would be heading for a new depression, with borrowers again unable to meet their repayment obligations, that all the new loans in the world would be unable to make a difference.¹¹

Within the EU (and/or the euro area), the strong policy response at both the national and EU level was aimed at mitigating the impact of the crisis on Europe's socioeconomic fabric. However, the economic downturn, the emergency budgetary support for dealing with it, and the monetary support measures (that we already dealt with in the Chap. 3.), would at the same time contribute to a sharp increase in public deficits and public debt.¹² (Cf., already Sect. 3.5.)

By April 2021, EU Member States were expected to submit their so-called "Stability and Convergence Programmes" in which they set out their medium-term budgetary policy. In the months after, following the entry into force of the "Regulation on the Recovery and Resilience Facility" (cf. Sect. 4.2.3.3.1.), EU Member States were additionally required to submit their "Recovery and Resilience Plans", the implementation of which, in many cases, had again to be accompanied by a sizeable EU-funded fiscal stimulus.¹³

In order to inform and prepare the Member States for what lay ahead, the EU Commission, moreover, published an informative "communication" on 3 March 2021, which provided broad guidance to the EU Member States on the conduct of fiscal policy in light of the EU regulation in the period ahead.¹⁴ However, at the time of this communication, the situation with regard to Covid-19 was still very uncertain, albeit some of the challenges that the EU economies would be facing when they would slowly start to recover from the Covid-19 pandemic, were getting clear. To address these expected challenges, the EU Commission considered that a coordinated and consistent policy response was necessary, based on two pillars: (1) credible medium-term fiscal policy strategies in order to support the economic recovery, and (2) ensuring fiscal sustainability in line with the EU fiscal policy framework.¹⁵

To reach to this point of restoring fiscal policy, the EU/Eurozone and its respective Member States had already come a long way in compromising on how the fiscal rules would have applied "in normal times", implying that throughout 2020 and the first months of 2021, fiscal policy has far from been in line with the EU's usual approach on fiscal policy matters.

We shall try to look at these in more detail in the following sections.

¹¹Blakeley (2020), p. x.

¹²European Commission (2021b), p. 1. Cf., furthermore, European Commission (2020e).

¹³European Commission (2021b), p. 1.

¹⁴European Commission (2021b), p. 1.

¹⁵European Commission (2021b), p. 1.

4.2.2 Background of the EU Fiscal Support Policy

4.2.2.1 Initial Covid-19 Response by the EU-Authorities

Given its profound impact on public health and on the economic situation throughout the EU, the Covid-19 pandemic had already by early March 2020 required a massive and coordinated fiscal and monetary policy response from both EU institutions and the EU national governments. The objectives of these measures were twofold: (1) to save lives and, (2) to mitigate the immediate negative effects on the economies of the EU Member States. The underlying policy was that both the EU Member States and the EU institutions themselves would commit to both unrestricted spending (= "spend as much as necessary to deal with the Covid-19 crisis"), and unconditional (re)financing (= "provide the EU Member States with all necessary liquidity in order to fight the pandemic").¹⁶

However, from the 1990s onwards, fiscal policymaking in the EU does not allow anymore for such a public policy. Instead, fiscal policy had, already soon after the creation of the euro, been significantly constrained by a variety of EU measures, notably the "Stability and Growth Pact" (SGP), the "Fiscal Compact", as well as by a wide variety of national and sub-national fiscal frameworks. In order to address the unprecedented Covid-19 crisis, some of the built-in escape clauses of these fiscal rules had to be activated, while some fiscal rules for which such escape clauses did not exist, even had to be temporarily suspended.

Already on 13 March 2020, the EU Commission published its strategy for responding with the socio-economic impact of what was initially referred to as "a sanitary crisis".¹⁷

The EU Commission thereby clearly explained that it would do anything within its power and resort to any of the tools at its disposal in order to mitigate the negative effects of the Covid-19 pandemic, in particular:¹⁸

- (1) By ensuring a necessary supply to the European health systems, based on a respect for the integrity of the principles governing the internal market and for the production and distribution chains of value.
- (2) By supporting people, so that income and jobs would not get affected by Covid-19 in a disproportionate manner and would not suffer from permanent effects of the Covid-19 crisis.
- (3) By supporting businesses, especially by ensuring that the liquidity of the European financial sector (or, phrased differently: "(private) credit") would continue to support the economy.

¹⁶Eisl (2020).

¹⁷European Commission (2020l).

¹⁸European Commission (2020l).

(4) And by enabling Member States to take decisive and coordinated action, using the full flexibility of the EU framework on "state aids" and on "the stability and growth pact".

In its response of 13 March 2020, the EU still considered that the main budgetary resources for dealing with the Covid-19 pandemic would come from national state budgets of the EU Member States themselves. The underlying EU policy at the time was still that EU Member States would be able to design fiscal support measures in accordance with existing EU rules (e.g., by resorting to measures that are usual deployed in crisis situations, such as wage subsidies, suspending payment obligations and time schedules with regard to corporate and value added taxes or social contributions, as well as by providing financial support to the direct benefit of consumers, such as providing means for the repayment of cancelled services or tickets that would otherwise not have been reimbursed by the operators or service providers concerned). The EU Commission also pointed to the fact that EU state aid rules amply allowed EU Member States for assisting companies facing liquidity shortage, or in need of other urgent rescue measures. The EU, e.g., referred to Article 107(2)(b) TFEU that allows Member States to compensate enterprises for damage directly caused by exceptional circumstances, especially also in sectors which felt an immediate negative impact of Covid-19, such as aviation and tourism.¹⁹

The EU Commission at the time also stated its readiness to propose to the EU Council to activate the so-called "general escape clause" of the Stability and Growth Pact, in case this would be necessary for providing more general support for budgetary policies. As we shall explain further in Sect. 4.2.2, this clause, when activated, allows the EU Commission, in cooperation with the EU Council, to suspend budgetary adjustment rules and policies issued or recommended by the EU Council "in the event of a severe economic downturn in the euro area or in the EU as a whole".²⁰

By means of a further early Covid-19 response measure, the EU Commission also announced its "Coronavirus Response Investment Initiative", aimed at mobilising EUR 37 billion to address the Covid-19 crisis. In addition, the EU Commission proposed to extend the scope of the "EU Solidarity Fund", so that this Fund would include a public health crisis as a trigger for its mobilisation, if necessary, to the

¹⁹Cf. European Commission (2020). Cf., furthermore, European Commission COM (2020) 112 final.

The EU Commission also explicitly pointed to the consequences of the Covid-19 outbreak in Italy at the time (cf. Sect. 2.4.2.3.1.). The EU Commission thereby took into consideration that the events in Italy were of such a nature and magnitude that the application of Article 107(3)(b) TFEU became possible, in particular by allowing the EU Commission to approve additional national aid measures for remedying a serious disturbance in the economy of a Member State. A similar approach was followed in the EU Commission's assessment of the use of Article 107(3)(b) with regard to other EU Member States. The EU Commission announced that it was preparing a special legal framework under Article 107(3)(b) TFEU that could be adopted in case of need. (European Commission (20201).)

²⁰European Commission COM (2020) 112 final; European Commission (2020).

benefit of the most affected Member States. However, illustrative of the extent to which the EU Commission was still in the process of downsizing the extent of the Covid-19 crisis at the time, it was envisaged that a mere EUR 800 million would be sufficient for this purpose.²¹

This EU communication of 13 March 2020 was soon to be followed by a number of more specific measures, including measures with regard to the availability of stocks and supplies of personal protective equipment (on 15 March 2020)²² and with regard to health-related border management (on 16 March 2020).²³ Following the actions taken by the EU Commission, on 16 March 2020 the Eurogroup, furthermore, adopted a declaration on the economic response to the Covid-19 outbreak. Further coordinated action by the EU Member States was, moreover, announced to be debated at a video conference at the level of the members of the European Council of 27 March 2020.²⁴

By the end of March 2020, most EU European countries had taken measures to restrict traffic to/from their territory, while many had also resorted to restrictions on traffic within their national borders as well.²⁵

However, in light of the policy approach that left financial support to the Member States themselves, the EU was increasingly criticised for its own lack of financial support to the EU Member States, as opposed to the well-publicised aid that had been occurring in third countries, at the time notably China and Russia, and soon after even The United States. As a result, the policy debate shifted to the question how far the EU could go in deploying own support measures when a global health

²³European Commission C (2020) 1753 final.

²⁴European Sources Online (2020).

²¹European Commission COM (2020) 112 final; European Commission (2020).

²²Cf. Commission Implementing Regulation (EU) 2020/402.

Pursuant to Article 1(1) of the "Commission Implementing Regulation (EU) 2020/402", an export authorisation, drawn up in accordance with the form set out in Annex II to that Commission Implementing Regulation, was required for the export, outside the EU, of any personal protective equipment listed in Annex I to the Commission Implementing Regulation, whether or not such equipment did or did not originate in the EU. Such an authorisation was to be granted by the competent authorities of the EU Member State in which the exporter is established and had, moreover, to be issued in writing or by electronic means. According to Article 1(2) of the Commission Implementing Regulation (EU) 2020/402, such exports were prohibited if such an export authorization could not be shown. Said Commission Implementing Regulation entered into force on 15 March 2020, and was applicable for 6 weeks; after this 6-week period, it automatically expired (cf. Article 13 of Commission Implementing Regulation (EU) 2020/402).

E.g., point 14 of European Commission C (2020) 1753 final allowed for EU and third-country nationals crossing external borders into the Schengen area, to be subjected to systematic checks at border crossing points, including with regard to their health. Point 18 of this document allowed Member States to reintroduce temporary border control at internal borders if this was justified on the grounds of public policy or internal security. In an extremely critical situation, a Member State could even determine the need to reintroduce border checks in response to the risk of an infectious disease. Member States would have to notify the reintroduction of border checks in accordance with the Schengen Borders Code (cf. point 18 of European Commission C (2020) 1753 final).

²⁵European Sources Online (2020).

crisis emerged, and to the question whether a concerted effort was feasible in order to provide effective and timely support to Member States.²⁶

Still focusing on adjusting its legal framework rather than on providing support itself, on 19 March 2020, the EU Commission decided to adopt a "Temporary Framework" with as aim the relaxation of state aid rules with regard to national support measures for dealing with the Covid-19 pandemic.²⁷ On the next day, still

According to the EU Commission, the State aid Temporary Framework for support to the economy in the context of the Covid-19 outbreak, based on Article 107(3)(b) of the Treaty on the Functioning of the European Union, was based on the recognition that the entire EU economy was affected by a serious disturbance. To address this, the temporary framework provided for five types of aid (cf. European Commission (2020o)): "(i) Direct grants, selective tax concessions and advance payments: Member States should be able to set up schemes to grant a company up to EUR 800,000 in order to meet its urgent liquidity needs. (ii) State guarantees for loans taken out by undertakings from banks: Member States had to be able to provide State guarantees to ensure that banks would continue to lend to those customers who needed them. (iii) Subsidised public loans to companies: Member States should be able to provide loans to companies at favourable interest rates. These loans can help companies meet immediate working capital and investment needs. (iv) Safeguards for banks channelling state aid to the real economy: Some Member States intended to build on banks' existing lending capacity and use it as a channel for supporting businesses, in particular SMEs. The framework makes clear that such aid is considered as direct support to the banks' clients, not to the banks themselves, and provides more detailed guidance on how to ensure that competition between banks is distorted as little as possible. (v) Short-term export credit insurance: The Framework provides additional flexibility to demonstrate that certain countries are facing non-marketable risks, so that the State can provide short-term export credit insurance when necessary."

Given the limited size of the EU budget at the time (as there had been no further measures taken yet for making more financial resources available), the main response for dealing with was still expected to come from the national budgets of the EU Member States. In turn, the Temporary Framework was designed to better target support to the economy, while at the same time limiting negative effects on the level playing field in the single market. In order to accomplish these effects, the Temporary Framework contained a set of safeguards. E.g., subsidised loans or guarantees to enterprises were linked to the volume of their economic activity, the latter measured by referring to factors such as wage bills, their turnover, or their liquidity needs. Reference could also be made to the use of public support for working capital or investment capital. The general criterion was that such aid should help enterprises to deal with the economic downturn caused by the pandemic and to prepare for a sustainable recovery. (Cf., furthermore, European Commission (20200).)

The Temporary Framework was, furthermore, intended to complement the many other possibilities already available to Member States for mitigating the socio-economic impact of the Covid-19 outbreak within the framework of the EU State aid rules. The EU Commission, e.g., referred to its already above-mentioned Communication on a coordinated economic response to the Covid-19 outbreak of 13 March 2020, which had set out these possibilities in detail. E.g., EU Member States were said to be allowed to introduce generally applicable changes in favour of companies (with as examples tax deferrals, or subsidies for short-time work regimes in all sectors). It was said that these would fall outside of the state aid rules. Member states were, furthermore, also said to be allowed to compensate enterprises for damages suffered as a result of, and directly caused by, the Covid-19 outbreak. This was especially considered useful to support sectors that had been particularly

²⁶European Sources Online (2020).

²⁷Cf. Communication from the Commission Temporary Framework for State aid measures to support the economy in the current Covid-19 outbreak (2020/C 91 I/01). Cf., furthermore, European Commission (2020o).

looking for measures to ease down on its legal framework for dealing with national support measures, the European Commission issued an assessment in which it dealt with the matter how to activate the general escape clause of the Stability and Growth Pact $(SGP)^{28}$ (cf. Sect. 4.2.2.).

On 24 March 2020, the Eurogroup debated initiating a "preventive credit line" under the European Stability Mechanism (ESM) framework and from which the Member States could draw support for dealing with the Covid-19 pandemic. Some Member States and analysts even increasingly started pleading for resorting to so-called "coronabonds", a series of joint bonds which would be issued by the EU itself for raising money on the capital markets in order to revive the EU economy amid the global health crisis that was caused by Covid-19. However, by late March 2020, this proposal still met severe objections by a group of fiscally conservative EU member countries, led by The Netherlands.²⁹

As countries across Europe had to take stronger containment measures for dealing with Covid-19, some analysts and commentators started wondering how such containment measures related to notions such as civil liberties and democracy. On 1 April 2020 a group of EU Member States (notably Belgium, Bulgaria, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, The Netherlands, Portugal, Romania, Spain and Sweden) even adopted a formal declaration in which they expressed their concern about the risk of Covid-19 containment measures violating the rule of law, the basic principles prevailing in democratic societies, as well as fundamental human rights.³⁰

On 2 April 2020, the European Commission adopted a new set of measures for dealing with the economic consequences of the Covid-19 outbreak. At the request of the European Council, the Eurogroup convened by means on a video conference on 7 April 2020 for purposes of debating about and agreeing upon support measures for dealing with the economic impact of the Covid-19 pandemic. As a result of this meeting, on 9 April 2020, the Eurozone finance ministers eventually reached an agreement on a policy report which contained several such proposals. However, the issue of joint debt coronabonds still remained a major source of tension between two factions, namely a group of EU member countries wanting such support and a second, more conservative group of EU member countries objecting to it. This led to another meeting by video conference which took place on 23 April 2020 and during which it was decided to endorse an "immediate economic response" to the

affected by the Covid-19 pandemic, such as transport, tourism, hospitality and retail. (Cf. European Commission (20200).)

The Temporary Framework was initially intended to be in force until the end of December 2020. However, in the interests of legal certainty, the EU Commission announced that it would assess, before that date, whether the Framework should be extended. (Cf. European Commission (2020o)). Then, on 28 January 2021, the EU Commission effectively announced that it had decided to prolong the Temporary Framework until 31 December 2021 (cf. European Commission (2021d).)

²⁸European Sources Online (2020).

²⁹European Sources Online (2020).

³⁰European Sources Online (2020).

crisis. This resulted in instructing the EU Commission to come up with a proposal for establishing a so-called "European Recovery Fund".³¹

4.2.2.2 Measures Regarding the Stability and Growth Pact: Activation of the General Escape Clause

Since its introduction in 1997, the so-called "Stability and Growth Pact" (SGP) has put both legal limitations and pressure on national budgetary policymaking at the level of the EU Member States. These are accomplished through a set of budgetary rules and through deploying an institutional framework for monitoring compliance with these rules.³²

The EU's fiscal framework has, since then, mostly, been enshrined in the "Stability and Growth Pact" (or, abbreviated, "SGP"). This SGP mainly aims at ensuring fiscal discipline, based upon two main requirements:

- (1) First, Member States have to avoid both "excessive government deficits" and "excessive government debt". These criteria are measured against reference values of 3% and 60% of Member States' GDP respectively.³³
- (2) Second, under the so-called "preventive arm" of the SGP, Member States have to comply with medium-term budgetary objectives. Country-specific budgetary targets may be set with a view of ensuring the sustainability of public finances, and of allowing the use of automatic stabilisers for measuring that the deficit thresholds prescribed by the European Treaty are not to be breached.³⁴

As the EU fell increasingly (and even more than before) into the clutches of economic neoliberalism during and in the aftermath of the 2008 financial crisis, the application of the SGP became even stricter, leaving less and less room for resorting to policies that had earlier in history (especially in the period from the 1950s until the 1970s) made the creation of welfare states possible. In the following chapters of this book, we shall take a closer look at the consequences of this for, e.g., health care

³¹European Sources Online (2020).

³²Eisl (2020).

³³The excessive deficit procedure, abbreviated as the EDP, is an action taken by the EU Commission against any EU Member State that exceeds the budget deficit limit set in the EU's stability and growth pact legislation. The procedure includes several steps, which may result in sanctions, in order to encourage a Member State to bring its budget deficit under control, which is a requirement for the proper functioning of EMU. According to the "Protocol (No 12) on the excessive deficit procedure" annexed to the Maastricht Treaty on Economic and Monetary Union, euro area Member States and candidate countries for accession to the euro area must demonstrate that they have sound public finances. (Cf. Eurostat (2021b).)

There are two criteria, which are laid down in Article 1 of Protocol No 12 on the excessive deficit procedure (cf. Eurostat (2021b)): "(1) The budget deficit should not exceed 3% of gross domestic product (GDP). (2) Government debt should not exceed 60% of GDP."

Cf., furthermore, Streeck (2017), p. 128.

³⁴European Commission (2013), p. 22.

(cf. Chap. 5) and care for the elderly (cf. Chap. 6). Efforts to constrain public budgets got even worse in the aftermath of the financial crisis of 2008. With regard to some EU member countries (such as Italy and Spain), these efforts were especially intensified in the years 2011 and 2012 and, according to the EU Commission, resulted in "a significant improvement" of the public finances of both the EU and the euro area. However, due to the size of the challenge that had been posed by the financial crisis of 2008 and its aftermath, and notwithstanding these severe austerity efforts, several EU Member States would still continue to show public deficits above the 3% of GDP reference value.³⁵

Perhaps realizing that its fiscal policy was too severe, in 2011, the so-called "six-pack"³⁶ reforms to the SGP were introduced. An escape clause to the SGP was hereby introduced in order to make it possible that EU Member States would temporarily depart from the existing fiscal rules, as especially laid down in the SGP, in response to "unusual events" outside the Member States' control. For this clause to be validly used, it was required that such an unusual event should have a major impact on public finances in a single EU Member State or, following a more general, spectacular economic downturn, on public finances of all EU Member States.³⁷

With regard to the "preventive part" of the general escape clause, Articles 5 (1) and 9(1) of Regulation (EC) No 1466/97 state that:

in periods of severe economic downturn for the euro area or the Union as a whole, Member States may be allowed temporarily to depart from the adjustment path towards the mediumterm budgetary objective, provided that this does not endanger fiscal sustainability in the medium term.

As regards the "corrective part" of the general escape clause, Articles 3(5) and 5 (2) stipulate that when a severe economic downturn for the euro area or the EU as a whole occurs, the EU Council may also decide, upon recommendation from the European Commission, to resort to a revised budgetary path.³⁸

The activation of the general escape clause of the SGP in response to the outbreak of the Covid-19 pandemic, specifically at the end of March 2020, would allow EU

³⁵European Commission (2013), p. 22.

³⁶On 13 December 2011 the strengthened Stability and Growth Pact (SGP) entered into force with a new set of rules for economic and budgetary surveillance. These new measures, the so-called 'six-pack', consisted of five regulations and one directive proposed by the EU Commission and approved by all 27 Member States and the European Parliament in October 2011. This change was hailed as the most far-reaching strengthening of economic governance in the EU and the euro area since the launch of Economic and Monetary Union almost 20 years earlier. In line with the agreements of the European Summit of 8 and 9 December 2020, the legislative package was intended to be a concrete and decisive step towards ensuring fiscal discipline, helping to stabilise the EU economy and preventing a new financial crisis in the EU. (Cf. European Commission (2011).)

³⁷Eisl (2020).

³⁸European Commission (2020e).

Member States to deviate from the budgetary obligations that normally apply³⁹ and which, if continued, would have made an adequate response to the Covid-19 outbreak virtually impossible.⁴⁰

According to Eisl, said clauses left sufficient room for flexibility to cope with the exceptional situation created by the Covid-19 virus within the context of the existing fiscal frameworks in the EU. This author considered it of vital importance to activate the built-in escape clause(s) in order to allow for decisive and coordinated fiscal action, that had moreover to be backed by a sufficiently supportive ECB. Wherever feasible, a flexible interpretation of debt repayment requirements and consolidation pathways was to be considered. Where the existing fiscal frameworks did not contain escape clauses, or where institutional or other rules risked political skirmishes, Eisl recommended suspending them at least temporarily and revising them in the medium term to allow appropriate fiscal policymaking for when another exogenous shock were to hit the EU. In the opinion of Eisl, if the Covid-19 crisis presented any opportunity at all, it was to use the exceptional fiscal remedies for dealing with an exceptional situation and for steering the economy on a more sustainable economic and environmental path, in line with the European Commission's ambitions of the "European Green Deal".⁴¹

Already by the end of March 2020, the perseverance of the Covid-19 outbreak led the EU Commission and the EU Council to assume that a severe economic downturn for the euro area and the EU as a whole was occurring and to take into consideration that the requirements for the activation of the general escape clause of the SGP were met.⁴² On 20 March 2020, the EU Commission, thus, formally proposed this activation of the SGP general escape clause as part of its further strategy for dealing with the Covid-19 pandemic in a swift, forceful and coordinated manner. In its announcement, the EU Commission added that the activation of the SGP general escape clause, once it would be endorsed by the EU Council, would allow EU Member States to take measures to adequately deal with the Covid-19 crisis.⁴³

³⁹European Commission (2021b), p. 1.

⁴⁰European Parliament (2021a), p. 1.

⁴¹Eisl (2020).

⁴²European Parliament (2021a), p. 1.

⁴³Cf. European Commission (2020c).

Already during a video conference with the members of the European Council that took place on 17 March 2020, the President of the EU Commission had made an announcement that the general escape clause of the SGP had to be activated immediately. As mentioned, this clause had been introduced in the framework of the SGP as part of the so-called 2011 "six-pack" reforms of the SGP, based upon lessons that had been drawn from the severe economic and financial crisis of 2009. The experience with said financial crisis of 2008 and its aftermath had in particular demonstrated that there was a need for specific provisions in the EU fiscal rules in order to allow for a coordinated and orderly temporary departure from the normal (and considered severe) requirements of the SGP, possibly even to the benefit of all EU Member States in a situation of global crisis caused by a severe economic downturn for the euro area, or the EU. The clause was, hence, laid down in the Articles 5(1), 6(3), 9(1) and 10(3) of Regulation (EC) No 1466/97 and in the Articles 3(5) and 5(2) of Regulation (EC) No 1467/97. The aim of the clause was to facilitate the coordination of budgetary

At the time the EU Commission proposed activating the general escape clause of the SGP in response to the Covid-19 crisis, the clause had not been activated since it had been added to the SGP in 2011. However, by the end of March 2020, the Covid-19 pandemic was deemed to have such a "major negative impact" on the European and global economy, that its activation was required. In its already above quoted communication of 13 March 2020, the EU Commission presented an economic scenario based on a scenario analysis which demonstrated that the real GDP in the EU could shrink by 1% in 2020. The communication of 13 March 2020 also indicated that even worse scenarios, resulting into a larger impact of the Covid-19 pandemic, were not be excluded. Furthermore, it was estimated at the time that the fall in economic activity in 2020 could be similar to the contraction in 2009, which had been the worst year of the financial crisis (while the impact of Covid-19 would soon prove to be much more severe). Another factor taken into account was the fact that, by the end of March 2020, EU Member States would be faced with the rising costs of effectively controlling the Covid-19 pandemic and supporting citizens and businesses affected by the crisis.⁴⁴ The EU Commission also pointed out that financial support measures, such as those urgently needed to (1) contain the Covid-19 pandemic, (2) provide resources to the healthcare-sector for responding to the Covid-19 pandemic at a medical level, (3) ensure liquidity support to enterprises and specific economic sectors in order to allow these to survive, and (4) safeguard employment and incomes of affected employees and independent workers, would have to be considered as "one-off budgetary" expenditures, and thus not subject to the normally applying EU budget regulation requirements.⁴⁵

Resorting to the general escape clause was, therefore, intended to assist EU Member States in their fight against Covid-19, especially by enabling them to conduct budgetary policies that would enable deploying all measures needed to adequately tackle the Covid-19 crisis, while at the same time still complying with the rules-based framework of the SGP.⁴⁶

policies in times of severe economic downturn. In particular, the general escape clause of the SGP, when activated, allows EU Member States, within the preventive and corrective procedures of the SGP itself, to resort to fiscal or budgetary measures to adequately deal with such a situation. (Cf. European Commission (2020e).)

⁴⁴European Parliament (2021a).

The EFB also noted that: "In principle, the clause should be deactivated as soon as the severe economic downturn in the EU and the euro area comes to an end. However, there is no commonly accepted or agreed definition of a severe economic downturn. The Commission and the Council may hold different views. Also within the Council views may diverge considerably, especially if the economic impact of the Covid-19 crisis differs across countries: some may soon embark on an upturn, others may experience negative growth for longer". (As quoted in European Parliament (2021a).)

⁴⁵Eisl (2020).

⁴⁶About this last point of concern, Eisl indicated that the EU Commission, thereby, had to bear in mind that activating the escape clause of the SGP did not mean indiscriminately suspending the budgetary adjustment path worked out in the SGP framework. According to this author, the activation of the general escape clause, instead, would come down to redesigning the SGP

On the basis of the above considerations and in view of the expected severe economic downturn that the Covid-19 crisis was likely to create, the European Commission reached the conclusion that the conditions for activating the general escape clause of the SGP were met, and invited the EU Council to endorse this conclusion.⁴⁷

By July 2020, the European Budget Council (EFB) stated in a report that no review date and no conditions for an exit from the escape clause had yet been indicated, but that they should be discussed and agreed as soon as possible.⁴⁸

However, to the extent that the activation of the general escape clause did not put the procedures of the SGP as such on hold, the EU Commission continued to conduct the annual budgetary surveillance cycle in parallel.⁴⁹ (Cf. Sect. 4.3.)

⁴⁸European Parliament (2021a).

adjustment path in a sufficiently country-specific manner, whereby every EU Member State would be allowed to take into account the exceptional circumstances of the severe economic impact of Covid-19 it was facing itself, as well as the economic downturn for the euro area, or the EU as a whole, because of Covid-19. Eisl, furthermore, pointed out that temporary deviations from the fiscal rules which the activated general escape clause could allow for, could be either "ex ante" or "ex post". According to Eisl, the EU Commission had to consider giving the EU Member States a "blanc cheque" with regard to 2020, and perhaps as well, albeit to a more limited extent, for the vears to come, in order to allow them to combat the crisis caused by Covid-19 and whereby complicated and/or painful political discussions between EU member countries and EU institutions on precise matters and manners for responding to them, had to be avoided, especially given the fact that such matters are embedded within a framework of national political and socio-economic structures. Eisl also issued a warning that such debates were likely to become more central and intense when the extent of the economic shock caused by Covid-19, as well as the impact of individual containment and mitigating measures resorted to by individual EU Member States, would become clearer. It was especially important at that point that the issue of fiscal sustainability at the EU level would be properly readdressed. What Eisl understood under the notion "carte blanche", was the creation of conditions that would allow each EU member country affected by the Covid-19 pandemic to use all its fiscal means necessary to ensure a properly functioning health care service, as well as to keep individuals and enterprises financially afloat. In order to cope as well as possible with the economic recession at a European level, Eisl therefore advised the EU Member States to coordinate their fiscal stimulus measures. In particular, the countries with greater fiscal space (such as Germany and the Netherlands) were expected to show a larger than usual willingness for adopting bold enough fiscal measures for supporting the European economy. (Cf. Eisl (2020).) ⁴⁷European Commission (2020d). Cf., furthermore, European Commission (2020e).

The EFB had also noted that: "In principle, the clause should be deactivated as soon as the severe economic downturn in the EU and the euro area comes to an end. However, there is no commonly accepted or agreed definition of a severe economic downturn. The Commission and the Council may hold different views. Also within the Council views may diverge considerably, especially if the economic impact of the Covid-19 crisis differs across countries: some may soon embark on an upturn, others may experience negative growth for longer". (As quoted in European Parliament (2021a).)

⁴⁹European Commission (2021b), p. 1.

4.2.2.3 Further Fiscal Policy Considerations About the Impact of Covid-19 on the Economic Situation

4.2.2.3.1 Economic Impact and Outlook of the Covid-19 Pandemic in the EU and the Euro Area

In both the EU and the euro area, economic activity had fluctuated sharply due to the dynamics of the Covid-19 pandemic, as well as due to the rigour of the Covid-19 response measures the EU Member States had resorted to.

According to a December 2020 IMF surveillance report, euro area real GDP contracted by 3.5% in Q1 2020 as lockdowns began in late February 2020, and by 12% during Q2 2020 as mobility within and between the EU Member States declined significantly. This contraction was mainly due to a declining private consumption, as consumer confidence deteriorated, households resorted more to precautionary savings, and spending on non-essential goods and services dropped drastically. The sharp fall in gross fixed capital formation and lower net exportsboth reflecting the collapse in world trade-was also reported as putting a brake on economic growth. At that time, flash estimates already available with regard to Q3 2020 pointed to a rising economic activity growth of almost 13% (q/q) as control measures were relaxed (which, however, would soon afterwards be responsible for the huge "second wave" of the Covid-19 pandemic, which mainly affected European countries; cf. Sects. 2.3 and 2.4.). Despite this strong recovery (albeit "at huge non-economic costs", allegedly a neoliberal euphemism for referring to a huge numbers of deaths), overall production for the year 2020 remained 4.5% below pre-pandemic levels, with the impact of the Covid-19 crisis varying widely from country to country, partly due to differences in economic structure and lockdown snares.⁵⁰

According to Partington, in the spring of 2020, global financial markets were thrown into turmoil when the Covid-19 pandemic brought western capitalism to its knees. The FTSE 100 experienced its worst day since Black Monday in 1987. On Wall Street, the Dow Jones fell faster than during the Wall Street crash of 1929. Globally, central banks cut interest rates to near zero, besides pumping billions into the financial system by using quantitative easing to restore confidence in the economy and to stabilise the situation. (Cf., furthermore, Chap. 3.) Since then, and notwithstanding this overall detrimental impact of the Covid-19 pandemic on the global economy, there have also been several large enterprises that rose to new record heights. E.g., the shares of major US technology companies rose as the Covid-19 pandemic spurred more activity online, boosting the fortunes of the world's richest billionaires. However, the FTSE 100 remained about 1000 points below its pre-crisis peak.⁵¹

⁵⁰International Monetary Fund (2021), p. 6.

⁵¹Partington (2021).

Again according to the above referred to December 2020 IMF report, despite the historic economic contraction that Covid-19 has caused, the unemployment rate in the EU rose only slightly, a fact that has been attributed to the widespread use of job retention schemes which EU member countries resorted to (as we shall point out in some more detail in Chap. 7.). This widespread use of short time working programmes not only provided employees and workers with income support for reduced working time, but has proven similarly effective for avoiding massive employee resignation, in this manner at the same time maintaining the link between employers and employees. According to the IMF, these combined measures were particularly effective for facilitating an unprecedented adjustment in the number of hours worked, without the accompanying destruction of jobs. As a result, in the course of 2020, the unemployment rate in the euro area was reported to have risen by only one percentage point to 8.4% (= figure of October 2020, seasonally adjusted). By comparison, around the same time, unemployment in the United States rose by about 3.5 percentage points in the course of the Covid-19 pandemic.⁵²

In light of the extreme second wave of the Covid-19 pandemic-which was believed to have been triggered by an excessive and premature loosening of Covid-19 measures during and after the summer of 2020 (cf. Sects. 2.3 and 2.4.), but which in its own turn made it necessary to reintroduce even more severe measures as of late-October 2020-already by December 2020, high-frequency indicators started suggesting that the economic recovery that had started to take momentum in O3 2020 (and that had been the most important reason for abandoning the Covid-19 containment measures too soon), already was losing momentum in Q4 2020. The latter implied that after some months of modest expansion, the composite PMI again became contractionary as of November 2020. This has, amongst others, especially been attributed to a declining activity in service providing, amid increasing Covid-19 contamination cases and Covid-19 related deaths, and the need for once again having to resort to more severe Covid-19 containment measures. By contrast, manufacturing was reported to have continued to expand, albeit at a slower pace than in normal circumstances. With retail sales rebounding to above pre-Covid-19 crisis levels, mobility indicators, by contrast, again showed a decrease because of new and stricter lockdowns. Overall, economic sentiment indicators were reported to remain weak for the rest of 2020, with consumer confidence again deteriorating during the months of October and November 2020.53

The euro area slipped back into recession in Q1 2021, as a too slow vaccination campaign (cf. Sect. 9.4.3.) and tighter restrictions to contain the third wave of the Covid-19 pandemic (cf. Sect. 2.4.3.) further damaged the economies of the EU region. According to Eurostat figures, between January and March 2021, GDP in the 19 euro area economies again contracted by 0.6% compared to Q4 2020.⁵⁴ Compared to Q1 2020, seasonally adjusted GDP declined by 1.8% for the euro area, and

⁵²International Monetary Fund (2021), p. 7.

⁵³International Monetary Fund (2021), p. 7.

⁵⁴Kollowe and Wearden (2021).

by 1.7% for the EU as a whole, after having fallen by 4.9% for the euro area, and by 4.6% for the EU as a whole in Q4 2020.⁵⁵ All of this implied that by April 2021, the euro area was in a technical recession, defined as two consecutive quarters—namely Q4 2020, and Q1 2021—of economic contraction, already for the second time since the start of the Covid-19 pandemic, a phenomenon that is referred to as a "double dip recession". On 1 May 2021, when it was announced that the EU had slipped back into recession, the United Kingdom had itself not yet reported its GDP for Q1 2021; UK GDP was reported to have contracted in January 2021, but to have increased in February 2021. With regard to Q1 2021, the United States had recorded an increase of 1.6%, while China had posted economic growth of 0.6%.⁵⁶

When looking at the situation of individual countries, in Q1 2021, three of the euro area's largest eurozone economies had contracted. The biggest decline came from Germany, which reported contraction amounting to 1.7%, while Spain reported a decline of 0.5%, and Italy's GDP was reported to have fallen 0.4%. There were, by contrast, also euro area countries that reported slightly better figures. With regard to Q1 2021, France reported economic growth of 0.4% which was attributed to the fact that the country had managed to postpone a new lockdown until the end of March 2021, although by then a new increase of Covid-19 contamination cases left President Emmanuel Macron little other choice than to finally intervene. (Cf. Sect. 2.4.2. 3.4.) The EU as a whole of 27 countries was also reported to slip into recession in Q1 2021, with GDP falling by 0.4%, following a similar 0.5% contraction in Q4 2020.⁵⁷ Of the remaining EU Member States for which data was available with regard to O1 2021, Portugal (-3.3%) recorded the largest fall in comparison to the previous quarter, followed by Latvia (-2.6%) and Germany (-1.7%), while Lithuania (+1.8%) and Sweden (+1.1%) recorded the largest increases. Year-on-year growth rates were negative for all EU countries except France (+1.5%) and Lithuania (+1.0%).⁵⁸

However, economists expected that the eurozone would rebound during Q2 2021, as the number of Covid vaccinations finally started increasing, while the exceptional EUR 750 million rescue package, known under the name "NextGenerationEU", was also expected to help address the immediate socio-economic damage caused by the Covid-19 pandemic.⁵⁹

In its "Report on Public Finances in EMU 2020",⁶⁰ the EU Commission detailed some of the economic consequences of the economic crisis caused by the Covid-19 pandemic, which it said was "unique in its severity".⁶¹ According to a Commission forecast of early 2021, the eurozone GDP was believed to have contracted by a total

⁵⁵Eurostat (2021a).

⁵⁶Kollowe and Wearden (2021).

⁵⁷Kollowe and Wearden (2021).

⁵⁸Eurostat (2021a).

⁵⁹Kollowe and Wearden (2021).

⁶⁰Cf. European Commission (2021g).

⁶¹Cf. European Commission (2021g), p. 9.

of 6.8% in 2020, before it would start recovering by an estimated 3.8% in 2021 and 2022. This implied that it would probably take until mid-2022 for the output in the euro area economy to return to pre-Covid-19 pandemic levels. Moreover, the severity of the recession in 2020, and the speed of predicted recovery in 2021 and 2022, were expected to differ significantly across Member States.⁶²

4.2.2.3.2 Early Expectations of Implementing the Next Generation EU Programme

In March 2021, one year after the Covid-19 pandemic had started to be acknowledged by the EU and the EU Member States and had, since then, been severely affecting both the EU and global economy, the EU and its Member States were still completely in the grip of said pandemic.⁶³

The start of the second wave of the Covid-19 pandemic during Q3 2020, as well as the emergence of more contagious variants of the Covid-19 virus, worsened the epidemiological situation caused by Covid-19 even more. This would force EU Member States to reintroduce or strengthen containment measures, which would in its own turn affect economic activity even more.⁶⁴

The end of December 2020 and the beginning of 2021 brought "some light at the end of the tunnel". Several factors caused this changing situation: (1) There was, much faster than expected, the development and the start of production of Covid-19 vaccines already in the autumn of 2020. (2) This was soon followed by the launch of mass Covid-19 vaccination campaigns in all EU Member States. These factors were believed to have improved prospects and to have raised hopes of a rapid return to "normalcy". (3) Furthermore, at the EU level, an agreement was finally reached on the "Multiannual Financial Framework and the Next Generation EU", which was expected to bring a major economic recovery (cf., furthermore, Sect. 4.2.3.3.). (4) Moreover, the so-called RRF (cf. Sect. 4.2.3.3.1.) had finally entered into force and was intended to assist EU Member States on their way to a sustainable socio-economic recovery.⁶⁵

Still, the initial enthusiasm caused by these four factors, was tempered. This was, mainly due to the fact that European economic activity kept contracting in Q4 2020,

⁶²Cf. European Commission (2021g), p. 9.

⁶³European Commission (2021b), p. 2.

⁶⁴European Commission (2021b), p. 2.

⁶⁵European Commission (2021b), p. 2.

It was also soon perceived that hopes for a rapid progress of the Covid-19 vaccination campaign were soon largely dampened by the complete debacle that the EU authorities and the governments of the EU Member States managed to make of their vaccination campaigns, especially in the period from December 2020 until April 2021. Indeed, due to a multitude of factors (which we shall readdress in Sect. 9.4.3.), the vaccination campaigns in the EU progressed much slower than planned, and certainly much slower than in some competing economies, such as the United Kingdom and the United States (cf., furthermore, European Commission (2021b), p. 2).

with survey indicators suggesting that economic activity would come under further pressure in early 2021. Although it was, furthermore, assumed that progress in vaccinating EU Member States' most vulnerable populations would gradually facilitate the resumption of economic activity, this recovery was expected to progress unevenly across EU member countries. A variety of elements was hereby believed to be at play, such as: (1) Differences with the expected speed of economic recovery because of differences in the severity of the Covid-19 pandemic between EU member countries, (2) differences with regard both the severeness and duration of control measures, (3) differences in reliance on tourism and leisure activities, (4) the overall resilience of a Member State's economy, and (5) the extent and timeliness of policy responses. As a result of these in some cases huge differences between EU member countries, some of these were expected to already see the distance to their pre-crisis economic production level decrease as early as the end of 2021, while other member countries were not even expected to reach that level of economic recovery by the end of 2022.⁶⁶

The European Commission itself warned that these projections were still subject to considerable uncertainty and increased risks. These uncertainties and risks were mainly related to uncertainties about the further evolution of the Covid-19 pandemic and the expected success-or continued failure-of the vaccination campaigns in the EU Member States: In a more positive scenario, the vaccination process could lead to a more rapid relaxation of containment measures and thus to an earlier and stronger economic recovery as well. On the negative side, e.g. due to emergence of variants of the Covid-19 virus, the Covid-19 pandemic could prove to be even more persistent or severe in future years. One of the biggest concerns at the time was that new and more infectious variants of the Covid-19 virus would delay the lifting of containment measures or, worse, would prove resistant to the Covid-19 vaccines already developed (cf. Chap. 9.). There was especially a huge concern that this would delay the expected economic recovery even further, which would in turn risk damaging the fabric of the economies and societies of EU Member States, that were already severely affected by the ongoing economic crisis, even more. Some specific elements of concern were that there would be more bankruptcies, an increase of long-term unemployment, and/or an increase of already huge societal inequalities.⁶⁷

Against this background of uncertainties, it was hoped that an ambitious and rapid implementation of the "Next Generation EU programme", including the RRF, would boost recovery of the EU economy.⁶⁸

⁶⁶European Commission (2021b), p. 2.

⁶⁷European Commission (2021b), pp. 2–3.

⁶⁸European Commission (2021b), pp. 2–3.

Following the political agreement reached with regard to the SRF in December 2020, the preparation of national recovery and resilience plans had intensified in all EU Member States. After the implementation of the measures of the recovery and resilience plans, it was expected that the economic recovery would be stronger than estimated in 2021 and 2022. In parallel with the development of recovery and resilience plans, EU Member States were encouraged to support green and digital recovery programmes as well. (Cf. European Commission (2021b), pp. 2–3.)

Meanwhile, the deterioration of the economies of the EU Member States' countries during Q4 2020, i.e., in the aftermath of the "second wave" of the Covid-19 pandemic, and during early 2021, which would eventually lead to the "third wave" of the Covid-19 pandemic (cf., furthermore, Sect. 2.5.6.), had already prompted EU Member States to extend economic and financial emergency measures and/or to provide additional budgetary support. At the same time, the risk for increasing sovereign debt was kept at a historical low level, partly due to a combination of decisive EU, ECB and EU Member State action. From the part of the EU, there was a close coordination of policy responses and a strongly supportive policy stance on both the fiscal (e.g., the continued deactivation of the general escape clause to the SGP) and on the monetary side (e.g., by maintaining near-to-zero interest rates, and by maintaining resort to OE and similar programs). It was also assumed that budget support could not be prematurely ended, as it was feared that a deviation from the commitment to maintain fiscal sustainability and/or monetary support in the medium term, e.g., in order to change financial market perceptions, could have disastrous consequences.⁶⁹

It was against this backdrop that, from March-April 2021, the EU authorities began to consider how to activate the various recovery measures they had put in place during 2020. What is striking is that, although on the surface, concern for non-economic interests seems to have been starting to play a more significant role in EU policy, on closer examination, the 2020 recovery plans still largely reverted to the classically tried and tested neo-liberal fiscal and monetary recipes. As our further examination of these recovery plans (cf. Sect. 4.2.3.) will demonstrate, all of these support plans and measures were based on the classic, neoliberal logic whereby the government has to finance its activities-including combating the worst crises imaginable-such as earlier the 2008 recession, and now the Covid-19 crisis-by, once again, bowing to the financial markets, or through raising (or announcing) new taxes.⁷⁰ The latter two methods are, therefore, interwoven in the recovery plans drawn up by the EU in 2020. More specifically, the EU authorities announced that, in the years to come, they would even themselves have to borrow immense sums from the financial markets, and then repay them over several more years, thus creating yet another intergenerational injustice.

⁶⁹European Commission (2021b), p. 3.

⁷⁰Cf., furthermore, Byttebier (2017), pp. 370–374.

4.2.3 Instalment of Specific EU Measures Allowing for Covid-19 Support

4.2.3.1 General Overview of the EU Support and Recovery Plans and Measures

By March 2020, the EU took a first step to support countries financially by providing more flexibility in the use of EU funds to combat the Covid-19 pandemic (leading to the "Coronavirus Response Investment Initiative Plus"; cf. Sect. 4.2.3.2.1.), by, as explained above (cf. Sect. 4.2.2.2.), activating the general escape clause in the SGP's budget rules and by temporarily easing down on the rules with regard to state aid to enterprises.⁷¹ This would soon be followed, in May 2020, by a basket of further financing support measures amounting to more than 4% of EU-27 GDP. The EU then quickly moved to implement some of its more profound support measures, by, e.g., already approving EUR 87 billion in loans from the shortly before introduced European instrument for temporary "Support to mitigate Unemployment Risks in an Emergency" (abbreviated "SURE"), which was created to support countries' short time working schemes (cf. Sect. 4.2.3.2.). Finally, in July 2020, the European Council reached what has been described as a "historic agreement" on a EUR 750 billion "Next Generation EU" (NGEU) financial support package. Once enacted into law, this package was to distribute grants and loans to EU member countries in the years to come, in order to help accelerate economic recovery from the Covid-19 crisis.⁷²

In the meantime, as has already been addressed in some more detail in the previous Chap. 3, the ECB itself was also in the process of responding to the Covid-19 crisis by easing conditions on monetary support, as well as by deploying a monetary policy that was aimed at ensuring monetary transmission to the real economy. As the severity of the Covid-19 crisis gradually became more apparent, the ECB adopted a series of measures aimed at supporting overall confidence in the financial system, as well as at preventing what was referred to as "a negative feedback loop between the financial system and the real economy". These measures included: (1) an increase in the already existing APP-program with an additional EUR 120 billion in the course of 2020, as well as (2) the introduction of a new "pandemic emergency purchase programme" (PEPP) that was granted an initial working envelope of EUR 750 billion. Almost half of this latter envelope would already have to be used up during the first 3 months of the Covid-19 pandemic. Given its widespread use, the PEPP programme was soon expanded with another EUR 1.35 trillion, while the minimum expected horizon for net purchases was extended by 6 months to mid-2021. The flexible design of the PEPP, which allowed for the purchase of government bonds with shorter maturities and lower credit rating than under the more classical APP programme, was thereby deemed of vital

⁷¹International Monetary Fund (2021), p. 8.

⁷²International Monetary Fund (2021), p. 8.

importance for stabilizing the financial markets, while at the same time allowing for a significant easing of the monetary policy approach. As addressed before as well (cf. Chap. 3.), the ECB also decided to ease the requirements with regard to collateral, and to provide substantial additional liquidity to the financial sector through both targeted and untargeted refinancing operations (especially LTROs).

Together with the significant expansion of asset purchases (under the APP and the PEPP), this contributed to a strong expansion of the ECB's balance sheet, comparable to that of central banks of other major advanced economies (such as the US Federal Reserve).⁷³

In turn, the banking supervision part of ECB policy provided commercial banks with significant capital and liquidity support which allowed them to enhance their ability to absorb losses, while at the same time ensuring that they remained able to continue to lend to a variety of market participants. E.g., as early as March 2020, it was announced that commercial banks could use up their capital conservation buffers and to temporarily operate below the capital level required by the "Pillar 2" guidelines and the liquidity coverage ratio. The prudential authorities, furthermore, granted temporary flexibility with regard to the classification and provisioning of loans backed by government assistance. These temporary prudential and bank supervision measures, flanked by an appropriate easing of countercyclical capital buffer requirements, resulted in a significant reduction of commercial banks' capital requirements.⁷⁴ However, the measures came at the same time accompanied with significant capital conservation measures, such as restrictions on dividend payments and on the purchase of own shares. Together, these measures were aimed at stimulating bank lending.⁷⁵

During 2020, the EU/Euro area and their respective Member States resorted to a wide variety of still further measures for minimising the impact of the Covid-19

⁷³International Monetary Fund (2021), p. 9.

⁷⁴The ECB estimated that the commercial banks' capital freed up by these measures could allow these banks to finance loans of up to EUR 1.8 trillion to households, small enterprises and companies in need of additional liquidity. It was hereby considered that the average risk of loans to households, small enterprises and companies would most likely increase from as a result of the shock caused by the Covid-19 pandemic. (Cf., furthermore, European Central Bank – Banking supervision (2021).)

Since March 2020, commercial banks issued more additional "Tier 1" and "Tier 2" instruments, increasing the CET1 capital support due to the change in P2R composition from initially EUR 30 billion of CET1 capital, to EUR 42 billion of CET1 capital by 30 September 2020. At that date, capital support amounted to approximately EUR 200 billion of CET1 capital, taking into account the aforementioned EUR 42 billion, P2G support of approximately EUR 90 billion, support of macro-prudential buffers of approximately EUR 20 billion, EUR 28 billion of retained dividends in 2020, and EUR 25 billion of provisions to be re-added to CET1 capital under the IFRS 9 transitional arrangements. (Cf. European Central Bank – Banking supervision (2021).)

⁷⁵International Monetary Fund (2021), p. 10. For an overview of these measures, cf. European Central Bank – Banking supervision (2021).

pandemic on the economy, and for easing the conditions for the adoption of fiscal response measures. The most important of these have been:⁷⁶

(1) Already on 23 April 2020, EU leaders took the decision to work towards the creation of an "EU recovery fund" to mitigate the economic effects of the Covid-19 crisis. Through this, EU leadership instructed the EU Commission to come up with a workable proposal as a matter of urgency which would also elaborate upon the relationship between the to-be-established recovery fund and its implications for the EU's long-term budget.

This proposal, named "A Recovery Plan for Europe", was ultimately presented by the EU Commission on 27 May 2020. As part of this recovery plan, on 21 July 2020, EU leadership agreed on a EUR 750 billion recovery package under the denomination "Next Generation EU". The recovery package then went through the applicable legislative steps with the aim of having it ready by early 2021.

- (2) In addition to this recovery package, EU leaders agreed on a further EUR 1074.3 billion long-term budget for the EU for the period 2021–2027. The budget was intended to support, among other things, investment in the so-called "digital" and "green" transition and resilience. Together with the EUR 540 billion of funds already made available for the three safety nets (for employees, for enterprises, and for Member States), the total EU recovery package amounted to EUR 2364.3 billion.
- (3) On 10 November 2020, the European Parliament and the EU Council reached a provisional agreement on the support package. The EU Council that took place on 10–11 December 2020 addressed some further concerns that had been raised by the provisional agreement, thus paving the way for the final adoption of the recovery package. This resulted in the ultimate adoption of the recovery package by means of the Council Regulation (EU, Euratom) 2020/2093.
- (4) The regulation establishing the "Recovery and Resilience Facility" (RRF) was then adopted by the EU Council on 11 February 2021. This RRF formed the heart of the "Next Generation EU" package and was specifically intended to provide EUR 672.5 billion to EU Member States to help them cope with the economic and social consequences of the Covid-19 pandemic.

In the following sections, we shall elaborate on the main elements of these fiscal recovery measures.

⁷⁶European Council – Council of the European Union (2021).

4.2.3.2 Safety Nets for Workers, Enterprises, and Member States

4.2.3.2.1 Early Covid-19 Initiatives

Through the "Corona Response Investment Initiative" (CRII) that was already adopted on 30 March 2020,⁷⁷ and the "Corona Response Investment Initiative Plus" (CRII+)⁷⁸ that was adopted on 23 April 2020, the EU very rapidly mobilised EUR 37.8 billion of unallocated cohesion and solidarity funds for dealing with the Covid-19 outbreak. It concerned funds that could be easily reallocated, in a flexible

⁷⁸Regulation (EU) 2020/558.

By adding a new Chapter V, Article 2, in Part Two, Title II of Regulation (EU) 1303/2013, Regulation (EU) 250/558 introduced some exceptional measures for the use of ESI funds in response to the Covid-19 outbreak. Thus, according to the newly introduced Article 25a(1) of Regulation (EU) 1303/2013, by way of derogation from Article 60(1) and Article 120(3), first and fourth subparagraphs, a co-financing rate of 100% might be applied at the request of a Member State to expenditure declared in payment applications submitted during the accounting year starting on 1 July 2020 and ending on 30 June 2021, for one or more priority axes in a programme supported by the ERDF, ESF or Cohesion Fund. According to the newly introduced Article 25a(3) of Regulation (EU) No 1303/2013, by way of derogation from Article 93(1) and in addition to the possibility provided for in Article 93(2), the resources available for the programming for the year 2020 could be transferred between categories of regions at the request of a Member State in response to the Covid-19 outbreak.

This "second package" of the "Coronavirus Responses Investment Initiative" complemented the first by introducing extraordinary flexibility to ensure that all unused aid from the European Structural and Investment Funds would be fully mobilised. This flexibility was provided through: (1) transfers between the three so-called cohesion policy funds (the "European Regional Development Fund", the "European Social Fund" and the "Cohesion Fund"); (2) transfers between the different categories of regions; and (3) flexibility in terms of thematic concentration. The so-called "second package" provided for the possibility of an EU co-financing rate of 100% for cohesion policy programmes with regard to the 2020-2021 financial year, aimed at allowing Member States to benefit from full EU funding for crisis-related measures. The CRII+ package was also aimed at simplifying the procedural steps related to the implementation of programmes, the use of financial instruments and audit. Furthermore, the CRII+ provided support to the most deprived persons by amending the rules governing the "Fund for European Aid to the Most Deprived Persons" (FEAD). E.g., it became possible to provide food aid and basic material assistance through electronic vouchers and to provide protective equipment, thus reducing the risk of Covid-19 contamination. It also became possible to fund 100% of measures with regard to the 2020-2021 financial year. (Cf., furthermore, European Commission (2021e).)

 $^{^{77}}$ Cf. Regulation (EU) 2020/460, amending Regulation (EU) No 1301/2013 and Regulation (EU) No 1303/2013.

This "first package" of the "Coronavirus Response Investment Initiative" focused on the immediate mobilisation of structural funds to enable a rapid response to the Covid-19 crisis. In this context, a number of changes were introduced that (1) broadened the scope of support from the European Structural and Investment Funds (ESIF), (2) provided immediate liquidity, and (3) offered flexibility through programme changes. This first Coronavirus Response Investment Initiative contained three elements: (1) some EUR 8 billion of immediate liquidity to accelerate up to EUR 37 billion of European public investment, (2) flexibility in the application of EU spending rules, and (3) an expansion of the scope of the EU Solidarity Fund. (Cf. European Commission (2020f).)

manner, to healthcare spending, support for short-time working schemes (STW), and support measures for small and medium-sized enterprises, particularly in the most severely affected European regions.⁷⁹

In the course of 2020, the EU Commission made several more proposals to strengthen the programmes already in place, so that they could play their full role in making the EU more resilient for addressing the challenges posed by the Covid-19 pandemic and its impact. These included: (1) Horizon Europe; (2) the Neighbourhood, Development and International Cooperation Instrument (NDICI); (3) the Humanitarian Aid Instrument; (4) the Digital Europe Programme; (5) the Connecting Europe Facility; (6) the Common Agricultural Policy; (7) the Instrument for Pre-Accession Assistance (IPA), etc.⁸⁰

Apart from these individual programmes, the Covid-19 crisis also underlined how important it was for the EU to be able to react quickly and flexibly in order to provide a coordinated European response. In order to reach this goal, being able to base the European approach on a flexible EU budget was considered of vital importance. It was precisely for this reason that the European Commission made a number of further proposals to increase the flexibility of the EU budget and to ameliorate its emergency instruments with regard to the period 2021–2027.⁸¹

In junction with the national policy responses of the EU Member States, the EU also responded to the employment and social emergencies caused by the Covid-19 pandemic through means of a so-called "multi-layered initiative" in support of workers and enterprises in its Member States:

- The ECB and the European Investment Bank (abbreviated "EIB") made substantial efforts for avoiding a pro-cyclical tightening of financing conditions for both the public and private sectors, as well as for avoiding liquidity shortages and credit squeezes. In particular, after an initial pledge of EUR 40 billion in support for European enterprises at the beginning of the Covid-19 crisis, the EIB Group set up a EUR 25 billion guarantee fund to increase its support by a further EUR 200 billion. This guarantee fund targeted small and medium-sized enterprises. (Cf. Sect. 3.2.3.)
- The EC amended several of its regulations to provide more flexibility for particularly affected sectors (such as airlines) or EU Member States. As has already been explained before, this included suspending state aid rules, as well as the activation of the SGP general escape clause in order to allow EU member countries to deviate from agreed upon budgetary requirements (cf. Sect. 4.2.2.).

• ...

⁷⁹European Council – Council of the European Union (2021); International Labour Organisation (2020).

⁸⁰Agentschap Innoveren & Ondernemen (2020).

⁸¹Agentschap Innoveren & Ondernemen (2020).

However, the most important programmes for addressing the Covid-19 crisis in the longer term have been those specifically designed for this purpose, which we shall examine in more detail in the following Sects. 4.2.3.2.–4.2.3.3.

4.2.3.2.2 Support to Mitigate Unemployment Risks in an Emergency (SURE)

4.2.3.2.2.1 Establishment of SURE

As soon as it became clear that Covid-19 would not disappear quickly, EU Member States agreed to set up SURE (short for: "Support to Mitigate Unemployment Risks in an Emergency"). SURE was especially created as a temporary lending instrument for helping finance short-time work (STW) schemes (besides similar measures to support self-employment across the EU). The instrument was to be backed by EUR 25 billion in pooled guarantees originating from EU Member States, which would then be paid into an EU budget on a voluntary basis. These pooled guarantees would enable the EU to borrow up to EUR 100 billion on the financial markets, and then lend these resources to the EU Member States on favourable terms.⁸²

The initiative was part of the EU's so-called early Covid-19 response. The EU Commission already proposed SURE on 2 April 2020. The Member States, meeting within the EU Council, adopted the regulation establishing SURE on 19 May 2020 (cf. Council Regulation (EU) 2020/672).⁸³ The regulation already entered into force on 20 May 2020.⁸⁴

The preamble to the Council Regulation itself, considered, among other things:

(5) That exceptional situation, which is beyond the control of the Member States and which has immobilised a substantial part of their labour force, has led to a sudden and severe increase in public expenditure by the Member States on short-time work schemes for employees and similar measures, in particular for the self-employed, as well as expenditure on some health-related measures, in particular in the workplace. In order to maintain the strong focus of the instrument provided for in this Regulation and thereby its effectiveness, health-related measures for the purpose of that instrument may consist of those aiming at reducing occupational hazards and ensuring the protection of workers and the self-employed in the workplace, and, where appropriate, some other health-related measures. It is necessary to facilitate efforts by the Member States to address the sudden and severe increase in public expenditure until the COVID-19 outbreak and its impact on their labour force are under control.

(6) The creation of a European instrument for temporary support to mitigate unemployment risks in an emergency (SURE) (the 'Instrument') following the COVID-19 outbreak should enable the Union to respond to the crisis in the labour market in a coordinated, rapid and effective manner and in a spirit of solidarity among Member States, thereby alleviating the

⁸²European Council – Council of the European Union (2021). International Labour Organisation (2020), p. 28.

⁸³European Commission (2020b). Cf., furthermore, Council Regulation (EU) 2020/672.

⁸⁴Article 16 Council Regulation (EU) 2020/672.

impact on employment for individuals and the most affected economic sectors and mitigating the direct effects of this exceptional situation on public expenditure by the Member States.

(...)

(8) In order to provide the affected Member States with sufficient financial means under favourable terms to enable them to deal with the impact of the COVID-19 outbreak on their labour market, the Union's borrowing and lending operations under the Instrument should be sufficiently large. The financial assistance granted by the Union in the form of loans should therefore be financed by recourse to international capital markets.

The initiative was later, on 24 August 2020, explained to the press by EU Commission chairwoman Ursula von der Leyden in the following way:⁸⁵

We must do everything in our power to preserve jobs and livelihoods. Today marks an important step in this regard: just four months after I proposed its creation, the Commission is proposing to provide EUR 81.4 billion under the SURE instrument to help protect jobs and workers affected by the coronavirus pandemic across the EU. SURE is a clear symbol of solidarity in the face of an unprecedented crisis. Europe is committed to protecting citizens.

The temporary "Support to mitigate Unemployment Risks in an Emergency" (SURE) was, in addition, intended to be made available to EU Member States which had to mobilise significant financial resources for combatting the negative socioeconomic consequences of the Covid-19 outbreak on their territory.⁸⁶ In Article 1(1) of Council Regulation (EU) 2020/672, the scope of SURE was thereto defined as addressing the consequences of the outbreak of Covid-19, with special regard to its socioeconomic impact.

SURE was thereby authorised to provide financial assistance of up to EUR 100 billion in the form of EU loans to affected EU Member States for coping with sudden increases in public expenditure in order to preserve jobs. SURE was at the same time indicated as a crucial part of the EU's comprehensive strategy to protect citizens and to mitigate the extremely negative socio-economic impact of the Covid-19 pandemic.⁸⁷

More specifically, the SURE instrument was intended to act as a second line of defence supporting short-time working schemes, complementing similar measures. The overall intent of the instrument was thus to help EU Member States in protecting jobs, and, through this, workers and the self-employed, against the risks of unemployment and income loss due to Covid-19.⁸⁸ In this manner, the Commission also saw SURE as a further tangible expression of EU solidarity, with Member States agreeing to support each other, through the intermediary of the EU, for providing additional financial resources where needed in the form of loans.⁸⁹

⁸⁵European Commission (2020b).

⁸⁶European Commission (2021a).

⁸⁷Cf. Article 1(2) Council Regulation (EU) 2020/672. Cf., furthermore, European Commission (2020a); European Commission (2021a).

⁸⁸European Commission (2021a).

⁸⁹European Commission (2021a).

Member State	Proposed loan amount in billion	Disbursed in EUR billion
Belgium	7.8	4
Bulgaria	0.511	-
Croatia	1	1.020
Cyprus	0.479	0.479
Czech Republic	2	1
Estonia	0.230	-
Greece	2.728	2.728
Hungary	0.504	0.504
Italy	27.4	24.817
Ireland	2.5	-
Latvia	0.192	0.192
Lithuania	0.602	0.602
Malta	0.243	0.243
Poland	11.2	5.276
Portugal	5.9	3
Romania	4.1	3
Slovakia	0.630	0.630
Slovenia	1.1	1.113
Spain	21.3	13.896
Total	90.6	62.5

 Table 4.1
 Overview of SURE support as of 16 March 2021 [Source: European Council – Council of the European Union (2021) and European Commission (2021a)]

4.2.3.2.2.2 Overview of SURE Support by March 2021

By 16 March 2021, the European Commission had already made proposals for a total of EUR 90.6 billion in financial assistance to 19 EU Member States. Of these, the EU Council had already formulated approval decisions with regard to EUR 90.3 billion benefiting 18 different EU Member States. On said date of 16 March 2021, the EU Council's approval for a further proposed EUR 230 million benefiting Estonia was expected in the weeks to follow.⁹⁰ Total SURE financial support then reached EUR 90.6 billion.⁹¹

Moreover, by said date of 16 March 2021, EUR 62.5 billion of SURE support had already been paid out to 16 EU Member States. After that date, other EU Member States could still submit additional requests for obtaining financial support under SURE, which at that time had a total firepower of up to EUR 100 billion.⁹² Table 4.1 gives a more detailed overview of the SURE support as of 16 March 2021.

⁹⁰European Council – Council of the European Union (2021).

⁹¹European Council – Council of the European Union (2021).

⁹²Cf. Article 5 of Council Regulation (EU) 2020/672. Cf., furthermore, European Commission (2021a); European Council – Council of the European Union (2021).

4.2.3.2.2.3 Legal Aspects of SURE

Financial assistance under SURE takes the form of loans granted by the EU to individual EU Member States on favourable terms.⁹³ These loans are intended to help EU Member States in coping with sudden increases in public expenditure because of efforts to maintain employment in the context of the Covid-19 pandemic crisis. More specifically, said loans are intended to make it possible for EU Member States to cover the costs directly linked to the financing of so-called national short-time working schemes, besides similar measures adopted in response to the Covid-19 pandemic, in particular for the benefit of the self-employed. Additionally, SURE can also be resorted to in order to finance certain health measures, particularly with regard to the workplace, deployed for ensuring a safe return to normal economic functioning.⁹⁴

More in particularly, according to Article 6(1) of Council Regulation (EU) No 2020/672, financial assistance under SURE is to be made available by means of implementing an EU Council decision that is adopted on the basis of a proposal from the European Commission. Before submitting such a proposal to the EU Council, the European Commission must first have consulted the EU Member State concerned, without delay, for purposes of verifying the existence of a sudden and serious increase in actual and, where appropriate, planned public expenditure directly linked to short-time working schemes and similar measures, as well as, where appropriate, to relevant health-related measures in the EU Member State requesting financial assistance and linked to the exceptional event caused by the Covid-19 outbreak. The EU Member State concerned must, moreover, have provided the necessary evidence to the European Commission. In addition, the EU Commission has to verify that the prudential rules laid down in Article 9 of Council Regulation (EU) 2020/672 have been respected.⁹⁵

The implementing decision of the EU Council itself should mention:⁹⁶

- (a) The amount of the loan, the maximum average maturity, the pricing formula, the maximum number of instalments, the availability period, as well as other detailed rules necessary for the granting of the financial assistance.
- (b) An assessment of compliance by the EU Member State with the conditions laid down in Article 3 of Council Regulation (EU) 2020/672.
- (c) A description of national systems of working time reduction, or similar measures and, where appropriate, of relevant health-related measures, which may be funded by means of the loan granted.

Article 11(1) of Council Regulation (EU) 2020/672, furthermore, allowed EU Member States to contribute to the SURE instrument even more by providing

⁹³Cf. Article 4 of Council Regulation (EU) 2020/672.

⁹⁴European Commission (2021a).

⁹⁵Article 6(2). Council Regulation (EU) 2020/672.

⁹⁶Article 6(3). Council Regulation (EU) 2020/672.

counter-guarantees against the risk borne by the EU. Such additional contributions were to be made in the form of irrevocable, unconditional and callable guarantees.⁹⁷

When adopting a positive implementing decision, the Council of the EU should take into account the existing and anticipated needs of the requesting EU Member State, as well as the requests for financial assistance under Council Regulation (EU) 2020/672 that other EU Member States have already submitted or will submit, with an aim of applying the principles of equal treatment, solidarity, proportionality and transparency.⁹⁸

In order to finance the SURE mechanism, the European Commission was, as explained above, authorised to issue so-called "social bonds" under what has been referred to as the "Social Bond Framework" (or, in full: "the EU SURE Social Bond Framework", hereafter also referred to as "the Framework"). The aim of this Social Bond Framework is to assure investors in these bonds that the funds mobilised under the mechanism will serve a genuine social purpose.⁹⁹

In order to reach these goals, the Framework was designed around and intended to meet the four core components of the International Capital Market Association (in short: ICMA)'s so-called "SBP". The EU, in other words, wanted to issue social bonds under the SURE instrument as a so-called "ESG" (with the abbreviation ESG referring to "Environment, Social, and Governance") debt instrument that would make it possible for the investment community to direct their investments for addressing some of the social needs of EU Member States affected by the Covid-19 pandemic crisis. This approach was at the same time intended to support the further development of the social bond market itself. The issuing of social bonds by the EU under the SURE initiative was especially aimed at meeting the transparency requirements with regard to the "use of proceeds", while at the same time encouraging the measurement of the social impact of the underlying financed public expenditures.¹⁰⁰

Eligible social expenditures were at the same intended to contribute to some of the United Nations Sustainable Development Goals (in short: "SDGs"). In particular, SDGs number 3 ("Good health and well-being") and number 8 ("Decent work and economic growth") had been part of the focus of the SURE instrument from the beginning of the initiative.¹⁰¹

By 10 March 2021, the EU Commission had already issued EUR 62.5 billion in such social bonds. This had happened in five rounds under the EU-SURE instrument. The issuances consisted of social bonds with maturities of 5, 10 and 15 years. It moreover appeared that there was very high investor interest in these highly rated

⁹⁷Article 11(2). Council Regulation (EU) 2020/672.

⁹⁸Article 6(3). Council Regulation (EU) 2020/672.

⁹⁹European Commission (2021a).

¹⁰⁰European Commission (2020a).

¹⁰¹European Commission (2020a).

public instruments, as a result of which an oversubscription resulted in favourable bond pricing conditions.¹⁰²

By 27 October 2020, the EU SURE social bonds were listed on the Luxembourg Stock Exchange. The bonds were also on display at the Luxembourg Green Exchange, the largest platform in the world dedicated exclusively to sustainable securities.¹⁰³ On that date, the EUR 17 billion social bond issue was the first ever social bond issued by the EU Commission. The issue consisted of two tranches: a EUR 10 billion tranche, with a maturity of 10 years, and a EUR 7 billion tranche, with a maturity of 20 years. The bond issuance was oversubscribed 13 times, with demand exceeding EUR 233 billion, which in the opinion of the European Commission reflected the huge support from the investment community for such social bonds designed to secure jobs and combat rising unemployment in the EU countries as a result of the Covid-19 pandemic and the ensuing economic crisis.¹⁰⁴

4.2.3.2.2.4 The Example of Belgium

Belgium received a positive EU Council implementing decision on 17 September 2020, for an amount of maximum EUR 7,803,380,000 (under a loan having a maximum average maturity of 15 years).¹⁰⁵

Belgium had requested financial assistance from the EU on 7 August 2020, planning to complement its national efforts in addressing the Covid-19 outbreak and respond to the socio-economic consequences of the Covid-19 outbreak for workers and the self-employed. The EU Council had taken into consideration that the Covid-19 outbreak and the extraordinary measures implemented by Belgium to contain the outbreak and its socio-economic and health-related impact, were expected to have a dramatic impact on public finances. According to the EU Commission's 2020 Spring forecast, Belgium was expected to have a general government deficit and debt of 8.9% and 113.8% of gross domestic product (GDP) respectively by the end of 2020. According to the EU Commission's 2020 Summer interim forecast, Belgium's GDP was projected to decrease by 8.8% in 2021. A further factor that the EU Council took into consideration was that the Covid-19 outbreak had immobilized a substantial part of the labour force in Belgium. This had led to a sudden and severe increase in public expenditure to maintain temporary unemployment scheme ("chômage temporaire/tijdelijke the werkloosheid"), the Covid-19 replacement income for the self-employed (the Covid-19 bridging right), the Covid-19 parental leave, and a number of regional and community income support schemes, and in support of public health measures.¹⁰⁶

¹⁰²European Commission (2021a).

¹⁰³European Commission (2021a).

¹⁰⁴European Commission (2020b).

¹⁰⁵ Article 1 Council Implementing Decision (EU) 2020/0225 (NLE).

¹⁰⁶Cf. recitals (2) and (3) of Council Implementing Decision (EU) 2020/0225 (NLE).

4.2.3.3 A Recovery Plan for Europe

4.2.3.3.1 Decision-Making Steps

Already on 2 May 2018, the EU Commission had presented its proposal for a at the time forthcoming, new long-term EU budget. This contained a proposal for a new framework that was soon after followed by legislative proposals with regard to 37 sectoral programmes (in the fields of, e.g., cohesion, agriculture, Erasmus, Horizon Europe, etc.). Between 2018 and early-2020, the EU Commission then worked closely with the rotating presidencies of the EU Council, as well as with the European Parliament in order to advance the negotiations.¹⁰⁷

In response to the unprecedented crisis caused by the Covid-19 virus, on 27 May 2020, the EU Commission rekindled its earlier proposal for a new temporary recovery instrument which was called "NextGenerationEU". This was initially based on a budget of EUR 750 billion, which was to be raised on the financial markets. The proposal was, furthermore, accompanied by targeted reinforcements to the EU's long-term budget for 2021–2027.¹⁰⁸

The recovery plan was finally established through the following further decisionmaking steps:

- (1) On 21 July 2020, the EU Heads of State or Government reached a political agreement on the new recovery package.¹⁰⁹
- (2) On 10 November 2020, the European Parliament and the Council of the EU reached an agreement in principle with regard to the recovery package.¹¹⁰
- (3) The EU Member States, meeting in the EU Council on 10 December 2020, formally agreed at EU Council level to finalise the adoption of both the MFF regulation (with the abbreviation "MFF" referring to "Multiannual Financial Framework" and pointing to the budgetary component of the recovery plan), and

¹⁰⁷European Commission (2020g).

¹⁰⁸European Commission (2020h).

The "NextGenerationEU" programme was announced as a plan to raise money by temporarily increasing the own resources ceiling to 2.00% of EU gross national income. The further intent was that the EU Commission would be able to use its strong credit rating for borrowing 750 billion euros on the financial markets. The additional funding that would thus be gathered, would then, one side, be channelled through EU programmes, and, on the other side, be repaid over a long period out of future EU budgets—not before 2028, and not after 2058. To help do this in a fair manner, the EU Commission proposed a number of new own resources. Moreover, in order to make funds available as soon as possible for addressing the most urgent needs rising from Covid-19, the EU Commission also proposed to amend its existing multiannual financial framework 2014–2020 to make an additional EUR 11.5 billion already available in 2020. (Cf. European Commission (2020h).)

¹⁰⁹Cf. the conclusions of the special meeting of the European Council (17, 18, 19, 20 and 21 July 2020).

¹¹⁰European Commission (2020i).

the "Own Resources Decision", pointing to the possibility to gather new financial means on the financial markets.¹¹¹

- (4) On 17 December 2020, the EU Council decided on the next EU long-term budget for the period 2021–2027. This also came down to the final step in the adoption process. This step was taken after a vote in the European Parliament that took place on 16 December 2020, which had endorsed the MFF regulation by a significant majority. With this EU Council decision, all conditions were met for the next multiannual financial framework (abbreviated as "MFF") for the period 2021–2027 to enter into force on 1 January 2021. As a result, EUR 1.074 trillion (in 2018 prices) would become available for those eligible for receiving such EU funding over the next 7 years.¹¹²
- (5) On 18 December 2020, the European Parliament and the EU Council reached an agreement on the "Recovery and Resilience Facility" which was to be the main instrument for implementing "NextGenerationEU".¹¹³

4.2.3.3.2 Two Main Parts of the Recovery Plan for Europe

In order to mobilise the necessary investments within the framework of the European Recovery Plan, the EU Commission proposed a two-pronged response:¹¹⁴

(1) The "Next Generation EU"-component itself that was set up as a new EUR 750 billion recovery instrument that was intended to boost the EU budget with new funding raised by the EU itself on financial markets for the period 2021–2024.

As explained in the previous sections, this recovery plan was first adopted by the EU Member States in July 2020. In accordance with this plan, the EU Commission would be allowed to borrow EUR 750 billion on the financial markets, repayable over a (very) long period of time, based on future EU budgets. The EUR 750 billion were then to be channelled through EU programmes in order to (1) support the EU Member States with investments and reforms, (2) encourage private investments and (3) strengthen EU programmes in the field of health and civil protection.¹¹⁵

¹¹¹Cf. the conclusions of the European Council meeting (10 and 11 December 2020).

¹¹²European Commission (2020j).

¹¹³European Commission (2020k).

¹¹⁴Agentschap Innoveren & Ondernemen (2020).

¹¹⁵Cf., furthermore, International Labour Organisation (2020).

In December 2020, this led to the adoption of the following legal texts (cf. under "References" for the full reference to each of these texts): "(1) An interinstitutional agreement of 16 December 2020. (2) The Regulation (EU, Euratom) 2020/2092, adopted on 16 December 2020. (3) A Joint Statement by the European Parliament, the Council and the Commission/Article 122, of 16 December 2020. (4) The Council Regulation (EU, Euratom) 2020/2093, adopted on 17 December 2020. (5) A Council motion of 18 December 2020."

(2) A strengthened long-term EU budget for the period 2021–2027 (for an amount of 1100 billion).

The expanded long-term budget, together with the additional financial means that the EU was able to gather through "NextGenerationEU", created the largest stimulus package ever funded out of EU budgets. While the NextGenerationEU-component was to be considered as a temporary instrument to stimulate economic recovery from Covid-19, the new long-term budget was touted as a budget "fit not only for today's realities, but also for tomorrow's uncertainties".¹¹⁶ The two components considered together implied that a total of EUR 1.8 trillion was made available to rebuild a "greener", "more digital" and "more resilient" Europe after Covid-19.¹¹⁷

The new and reinforced EU's long-term budget itself was to be financed from the usual sources of income, such as: (1) customs duties; (2) EU Member States' contributions based on value added tax (VAT), and (3) contributions based on gross national income (GNI). In addition, from 1 January 2021, a new national contribution on non-recycled plastic packaging waste, was introduced as an additional source of revenue for the EU budget. As explained, in order to finance Covid-19 recovery, the EU would under the NextGenerationEU-component of the package, also borrow on the financial markets at more favourable rates than EU Member States would have available, in order to then redistribute the amounts raised among the EU Member States and over the EU recovery programmes. On a technical-legal level, in order to allow the EU Commission to start borrowing on the financial markets, all EU Member States had to ratify the "new Own Resources Decision" in accordance with their national, constitutional requirements.¹¹⁸

Table 4.2 gives an overview of the components of the Multiannual Financial Framework 2021–2027 (by indicating the total allocations per heading).

To achieve the objectives of the Recovery Plan for Europe, the EU Commission then deployed a range of policy instruments.¹¹⁹ More specifically, the NextGenerationEU-component was announced to be rolled out across three pillars, which are outlined below in Table 4.3.¹²⁰

The means assembled through NextGenerationEU were to be channelled through various instruments under the abovementioned three pillars, (initially) for the budgets shown in Table 4.4.¹²¹ The amounts in Table 4.4 were agreed in paragraph A14. of the Conclusions of the Special meeting of the European Council (that took place on 17, 18, 19, 20 and 21 July 2020).

¹¹⁶European Commission (2020g).

¹¹⁷European Commission (2020g).

¹¹⁸European Commission (2020g).

¹¹⁹Agentschap Innoveren & Ondernemen (2020).

¹²⁰Agentschap Innoveren & Ondernemen (2020).

¹²¹European Council (2020a, b, c), p. 5.

	MFF	NextGenerationEU	Total
1. Single market, innovation and digital	EUR 132.8 billion	EUR 10.6 billion	EUR 143.4 billion
2. Cohesion, resilience and values	EUR 377.8 billion	EUR 721.9 billion	EUR 1099.7 billion
3. Natural resources and environment	EUR 356.4 billion	EUR 17.5 billion	EUR 373.9 billion
4. Migration and border management	EUR 22.7 billion	-	EUR 22.7 billion
5. Security and defence	EUR 13.2 billion	-	EUR 13.2 billion
6. Neighbourhood and the world	EUR 98.4 billion	-	EUR 98.4 billion
7. European public administration	EUR 73.1 billion	-	EUR 73.1 billion
Total MFF	EUR 1074.3 billion	EUR 750 billion	EUR 1824.3 billion

Table 4.2 Multiannual Financial Framework 2021–2027 total allocations per heading [Source:European Commission (2020g)]

Table 4.3	Overview of	of the three	pillars of N	extGenerati	onEU [So	ource: A	Agentschap	Innoveren &
Onderneme	en (2020)]							

Pillar I:	(1) Recovery and Resilience facility	Supporting invest-
Supporting Member States	(RRF)	ments and reforms
to recover	(2) Recovery Assistance for Cohesion and the Territories of Europe— REACT-EU	Supporting a just transition (Within European
	 (3) Reinforced rural development programmes (4) Reinforced Just Transition Mechanism 	Semester framework)
Pillar II:	(5) Solvency Support Instrument	Supporting key sec-
Kick-starting the economy and helping private investment	(6) Strategic Investment Facility(7) Strengthened InvestEU programme	tors and technologies Investing in key value chains Solvency support for viable companies
Pillar III: Learning the lessons from the crisis	(8) New Health programme(9) Reinforced rescEU(10) Reinforced programmes for research, innovation and external action	Supporting key programmes for future crises Supporting global partners

Table 4.4Budgets of theNextGenerationEUProgrammes [Source:European Council(2020a, b, c), p. 5; European	NGEU programme	In billion EUR
	Recovery and Resilience Facility (RRF)	672.5
	– of which loans	360
	– of which grants	312.5
Commission (2020g)]	ReactEU	47.5
	Horizon Europe	5
	InvestEU	5.6
	Rural Development	7.5
	Just Transition Fund (JTF)	10
	RescEU	1.9
	Total	750

4.2.3.3.3 Three Pillars of NextGenerationEU

4.2.3.3.3.1 Pillar I: Recovery Support

4.2.3.3.3.1.1 Overview

Under "Pillar I. Supporting Member States to recover, repair and emerge stronger from the crisis" of NextGenerationEU, three (groups of) instruments were to be mobilised, namely:¹²²

- (1) The "European Recovery and Resilience Facility", embedded in the European semester.
- (2) REACT-EU—The "Recovery Assistance for Cohesion and for the Territories of Europe".
- (3) Supporting the green transition to a climate-neutral economy with resources gathered through the "Next Generation EU".

4.2.3.3.3.1.2 Recovery and Resilience Facility (RRF)

In its "Annual Sustainable Growth Strategy" for 2021, the European Commission set out its (forward) guidance for implementing the so-called "Recovery and Resilience Facility" (RRF).

The RRF¹²³ was intended as the linchpin of the NextGenerationEU-plan, with EUR 672.5 billion in loans and grants raised for supporting reforms and investments set up by EU Member States. The aim of the RRF was to mitigate the socioeconomic consequences of the Covid-19 pandemic, while at the same time making European economies and societies more sustainable, resilient and prepared to meet the challenges and opportunities of the green and digital transition that was continuing at the same time. Under the RRF, EU Member States that were working on their

¹²²Agentschap Innoveren & Ondernemen (2020).

¹²³On a legal-technical level, the SRF was installed by Regulation (EU) 2021/241.

recovery and resilience plans would have access to the funds the EU managed to raise on the financial markets under NextGenerationEU.¹²⁴

Article 4(1) of Regulation 2021/241 defined the general objective of the RRF as follows:

to promote the Union's economic, social and territorial cohesion by improving the resilience, crisis preparedness, adjustment capacity and growth potential of the Member States, by mitigating the social and economic impact of that crisis, in particular on women, by contributing to the implementation of the European Pillar of Social Rights, by supporting the green transition, by contributing to the achievement of the Union's 2030 climate targets set out in point (11) of Article 2 of Regulation (EU) 2018/1999 and by complying with the objective of EU climate neutrality by 2050 and of the digital transition, thereby contributing to the upward economic and social convergence, restoring and promoting sustainable growth and the integration of the economies of the Union, fostering high quality employment creation, and contributing to the strategic autonomy of the Union alongside an open economy and generating European added value.

The RRF would be funded through "grants and loans" for the implementation of the EU Member States' national recovery and resilience plans, which were to be drawn up in line with the objectives of the "European Semester". These national recovery and resilience plans, moreover, had to contribute to the green and digital transition, as well as to reinforcing the resilience of national economies. EU Member States were thereto expected to submit draft recovery and resilience plans by 15 October 2020. As mentioned above, the budget for the RRF amounted to EUR 672.5 billion, of which EUR 312.5 billion in grants (as regulated by Article 6 (1)(a) of Regulation 2021/241) and EUR 360 billion in loans (as regulated by Article 6(1)(b) of Regulation 2021/241).

The RRF would, furthermore, be steered by the "Recovery and Resilience Task Force", which would work closely with the Directorate-General for Economic and Financial Affairs. This Recovery and Resilience Task Force (abbreviated as "RECOVER") was eventually established on 16 August 2020 within the Secretariat-General of the EU Commission. RECOVER was made responsible for steering the implementation of the RRF, as well as for coordinating the European Semester. RECOVER would hereby report directly to EU Commission President Ursula von der Leyen. As announced, RECOVER has been working in close cooperation with the EU Commission's Directorate-General for Economic and Financial Affairs on the following matters:¹²⁵

- (1) The coordination of the support to EU Member States in the preparation of their recovery and resilience plans.
- (2) Working together with EU Member States in order to ensure that the Member States' notified recovery and resilience plans would meet the legal requirements, as well as achieving the goals of the dual green and digital transition and of economic recovery.

¹²⁴European Commission (2020g).

¹²⁵European Commission (2021f).

	For 70% of the amount available	For 30% of the amount available	Total
Belgium	3.6	2.3	5.9
Bulgaria	4.6	1.6	6.3
Czechia	3.5	3.5	7.1
Denmark	1.3	0.2	1.6
Germany	16.3	9.3	25.6
Estonia	0.8	0.2	1.0
Ireland	0.9	0.1	1.0
Greece	13.5	4.3	17.8
Spain	46.6	22.9	69.5
France	24.3	15.0	39.4
Croatia	4.6	1.7	6.3
Italy	47.9	21.0	68.9
Cyprus	0.8	0.2	1.0
Latvia	1.6	0.3	2.0
Lithuania	2.1	0.1	2.2
Luxembourg	0.1	0.0	0.1
Hungary	4.6	2.5	7.2
Malta	0.2	0.1	0.3
Netherlands	3.9	2.0	6.0
Austria	2.2	1.2	3.5
Poland	20.3	3.6	23.9
Portugal	9.8	4.1	13.9
Romania	10.2	4.0	14.2
Slovenia	1.3	0.5	1.8
Slovakia	4.6	1.7	6.3
Finland	1.7	0.4	2.1
Sweden	2.9	0.4	3.3
EU 27	234.5	103.5	338.0

 Table 4.5
 Recovery and resilience facility: maximum grant allocations [Source: https://ec.europa.

 eu/info/sites/info/files/about_the_european_commission/eu_budget/recovery_and_resilience_facility_.pdf (consulted on April 4, 2021)]

- (3) The preparation of the necessary implementing decisions for the approval of the recovery and resilience plans.
- (4) Assessing EU Member States' progress in implementing the recovery and resilience plans and in analysing the regular reports provided for in the legislation.
- (5) The Coordination of the European Semester during this period.¹²⁶

Table 4.5 gives an overview of the maximum grant allocations under the Recovery and Resilience Facility.

¹²⁶On the European Semester, Cf. Sect. 5.2.1.2.

The RRF was effectively established by Regulation (EU) 2021/241. The "Facility" was specifically designed to support EU Member States' efforts to raise their economic recovery and growth potential through both structural reforms and investment, while at the same time also being aimed to contribute to the green and digital transition. The mechanism would provide EUR 312.5 billion in non-refundable aid, and up to EUR 360 billion in loans to EU Member States. It would, thereby, especially target the economies most affected by the economic consequences of the Covid-19 pandemic. The facility was, furthermore, intended to help reduce the risk of disparities in socio-economic conditions within both the euro area and the EU. The huge overall size of the RRF-facility was made possible by an unprecedented shift in the direction of EU debt issuance, whereby it was the EU itself that would solicit the financial markets. The success rate of this approach was expected to depend equally on the quality of spending, as on the ability of EU Member States to implement their recovery, growth and transition plans in practice. The latter aspect was believed to be dependent on if effective structures for absorbing the substantial and frontloaded EU funding could be set up. Also deemed important by the Commission was that there would be a sufficient degree of coherence between the Member States' medium-term budgetary planning and their investments and reforms under the RRF.¹²⁷

According to the EU Commission, the significant recovery and growth impact of the NextGenerationEU immediately became apparent from first model-based simulations. From this, it was assumed that the EU's GDP would be nearly 2% higher in the short and medium term, and 1% higher in the long term, provided that all subsidies and half of the loans under the programme would effectively be used to increase productive public investment. It was also assumed that this higher investment would lead to a boost in demand in the short term, as well as potential growth in the medium term. This higher GDP was, furthermore, expected to have a favourable impact on debt-to-GDP ratios. Finally, the coordinated nature of the fiscal stimulus programme was also expected to result into positive growth spill overs due to increased export opportunities within the EU.¹²⁸

The EU Commission also expected the introduction of the RRF to have the following positive effects:¹²⁹

- A significant positive impact on national fiscal policies.
- Stimulating Member States to make public expenditure and revenues more growth friendly.
- The support of recovery plans.
- The strengthening of economic and social resilience.

¹²⁷European Commission (2021b), pp. 8–9.

¹²⁸European Commission (2021b), p. 9.

¹²⁹European Commission (2021b), p. 10.

- The strengthening of tax collection and enforcement, the broadening of tax bases, and the implementation of growth-friendly tax shifts, especially by reducing the tax burden on labour.
- The support of environmental and climate goals.
- The support of sound public finances through higher economic growth, presumably at no budgetary cost.
- ...

4.2.3.3.3.1.3 React-EU

A second component of the NextGenerationEU included EUR 47.5 billion for "REACT-EU", an initiative that was specifically designed to be the successor of the "Coronavirus Response Investment Initiative" and the "Coronavirus Response Investment Initiative Plus". REACT-EU was, thereby, in particular aimed at contributing to a "green", "digital" and "resilient" recovery of the economy.¹³⁰

Funding under REACT-EU would be made available to:¹³¹

- The European Regional Development Fund (ERDF).
- The European Social Fund (ESF).
- The European Fund for Aid to the Most Deprived (FEAD).

These additional funds were to be provided through NextGenerationEU for the period 2021–2022, and through a targeted revision of the already pre-existing financial framework for 2020.¹³²

REACT-EU was thus set up to work by means of flexible cohesion policy grants for municipalities, hospitals and businesses which are however channelled through the managing authorities of the Member States concerned. There is, thereby, no requirement for additional co-financing by the Member States themselves. The initially envisaged budget of REACT-EU amounted to EUR 55 billion, later reduced to EUR 47.5 billion. This was meant as a form of additional cohesion policy funding for the period between 2020 and 2022.¹³³

Table 4.6 gives an overview of the allocations under REACT-EU per Member State regarding 2021.

4.2.3.3.3.1.4 Supporting the Green Transition

The main idea behind the third component of the first pillar of NextGenerationEU, was to support the green transition to a climate-neutral economy (again based upon resources made available through "Next Generation EU"). For this, the "Just Transition Fund" was enhanced with up to EUR 40 billion in order to help Member States

¹³⁰European Commission (2020g).

¹³¹European Commission (2020g).

¹³²European Commission (2020g).

¹³³European Commission (2020g).

Table 4.6 Allocations under		2018 prices	Current prices
REACT-EU for 2021 per Member State (in million	Belgium	245	260
EUR—Gross allocations	Bulgaria	413	438
before deduction of adminis-	Czechia	790	838
trative expenditure and tech-	Denmark	168	178
nical assistance) [Source:	Germany	1785	1894
https://ec.europa.eu/info/sites/ info/files/about_the_euro	Estonia	168	178
pean commission/eu budget/	Ireland	84	89
react-eu_allocations_2021_2.	Greece	1616	1715
pdf (consulted on 4 April	Spain	10,269	10,898
2021)]	France	2926	3105
	Croatia	541	574
	Italy	10,693	11,348
	Cyprus	105	112
	Latvia	199	211
	Lithuania	259	275
	Luxembourg	132	140
	Hungary	834	885
	Malta	105	112
	Netherlands	417	443
	Austria	207	219
	Poland	1556	1651
	Portugal	1508	1600
	Romania	1252	1329
	Slovenia	248	263
	Slovakia	583	618
	Finland	127	135
	Sweden	272	288
	EU 27	37,500	39,795

in accomplish this. A second part of this third component concerned a EUR 15 billion reinforcement for the "European Agricultural Fund for Rural Development". The latter financial injection was specifically aimed at supporting rural areas in addressing the necessary structural changes in line with the "European Green Deal", as well as in reaching the ambitious European goals in line with the new strategies on "Biodiversity and Farm to Fork".¹³⁴

Table 4.7 gives an overview of the allocations per Member State under the Just Transition Fund.

¹³⁴European Commission (2020g).

	Under NextGenerationEU	Under MFF 2021-2027	Total	Share (%)
Belgium	95	71	166	9
Bulgaria	673	505	1178	6.7
Czechia	853	640	1493	8.5
Denmark	46	35	81	0.5
Germany	1288	966	2254	12.9
Estonia	184	138	322	1.8
Ireland	44	33	77	0.4
Greece	431	324	755	4.3
Spain	452	339	790	4.5
France	535	402	937	5.4
Croatia	97	72	169	1.0
Italy	535	401	937	5.4
Cyprus	53	39	92	0.5
Latvia	100	75	174	1.0
Lithuania	142	107	249	1.4
Luxembourg	5	4	8	0.0
Hungary	136	102	237	1.4
Malta	12	9	21	0.1
Netherlands	324	243	567	3.2
Austria	71	53	124	0.7
Poland	2000	1500	3500	20.0
Portugal	116	87	204	1.2
Romania	1112	834	1947	11.1
Slovenia	134	101	235	1.3
Slovakia	239	179	418	2.4
Finland	242	182	424	2.4
Sweden	81	61	142	0.8
EU 27	10,000	7500	17,500	100.0

Table 4.7 Just Transition Fund—allocations per Member State (in million EUR—Gross allocations before transfers for technical assistance) [Source: https://ec.europa.eu/info/sites/info/files/ about_the_european_commission/eu_budget/just_transition_fund_allocations_05.11_v2_0.pdf (consulted on April 4, 2021)]

4.2.3.3.3.2 Pillar II: Kick-Starting the Economy

4.2.3.3.3.2.1 General

Under "Pillar II. Kick-starting the economy and promoting private investment", the following instruments were set up:¹³⁵

(1) The "Enhanced InvestEU Programme", including a "Strategic Investment Facility".

¹³⁵Cf. Agentschap Innoveren & Ondernemen (2020).

(2) The "New Solvency Support Instrument", meant to support equity of viable companies.

4.2.3.3.3.2.2 InvestEU

The original proposal for an enhanced EU investment program was already tabled by the EU Commission in 2018, but investment needs increased significantly due to the impact of the Covid-19 pandemic on the European economy, and due to the risk that an "asymmetric recovery" would start to occur across the EU and within the EU Member States. In the context of the revamped proposals on the MFF 2021–2027, the European Commission thereto tabled a revised proposal for what started to be referred to as the "InvestEU-Programme" on 29 May 2020.¹³⁶

This new proposal increased the initial financial envelope and amended its scope to mirror the expected post-Covid-19 pandemic needs of the European economy. The new proposal, thereby, fully reflected the elements already agreed upon by the co-legislators when negotiating the original MFF proposal in 2018. However, in order to cater to the future needs of the European economy, and in order to secure or maintain strategic autonomy in certain key sectors, a new window was added to the programme, more precisely: "the strategic European investment window". This programme was to be based upon the provisioning of an EU budget guarantee in order to finance investment projects through the EIB group and/or national promotional banks. The initial budget of the InvestEU-programme amounted to EUR 15.3 billion. Additionally, the new "Strategic Investment Facility" was set up with an additional EUR 15 billion provisioning under Next Generation EU.¹³⁷

The (NEW) programme was thus to stand on four legs:¹³⁸

- (1) "InvestEU Fund", which would provide an EU guarantee;
- (2) "InvestEU Advisory Hub", which would in particular provide project development-related technical assistance;
- (3) "InvestEU Portal", which would provide easy access to a database for promoting projects in search of financing;
- (4) blending operations.

On 26 March 2021, the proposal was approved and became Regulation (EU) 2021/523. Under point (5) of its preamble, the main purpose of the new regulation was described as follows:

The InvestEU Fund should contribute to improving the competitiveness and socio-economic convergence and cohesion of the Union, including in the fields of innovation and digitisation, to the efficient use of resources in accordance with the circular economy, to the sustainability and inclusiveness of the Union's economic growth and to the social resilience and integration of Union capital markets, including through solutions that address

¹³⁶Proposal of the European Commission of May 25, 2020, COM (2020) 403 final.

¹³⁷European Sources Online (2021).

¹³⁸European Sources Online (2021).

the fragmentation of Union capital markets and that diversify sources of financing for Union enterprises. To that end, the InvestEU Fund should support projects that are technically and economically viable by providing a framework for the use of debt, risk sharing and equity and quasi-equity instruments backed up by a guarantee from the Union budget and by financial contributions from implementing partners as relevant. The InvestEU Fund should be demand-driven, while at the same time focused on providing strategic, long-term benefits in relation to key areas of Union policy which would otherwise not be funded or would be insufficiently funded, thereby contributing to meeting the Union's policy objectives. Support from the InvestEU Fund should cover a wide range of sectors and regions, but should avoid excessive sectoral or geographical concentration and should facilitate access to financing of projects composed of partner entities in multiple regions across the Union, including projects that foster the development of networks, clusters and digital innovation hubs.

Article 1, par. 1 of Regulation (EU) 2021/523 describes its principal subject, namely the establishment of "the InvestEU Fund", aimed to provide for an EU guarantee to support financing and investment operations carried out by the implementing partners that contribute to objectives of the Union's internal policies. According to the same Article 1, par 2. of Regulation (EU) 2021/523, it also establishes the "InvestEU Advisory Hub", meant as an advisory support mechanism to provide support for the development of investable projects and access to financing and to provide related capacity building assistance.

Also according to Article 1, par 2. of Regulation (EU) 2021/523, the Regulation further established the "InvestEU Portal", a database granting visibility to projects for which project promoters seek financing, and which provides investors with information about investment opportunities.

According to Article 3.1 of Regulation (EU) 2021/523, the general objective of the InvestEU Programme is to support the policy objectives of the Union by means of financing and investment operations that contribute to:

- (a) the competitiveness of the EU, including research, innovation and digitisation.
- (b) growth and employment in the EU economy, the sustainability of the EU economy and its environmental and climate dimension contributing to the achievement of the SDGs and the objectives of the Paris Agreement, as well as to the creation of high-quality jobs.
- (c) the social resilience, inclusiveness and innovativeness of the EU.
- (d) the promotion of scientific and technological advances, of culture, education and training.
- (e) the integration of the EU capital markets and the strengthening of the internal market, including solutions to address the fragmentation of EU capital markets, diversify sources of financing for EU enterprises and promote sustainable finance.
- (f) the promotion of economic, social and territorial cohesion; or
- (g) the sustainable and inclusive recovery of the EU economy after the Covid-19 crisis, including by providing capital support for SMEs that were negatively affected by the Covid-19 crisis and were not already in difficulty in State aid terms at the end of 2019, upholding and strengthening existing strategic value chains of tangible or intangible assets, developing new ones, and maintaining

and reinforcing activities of strategic importance to the EU, including important projects of common European interest, in relation to critical infrastructure, whether physical or virtual, transformative technologies, game-changing innovations and inputs to businesses and consumers and supporting a sustainable transition.

According to Article 3.2 of Regulation (EU) 2021/523, the InvestEU Programme has the following specific objectives:

- (a) supporting financing and investment operations related to sustainable infrastructure in the areas referred to in point (a) of Article 8(1) of the Regulation;
- (b) supporting financing and investment operations related to research, innovation and digitisation, including support for the scaling up of innovative companies and the rolling out of technologies to market, in the areas referred to in point (b) of Article 8(1) of the Regulation;
- (c) increasing the access to and the availability of finance for SMEs and for small mid-cap companies and to enhance the global competitiveness of such SMEs;
- (d) increasing access to and the availability of microfinance and finance for social enterprises, to support financing and investment operations related to social investment, competences and skills, and to develop and consolidate social investment markets, in the areas referred to in point (d) of Article 8(1) of the Regulation.

Article 8.1 of Regulation (EU) 2021/523, furthermore, stipulates that the InvestEU Fund is to operate through the following four policy windows, intended to address market failures or suboptimal investment situations within their specific scope:

- (a) A sustainable infrastructure policy window which comprises sustainable investment in the areas of transport, including multimodal transport, road safety, including in accordance with the EU objective of eliminating fatal road accidents and serious injuries by 2050, the renewal and maintenance of rail and road infrastructure, energy, in particular renewable energy, energy efficiency in accordance with the 2030 energy framework, buildings renovation projects focused on energy savings and the integration of buildings into a connected energy, storage, digital and transport systems, improving interconnection levels, digital connectivity and access, including in rural areas, supply and processing of raw materials, space, oceans, water, including inland waterways, waste management in accordance with the waste hierarchy and the circular economy, nature and other environment infrastructure, cultural heritage, tourism, equipment, mobile assets and the deployment of innovative technologies that contribute to the environmental or climate resilience or social sustainability objectives of the EU and that meet the environmental or social sustainability standards of the EU.
- (b) A research, innovation and digitisation policy window which comprises research, product development and innovation activities, the transfer of technologies and research results to the market to support market enablers and cooperation between enterprises, the demonstration and deployment of innovative

solutions and support for the scaling up of innovative companies, as well as digitisation of EU industry.

- (c) An SME policy window which comprises access to and the availability of finance primarily for SMEs, including for innovative SMEs and SMEs operating in the cultural and creative sectors, as well as for small mid-cap companies.
- (d) A social investment and skills policy window, which comprises microfinance, social enterprise finance, social economy and measures to promote gender equality, skills, education, training and related services, social infrastructure, including health and educational infrastructure and social and student housing, social innovation, health and long-term care, inclusion and accessibility, cultural and creative activities with a social goal, and the integration of vulnerable people, including third country nationals.

4.2.3.3.3.2.3 Proposal for a Solvency Support Instrument

At the end of May 2020, the EU Commission also adopted a proposal for a Solvency Support Instrument.¹³⁹

The aim of this proposal was to support otherwise viable companies in the EU that faced solvency difficulties as a result of the Covid-19 crisis, and to mitigate possible distortions to the single market and its level playing field. Such distortions were to be expected given the differing degree to which the Member States were affected and the likely unevenness of their responses, depending on their fiscal capacity and level of debt. The EU Commission proposed to increase the guarantee granted to the European Investment Bank under the "European Fund for Strategic Investments" and to use it to support financial intermediaries, which was then to select companies eligible for solvency help.¹⁴⁰

At the European Council meeting of July 2020, the EU Heads of State or Government had not yet taken up the idea of the solvency support instrument. Both the European Parliament and EU Commission President, Ursula von der Leyen, had expressed their regret at this. Continuing the examination of the proposal in Parliament, the co-rapporteurs—José Manuel Fernandes (EPP, Spain), Irene Tinagli (S&D, Italy) and Nils Torvalds (Renew Europe, Finland)—then published a draft report in which they proposed to widen the scope of eligible companies and ensure fair geographical distribution.¹⁴¹

At the time, the "European Fund for Strategic Investments" (EFSI) was an EU-budget based guarantee managed by the "European Investment Bank (EIB) Group". The Group provided financing to higher-risk projects using its leverage at the highest credit rating. An independent Investment Committee decided, based on transparent and publicly available criteria, on the eligibility of projects for EFSI support. There were no quotas limiting the help by sector, or per Member State, and

¹³⁹Cf. Proposal of the European Commission COM (2020) 404 final.

¹⁴⁰ Szczepanski (2020), p. 1.

¹⁴¹ Szczepanski (2020), p. 1.

the financing was solely driven by market demand. Figures showed that, at the beginning of October 2020, total investments related to EFSI approvals amounted to EUR 524 billion. The financing focused on smaller companies, digitalisation, research, development and innovation, and energy efficiency improvements. Altogether, these sectors accounted for 89% of the Bank's investments.¹⁴²

The proposal for the Solvency Support Instrument intended to respond to Covid-19, was adopted by the EU Commission on 29 May 2020. Its main aim was to help prevent insolvencies of viable companies which had been profoundly and negatively affected by the Covid-19 crisis. It was also intended to help achieve the EU priorities of the "twin green and digital transitions" and of supporting cross-border economic activities in the EU, as well as strengthening the Union's social dimension and convergence.¹⁴³ The financing of the Instrument would come from money raised jointly by the EU on financial markets using the Recovery Instrument. This would be used to expand an EU guarantee granted to the European Investment Bank (EIB) Group under the European Fund for Strategic Investments (EFSI). The EU Commission in this regard proposed that the at the time prevailing guarantee would be increased by EUR 66 billion for the purposes of the Instrument, to reach a total of EUR 92.4 billion. Using this EUR 66 billion guarantee, the instrument was expected to mobilise EUR 300 billion for the real economy. The instrument would also constitute a separate window under the EFSI to attract private capital. The increased guarantee would be used by the EIB Group to provide investment, guarantees or funding of financial intermediaries (such as private equity funds, special purpose vehicles, investment platforms or national promotional banks). Independent fund or vehicle managers would then carry out a selection of eligible companies with adequate return prospects, using a commercial logic. Such a public intervention, while based on these commercial terms, hence, aimed to crowd in private investors by decreasing their risk. According to the EU's initial proposal, the Instrument was primarily meant to channel solvency support through financial market intermediaries (which were to be established and operate in the EU in order to be eligible for the SSI), and only exceptionally to enable direct support to companies by the EIB Group.¹⁴⁴ The EFSI Steering Board, appointed by the EU Commission and the EIB, was to play a key role in the governance structure of the Instrument.¹⁴⁵ The SSI would be open to all Member States and sectors covered by the EFSI, but with an

¹⁴² Szczepanski (2020), p. 2.

¹⁴³ Szczepanski (2020), p. 3.

¹⁴⁴ Szczepanski (2020), pp. 3-4.

¹⁴⁵Szczepanski (2020), p. 4.

According to the proposal of 29 May 2020, the members EFSI Steering Board were to consist of three representatives from the EU Commission, one from the EIB, and an observer from the European Parliament. This board was to set the investment guidelines and carry out quarterly reviews of the Instrument. It would also appoint the Investment Committee for 3 years, to be composed of eight financial experts and headed by the Managing Director. This Committee would approve decisions, proposed by the EIB staff, on which financial intermediaries should benefit from the Instrument. EU Member States would not take part in the decision-making on the EFSI

increased focus on those most economically affected by the Covid-19 pandemic, and for which national solvency support measures were weaker.¹⁴⁶

According to the proposal of 29 May 2020, the Instrument would however not be available to businesses that were already in financial difficulties at the end of 2019, before the Covid-19 outbreak.¹⁴⁷

The EU Commission indicated its wish to put the Instrument in place as soon as possible in 2020, and to deploy it at full capacity in the course of 2021, with the investment period ending in 2024. However, it insisted that 60% of the financing and investment operations should already be approved by the end of 2022.¹⁴⁸

By 21 July 2020, EU Heads of State or Government reached a political agreement on the 2021–2027 "Multiannual Financial Framework", and on the EUR 750 billion recovery instrument, "Next Generation EU" (NGEU). (Cf. Sect. 4.2.3.3.3.) However, the idea of an additional "Solvency Support Instrument", envisaged under the NGEU's second pillar, was dropped by the EU leaders,¹⁴⁹ although the proposal had been welcomed by some of the EU's advisory committees, such as the Economic and Social Committee (EESC) and Committee of the Regions (CoR).¹⁵⁰

After this refusal by the EU Heads of State or Government, the initiative remained supported by several stakeholders groups, such as "Eurochambers", "SME United", "AECM" (European Association of Credit Guarantee Institutions), "NEFI" (European Network of Promotional Banks) and "ETUC" (the European Trade Union Confederation), all urging—especially by putting pressure on members of the European parliament (MEPs)—that the instrument would be rekindled.¹⁵¹ In the European Parliament, the file was then assigned to the "Economic and Monetary Affairs" (ECON) and "Budgets" (BUDG) Committees, under Rule 58 of the Rules of Procedure (i.e., the joint committee procedure), and to the "Committees on Environment, Public Health and Food Safety" (ENVI), "Industry Research and Energy" (ITRE) and "Transport and Tourism" (TRAN) as associated committees (Rule 57).¹⁵²

The three appointed rapporteurs published their draft report on July 29, 2020. The draft report called on the EU Commission to make a variety of amendments to the initial proposal.¹⁵³ On 27 August 2020, a further 197 amendments proposed by

guarantee but could co-invest and set-up platforms and special vehicles. (Cf. Szczepanski (2020), p. 4.)

¹⁴⁶Szczepanski (2020), p. 4.

The EFSI Steering Board was to set geographical concentration limits to ensure that the distribution of investment corresponded to these principles and would not be concentrated in a limited number of Member States. (Cf. Szczepanski (2020), p. 4.)

¹⁴⁷ Szczepanski (2020), p. 4.

¹⁴⁸ Szczepanski (2020), p. 4.

¹⁴⁹Szczepanski (2020), p. 3.

¹⁵⁰Szczepanski (2020), p. 4.

¹⁵¹Szczepanski (2020), p. 5.

¹⁵²Szczepanski (2020), pp. 4-5.

¹⁵³For an overview, cf. Szczepanski (2020), p. 6.

MEPs were published.¹⁵⁴ These covered all the parts of the proposal including: options for broadening the aim and scope of the SSI, ensuring fair allocation of funds, proposals for specific economic sectors to be prioritised, limits and prohibition on executive pay, bonuses and dividends pay-outs, ideas for commitments required from companies covered by the SSI and green transition plans, measures to prevent tax avoidance, money laundering, fraud and abuse, ensuring alignment with broader EU objectives and reporting obligations.¹⁵⁵

The ITRE committee adopted its opinion on September 2, 2020, focusing on making the instrument more targeted towards saving jobs and creating new sustainable ones, as well as helping SMEs, especially to overcome the challenges of their green and digital transformation. It also proposed that the operations of the Instrument would be aligned with a wider and clear list of EU policy priorities.¹⁵⁶ The ENVI committee adopted its opinion on 3 September 2020. It argued that the instrument would contribute to the achievement of climate, energy and environmental targets in the EU. It also recommended that most supported companies would be SMEs.¹⁵⁷

4.2.3.3.3.3 Pillar III: Learning Lessons from the Covid-19 Crisis

4.2.3.3.3.3.1 General

Under 'Pillar III. Learning the lessons of the crisis and addressing Europe's strategic challenges', the following instruments were announced:¹⁵⁸

(1) A New health programme, "EU4Health", aimed at helping to equip Europe against future health threats.

The new Health Programme, "EU4Health", was more especially to be installed in order to strengthen health security and prepare for future health crises, with a budget of EUR 9.4 billion.

(2) Reinforcing rescEU, the EU's "Civil Protection Mechanism", for responding to large-scale emergencies.

This program was to be based upon grants and procurements managed by the EU Commission, for an initial total budget of EUR 3.1 billion.

4.2.3.3.3.3.2 New Health Program "EU4Health"

On 28 May 2020, as part of the Next Generation EU (NGEU) recovery instrument, the EU Commission adopted a proposal for a regulation on new stand-alone health

¹⁵⁴European Parliament - Committee on Budgets and Committee on Economic and Monetary Affairs (2020/0106 (COD)).

¹⁵⁵Szczepanski (2020), p. 6.

¹⁵⁶Szczepanski (2020), pp. 6-7.

¹⁵⁷Szczepanski (2020), p. 7.

¹⁵⁸Agentschap Innoveren & Ondernemen (2020).

programme for the 2021–2027 period—the 'EU4Health programme'—to strengthen health security and prepare for future health crises.¹⁵⁹ According to the EU Commission, the Covid-19 pandemic had revealed a clear need to strengthen crisis management and health systems, and the EU4Health programme was the EU's response to these challenges. It was intended to build on the lessons learned with a view to better equipping the EU for the future.¹⁶⁰

According to the EU Commission's proposal, EU4Health was to have three main priorities:¹⁶¹

¹⁵⁹Proposal of the European Commission COM/2020/405.

The legal basis for the proposal was Article 168(5) TFEU, which provides for the adoption of incentive measures designed to protect and improve human health and in particular to combat the major cross-border health scourges, measures concerning monitoring, early warning of and combating serious cross-border threats to health, and measures which have as their direct objective the protection of public health regarding tobacco and the abuse of alcohol. Under Article 168 TFEU, the EU is to complement and support national health policies, encourage cooperation between Member States and promote the coordination between their programmes, in full respect of the responsibilities of the Member States for the definition of their health policies and the organisation and delivery of health services and medical care. The EU4Health Programme laid down in the proposal of 28 May 2020, implemented under direct and indirect management, was said to cover actions and incentive measures aimed at preventing health risks and protecting and improving human health. Pursuant to point (a) of Article 6 TFEU, the EU is to have competence to carry out actions to support, coordinate or supplement the actions of the Member States for the protection and improvement of human health. Under Article 168 TFEU the Union is to complement and support national health policies. The objectives of the proposed Regulation are to protect people in the EU from serious cross-border threats to health; to contribute to a high level of protection of public health by supporting actions which promote health, prevent diseases, strengthen health systems, improve availability and affordability in the EU of medicines and other crisis relevant products and support integrated and coordinated work and exchange of best practices in this respect. Given the measures envisaged under the proposal, it was argued that the objectives of the EU4Health Programme cannot be sufficiently achieved by the Member States alone but rather can better be achieved at EU level, and therefore the EU was said to be allowed to adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the EU Treaty. The EU4Health Programme was, moreover, announced to be implemented with full respect to the responsibilities of the Member States, for the definition of their health policy and for the organisation and delivery of health services and medical care as stated in Article 168 TFEU. Hence, the EU Commission deemed that the subsidiarity principle was respected. In accordance with the principle of proportionality, the EU Commission held that its proposal did not go beyond what is necessary to achieve its goals. The EU Commission explained that the principle of proportionality had guided the Commission's design of the EU4Health Programme, which proposed to identify and enable synergies with other programmes and to strengthen collaboration with the Member States in defining priorities for it. The proposal was thus believed to be proportionate and to seek to increased participation of Member States in the actions it supported by lowering as much as possible the barriers to participation, and providing for a reduction of administrative burden on the EU and on the national authorities that remained limited to what is necessary for the EU Commission to exercise its responsibility for implementing the Union budget. (Cf. Proposal of the European Commission COM/2020/405, Explanatory Memorandum, Point 2. Legal basis, subsidiarity and proportionality.)

¹⁶⁰European Parliament (2021b), p. 1.

¹⁶¹European Parliament (2021b), p. 1.

- (1) Strengthening health systems, by focusing on: Improving the accessibility, efficiency and resilience of health systems; Reducing inequalities in accessing healthcare; Tackling non-communicable diseases, such as cancer by improving diagnosis, prevention and care; Exchanging of best practices on health promotion and disease prevention; Scaling up networking through the European reference networks and extending it to infectious and non-communicable diseases; and Supporting global cooperation on health challenges to improve health, reduce inequalities and increase protection against global health threats.
- (2) Making medicines available and affordable, by focusing on: Making medicines, medical devices and other critical health supplies available and affordable for patients and health systems; Advocating prudent and efficient use of medicines such as antimicrobials; and Supporting innovative medical products and greener manufacturing.
- (3) Tackling cross-border health threats, by focusing on: Ensuring prevention, preparedness, surveillance and response to cross-border health threats; Building emergency reserves of medicines, medical devices and other health supplies; Establishing a EU health emergency team to provide expert advice and technical assistance in case of a health crisis; and Coordinating emergency healthcare capacity.

Under this proposal of 28 May 2020, funding for the new programme would amount to EUR 9.4 billion in constant 2018 prices, or \pm EUR 10.4 billion in prices prevailing at the time of the proposal.¹⁶²

However, as health issues are not high on the neoliberal agenda, already during the negotiations on the EU's long-term budget, the envelope allocated to EU4Health was revised downwards, compared with what was originally proposed.¹⁶³

In the European Parliament, the Committee on the Environment, Public Health and Food Safety (ENVI) received responsibility for the file. The rapporteur, Cristian-Silviu Buşoi (EPP, Romania), was appointed on 2 June 2020. On 14 October 2020, ENVI adopted the rapporteur's draft report.¹⁶⁴

¹⁶²European Parliament (2021b), p. 2.

More precisely, according to Point 4 of the Explanatory Memorandum of the Proposal of May 28, 2020, the total budget allocated for the EU4Health Programme would amount to EUR 10,397,614,000 (in current prices) for the 2021–2027 period. (Proposal of the European Commission COM/2020/405, Explanatory Memorandum, Point 4. Budgetary implications.) ¹⁶³European Parliament (2021b), p. 2.

On July 21, 2020, the EU Council adopted conclusions on the NGEU recovery instrument and the multiannual financial framework (MFF) for 2021–2027. According to the conclusions, the EU4Health programme would be allocated EUR 1.7 billion in constant 2018 prices. On November 10, 2020, the European Parliament and the German Presidency of the Council reached a political agreement on the 2021–2027 MFF and new own resources. On December 17, 2020, the European Parliament gave its consent to the next MFF. The EU4Health programme was to be allocated a budget of EUR 5.1 billion in 2018 prices for the 2021–2027 period. (European Parliament (2021b), p. 2.)

¹⁶⁴European Parliament (2021b), p. 2.

The EU Council agreed on its mandate for negotiation with the European Parliament on 16 October 2020. The European Parliament confirmed the ENVI report in plenary on 13 November 2020, thereby paving the way for interinstitutional negotiations. On 14 December 2020, the European Parliament and the EU Council reached a provisional agreement. ENVI adopted the final compromise text resulting from these interinstitutional negotiations on 15 January 2021.¹⁶⁵

According to the text, the new EU4Health programme was to support actions in areas where the EU's contribution would have clear added value.¹⁶⁶

The programme's objectives were to include:¹⁶⁷

- (1) Supporting health promotion and disease prevention, including by reducing health inequalities.
- (2) Protecting people in the EU from serious cross-border threats to health and strengthening European health systems' responsiveness to cope with those threats.
- (3) Improving the availability, accessibility and affordability of medicines, medical devices and crisis relevant products (such as hospital equipment, protective clothing and diagnostic tools).
- (4) Strengthening European health systems by improving their resilience and resource efficiency, including through digital transformation.

Of the programme's proposed total budget, 20% was proposed to go to health promotion and disease prevention, 12.5% to procurement complementing national stockpiling of essential crisis-relevant products at the EU level, and 12.5% to supporting global commitments and health initiatives, in particular, the WHO. A further 8% was earmarked for administrative expenses. The remainder of the funds was proposed to be allocated going forward.¹⁶⁸

It was also proposed to establish an EU4Health steering group, which was proposed to be composed of one member and one alternate from each Member State, with the EU Commission providing the group's secretariat. The EU Commission was to consult with stakeholders, including civil society representatives and patient organizations, to seek their input on the annual work programs. The EU

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¹⁶⁵European Parliament (2021b), p. 2.

¹⁶⁶European Parliament (2021b), p. 2.

¹⁶⁷European Parliament (2021b), p. 2.

¹⁶⁸European Parliament (2021b), p. 2.

Commission would then present both the steering group's and the stakeholders' conclusions to the European Parliament once a year.¹⁶⁹

The EU Council's Permanent Representatives Committee endorsed the final compromise at its meeting of 18 December 2020. On 9 March 2021, the European Parliament adopted its first-reading position on this compromise text with 631 votes in favour, 32 against and 34 abstentions. The EU Council then approved this text version on 17 March 2021.¹⁷⁰

Finally, on 24 March 2021, the Regulation (EU) 2021/522 was enacted by the EU Council and the European Parliament. According to Article 3 of Regulation (EU) 2021/522, the Programme shall have a EU added value and complement the policies of the Member States, in order to improve human health throughout the EU and to ensure a high level of protection of human health in all EU policies and activities. It shall pursue the following general objectives in keeping with the "One Health approach", where applicable:

- (a) improving and fostering health in the EU to reduce the burden of communicable and non-communicable diseases, by supporting health promotion and disease prevention, by reducing health inequalities, by fostering healthy lifestyles and by promoting access to healthcare.
- (b) protecting people in the EU from serious cross-border threats to health and strengthening the responsiveness of health systems and coordination among the Member States in order to cope with serious cross-border threats to health.
- (c) improving the availability, accessibility and affordability of medicinal products and medical devices, and crisis-relevant products in the EU, and supporting innovation regarding such products.
- (d) strengthening health systems by improving their resilience and resource efficiency, in particular through:
 - 1. supporting integrated and coordinated work between Member States.
 - 2. promoting the implementation of best practices and promoting data sharing.
 - 3. reinforcing the healthcare workforce.
 - 4. tackling the implications of demographic challenges; and
 - 5. advancing digital transformation.

Article 4 of Regulation (EU) 2021/522 mentions some further "specific objectives".

4.2.3.3.3.3.3 Reinforcing "rescEU"

Already in 2019, the EU had reinforced and strengthened some of the components of its so-called "disaster risk management" by upgrading the in 2013 established "EU

¹⁶⁹European Parliament (2021b), pp. 2–3.

¹⁷⁰European Parliament (2021b), p. 3.

Civil Protection Mechanism".¹⁷¹ The latest element added to this Mechanism¹⁷²—referred to as "rescEU"—had as objective enhancing both the protection of citizens from disasters, as well as the management of emerging risks. In addition, rescEU established a new European reserve of resources (the "rescEU reserve"), which includes a fleet of firefighting planes and helicopters, medical evacuation planes, as well as a stockpile of medical equipment and field hospitals that can respond to a variety of risk situations, ranging from health emergencies, to chemical, biological, radiological, and nuclear incidents.¹⁷³

With special regard to the Covid-19 virus crisis, it was perceived that the latter had overwhelmed the ability of EU Member States to still assist each other. This was especially attributed to the fact that all EU countries were facing the Covid-19 disaster simultaneously and to a similar extent. For such cases, when EU Member States are unable to assist each other due to the high risks faced by each of the EU countries, "rescEU" was meant to provide an extra layer of protection. Through the rescEU reserve, the EU would be enabled to ensure a faster and more comprehensive response.¹⁷⁴

As part of this program, the EU Commission had already created a strategic rescEU medical reserve and distribution mechanism under the umbrella of the so-called "EU Civil Protection Mechanism". This reserve, e.g., enables a swift delivery of medical equipment, such as respiratory ventilators and PPE. The

¹⁷¹Decision 1313/2013/EU.

According to Article 1.1 of the Decision 1313/2013/EU, the "Union Civil Protection Mechanism" ("the Union Mechanism") aims to strengthen the cooperation between the EU and the Member States and to facilitate coordination in the field of civil protection in order to improve the effectiveness of systems for preventing, preparing for and responding to natural and man-made disasters. According to Article 1.2 of the Decision 1313/2013/EU, the protection to be ensured by the Union Mechanism covers primarily people, but also the environment and property, including cultural heritage, against all kinds of natural and man-made disasters, including the consequences of acts of terrorism, technological, radiological or environmental disasters, marine pollution, and acute health emergencies, occurring inside or outside the Union. In the case of the consequences of acts of terrorism or radiological disasters, the Union Mechanism may cover only preparedness and response actions. According to Article 1.3 of the Decision 1313/2013/EU, the Union Mechanism also promotes solidarity between the Member States through practical cooperation and coordination, without prejudice to the Member States' primary responsibility to protect people, the environment, and property, including cultural heritage, on their territory against disasters and to provide their disaster-management systems with sufficient capabilities to enable them to cope adequately and in a consistent manner with disasters of a nature and magnitude that can reasonably be expected and prepared for.

¹⁷²ResEu was added to the EU Civil Protection Mechanism by Decision (EU) 2019/420. Article 1 of Decision (EU) 2019/420 thereto replaced the former article 12 of the Decision (EU) 1313/2013. According to the thus altered Article 12 of the Decision (2U) 1313/2013, "rescEU" was "established to provide assistance in overwhelming situations where overall existing capacities at national level and those pre-committed by Member States to the European Civil Protection Pool are not, in the circumstances, able to ensure an effective response to the various kinds of disasters referred to in Article 1(2)".

¹⁷³European Commission (2021c).

¹⁷⁴European Commission (2021c).

stockpile, hosted by 9 EU Member States (notably Belgium, Denmark, Germany, Greece, Hungary, Romania, Slovenia, Sweden, and The Netherlands), is in this regard intended to allow the EU to react to health crises more quickly. During the Covid-19 crisis, more than 3.5 million of protective face masks, along with respiratory ventilators and other equipment coming from the strategic rescEU distribution centres, were in this manner (re)distributed to countries who needed them most. The rescEU reserve is, furthermore, constantly acquiring and replenishing new and more medical equipment and PPE.¹⁷⁵

The EU also increased financial support for capacities registered in accordance with the so-called "European Civil Protection Pool". This financial support was intended for the adaptation and the repair of capacities, as well as for covering operational costs (inside the EU) and transport costs (outside the EU), when deployed under the EU Civil Protection Mechanism.¹⁷⁶

On 2 June 2020, considering the events around Covid-19, the European Commission also formulated a new proposal for amending Decision 1313/2012/EU.¹⁷⁷ The Commission's new proposal aimed at giving the EU the tools to react more quickly when a serious cross-border emergency, such as Covid-19, strikes and affects (several) EU member countries all at the same time. To accomplish this goal, rescEU was significantly reinforced with EUR 2 billion over 2021–2027. This financial injection was aimed to create reserves of strategic equipment intended for covering health emergencies, forest fire outbreaks, chemical, biological, radiological, or nuclear incidents or other major emergencies. As a result, the total budget for the EU Civil Protection Mechanism would amount to EUR 3.1 billion.¹⁷⁸

Under the EU Commission's new proposal, the EU would be able:¹⁷⁹ (1) to create a reserve of crisis response capacities, (2) to directly procure equipment, (3) to fully finance the development and operational costs of rescEU capabilities, (4) to use its budget more flexibly to be able to prepare more effectively and react faster in times of exceptional needs, and (5) to dispose of the logistical capacity to provide multipurpose air services in case of emergencies, as well as to ensure timely transport and delivery of assistance.

These enhanced strategic capacities were, according to the European Commission, moreover, intended to supplement these of the EU Member States themselves. Said enhanced strategic capacities were also intended to be strategically pre-positioned in such a manner as to guarantee the most effective geographic coverage in response to an emergency. In this manner, a sufficient number of strategic assets would become available in order to support EU member countries and participating states in situations of large-scale emergencies, thereby offering an

¹⁷⁵European Commission (2021c).

¹⁷⁶European Commission (2021c).

¹⁷⁷ Proposal of the European Commission of June 2, 2020, COM(2020) 220 final.

¹⁷⁸European Commission (2020m).

¹⁷⁹European Commission (2020m, 2020n).

effective EU-response.¹⁸⁰ The upgraded EU Civil Protection Mechanism would, finally, equip the EU with assets and logistical infrastructure intended for catering different types of emergencies, including those with a medical dimension.¹⁸¹ This would also include internationally deployable experts, technical and scientific support for all types of disasters, as well as specific medical equipment and personnel, such as "flying medical experts", nurses and epidemiologists.¹⁸²

4.3 Actual Fiscal Policy of the EU and the EU/Euro Area Member States in Times of Covid-19

4.3.1 The National Fiscal Policy Responses: Addressing the Covid-19 Pandemic, Sustaining the Economy and Supporting a Sustainable Economic Recovery

4.3.1.1 Findings by the EU Commission

Shortly after the outbreak of Covid-19 in continental Europe, in the own estimation of the European Commission, the EU Member States undertook what has been referred to as an "unprecedentedly strong and rapid fiscal policy response". The aim of these fiscal measures was to offset the huge contraction in GDP which amounted to about 4.5 percentage points in 2020. On a legal-technical level, these fiscal response measures were made possible by the early activation of the general escape clause to the SGP in March 2020 (cf. Sect. 4.2.2.), as well as by deploying the full flexibility provided by the EU State aid rules, in particular through the "temporary framework" with regard to these rules that were also adopted in March 2020 (cf. Sect. 4.2.2.1.).¹⁸³

In general, the discretionary fiscal measures adopted in 2020 can be grouped into three categories:¹⁸⁴

(1) Immediate fiscal impulse: Such immediate fiscal impulses were given through both additional public expenditure (such as for the purchase of medical supplies, support for keeping people employed, subsidising SMEs, public investments...) and letting go of tax and other revenues (such as the cancellation of certain taxes and social security contributions).

¹⁸⁰European Commission (2020n).

¹⁸¹European Commission (2020n).

¹⁸²European Commission (2020n).

¹⁸³European Commission (2021b), pp. 4–5. Cf., furthermore, European Commission (2021d).

¹⁸⁴Anderson et al. (2020).

The downsize of these measures was that they immediately led to a worsening of the budget balance of the Member States concerned without any direct (financial) compensation prospects.

- (2) Payment deferrals: several member countries resorted to deferring certain payments (instead of completely cancelling them), e.g., with regard to taxes and social security contributions. Such deferment simply implied that these amounts were not cancelled but were still to be paid later. Although such measures improved the cash position of both individuals and enterprises, they did not abolish their obligations. Throughout 2020, albeit some of these postponements lasted for a few months, they still were in most cases intended to expire in 2020. This meant that they had in such cases no impact on the overall budget balance for 2020, but only on possible monthly budget balances. However, there were also postponements of public revenues for 2020 that became due to expire in 2021, or even later. In such cases, there was a deterioration in the fiscal balances of 2020, but this was expected to improve again later. A further tool for improving the cash position of affected individuals and enterprises implied that some member countries postponed loan repayments or payment of utility bills. These measures could, however, also impact government budgets. Even in cases where such loans were provided by private banks, or in cases where the utilities were provided by private suppliers, the fiscal balance of such deferrals was expected to deteriorate with regard to the year 2020, as these deferrals resulted in lower profits for the private enterprises concerned and, hence, in lower resulting profit taxes for the countries themselves, although this was expected to improve later.
- (3) Other liquidity facilities and guarantee mechanisms: this category of measures include export guarantees, liquidity assistance, as well as credit lines through national development banks. A part of these measures were intended to improve the liquidity position of the private sector. Unlike deferrals, which are granted automatically and generally apply to selected target groups, this category of measures required positive action from the affected enterprises. Credit lines and guarantees granted in 2020 in most cases did not weaken the fiscal balance with regard to 2020 (but they could create contingent liabilities that might turn into actual expenditure in 2020, or later).

Table 4.8 shows the amount (as a percentage of GDP) of these measures, as deployed by 18 November 2020, per country.¹⁸⁵

Overall, budget support in the EU—both with regard to automatic stabilisers and discretionary measures—amounted around 8% of GDP in 2020. This percentage was considerably higher than the budget support that had been provided in 2008–2009 (in response to the 2008 financial crisis).¹⁸⁶ Accorded to information provided by the European Commission, Member States, more precisely, resorted to crisis-related discretionary fiscal measures that amounted to almost 4% of GDP in

¹⁸⁵Anderson et al. (2020).

¹⁸⁶European Commission (2021b), pp. 4–5.

	Immediate fiscal		Other liquidity/	
	impulse (%)	Deferral (%)	guarantee (%)	Last update
Belgium	1.4	4.8	21.9	22/10/2020
Denmark	5.5	7.2	4.1	01/07/2020
France	5.1	8.7	14.2	05/11/2020
Germany	8.3	7.3	24.3	04/08/2020
Greece	3.1	1.2	2.1	05/06/2020
Hungary	0.4	8.3	0.0	25/03/2020
Italy	3.4	13.2	32.1	22/06/2020
Netherlands	3.7	7.9	3.4	27/05/2020
Portugal	2.5	11.1	5.5	04/05/2020
Spain	4.3	0.4	12.2	18/11/2020
UK	8.3	2.0	15.4	18/11/2020
United States	9.1	2.6	2.6	27/04/2020

 Table 4.8
 Discretionary 2020 fiscal measures adopted in response to Covid-19 by 18 November 2020, % of 2019 GDP [Source: Anderson et al. (2020)]

2020, on top of already sizeable automatic stabilisers that were estimated at around another 4% of GDP. The biggest part of these discretionary measures consisted of additional expenditure, good for about 3.3% of GDP. This included emergency expenditure for healthcare (0.6% of GDP), e.g., for increasing the capacity of health care systems, for providing protective equipment, and/or for setting up testing and tracing systems. Expenditure measures in other domains amounted to about 2.7% of GDP and, e.g., consisted of compensations to specific economic sectors for income losses, short-time working (STW) schemes, and other measures. Tax relief measures were reported to account for a further 0.4% of GDP.¹⁸⁷

However, Member States were reported to have also provided substantial indirect liquidity support for a percentage of about 19% of GDP, mostly in the form of government guarantees. Most of these guarantee schemes were subject to a formal State aid assessment and to the prior approval by the EU Commission, which was in most cases rapidly granted under the temporary framework with regard to the EU State aid rules.¹⁸⁸

On 20 July 2020, the Council of the EU formally recommended that EU Member States would resort to all necessary measures for effectively tackling the Covid-19 pandemic, supporting the economy and sustaining economic recovery. The EU Council also recommended that Member States would implement fiscal policies aimed at achieving prudent medium-term budgetary objectives, ensuring debt sustainability and supporting investment, where economic conditions permitted this.¹⁸⁹

¹⁸⁷European Commission (2021b), p. 5.

¹⁸⁸European Commission (2021b), p. 5.

¹⁸⁹European Commission (2021b), p. 5.

According to the EU Commission, the measures that have been resorted to by the EU Member States throughout 2020, have especially been effective for protecting employment. In particular, it

Still according to the EU Commission, the vital liquidity support that was granted through fiscal measures, succeeded in preventing that liquidity shortfalls led to solvency problems. This took explicit account of the fact that the business sector hugely suffered during the Covid-19 crisis and that many financially sound companies, with viable business models, had nevertheless found themselves in financial difficulties. The impact of the Covid-19 crisis hereby varied from sector to sector, with businesses in the service sector, which rely more directly on social contacts, particularly having been put under pressure. Government support measures to such businesses included: (1) capital injections, (2) opening credit lines, (3) providing government guarantees for loans, (4) deferring interest payments, (5) postponing or cancelling certain taxes and social contributions, and (6) insolvency-related measures. According to estimates made by the European Commission, without these public support measures (apart from short time working schemes) or new loans, a quarter of EU enterprises would have found themselves in severe liquidity distress by the end of 2020, while already having used up their capital buffers.¹⁹⁰

At the end of 2020, public sector credit guarantees, and loan repayment moratoria, had managed to prevent an increase in loan defaults. Administrative delays, loan repayment moratoria and the temporary relaxation of bankruptcy laws also attributed to fewer firms going bankrupt in 2020 than in the previous year.¹⁹¹

Still, by the end of 2020, these forms of discretionary budget support would decline gradually due to the withdrawal or expiry of emergency measures. With the emergence of what would be referred to as the "third wave" of the Covid-19 pandemic (cf. Sect. 2.4.3.), many EU Member States were by the end of 2020 forced to reconsider the pace of withdrawal of emergency measures and continued

was considered that national initiatives for supporting short time working (STW) schemes succeeded to protect about 20% of employment throughout the EU. Said Member States were hereby reported of having made extensive use of financial support in the form of favourable loans under the SURE programme (cf. Sect. 4.2.3.2.2.) for financing both STW schemes and similar measures to protect employees and the self-employed. The measures made possible under SURE financing were of a varied nature, including elements as: flexibilization of existing schemes to support job transitions, skills upgrading, and exceptional vocational training as an alternative for reduced work time. Such government-sponsored schemes allowed for reduced labour costs for enterprises, while at the same time providing workers with a better replacement income than those possible under more conventional unemployment benefits. These measures also helped to preserve jobs and to limit further falls in the number of jobs, household disposable income as well as domestic demand. According to the EU Commission, these schemes proved to be very effective: notwithstanding the sharp decline in economic activity itself, the EU's employment rate only increased marginally throughout 2020. This increase was said to have been much smaller than that which would have appeared in light of the normal relationship between unemployment figures and (decline in) GDP growth. Moreover, the unemployment rate in the EU fluctuated much less than the one in the United States. Finally, employment support schemes were most effective in countries with already well-established national programmes. Countries that resorted to such schemes only for the first time during the Covid-19 pandemic reported a slightly smaller mitigating effect from the Covid-19 measures on unemployment. (Cf. European Commission (2021b), p. 5.)

¹⁹⁰European Commission (2021b), pp. 5–6.

¹⁹¹European Commission (2021b), pp. 5–6.

restrictions on social contacts, making it necessary for national fiscal responses to remain agile.¹⁹²

Overall, the impact of the Covid-19-related measures was expected to be around 2.6% of GDP by March 2021, and around 0.6% of GDP by 2022. In addition, there was an expectancy that automatic stabilisers would continue to support the economy.¹⁹³

The euro area Member States' "Draft budgetary plans" for 2021 which said Member States gradually started to prepare in the course of 2020, proved to be generally in line with the EU's fiscal policy recommendations. In the autumn of 2020, the EU Commission started assessing the draft fiscal plans of the euro area Member States for 2021 on the basis of a qualitative assessment of the fiscal measures resorted to, including their targeted and temporary nature. Most measures in the draft budgetary plans were hereby aimed at maintaining economic activity against a background of high uncertainty. Albeit the majority of these measures resorted to in most euro area Member States budget plans were temporary, some measures in the draft budgetary plans of a few Member States turned out not to be temporary, or to be offset by compensatory measures. Following the EU Commission assessment of the draft 2021 budget plans, Member States adopted further measures with an additional direct budgetary impact of 1.0% of EU GDP in 2021. Almost all of these were on the expenditure side of the Member States' budgets. E.g., additional expenditure on healthcare and on short time working (STW) schemes were estimated to amount to 0.2% of GDP each. Additional expenditure also included various support schemes for enterprises affected by the Covid-19 crisis, including subsidies for particularly affected sectors.¹⁹⁴

4.3.1.2 Illustration: The Example of France

To the extent that the analysis of Sect. 4.3.1.1 is based upon abstract information provided by the European Commission regarding, as such, very concrete fiscal and liquidity measures that varied from country to country (in light of the socioeconomic, political, cultural ... specificities of each of the EU Member States concerned), a more detailed overview of the situation in a specific country may provide some further clarification of what all this implies in practical terms. In light of the availability of figures, it has been opted to sketch such illustration based on the example of France. This overview has, moreover, been based on the figures presented by the European think tank "Bruegel" which specializes in economics and in providing economic assessments.¹⁹⁵ The dates of announcement of the figures which were used by Bruegel to make its analysis of France have been: 12, 24 and

¹⁹²European Commission (2021b), p. 6.

¹⁹³European Commission (2021b), p. 6.

¹⁹⁴European Commission (2021b), p. 6.

¹⁹⁵Cf. at https://www.bruegel.org/about/.

26 March 2020, 24 April 2020, 14 and 26 May 2020, 10 June 2020, 3 September 2020, and 29 October 2020. The analysis of Bruegel, moreover, followed the division into the three categories mentioned in Sect. 4.3.1.1. This overview is presented in Table 4.9.

4.3.2 The EU Policy Response: Making Best Use of the General Escape Clause and 'Next Generation EU'

As explained earlier, in March 2020 the EU authorities had resorted to activating the general escape clause of the SGP which basically allows for a temporary derogation from the normal functioning of the EU fiscal rules in an acknowledged situation of severe economic downturn (cf. Sect. 4.2.2.).

As regards the preventive part of the SGP in particular, Articles 5(1) and 9(1) of Regulation (EC) No 1466/97 laydown that:

in periods of severe economic downturn for the euro area or the Union as a whole, member states may be allowed temporarily to depart from the adjustment path towards the mediumterm budgetary objective, provided that this does not endanger fiscal sustainability in the medium term.

At the same time, however, the EU Commission considered that the activation of the general escape clause did not suspend the (other) procedural requirements of the SGPt, but that this activation would allow the EU Commission and the EU Council to take the necessary policy coordination measures for fighting the pandemic within the framework of the Pact, while being allowed from deviating from the budgetary rules that would apply under normal circumstances.¹⁹⁶

In May 2020, the Commission approved reports under Article 126(3) of the Treaty on the Functioning of the EU with regard to all Member States, with the exception of Romania. The reason for this exclusion of Romania was that the latter country was already subject to an excessive deficit procedure at the time. Said reports assessed the Member States' compliance with the so-called "deficit criterion" for 2020, based on their own plans and/or on the European Commission's spring 2020 forecast. With regard to some Member States, compliance with the debt criterion for 2019 was also assessed.¹⁹⁷

As a result of their policy response to the Covid-19 pandemic, EU Member States' planned deficits with regard to 2020 were in most cases above the 3% of GDP threshold. Given the fact that this was the case for most Member States, the European Commission could only conclude that no decision was needed at that stage for the policy question of whether an "excessive deficit procedure" was to be opened

¹⁹⁶European Commission (2021b), pp. 6–7.

¹⁹⁷European Commission (2021b), p. 7.

Immediate fiscal impulse (EUR 124 billion)	Deferrals (EUR 210 billion)	Other liquidity and guarantee measures (EUR 342 billion)
EUR 14 billion per month of confinement for the measures announced on October 20, 2020. EUR 6 billion will go to a reactivated and strengthened Solidarity Fund for small firms, EUR 1 billion to relieving social contributions, and a further EUR 7 billion to partial unemploy- ment (activité partielle). Another EUR 1 billion is written into the 2021 budget to compensate landlords who reduce rents for businesses in Q4 2020. In total, EUR 20 billion will be written into the revised budget for 2020 as a precautionary measure.	EUR 22.5 billion (estimate): Since the government has estimated that of the total EUR 25.5 billion for defer- rals and cancellations of taxes and social security contributions, roughly EUR 3 billion would be cap- tured by cancellations, this leaves EUR 22.5 billion for deferrals (sources 1 and 2).	EUR 0.5 billion from the 'France Relance' Programme announced on 3 September 2020.
EUR 5.3 billion from the 'France Relance' Programme announced on September 3, 2020.	EUR 180 billion, debt repayment moratorium: corpo- rate loams repayments are deferred by 6 months (source). We estimate the volume as follows: the out- standing stock of loams to non-financial corporations was EUR 1063 billion in January 2020 (source). By assuming an average maturity of 3 years, one-sixth of it would expire in the next 6 months, leading to EUR 177 billion amortisation postponement. As regards interest, total interest revenue of French banks was EUR 8.7 billion in 2018 (source), which include revenues from households and other sectors. Given that household loams amount to EUR 1300 billion (source), somewhat less than half of interest income would come from the non-financial corporate sector in the full year. The debt repayment moratorium applies for 6 months, but interest income would have increased from 2018 to 2020 in the absence of the pandemic-	Public guarantee of loans made up until 21 December 2020, up to EUR 315 billion total (source). Large companies that continue paying their shareholders' dividends cannot benefit from this loan guarantee. (source) This includes EUR 2 billion in public loan guarantees specif- ically for start-ups, which can cover up to 90% of the loan, depending on loan maturity. These loans can be distributed by private banks and Bpifrance (source), EUR 10 billion to activate a public reinsurance mechanism on outstanding amounts in credit insurances and EUR 5 billion to expand the public reinsurance mechanism called "Cap Francexport" which reinsures export credit insurance for French companies.

 Table 4.9 Fiscal measure of France by 29 October 2020 [Source: Anderson et al. (2020)]

ferred al of illion. ricity EUR 6.5 billion of State-guaranteed "seasonal" reve- loans to the tourism sector, with more o% or favourable conditions than regular State- to guaranteed loans.	can- f sury is	EUR 0.5 billion guarantees by internal reallocations within Bpifrance and/or budget allocations.	ibu- EUR 20 billion of credits to 'strategic economic actors' to reinforce their capital or debt securi- ties. This new programme was to be managed by the Commissioner for State Participation (head of the Agence des participations de l'Etat, which manages the state's holdings in firms).
cased economic distribution, so we assume a deferred interest of EUR 3 billion, leading to total deferral of EUR 177 billion + EUR 3 billion = EUR 180 billion. EUR 3 billion: deferral of utility fees (gas, electricity and water) and rent, for small companies with a reve- nue of less than EUR 1 million, who have lost 70% or more of their revenue in March 2020, compared to March 2019. The cost to the Treasury announced by Bruno Le Maire, minister of Finance, for all deferrals of fiscal and social costs to companies was soft fiscal and social costs to companies was	EUR 32 billion are costs due to tax deferrals or can- cellations (see point above). As such, the cost of deferral of utility fees and rent to the public treasury is estimated to be EUR 3 billion.	EUR 170 million: Rent payment deferrals of 3– 6 months for companies in the Banque des Territoires' portfolio in the tourism sector.	EUR 2.2 billion: Exonerations from social contribu- tions for SMEs in the tourism sector.
EUR 8 billion for national health system. This will be used to buy necessary material, including masks, as well as to fund exceptional compensations for health workers.		EUR 31 billion for keeping people employed ("chômage partiel"): Companies pay their workers 70% of their gross salary (which is roughly equivalent to 84% of net salary, source), or 100% of net salary for those at the minimum wage, in which case the State reimburses them entirely for all salaries paid, up to 4.5 times the minimum wage. The State covers EUR 16 billion through its budget, and the remaining EUR 8 bil- lion are provided by the Unedic (mandatory	EUR 8 billion subsidies through the Solidarity Fund, for small companies with a revenue of less than EUR 1 million, who have lost 50% or more of their revenue in March 2020, compared to March 2019.

Immediate fiscal impulse (EUR 124 billion)	Deferrals (EUR 210 billion)	Other liquidity and guarantee measures (EUR 342 billion)
EUR 0.5 billion: Extension of replacement income for unemployed people and postpone- ment to first September 2020 of implementation of reform on retirement system.	EUR 3.5 billion: Plan to support the aeronautical industry. Measures include a EUR 1.5 billion morato- rium for the reimbursement of export credits and EUR 2 billion to make up for less stringent repayment conditions for any new purchases of Airbus planes.	EUR 925 million increase in the Fund for Eco- nomic and Social Development's (FESD) funding capacity. This programme provides loans to weak companies or companies facing economic difficulties, especially companies of intermediary size (between 250 and 4900 employees and less than EUR 1.5 billion revenue).
EUR 3 billion: Cancellation of taxes and social security contributions for companies and inde- pendent workers facing difficulties, which is subject to an individual case examination. All large companies that deferred their fiscal and social contributions while also continuing to pay their shareholders' dividends will have to reim- burse the State treasury with penalties.		
EUR 3.9 billion: Emergency plan to support tech start-ups. This plan includes an envelope of 160 million euros, managed by Bpifrance to finance bridges between two fundraising campaigns, EUR 1.5 billion to accelerate the reimbursement of State tax credits to start-ups, namely research tax credits, EUR 250 million to accelerate the payment of support for innovation of the PIA (<i>Programme d'investissements d'avenity</i> , EUR 1.3 billion of support to innovation vating companies through Bpifrance, a EUR 150-million "French Tech Sovereignty" fund to reinforce France's strategic autonomy in		

 Table 4.9 (continued)

future technologies and key markets, EUR 100 million of loans to provide treasury capacity to viable start-ups that could not get a State-guaranteed loan, EUR 150 million to the Support Programme for Major Innovation (PSIM), EUR 80 million for innovation and SMEs in the framework of the innovation contest i-Nov, EUR 200 million of funding through various other programmes.	
EUR 2.5 billion: Additional emergency credit.	
EUR 21.5 billion: Anticipated reimbursement of State tax credits. (1) Claims on company taxes are reimbursed at a rate of 75% of the following sums: EUR 1.5 billion for research State tax credits (CIR), EUR 6 billion for competitivity and employment, EUR 1 billion other State tax credits and around EUR 10 billion for other reimbursements; (2) Claims on Value Added Tax are reimbursed at a rate of 100% for the sum of EUR 8 billion.	
EUR 8 billion: plan to support automotive sector, which includes policies to encourage renewal of the French car fleet with a focus on less carbon- intensive vehicles, a EUR 1 billion fund for the modernization and digitization of automotive production chains, and support for companies and employees, especially encouraging voca- tional training schemes.	
EUR 9.3 billion (estimate): Plan to support the tourism industry. Measures include: maintaining partial unemployment measures, extending	
	(continued)

Table 4.9 (continued)		
Immediate fiscal impulse (EUR 124 billion)	Deferrals (EUR 210 billion)	Other liquidity and guarantee measures (EUR 342 billion)
eligibility for Solidarity Fund beyond the month of May 2020 and reinforcing investment plan in conjunction with BpiFrance and the Banque des Territoires. The full plan amounts to EUR 18 bil- lion, from which we remove EUR 2.2 billion of exonerations from social contributions and EUR 6.5 billion of State-guaranteed loans.		
EUR 300 million: Fund to finance recruitment subsidies when employers hire an apprentice currently in training.		
EUR 3.5 billion (estimate): Plan to support the aeronautical industry. This includes: EUR 1 bil- lion investment fund for the aerospace industry; EUR 1.5 billion of funding for the Council for Civil Aeronautical Research (CORAC) to develop low-carbon technologies; EUR 1 billion for temporary unemployment measures (this number is not given so we estimate it by subtracting the sum of all other measures in the plan from the total EUR 15 billion of the overall funding in the plan to support the aerospace industry). (Note: an additional EUR 832 million of military public orders and EUR 300 million for the modernization of the aerospace industry is included in France Relance.)		
Measures include: EUK 83 million to reinforce the loan capacity of the Institute for the financing		

 Table 4.9 (continued)

of cinema and cultural industries (IFCIC); EUR 50 million to support the musical sector; EUR 50 million to support the musical sector; EUR 45 billion mobilized for regional port the press. EUR 4.5 billion mobilized for regional governments. EUR 720 million to support the most vulnerable members of French society. Measures include: EUR 200 million aimed at helping stu- dents; EUR 230 million aimed at reacting "learning vacation" centres for school children who were taken out of school due to the con- finement; EUR 7 million to support victims of violence towards women.		
EUR 4.5 billion mobilized for regional governments.EUR 720 million to support the most vulnerable members of French society. Measures include: EUR 200 million aimed at helping homeless people; EUR 230 million aimed at helping stu- dents; EUR 233 million aimed at creating "learning vacation" centres for school children who were taken out of school due to the con- finement; EUR 7 million to support victims of violence towards women.EUR 4.5	of cinema and cultural industries (IFCIC); EUR 50 million to support the musical sector; EUR 50 million to insure film shoots that got delayed or cancelled; EUR 200 million to sup- port the press.	
EUR 720 million to support the most vulnerable members of French society. Measures include: EUR 200 million aimed at helping homeless people; EUR 230 million aimed at helping stu- dents; EUR 283 million aimed at creating "learning vacation" centres for school children who were taken out of school due to the con- finement; EUR 7 million to support victims of violence towards women.	EUR 4.5 billion mobilized for regional governments.	
	EUR 720 million to support the most vulnerable members of French society. Measures include: EUR 200 million aimed at helping homeless people; EUR 230 million aimed at retating "learning vacation" centres for school children who were taken out of school due to the con- finement; EUR 7 million to support victims of violence towards women.	

for all of these Member States. This was justified by the exceptional uncertainty created by the Covid-19 outbreak on a macroeconomic and fiscal level, including for the design of a credible fiscal policy path.¹⁹⁸

According to the European Commission, any decision on the continued activations of the general escape clause of the SGP had to be taken on the basis of an overall assessment of the state of the EU economy in light of quantitative criteria. By May 2021, such an economic outlook still remained very uncertain, making it impossible to reach the conclusion (with a sufficient degree of certainty) that the severe economic downturn in the EU or the euro area would soon come to an end, especially in the light of the disastrous start of the European Covid-19 vaccination campaigns (cf., furthermore, Sect. 9.4.3.) and of the outbreak of a third wave of the pandemic (cf. Sect. 2.4.3.). In the opinion of the European Commission, the deactivation of the general escape clause (and, hence, the reactivation of the SGP as a whole) remained conditional on the state of the EU economy, as well as on the state of the euro area economies, with the European Commission explicitly acknowledging that it would take time for these economies to return to more normal economic conditions.¹⁹⁹

In the opinion of the European Commission, the main quantitative criterion for making the overall assessment of whether or not to continue the deactivation of the SGP's general escape clause would be the measuring of the overall economic activity in the EU or the euro area, compared to pre-crisis levels (at the end of 2019). According to the EU Commission's winter forecast for 2021, EU GDP was expected to again amount to its 2019 level no sooner than mid-2022. This was considered to be a sufficient preliminary indication for justifying that the general escape clause would probably remain activated throughout 2022, only to be deactivated as of 2023.²⁰⁰

4.4 United States

4.4.1 Overview

In the course of 2020 and 2021, the American legislator approved several major pieces of legislation for responding to the Covid-19 pandemic.²⁰¹

This first important legal measure for dealing with the Covid-19 crisis, was already resorted to on 6 March 2020. It concerned "H.R. 6074",²⁰² or the "Coronavirus Preparedness and Response Supplemental Appropriations Act". This law

¹⁹⁸European Commission (2021b), p. 7.

¹⁹⁹European Commission (2021b), p. 7.

²⁰⁰European Commission (2021b), p. 8.

²⁰¹USAfacts (2020).

²⁰²Cf. H.R. 6074 — 116th Congress (2019–2020).

provided USD 8.3 billion in funding for vaccine development, loans to affected small enterprises, evacuations and emergency activities at State Department facilities, besides a variety of other humanitarian assistance.²⁰³

The second piece of legislation concerned "H.R. 6201",²⁰⁴ or the "Families First Coronavirus Response Act". This law was passed on 17 March 2020 and provided roughly USD 100 billion in tax credits aimed at supporting emergency paid leave benefits. The law also expanded unemployment benefits and mandated that employers would give, approximately, 2 weeks of paid sick leave to their employees. The law at the same time increased access to food and nutrition support, targeted at both children and adults and accomplished this through waiving specific program requirements.²⁰⁵

However, the centrepiece legislation for dealing with the Covid-19 crisis under the Trump administration, was the "Coronavirus Aid, Relief, and Economic Security Act" or the "CARES Act",²⁰⁶ which was approved by the US Senate on 19 March 2020 and then passed by the US Congress on 27 March 2020. (Cf. Sect. 4.4.2.)

A fourth piece of legislation still voted under the presidency of Donald Trump, was the "Consolidated Appropriations Act" (CAA), 2021. (Cf. Sect. 4.4.3.)

A fifth important piece of legislation for dealing with the consequences of the Covid-19 pandemic was President Joe Biden's "American Rescue Plan Act" of 11 March 2021.²⁰⁷ The latter law was aimed at providing additional relief to workers and employers through a combination of further tax credits, expanded federal unemployment benefits, and additional forms of small-business aid²⁰⁸ (cf. Sect. 4.4.4.).

4.4.2 The "Coronavirus Aid, Relief, and Economic Security Act" (or "CARES Act")

4.4.2.1 Passing of the CARES Act

The "Coronavirus Aid, Relief, and Economic Security Act" or the "CARES Act"²⁰⁹ was approved by the US Senate on 19 March 2020. The CARES Act was then passed by the US Congress on 27 March 2020. The Act, purportedly, allocated USD 2.2 trillion for providing fast and direct economic aid to the American people negatively impacted by the Covid-19 pandemic. Of that money, approximately

²⁰³USAfacts (2020).

²⁰⁴Cf. H.R. 6201 — 116th Congress (2019–2020).

²⁰⁵USAfacts (2020).

²⁰⁶US Congress (2020a).

²⁰⁷US Congress (2021).

²⁰⁸Nagele-Piazza (2021).

²⁰⁹US Congress (2021).

USD 14 billion was granted to the Office of Postsecondary Education, under the form of a programme that has been referred to as the "Higher Education Emergency Relief Fund", or "HEERF".²¹⁰

The CARES Act's other principal provisions included:²¹¹

- A new Paycheck Protection Program, which expanded eligibility for, and provided USD 349 billion to fund, special new loans, loan forgiveness, and other relief to small enterprises that were negatively affected by the Covid-19 crisis.
- A USD 500 billion federal stimulus program for air carriers and other companies in severely distressed sectors of the American economy. The lending programs imposed stock buyback, dividend, executive compensation, and other restrictions on direct loan recipients.
- Changes to the tax code in order to provide economic relief to businesses.
- The creation of rapid tax rebates and expansion of unemployment benefits to provide relief to individuals.
- Substantial federal spending and significant changes for healthcare companies, providers, and patients.
- The creation of a Coronavirus Relief Fund (CRF).

4.4.2.2 General Budgetary Impact of the CARES Act

According to Boccia and Bogie, the official amount of financial support that the CARES Act provided in response to the Covid-19 pandemic amounted to USD 1.8 trillion, an amount lower than previous projections of almost USD 2.3 trillion, in part because the former estimation excluded loan guarantees on debt that the government expected to be repaid. According to these authors, by comparison, the American Recovery and Reinvestment Act of 2009 had (only) injected USD 831 billion into the US economy through tax cuts and spending programs. The CARES Act passed in March 2020 was, hence, more than twice the size of the American Recovery and Reinvestment Act, thereby dwarfing what had previously been the country's largest stimulus package since World War II.²¹²

By means of a second comparison, with regard to the fiscal year 2019, the US federal government had spent a total of USD 1.3 trillion on discretionary programs. That was just over 74% of the spending approved by the CARES Act alone. Moreover, of that USD 1.3 trillion for the year 2019, the US Congress allocated USD 676 billion for national defence. By comparison, federal revenues that year totalled USD 3.5 trillion. The CARES package alone was expected to consume more than half of those revenues. The CARES Act was, furthermore, expected to add USD 1.8 trillion more to the government deficit for 2020 alone. When adding the

²¹⁰Gore et al. (2020), p. 1; Boccia and Bogie (2020).

²¹¹Gore et al. (2020), p. 1.

²¹²Boccia and Bogie (2020). Cf., furthermore, USAfacts (2020).

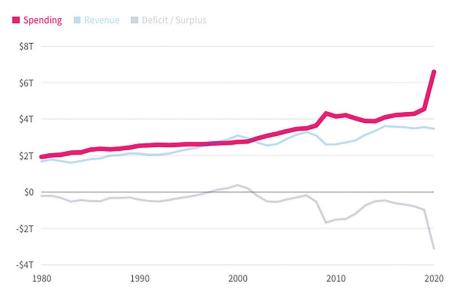


Fig. 4.1 US government spending, revenue, and deficit/surplus [Source: USAfacts (2020)]

amounts of the early Covid-19 measures, namely the "Families First Coronavirus Response Act" at USD 192 billion, and the initial "Coronavirus Preparedness and Response Supplemental Appropriations Act" at USD 8 billion, the US federal government deficit for 2020 had been tripled. The long-term debt impact, with additional borrowing costs included, were expected to even be greater.²¹³

Figure 4.1 gives an indication of the evolution of the US federal government spending, revenue and deficit/surplus as of the 1980s.²¹⁴

4.4.2.3 Content of the CARES Act, in Headlines

According to a profound and informative assessment undertaken by USAfacts, the full text of the CARES Act is over 800 pages, with appropriations of up to USD 500 billion, but also many much smaller appropriations, such as a USD 100 million to support the Transportation Security Administration, and USD 9.1 million for supporting cyber security and infrastructure protection.²¹⁵

Figure 4.2 provides an overview of the Act's main spending areas.

According to "USAfacts", the biggest part of spending under the CARES Act has been on roughly USD 500 billion for supporting ailing enterprises. This spending segment of the CARES Act was reported to include, amongst others, the following

²¹³Boccia and Bogie (2020).

²¹⁴USAfacts (2020).

²¹⁵USAfacts (2020).

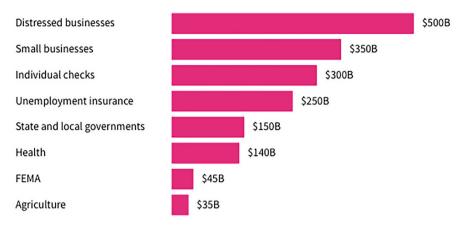


Fig. 4.2 The largest budget components of the CARES Act [Source: USAfacts (2020)]

components: (1) over USD 425 billion for allowing the US Federal Reserve to rapidly expand its lending activities, as well as its purchases of government-backed securities, (2) USD 50 billion for loans to passenger airlines, (3) USD 8 billion for loans to cargo airlines, and (4) USD 17 billion for support to other enterprises critical for ensuring national security.²¹⁶ However, the possibility to provide loans to enterprises was not unconditional. E.g., employees entitled to remuneration amounting to more than USD 425,000 per year, were not to be given any higher remuneration, any repurchase of shares was prohibited during the term of the loan, and companies had to maintain their personnel level as high as possible.²¹⁷

The second biggest part of the spending component of the CARES Act concerned about USD 350 billion of support to small enterprises (referring to "businesses with fewer than 500 employees"). The bulk of this money for small enterprises ran through one of the best-known programmes of the CARES Act, namely the "Paycheck Protection Program". This programme allowed small enterprises to borrow up to 250% of their average monthly wage bill, with a maximum limit of USD 10 million. Applications for receiving such a loan could be made through most banks. These loans were specifically intended to cover 8 weeks of payroll expenses and additional debt repayments. Money from such loans that was effectively used for paying wages and existing interest payments on mortgages, rent payments, leases and utilities, would, furthermore, be "waived"—i.e., would not have to be paid back by the lending enterprises.²¹⁸

²¹⁶USAfacts (2020), furthermore, pointed to the fact that, by way of comparison, during the 2008–2009 recession, General Motors and Chrysler had received around USD 80 billion in support under the "Troubled Asset Relief Programme" (of which USD 63 billion had been repaid).
²¹⁷USAfacts (2020).

²¹⁸USAfacts (2020).

By 6 May 2021, the funding for the Paycheck Protection Programme had almost run out. Only USD 8 billion remained in the programme which, since its inception, had disbursed nearly

Another key component of the CARES legislation concerned a programme aimed at providing eligible persons with a tax rebate of USD 1200, to be increased by USD 500 per eligible child. The rebate already declined at income levels above USD 75,000 (or USD 150,000 for joint residents). According to an estimate made by the Joint Committee on Taxation, this programme was good for a cost of USD 300 billion over the subsequent 2 years.²¹⁹

USD 250 billion dollars were allocated to a temporary programme for "Pandemic Unemployment Assistance (PUA)". This programme extended coverage to a huge number of workers, including self-employed people and gig workers. The programme also provided up to 39 weeks of federally funded unemployment insurance (UI) benefits for unemployed workers who were not eligible for other unemployment benefits or paid leave. State legislation had to determine a person's benefit amount based on such a person's recent earnings. Under this programme, all eligible unemployment insurance benefits were to be supplemented by an additional benefit of USD 600 per week during the weeks of unemployment ending on, or before, 31 July 2020. For context: The average weekly regular unemployment benefit in the United States amounted to USD 356 per week in 2018. In 2018, claims for 79.2 million weeks of regular unemployment insurance had been made, accounting for USD 25.6 billion in government expenditure. According to data provided by the Bureau of labor Statistics, the median weekly wage for part-time workers in 2019 was USD 279. For full-time workers, it amounted to USD 933 per week.²²⁰

The CARES Act also established a USD 150 billion Coronavirus Relief Fund (CRF) for support to state, local and tribal governments. States were to receive an amount proportional to their population, with a minimum amount of USD 1.25 billion per state. The fund was to be used for all necessary expenses related to Covid-19. For some background, state and local governments across the United States were reported to have spent a total of USD 3.6 trillion in 2017, with large states such as California having spent a whopping USD 567 billion, and smaller states such as Idaho having spent USD 13 billion.²²¹

The CARES Act also distributed more than USD 140 billion in funds for various health-related efforts, in addition to an amount of USD 8.3 billion already before

USD 800 billion in loans that could be forgiven. It, moreover, appeared that, although the Trump administration had billed the initiative as targeting "small businesses", a significant portion of the loan forgiveness had gone to companies employing thousands of employees, or to franchisees of large corporations. Furthermore, a loophole in the Small Business Administration (SBA) programme had allowed money to be distributed to restaurants and hotels that should not have been considered small "businesses". The on 6 May 2021 still remaining USD 8 billion in PPP funds were intended to be distributed through community financial institutions, which generally provide loans to businesses run by women, minorities and other disadvantaged communities. This would close the application window for most other enterprises, a few weeks earlier than expected. (Cf. Gandel (2021).)

²¹⁹USAfacts (2020).

²²⁰USAfacts (2020).

²²¹USAfacts (2020).

been earmarked for public health (cf. Sect. 4.4.2.4.7.). The CARES Act thus provided USD 100 billion to a "Public Health and Social Services Emergency Fund" which was intended to provide money to hospitals and other health care facilities responding to the Covid-19 pandemic. The law also allocated USD 16 billion for the "Strategic National Stockpile" and USD 27 billion for the development of Covid-19 diagnostics, vaccines, therapeutic treatments and personal protective equipment. Several other health-related funds were also distributed under the CARES Act, including USD 4.3 billion for the Centers for Disease Control and Prevention (CDC) and USD 200 million for the Centers for Medicare and Medicaid Services. To illustrate, the federal government had spent roughly USD 55 billion on public health in 2019, which represented a mere 0.1% of total federal spending that year.²²²

4.4.2.4 Further Details About Specific Components/Programs of the CARES Act

4.4.2.4.1 Paycheck Protection Program

According to Gore et al., the CARES Act added USD 349 billion to the already above-mentioned new "Paycheck Protection Program" that is administered by the Small Business Administration ("SBA"). This program was set up to provide loans and loan forgiveness in order to furnish enterprises with liquidity to keep employees on the payroll. The maximum amount available to a small enterprise under a Paycheck Protection Program loan was the lesser of: (1) 2.5 times the amount of the enterprise's average monthly payroll costs, excluding any compensation of an employee in excess of his annual salary of USD 100,000 or compensation to an employee with a principal residence outside of the USA; or (2) USD 10 million.²²³

Enterprises were allowed to use these loans to pay:²²⁴

- Payroll costs, including salaries, wages, paid leave, group healthcare benefits, retirement benefits, and state or local taxes; and
- Interest on any mortgage obligation, rent, utilities, and interest on certain pre-existing debt obligations.

According to the mentioned authors, ordinarily, the SBA applied the size standards in 13 C.F.R. § 121.201 for determining eligibility for SBA loans. However, the Paycheck Protection Program of the CARES Act altered the SBA's size standards to expand eligibility for these new SBA loans in two significant manners:²²⁵

²²²USAfacts (2020).

²²³Gore et al. (2020), p. 2.

²²⁴Gore et al. (2020), p. 2.

²²⁵Gore et al. (2020), p. 2.

- (a) First, the CARES Act increased the maximum size of enterprises under the standard to the greater of: (1) 500 employees; or (2) the prevailing maximum in the SBA's regulations. For accommodations or food service enterprises, the Act applied the 500-employee size standard at each business location, not to the total across all locations. Moreover, under the SBA's affiliation rule, the SBA aggregated the business and all affiliated companies for purposes of size standards.²²⁶
- (b) Second, the Paycheck Protection Program waived the affiliation rule for three types of enterprises: (1) Accommodations or food service businesses with no more than 500 employees at each business location; (2) Franchises assigned an SBA franchise identifier code; and (3) Businesses that received financial assistance through the Small Business Investment Company program.²²⁷

The Paycheck Protection Program also waived the SBA's usual rule that the eligible enterprise should be unable to obtain credit elsewhere, as well as the usual personal guarantee and collateral requirements.²²⁸

4.4.2.4.2 Federal Stimulus Relief for Severely Distressed Economic Sectors

The Federal Stimulus Relief for Severely Distressed Economic Sectors program of the CARES Act authorized the Treasury Secretary to provide loans, loan guarantees, and other investments in support of eligible enterprises, states, and municipalities. Under this program, the CARES Act authorized up to USD 500 billion for lending programs, including:²²⁹

- Up to USD 25 billion to make loans and loan guarantees for passenger air carriers, eligible enterprises that were certified under 14 CFR Part 145 (i.e., maintenance repair operations), and ticket agents.
- Up to USD 4 billion to make loans and loan guarantees for cargo air carriers.
- Up to USD 17 billion to make loans and loan guarantees for "businesses critical to maintaining national security."
- Up to USD 454 billion, plus any remainder from the three categories above, to make loans and loan guarantees to, and investments in, Federal Reserve programs or facilities, for the purpose of providing liquidity to the financial system that supports lending to otherwise eligible enterprises, states, or municipalities.

²²⁶Gore et al. (2020), p. 2.

²²⁷Gore et al. (2020), p. 2.

²²⁸Gore et al. (2020), p. 2.

²²⁹Gore et al. (2020), p. 2.

4.4.2.4.3 Passenger Air Carriers and Related Enterprises in Particular

As regards the conditions the CARES Act imposed on stimulus loans to passenger air carriers and related enterprises, cargo air carriers, and enterprises critical to national security in particular, the CARES Act instructed the US Treasury Secretary to publish procedures for applications and minimum requirements within 10 days upon enactment of the Act. The CARES Act also imposed several conditions in addition to otherwise applicable Treasury rules, including:²³⁰

- A borrower and its affiliates could not engage in stock buybacks of the borrower or its parent (unless required by contract in effect on date of the Act), or pay dividends until 1 year after the loan would no longer be outstanding.
- A borrower had to agree, until 30 September 2020, to maintain employment levels applicable as of 24 March 2020, and had to retain no less than 90% of employees as of that date.
- A borrower had to certify that it was a US-domiciled business and that its employees were predominantly located in the United States.
- The duration of the loan was to be as short as possible and not to exceed 5 years.
- Alternative financing was not reasonably available to the borrower.
- The loan had to be sufficiently secured, or made at an interest rate that reflected the risk of the loan and, if possible, not less than an interest rate based on market conditions for comparable obligations before the Covid-19 outbreak.
- The loan could not be forgiven.
- The borrower's operations had to be jeopardized by losses related to the Covid-19 pandemic.

The loan programs also imposed restrictions on the compensation an eligible borrower was allowed to pay to the employee. In particular, the borrower was not allowed to increase the compensation of an employee whose total compensation exceeded USD 425,000 but was less than USD 3 million or pay such employees severance or termination payments that exceeded twice the maximum total annual compensation received by that employee. The Act also imposed a special compensation prohibition on officers or employees making more than USD 3 million: such employees were not to not receive compensation in excess of USD 3 million plus 50% of their pay in excess of USD 3 million. The Secretary's regulations could impose other conditions, including on air carriers and businesses critical to national security.²³¹

²³⁰Gore et al. (2020), p. 3.

²³¹Gore et al. (2020), p. 2.

4.4.2.4.4 Support for FED Liquidity Programs and Facilities

With regard to requirements and other considerations which the CARES Act imposed on the Treasury's support for FED liquidity programs and facilities, the Act again authorized the Treasury Secretary to make loans and loan guarantees to, and other investments in, FED liquidity programs or facilities that supported lending to eligible businesses, states, or municipalities by: (1) purchasing obligations or other interests directly from issuers; (2) purchasing obligations or interests in secondary markets; or (3) making loans.²³² (On these monetary programs, cf. already Sect. 3.3.)

The following further rules applied:²³³

- Applicable requirements of section 13(3) of the Federal Reserve Act would apply to an obligation or interest acquired under such a program or facility.
- The principal amount of any obligation issued by an eligible enterprise, state, or municipality under such a program or facility could not be reduced through loan forgiveness.
- Specifically with regard to direct loans made pursuant to such a program or facility, equity repurchase prohibitions (except to the extent required by contract in effect on the date of the Act) regarding the enterprise and any parent company, capital distribution prohibitions, and limitations on certain employee compensation would generally apply until 12 months after the loan was no longer outstanding.
- The CARES Act also stated that the Treasury Secretary was to endeavour to seek the implementation of a Federal Reserve liquidity program or facility that provided financing to banks and other lenders that made direct loans to mid-sized enterprises and included specific requirements for borrowers under such a program or facility.

4.4.2.4.5 Further Measures of Relief to Enterprises

4.4.2.4.5.1 Credit for Covering Part of Employee Wages

The CARES Act provided significant tax relief to enterprises.²³⁴

With regard to the assistance that was made available to employers who kept employees on payroll even though the enterprise had temporarily stopped its activities, the CARES Act provided eligible employers a fully refundable credit.²³⁵

²³²Gore et al. (2020), p. 2.

²³³Gore et al. (2020), p. 2.

²³⁴Gore et al. (2020), p. 2.

 $^{^{235}}$ This happened against the employer portion of Social Security taxes (6.2% of wages) (cf. Gore et al. (2020), p. 2).

The credit that was granted to such an employer was equal to 50% of qualified wages paid, up to a maximum of USD 5000 of credit per employee. Eligible wages were those paid to an employee for any period during which the employer was an eligible employer. For enterprises employing more than 100 employees, however, the wages had to be paid to employees who did not provide services during that period.²³⁶

An eligible employer was one whose business either: (1) was fully or partially suspended because of a governmental decision in response to the Covid-19 pandemic, or (2) suffered a significant decline (50% or more) in gross receipts in given calendar quarter compared to the same quarter in the preceding year. Moreover, such an employer eligible due to a decline in his gross receipts still remained eligible until the first calendar quarter during which his gross receipts returned to 80%, or more, of the gross receipts from the same calendar quarter in the preceding year.²³⁷

This credit remained available for wages paid between 13 March 2020 and 31 December $2020.^{238}$

4.4.2.4.5.2 Delay of Employer Payroll Taxes

The CARES Act, furthermore, granted a "Delay of Payment of Employer Payroll Taxes". This system allowed employers to defer payment of the employer portion of Social Security taxes (6.2% of wages) that would have been payable between the date of enactment of the CARES Act and 31 December 2020. Self-employed people were similarly allowed to defer payment of half of the self-employment tax that would have been payable between enactment of the CARES Act and 31 December 2020.²³⁹

However, the system allowed for a deferment, as a result of which all payment obligations remained due. Thus, deferred payments were required to be repaid over the next 2 years, implying that at least 50% of the deferred taxes had to be paid by 31 December 2021, while the remaining 50% had to be paid by 31 December 2022. Employers did not become subject to deposit penalties, while self-employed people did not become subject to estimated tax penalties with regard to the deferred payments provided that these would eventually get paid by the extended due dates. Furthermore, the deferral system was not available to a taxpayer who had a loan forgiven under the Paycheck Protection Program made available under Title I of the CARES Act.²⁴⁰

²³⁶Gore et al. (2020), p. 2.

²³⁷Gore et al. (2020), pp. 3–4.

²³⁸Gore et al. (2020), pp. 3–4.

²³⁹Gore et al. (2020), p. 4.

²⁴⁰Gore et al. (2020), p. 4.

4.4.2.4.6 Tax Rebates and Other Measures to the Benefit of Individuals and Families

The CARES Act also provided tax rebates to individuals and families, such as an immediate rebate of up to USD 1200 (USD 2400 for married taxpayers, filing jointly), increased with an additional USD 500 for each qualifying child of the taxpayer(s). This rebate was however reduced by 5% of the taxpayer's adjusted (yearly) gross income ("AGI") in case the latter income exceeded: (1) USD 75,000 for single taxpayers (or married taxpayers filing separately); (2) USD 112,500 for heads of household; and (3) USD 150,000 for joint filers.²⁴¹

Moreover, the CARES Act eased rules for individuals to make so-called "inservice withdrawals", or to take loans from qualified retirement plans in 2020. The CARES Act also waived certain required minimum distributions that would otherwise have occurred from certain contribution retirement accounts.²⁴²

The CARES Act also made some changes to unemployment assistance in order to both increase benefits and broaden eligibility for individuals whose jobs had been affected by Covid-19. E.g., as explained before, the CARES Act created a temporary "Pandemic Unemployment Assistance" (PUA) program for people who otherwise would have been ineligible for unemployment benefits, such as people being self-employed, people seeking part-time employment, people having insufficient work history, or people who would otherwise not qualify for regular unemployment.²⁴³ The CARES Act thus paid USD 600 per week, through 31 July 2020, above the

²⁴¹Gore et al. (2020), p. 5.

Gore et al. have pointed to the fact that the rebates were to be issued rapidly under the form of checks or direct deposits into accounts individuals designated on prior tax returns for purposes of receiving refunds. The fund was to be administered by the US Department of Health and Human Services. (Cf. Gore et al. (2020), p. 5.)

²⁴²Gore et al. (2020), p. 5.

²⁴³Gore et al. (2020), p. 5.

According to Isaacs and Whittaker, section 2102 of the CARES Act created a temporary, federal UI program for individuals not otherwise eligible for UI benefits (e.g., self-employed, independent contractors, gig economy workers...). This programme was called "PUA". PUA was to be administered by the states and was to provide up to 39 weeks of federally financed UI benefits to unemployed workers who (1) were ineligible for any other state or federal UI benefit; (2) met conditions related to being unemployed, partially unemployed, or unable to work due to Covid-19; and (3) were not able to telework and are not receiving any paid leave. The PUA maximum duration of 39 weeks was offset by any weeks of regular UC or EB. PUA was to be available in all states and US territories, subject to agreements with US Department of labor (DOL). Still according to Isaacs and Whittaker, PUA paid benefits for weeks of unemployment, partial unemployment, or inability to work beginning on, or after 27 January 2020, and to be ended on or before 31 December 2020. PUA benefits were, furthermore, authorized to be paid retroactively. The PUA benefit amount was the weekly benefit amount ("WBA") as calculated under state law based on recent earnings (subject to the minimum benefit under Disaster Unemployment Assistance [DUA], which was half of the state's average weekly UC benefit amount). In territories without UC programs, the PUA benefit was determined by DUA regulations. Finally, all PUA benefits, like all other UI benefits, were to be augmented by USD 600 per week by FPUC through July 2020. (Cf. Isaacs and Whittaker (2020), p. 1.)

unemployment benefits otherwise available under state formulas to each individual receiving unemployment insurance or Pandemic Unemployment Assistance. The CARES Act also extended unemployment benefits for an additional 13 weeks for those who remained unemployed after state unemployment resources were unavailable. These benefits were to be available through December 2020.²⁴⁴

4.4.2.4.7 Healthcare Provisions

With regard to the level of healthcare provisions, it is noteworthy to point to the fact that the CARES Act created a USD 100 billion fund meant for reimbursing hospitals and healthcare providers for costs attributable to Covid-19.²⁴⁵

In addition, the CARES Act made several other important changes to federal health laws. The CARES Act also expanded the requirement for health insurers, with no cost sharing by the patient, to cover either FDA-approved or HHS-identified Covid-19 diagnostic tests. This was conditional upon the requirement that test providers would display the test's cash price on a website. The Act, furthermore, imposed on insurers to reimburse that price or a negotiated price.²⁴⁶

The CARES Act contained several more rules with regard to health care, such as expanded telehealth authorization and increased Medicare reimbursements for certain Covid-19 related care services, as well as for certain non-Covid-19 care services.²⁴⁷

The CARES Act finally also updated and streamlined an existing over the counter ("OTC") monograph system for OTC drug products, transitioning from a process of formal rulemaking to administrative orders. Under certain circumstances, the

Section 2107 of the CARES Act created PEUC, which authorized up to 13 additional weeks of federally financed UI benefits for individuals who exhausted state and federal UI benefits and were able, available, and actively seeking work, subject to Covid-19-related flexibilities. PEUC was administered by states and was authorized through the end of December 2020. The PEUC benefit amount was the WBA, as calculated under state law. All PEUC benefits would be increased USD 600 a week by FPUC through July 2020. During the period that PEUC was authorized, states were prohibited from reducing UC benefit amount or duration. (Cf. Isaacs and Whittaker (2020), p. 1.)

²⁴⁴Gore et al. (2020), p. 5.

Section 2104 of the CARES Act provided more precisely an additional, federally financed USD 600 benefit (= the "Federal Pandemic Unemployment Compensation" [or "FPUC"]) that augmented weekly UI benefits including regular, state Unemployment Compensation (UC), Extended Benefits (EB), Pandemic Unemployment Assistance (PUA), and Pandemic Emergency Unemployment Compensation (PEUC). This FPUC was payable through agreements with states for weeks of unemployment ending on, or before, 31 July 2020. During the period that this payment was authorized, states were prohibited from reducing their UC benefit amount or duration. FPUC income was disregarded for the purposes of Medicaid and the Children's Health Insurance Program ("CHIP"). (Cf. Isaacs and Whittaker (2020), p. 1.)

²⁴⁵Gore et al. (2020), p. 5.

²⁴⁶Gore et al. (2020), p. 5.

²⁴⁷Gore et al. (2020), p. 5.

CARES Act also provided for limited marketing exclusivity of qualifying products.²⁴⁸

4.4.2.4.8 Coronavirus Relief Fund (CRF)

An important further feature of the CARES Act concerned the establishment, by section 5001 of the CARES Act, of the CRF as a means of assistance to national and local governments. The CARES Act, more precisely, made a total amount of USD 150 billion of federal budget support available for state and local governments through the CRF. Eligibility for such support was made dependent on location, level of government and intended use of the potential funds.²⁴⁹

The CARES Act provided for a total of USD 8 billion to be distributed through the CRF to tribal governments. The CARES Act thereby stated that the allocations to individual tribes had to be based on the increase in government spending from fiscal year 2019 to fiscal year 2020. This had to done via a process established by the US Treasury and the Department of the Interior. That process resulted in two rounds of payments. In a first round, 60% of the total tribal support was disbursed, with allocations based on tribal population data. By contrast, the second round's payments were to be distributed based on tribal employment and expenditure data, once these data would be available. The Department of Finance was made responsible for disbursing all allocations to tribal governments, except those for Alaska Native governments whose participation was the subject of a pending lawsuit.²⁵⁰

CRF assistance was in general intended for supporting state governments. However, the CARES Act allowed that local governments with at least 500,000 inhabitants (according to the latest census data) would opt for receiving assistance directly from the US Treasury,²⁵¹ while local governments in general could receive

²⁴⁸Gore et al. (2020), p. 5.

²⁴⁹In the past, a similar fund, the so-called "State Fiscal Stabilisation Fund" had been created during the 2007–2009 recession by the American Recovery and Reinvestment Act of 2009 (P.L. 111-5). The State Fiscal Stabilization Fund had provided USD 54 billion to state and local governments, most of which was earmarked for certain types of spending on (cf. Gore et al. (2020), p. 5): "(1) USD 8 billion had been set aside for "tribal governments", with the allocation for each tribal region based on its share of total tribal expenditure in fiscal year 2019, as determined by the US Treasury Secretary in consultation with the Secretary of the Interior. (2) USD 3 billion had been allocated to the territories of the District of Columbia (DC), Puerto Rico, the US Virgin Islands, Guam, the Northern Mariana Islands and American Samoa, with each territory receiving an amount based on its share of the total population of all the territories, with the population size being determined by the Minister of Finance."

²⁵⁰Driessen (2021), pp. 4–5.

²⁵¹Driessen (2021), pp. 5–6.

In such a case, these direct local assistance allocations were then to be subtracted from the state government's allocation (with the state allocation held constant) and were equal to the product of (1) the amount of the state or territory allocation, (2) the percentage of the state or territory population allocated to the local government, and 45%. (Cf. Driessen (2021), pp. 5–6.)

assistance from their state, as long as the funds obtained would be used for eligible purposes.²⁵²

Although no additional national and local support was provided under the CAA (cf. Sect. 4.4.3.), the deadline for spending the Coronavirus Relief Fund (CRF) funds under the CARES Act was extended by the CAA until 31 December 2021.²⁵³

4.4.3 The Consolidated Appropriations Act (CAA), 2021

On 21 December 2020, after what has been referred to as an 8-month test of endurance, the US House passed a USD 900 billion Covid-relief and a USD 1.4 trillion government funding package that was meant to provide critical Covid-19 pandemic aid to Americans, while securing federal agency operations through September 2021.²⁵⁴ The Act was named the "Consolidated Appropriations Act, 2021".²⁵⁵

²⁵³National Conference of State Legislatures (2021), p. 1.

²⁵⁴On 27 July 2020, Republicans had introduced a package of bills known as "the Health, Economic Assistance, Liability Protection, and Schools (HEALS) Act", which provided provisions for another stimulus check, more money for small enterprises, and liability protections for companies seeking to bring employees back to the workplace during the Covid-19 pandemic. By August 2020, talks had stalled between the White House and Democrats on a potential subsequent (to the CARES Act) round of relief, even as jobless claims reached a record high of USD 1186 million. At the time, President Trump claimed that he would issue executive orders if a deal would not be reached. (Cf. AJMC Staff (2021).)

²⁵⁵Cf. US Congress (2020b).

This bill later became the vehicle for passage of the "Consolidated Appropriations Act 2021", a major government funding bill, which included economic stimulus provisions due to the coronavirus Covid-19 pandemic. The bill passed overwhelmingly and with bipartisan support in the House through two roll call votes on 21 December 2020. The first vote was on the portion of the bill for the appropriations for some federal departments including Commerce, Justice, Defense, Treasury, and Homeland Security, and some federal components including the White House and the District of Columbia. The second vote was on the remaining portion of the bill, which included appropriations for the remainder of the federal government, as well as coronavirus stimulus and relief and many other miscellaneous provisions. It also passed the Senate overwhelmingly late that night. This bill was at the time believed to be the fifth longest bill to be passed by Congress in the history of the United States. (Cf. Govtrack (2020).)

²⁵²Driessen (2021), p. 6.

In 2018, state governments had transferred USD 543 billion to local governments, or 27% of all local government revenues. In many cases, populations were served by more than one local government eligible for direct assistance from the CRF (e.g., a city with a population of 700,000 located in a county with 200,000 other people, and thus with a county population of 900,000). Guidance from the Secretary of the Treasury clarified that in such cases, all overlapping governments were eligible for assistance. However, direct assistance payments to larger municipalities would only be calculated by reference to their own population, or would be reduced by amounts that could also be attributed to smaller municipalities receiving assistance (i.e. in the above example, the county government uses only a population of 200,000 for its calculation of the direct payment). (Cf. Driessen (2021), p. 6.)

This mammoth measure, signed by President Donald Trump on 27 December 2020, provided for a new round of direct payments, higher unemployment benefits, funding for education, and support for sectors still affected by the economic impact of the Covid-19 pandemic.²⁵⁶

Congress itself had approved the long-awaited, additional set of Covid-19 legislation on 21 December 2020 as part of a "Bipartisan-Bicameral Omnibus COVID Relief Deal". The Senate approved the bill with 92-6 votes, and the House of Representatives with 359-53 votes. The "relief bill" was included as Division N of a more general legislative package that included public financing and other bills. The final text of the legislative package²⁵⁷ was thereby the result of frantic last-minute negotiations between the Trump administration and lawmakers, and between Republicans and Democrats.²⁵⁸

The CAA represented the second largest Covid-19 recovery legislation, after the CARES Act, for a combined total of more than USD 3 trillion in support. The continuation of fiscal support for small enterprises, unemployed workers, house-holds and other entities was intended to help bridge the gap until the large-scale Covid-19 vaccine rollout announced for 2021 (cf. Sect. 9.4.2.) was expected to end the worst of the Covid-19 crisis. In addition, the next (117th) Congress and the incoming Biden presidential administration were expected to consider further aid and incentives in early 2021.²⁵⁹ According to the federal government's website, the CAA was also the fifth-longest bill passed by Congress in US history.²⁶⁰

Although the law is much more detailed, here follows a general overview of ten of its main features:²⁶¹

- (1) The set of Covid-19 measures carried a total price tag of USD 900 billion, to be attached to a year-end spending bill of USD 1.4 trillion, bringing the total cost of the package to about USD 2.3 trillion, making it one of the largest spending bills of the 116th Congress. About USD 429 billion of the package came from reused, unused funds from the "Paycheck Protection Program" included in the CARES law of March 2020.
- (2) The CAA included an extension of the (federal) "Pandemic Unemployment Assistance program" under which the federal government supplemented state unemployment benefits (cf. Sect. 4.4.2.4.6.).

The new round of the programme would include benefits of USD 300 per week for up to 11 weeks, beginning on 27 December 2020. The legislation, furthermore, intended to support the unemployed with a USD 25 billion temporary and targeted rental assistance programme, extending a pre-existing

²⁵⁶National Conference of State Legislatures (2021), p. 1.

²⁵⁷US Senate (2020).

²⁵⁸Foley & Larnder LLP (2020).

²⁵⁹Watson and York (2020).

²⁶⁰US Congress (2021).

²⁶¹Cf. Merill and Rifis (2020), Watson and York (2020) and Terrell (2020).

eviction moratorium (instituted by the Centers for Disease Control and Prevention (CDC)) until 31 January 2021.²⁶²

The CAA also provided for a second round of direct payments to individuals, modelled on the reparations granted as part of the CARES Act, albeit with significant changes. The direct payments would be up to USD 600 per person and eligible child, with no ceiling on household size. Adult dependents would not be eligible. The rebate would be set up in the same manner as the recovery rebates, namely as early eligible dependents and USD 174,000 for married couples with a joint household without eligible dependents.²⁶³

- (3) The CAA provided a new round of incentive vouchers in the amount of USD 600 per person, including children, below an income threshold of USD 75,000 per year or more. It also provided food assistance to families in need by increasing SNAP benefits, funding for the Commodity Supplemental Food Program and support for farmers.²⁶⁴
- (4) The CAA included roughly USD 325 billion for loans to small enterprises, including a new round of the wage protection programme. It also simplified the "loan forgiveness" process of the CARES Act for borrowers with loans of USD 150,000 or less.

Renewed funds totalling USD 284 billion were allocated to the Paycheck Protection Program (PPP). The CAA thereby broadened eligibility for non-profit organisations and included reserves for very small enterprises and community-based lenders. Second-time loans were limited to companies with fewer than 300 employees and a decrease in gross receipts of at least 25% in a quarter of 2020, compared to the same quarter of 2019. The maximum size of loans for second-time borrowers was set at USD 2 million. Companies that took out a PPP loan could also take advantage of the Employee Retention Tax Credit (ERTC), whereas previously they could only choose one or the other.²⁶⁵ PPP loans could be used to pay for eligible expenses, extended to eligible expenses, in addition to employee wages or operating costs such as rent and utilities. When used for eligible expenses, PPP loans could be waived. The

²⁶² The "Pandemic Emergency Unemployment Compensation" (PEUC), which originally provided for an additional 13 weeks of UI benefits, was extended by 11 weeks (for a combined maximum of 50 weeks) and was due to expire on 14 March 2021. Individuals who were still receiving benefits beyond the standard 26-week period on 14 March 2021, were to continue receiving them until 5 April 2021, if they had not reached their maximum number of benefit weeks by then. Federal funding was to be extended for states that waived their benefit waiting period. Workers with at least USD 5000 in self-employment income may be eligible for an additional USD 100 per week in Mixed Earner Unemployment Compensation to compensate for a lower basic UI benefit. The bill allocated USD 120 billion for UI benefits. (Cf. Watson and York (2020).)

²⁶³Watson and York (2020).

²⁶⁴Before the bill was passed, President Donald Trump had declared that the \$600 in stimulus checks for Americans was not enough and had tried to increase the checks to \$2000. (Richard (2020).)

²⁶⁵Watson and York (2020).

CAA also provided a simplified application process for loan for giveness of up to USD 150,000. 266

- (5) The CAA provided USD 20 billion for new EIDL ("economic injury disaster loan programme") grants for enterprises in low-income communities, USD 43.5 billion for continued debt relief from the Small Business Administration (SBA), and USD 2 billion for SBA loan enhancements. In addition, USD 15 billion in dedicated financing was set aside for cinemas, independent film theatres and cultural institutions.
- (6) The CAA increased the refundable payroll tax credit from a maximum of USD 5000 to USD 14,000 by changing the calculation from 50% of wages up to USD 10,000, to 70% of wages up to USD 10,000 for a quarter. The CAA clarified that companies could take the employee retention tax credit and participate in the PPP.
- (7) The CAA included USD 82 billion for education funding, including K-12 and higher education to help reopen in-person learning. The CAA also included support for public schools, territories and the Bureau of Indian education. Furthermore, USD 10 billion was allocated for grants to childcare centres to help them safely reopen.
- (8) Under the CAA, USD 69 billion was allocated for testing, traceability, vaccine development and vaccine distribution.

When the law came into force, both the BioNTech-Pfizer (or "Comirnaty") and Moderna Covid-19 vaccines had been granted emergency licences. As states had been made in charge of distribution, this made funding in this category particularly important. (Cf., furthermore, Sect. 9.3.1.3.)

- (9) The CAA helped the transport sector with USD 50 billion in aid for airlines (USD 16 billion), airports (USD 2 billion), highways (USD 10 billion), buses (USD 2 billion), Amtrak (USD 1 billion), and public transport (USD 14 billion). The US Postal Service was also helped by the removal of a loan repayment scheme from the CARES Act.
- (10) The CAA provided USD 3 billion to the Healthcare Provider Relief Fund to compensate caregivers for additional costs and lost income due to the Covid-19 pandemic.

²⁶⁶Watson and York (2020).

According to Watson and York, the bill also clarified that companies could deduct costs paid with waived PPP loans. This clarification applied to both old and new loans and did not include any safeguards or restrictions. Normally, cancelled debts are considered as taxable income. Under the CARES Act, legislators specified that waived PPP loans would not count as taxable income. They also wanted expenses paid with PPP loans to be deductible but did not specify this in the law itself. Section 265 of the Tax Act generally prohibits companies from deducting expenses related to income that is tax-free, so without specification, the Ministry of Finance had ruled that expenses paid with PPP loans are not deductible. This clarification resulted in a two-tiered subsidy to businesses, consisting of deductions and tax-free loan forgiveness. When the CARES Act was drafted, legislators had this two-tiered subsidy in mind, and the Joint Committee on Taxation assessed the original provision as such. This clarification, a kind of technical correction, had no budgetary impact. (Cf. Watson and York (2020).)

4.4.4 The American Rescue Plan Act, 2021

On 11 March 2021, President Joe Biden signed a new set of Covid-19-related laws, the "American Rescue Plan Act of 2021",²⁶⁷ which was intended to provide additional assistance to workers and employers under the form of tax credits, extended federal unemployment benefits and additional support for small enterprises.²⁶⁸

The US House of Representatives had previously approved a version of the "American Rescue Plan Act" on 27 February 2021. The US Senate approved a revised version on 6 March 2021.²⁶⁹

To make this plan possible, the House and Senate had already approved a budget revision in February 2021 that allowed to put together the USD 1.9 trillion aid package. The size of the package has remained roughly the same since it had been unveiled by President Biden during the transition period, and after he had successfully rebuffed a proposal by a group of 10 Republicans that advocated only a USD 618 billion bill.²⁷⁰

The American Rescue Plan Act 2021 initiative was announced on the White House website on 20 January 2021, where it was explained that President Biden was:²⁷¹

laying out the first step of an aggressive, two-step plan for rescue, from the depths of this crisis, and recovery, by investing in America, creating millions of additional good-paying jobs, combatting the climate crisis, advancing racial equity, and building back better than before.

Furthermore, the American Rescue Plan was announced:²⁷²

to change the course of the pandemic, build a bridge towards economic recovery, and invest in racial justice" [and to] address the stark, intergenerational inequities that had worsened in the wake of Covid-19.

It was also estimated "that these proposals would cut child poverty in half".²⁷³

However, the Senate's conciliation rules were much stricter than those of the House. In addition to raising the minimum wage, the Senate scrapped funding for an expansion of the "Bay Area Rapid Transit" underground in Silicon Valley and a bridge in New York State. The Democrats also shifted tax provisions in the bill. They scrapped a House proposal that would have ended the growth of annual limits on contributions to retirement accounts after 2030. These were replaced by tighter

²⁶⁷H.R.1319—American Rescue Plan Act of 2021 117th Congress (2021–2022)—https://www.congress.gov/bill/117th-congress/house-bill/1319/text.

²⁶⁸Nagele-Piazza (2021).

²⁶⁹Nagele-Piazza (2021) and Plunkett (2021).

²⁷⁰Rubin (2021).

²⁷¹The White House Briefing Room (2021).

²⁷²The White House Briefing Room (2021).

²⁷³The White House Briefing Room (2021).

limits on executive pay, but only starting in 2027. Senate Democrats also added a proposal that would make a large portion of student loan forgiveness free of income tax, by making an exception to the normal rule that student loan forgiveness is income from 2021 to 2025.²⁷⁴

The American Rescue Plan Act of 2021 provided for a third round of direct stimulus vouchers for eligible beneficiaries. Individuals with an annual adjusted gross income of USD 75,000 or less would receive an amount of USD 1400 (plus USD 1400 for each eligible dependent). Persons with an income of more than USD 75,000 would receive less than USD 1400, and the benefit was completely eliminated for persons with an income of USD 80,000 or more.²⁷⁵ For married couples, each spouse was entitled to USD 1400 (USD 2800 for both), but the threshold was at a total annual income of USD 150,000, or less, and would be phased out for couples earning USD 160,000 or more per year.²⁷⁶

The American Rescue Plan Act of 2021 extended the three main unemployment insurance programmes started by the CARES Act and continued in the CAA, 2021.²⁷⁷

The Pandemic Unemployment Assistance (PUA) programme, which was designed for laborers who are traditionally ineligible for unemployment insurance (such as the self-employed), was normally scheduled to expire on 14 March 2021. However, the American Rescue Plan Act of 2021 extended it until 6 September 2021, and the number of weeks of eligibility was increased from 50 weeks to 79 weeks.²⁷⁸

Since the CARES Act, the "Pandemic Emergency Unemployment Compensation" (FPUC) provided additional weeks of unemployment compensation for persons who had exhausted their state unemployment benefits. The FPUC was to expire on 14 March 2021, but the programme was extended to 6 September 2021, by the American Rescue Plan Act of 2021. In addition, the eligible weeks were extended from 24 weeks to 53 weeks.²⁷⁹ Similarly, the FPUC supplement of USD 300 per week, which was also due to expire on 14 March 2021, was extended until 6 September 2021 by the American Rescue Plan Act.²⁸⁰

Importantly, under the American Rescue Plan Act of 2021, benefit recipients earning less than USD 50,000 annually were not required to declare the first USD 10,200 of unemployment benefits as income for the 2020 tax year.²⁸¹

²⁷⁴Rubin (2021).

²⁷⁵Plunkett (2021).

²⁷⁶Plunkett (2021). Cf., furthermore, Rubin (2021).

²⁷⁷Plunkett (2021).

²⁷⁸Plunkett (2021) and Nagele-Piazza (2021).

²⁷⁹Plunkett (2021) and Nagele-Piazza (2021).

²⁸⁰Plunkett (2021) and Rubin (2021).

The amount of USD 300 per week was lower than the USD 400 per week adopted by the House, but it was extended by 1 month, until September 2021. In addition, the first \$10,200 of the 2020 benefits would not be taxable. (Cf. Rubin (2021).)

²⁸¹Plunkett (2021).

The American Rescue Plan Act of 2021 also established a fund for the "Pension Benefit Guaranty Corporation" intended for providing financial assistance to "critical and declining" plans. This financial assistance was not a loan and did, hence, not involve repayment obligations for the schemes receiving assistance. The rules governing the withdrawal requirement remained unaltered and the legislation did nothing to deal with the problems that had led to the multi-employer pension crisis in the first place.²⁸²

From 1 April 2021 to 30 September 2021, eligible individuals who are laid off, put on leave or reduce their working hours, could choose to continue their group health insurance without having obliged to pay COBRA premiums.²⁸³

The American Rescue Plan Act of 2021 also provided premium subsidies for individuals who purchased health insurance on the "Affordable Care Act" exchanges until 2022. The subsidies were considered income increases, but under the law, individuals would not have to pay more than 8.5% of their income for health insurance purchased on an exchange.²⁸⁴

The American Rescue Plan Act of 2021, furthermore, extended tax credits to offset the costs for employers who voluntarily granted Families First Coronavirus Response Act (FFCRA) paid emergency medical leave or extended family and medical leave to their workers. The tax credits would be available from 1 April 2021 to 30 September 2021. In addition to the reasons for paid emergency sick leave allowed under the FFCRA, tax credits would be made available for sick leave wages paid when:²⁸⁵

an employee is seeking or awaiting the results of a diagnostic test for, or a medical diagnosis of, Covid-19 and such employee had been exposed to Covid-19 or the employee's employer had requested such test or diagnosis, or the employee was obtaining immunization related to Covid-19 or recovering from any injury, disability, illness, or condition related to such immunization.

Similarly, tax credits for paid emergency family leave could be taken when workers were unable to work or telecommute due to caring for a child whose school was closed due to the Covid-19 pandemic, for the existing six FFCRA sick leave reasons, as well as for two additional testing and vaccination reasons.²⁸⁶

The Biden package also included tens of billions of dollars aimed to facilitate the rollout of the Covid-19 vaccines. Specifically, USD 8.75 billion was allocated to federal, state, local, territorial and tribal public health agencies to distribute, administer and monitor vaccinations, with some funds specifically intended for ensuring that the administration of the Covid-19 vaccines would reach the disadvantaged communities. Vaccine development would also receive an additional boost, with about USD 20 billion allocated to federal biomedical research for the production and

²⁸²Plunkett (2021).

²⁸³Plunkett (2021).

²⁸⁴Plunkett (2021).

²⁸⁵Plunkett (2021) and Nagele-Piazza (2021).

²⁸⁶Plunkett (2021) and Nagele-Piazza (2021).

procurement of Covid-19 vaccines and therapeutics, along with about USD 3 billion for a strategic national stockpile of Covid-19 vaccines. Another USD 25 billion would be spent on testing and contact tracing and on reimbursing hospitals for lost income related to the Covid-19 pandemic.²⁸⁷

Furthermore, the employee deduction introduced under the CARES Act was to be continued until 31 December 2021. This provision allowed certain companies to claim a tax credit for eligible wages paid to employees.²⁸⁸

Two existing CARES Act assistance programmes of the Small Business Administration (SBA) received a further cash injection under the American Rescue Plan Act of 2021. The Paycheck Protection Program was granted another USD 7.25 billion, although the programme would not be prolonged beyond its prevailing expiry date of 31 March 2021. Another USD 15 billion was earmarked for the Economic Injury Disaster Loan Program.²⁸⁹

Furthermore, the American Rescue Plan Act of 2021 allocated USD 28.6 billion for the creation of the "Restaurant Revitalization Fund", which would also be managed by the SBA. Eligible entities for grants from this fund included restaurants, bars, lounges, caterers and certain other businesses that had less than 20 locations and that were not publicly traded. The money received under the programme could be used for "personnel costs", "rent and mortgage payments", "utilities", "maintenance costs", "food and beverage expenses", "sick leave" and other prescribed costs.²⁹⁰

Section 3610 of the CARES Act had been designed to reimburse federal contractors for paid leave granted to certain of their employees or subcontractors who are/were unable to work or telecommute due to the Covid-19 pandemic. The programme had already been extended by the CAA until 31 March 2020. The American Rescue Plan Act of 2021 further extended the programme until 30 September 2021.²⁹¹

The American Rescue Plan Act of 2021 was further to provide USD 200 million for the Wage and Hour Division of the US Department of Labor, the Office of Workers' Compensation Programs, the Office of the Solicitor, the Mine Safety and Health Administration, and the Occupational Safety and Health Administration (OSHA) to carry out activities related to the protection of workers from Covid-19, and for the Office of Inspector General to oversee the Secretary's activities "to prevent, prepare for, and combat Covid-19." More specifically, [not] less than USD 100 million would be set aside for OSHA, and at least USD 5 million of that amount was meant for Covid-19 enforcement activities in high-risk workplaces,

²⁸⁷Rubin (2021).

²⁸⁸Plunkett (2021).

²⁸⁹Plunkett (2021).

²⁹⁰Plunkett (2021) and Nagele-Piazza (2021).

²⁹¹Plunkett (2021).

such as health care facilities, meat and poultry processing plants, agricultural labor places and prisons.²⁹²

4.5 Conclusions

During the Covid-19 crisis, the United States, the EU and the EU Member States (the latter, under a EU tolerance policy, esp. the activation of the general escape clause of the Stability Growth Pact (SGP): cf. Sect. 4.2.2.2.), each in their own way, made massive amounts of financial support available to their ailing economies, most notably to the corporate sector, thus protecting the latter from a deluge of bankruptcies.

In order to finance this support, both the United States and the EU member states—but even the EU itself—took out massive loans on the financial markets.

In this manner, the Covid-19 fiscal support became yet another illustration of how, especially in times of crisis, one of the basic principles of capitalism keeps prevailing, namely the supremacy of the interests of "capital", ergo of the economy, over those of "labour", ergo of real people of flesh and blood. (Cf., furthermore, Sect. 2.2.7.)

As a result, in full accordance with this neoliberal logic, most of the Covid-19 financial support went to large enterprises, from there to "trickle down" on common people in their capacity as employees. Recourse was thus, once more in history, taken to the traditional neoliberal recipe that had been used in the financial crisis of 2008, albeit this time not just in favour of banks, but of the entire business sector.

In light of this fiscal approach, one may even start to argue that capitalism has evolved into a form of socialism for the rich, subsidized by the poor. According to Chomsky, the corporate elite are in this manner basically given a for free insurance policy to the extent that, each time they get in trouble, the state—hence the general public—will bail them out. This is, moreover, bound to happen again and again.²⁹³

This massive financial support to the business sector, obviously, implied a far-reaching willingness on the part of the Western, neoliberal governments to shield large enterprises—ergo the rich (particularly the shareholders and other—important—stakeholders of (big) enterprises)—from the harsh logic of the free market itself, while everyone else is, with each crisis, getting more subjected to this capitalistic logic.²⁹⁴ Under classical and neoliberal doctrine, the former forms of financial support to the entrepreneurial world, should not even be possible, to the extent that they are, by definition, not in line with market functioning.²⁹⁵ According to neoliberal theory, enterprises facing hardship, in principle, should have to look

²⁹²Plunkett (2021) and Nagele-Piazza (2021).

²⁹³Cf. Chomsky (2017), p. 84.

²⁹⁴Cf. Chomsky (2017), p. 84, referring to this as to "the nanny state".

²⁹⁵Chomsky (2017), p. 85.

after themselves, or simply go bankrupt. But, with regard to the rich and their enterprises, neoliberal policymakers clearly do not want to play the economic game in that manner anymore. On the contrary, with each crisis, the rich and their enterprises get the signal that, if the going gets tough, their neoliberal government will generously come to their aid, and then pass the cost of this aid on to the taxpayer in a more distant future. Already in the past, this neoliberal policy approach has been referred to as the "privatization of profits and socialization of costs"-principle, which had already been benevolently applied in response to the financial crisis of 2008.

This also implies that each crisis makes states more debt-laden, and therefore poorer, and, to the extent that states are themselves but a fiction of the law, this implies that in the real world, where people of flesh and blood are the ones who live and work, and pay taxes, it is mainly the lower and middle classes who have to bear the funding of government through said taxes. This implies that, once again, it is the common man (belonging to the lower and middle classes of society) who is the big victim of the crisis, with all the typically associated intergenerational injustices this entails. And as after the crisis, neoliberal governments are bound to resort to austerity to clean up their mess, the average citizens will have to endure an even further demolition of their welfare state as well.

This will obviously have far-reaching dimensions for the future of the Western world, which we shall readdress in Chap. 11.

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Chapter 5 General Healthcare



5.1 Theoretical Debate

5.1.1 General: Towards the Marketization of the Healthcare Sector

In her book "Family Values. Between Neoliberalism and the New Social Conservatism",¹ Melinda Cooper has argued that the traditional American welfare state model of the 1960s and 1970s in general, and the sector of healthcare institutions in the broad sense of the word more specifically, from the late 1970s on, was to a large extent dismantled because of a combination of three important events: (1) left-wing liberals stopped to embrace and defend the welfare state—they criticized it relent-lessly and advocated far-reaching (albeit often unrealistic) radical alternatives; (2) neoliberal thinking gained more and more ground, especially after the economic crisis of the 1970s set in and Keynesian remedies seemed to fail, and (3) neoliberals entered into an "ideational coalition" with (neo)conservatives and their combined discourse became dominant in public policy over time.²

Based upon this approach, the Dutch sociologist Trappenburg has made a similar attempt at describing the evolution of the Dutch healthcare policy of the past decades.³ Trappenburg concludes that in the Netherlands, similar ideological movements (both left-wing ideologies, as well as conservative and neoliberal ideologies) became hostile to the (European) welfare state model—criticizing professionals, care institutions and the healthcare system in its totality. This, as of the 1980s, resulted in a partial "marketization" of the healthcare sector.⁴

¹Cooper (2017).

²Trappenburg (2019), p. 289.

³Trappenburg (2019), p. 289.

⁴Trappenburg (2019), p. 289.

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The evolution in the Netherlands is not so different from the one in other European countries. As of the 1980s, many European countries have been walking a similar neoliberal path, to a large extent steered by EU (austerity-)policy. As a result, the findings of Trappenburg (and those of Cooper herself) are useful to introduce the problem of the "marketization of the healthcare sector" in Western countries.

From this basis, it will appear how the implementation of neoliberal ideas in practice undermined both the social security systems, as well as the working methods of healthcare institutions, in particular hospitals, leaving healthcare systems critically vulnerable just as Covid-19 reached the Western world. This will be the theme of the present Chap. 5.

In the next Chap. 6, we shall investigate how the sector of the long-term nursing and retirement homes suffered from the fact that both in the United States (as of the 1980s) and in Europe (as of the 1990s), public nursing homes were to a growing extent privatized and/or, through other methods, replaced by profit-driven, private companies or corporations. The hospital sector has, in contrast, kept its non-profit character to a bigger extent. However, this does not imply that hospitals have not become subjected to neoliberal logic, albeit by different means, such as severe austerity policy in both the Member States of the EU (including the United Kingdom) and the United States.

This increasing marketization of the health sector in the Western world from the 1980s onward is one of the main reasons why, when Covid-19 hit, it had been so weakened that it took months before a (more or less) proper response was set up to the Covid-19 pandemic, far too late for the many people who had died by then.

5.1.2 Left-Wing Criticism and (Neo)conservative Ethics Feeding Neoliberal Reforms

5.1.2.1 General

In the 1980s (in the United States) and 1990s (in Europe), the neoliberal discourse picked up on former criticism on the working of the healthcare sector from left-wing and conservative ideologies dating from the 1960s already, thus introducing left-wing and communitarian ideas to neoliberal reform actions. The result has been that throughout the Western world, the prevailing healthcare systems started to form a mixture of these neoliberal, conservative-communitarian and radical left ideas.⁵

⁵Trappenburg (2019), p. 289.

5.1.2.2 The Marriage of Left-Wing, Neoliberal, and Conservative Ideas on Healthcare in the United States

At the end of the 1960s, the United States did not look that different from the West-European welfare states. Income differences were kept modest with high taxes and strong unions, higher education was affordable for students from all income classes and the welfare state took care of vulnerable elements in society.⁶

In her book "Family Values. Between neoliberalism and the New Social Conservatism", the US sociologist Cooper described how the societal equilibrium that was formed in the period after World War II and that had culminated in the Western welfare state model which had its peak moment in the 1960s and early 1970s, was deliberately abandoned in the course of the late 1970s and 1980s. Cooper holds three ideological developments responsible for this decline of the welfare state model, which, according to her, took place almost simultaneously:⁷

(1) First, the American "left"—in as much there has ever been an "American left"—in present-time usually referred to as the "liberals", showed discontent about the limited character of the welfare state model that applied in the United States. Characteristic for this "liberal thinking" was, on the one hand, their fierce criticism of the then designation of the welfare state, while that same welfare state, on the other hand, had to be expanded drastically.⁸ According to Cooper, a heterogeneous liberal front thus spearheaded a general movement of insurrection against the totalitarian institutions and disciplinary powers of the twentieth-century social sciences—the mental hospitals, prisons, and homes for the disabled, the delinquent and deviant—that were considered responsible for defining and policing notions of sexual and racial variance.⁹

Regrettably, the professional, institutional healthcare which had been so important for the formation of the classical welfare state model, was also severely criticized. E.g., both healthcare professionals and institutions were considered unnecessarily "disciplining". The assumption was that professional care takers showed a too paternalistic attitude towards the people they helped, which stood in the way of the free development of individuals.¹⁰

⁶Trappenburg (2019), p. 291.

⁷Cooper (2017), pp. 180–188.

⁸Cooper (2017), p. 184.

Liberals, for instance, started pleading for a much further expansion of the welfare state model, a plea that resonated in the "Great Society program" of President Johnson. In this vision, the extension of the welfare state model had to be paid out of systems of property taxes. (Cf. Cooper (2017), p. 184.)

⁹Cooper (2017), p. 183.

¹⁰Cooper (2017), p. 185.

Liberals in the same manner criticized the education regime at universities and campaigned against the American medical organizations. By the end of the 1960s, their calls for a radical change of American society were widely supported. (Cf. Cooper (2017), p. 185.)

As the health activists of the New Left remained committed to the expansion of government-funded care and universal health insurance, they still fought to dismantle the disciplinary forms in which these services were according to them too much delivered.¹¹

(2) While through their severe criticism, it was, strangely enough, the liberals who provided a lot of the theoretical arguments against the then prevailing welfare state model, economists and neoliberals themselves got the wind in the sails because of the economic crisis of the 1970s and 1980s.¹²

For years it had been customary to couple wages to prices of consumer goods and to conduct a monetary policy based upon a guided inflation model (following Keynesian ideas). At the end of the 1970s, it turned out that Keynesian policy could no longer prevent people from losing their jobs. The simultaneous occurrence of inflation and unemployment started making the neoliberal ideas of Chicago school economists like Milton Friedman, Richard Posner, James Buchananan and Gary Becker very attractive for a wide variety of policymakers (both in the United States, as in West-Europe). Their teachings started to be known as "(economic) neoliberalism".¹³ In the emerging austerity context, the neoliberal critique of social insurance (being too expensive) gradually moved beyond the walls of academia to find a receptive audience among policymakers and public health specialists.¹⁴

(3) Thirdly, libertarian and neoliberal economists in the United States developed an increasingly close relationship with a wide variety of conservative ideas of Catholics, conservatives, evangelical Christians and communitarians.¹⁵

As a result, neoliberal ideas got increasingly influenced by a conservative, moral dimension.¹⁶ Economic questions such as inflation became a moral problem: it was argued that that people who were "savers" saw their capital increase through hard work and prudent living, while the "needy" were seen as the scum of society, who did not want to work and save their income but preferred relying on handouts from various types of social assistance.¹⁷

As regards healthcare, a typical illustration of this coalition between neoliberal and conservative ideas on socio-economic topics was the neoliberal approach towards the aids epidemy that struck in the early 1980s, especially

¹¹Cooper (2017), p. 185.

¹²Trappenburg (2019), p. 292.

¹³Trappenburg (2019), p. 292. Cf., furthermore, Streeck (2013), p. 87.

¹⁴Cooper (2017), p. 184.

¹⁵Trappenburg (2019), p. 292.

Thinkers such as Lawrence Mead, Patrick Moynihan, Irving Kristol and Daniel Bell in this regard drew the attention of the "Libertarian Circle". In her book "Family Values", Cooper explains the close relationship between economic neoliberalism and political conservatism—even in case the latter speaks the language of anticapitalist critique—as equally constitutive expressions of modern-day capitalism (cf. Cooper (2017), pp. 15–16).

¹⁶Trappenburg (2019), p. 292.

¹⁷Trappenburg (2019), p. 292.

under drug users and homosexual men. Because of this, AIDS soon became stigmatized as a limited societal problem that was only relevant for some of society's most immoral degenerates. Drug use and unsafe (homosexual) sex were considered to be "lifestyle choices", implying that the risks incurred by such immoral choices, should be faced entirely by those who made them. AIDS was in this approach considered to be a totally different illness than other infectious diseases, such as whooping cough, measles, or polio. As a result of this symbiosis between the ideas of neoliberal economists and conservative right, the AIDS-crisis received moral connotations: If people refrained from sex before or outside of marriage and did not use drugs, they would never get sick in the first place. This attitude, e.g., inspired Nancy Reagan's sloganized appeal to the American youth: "Just say no (to sex and drugs)." The aids problem was turned into an argument against a further expansion of public healthcare in the United States, as it was no longer deemed acceptable for decent US taxpayers to have to pay for other people 's "Risky Lifestyle Choices".¹⁸

The result was that, at the end of the 1970s and the beginning of the 1980s, the shortly before muted ethics of moral hazard, fault and responsibility that started informing neoliberalism's academic critiques of the welfare state, found a more fulsome expression in a new public health rhetoric that focused on the relationship between irresponsible lifestyle choices and rising healthcare costs. Through this, the overriding importance of individual behaviour and lifestyle gradually became established as major factors in the nation's unsatisfactory health status and ever-rising healthcare bill, and soon became one of the guiding principles of public health policy.¹⁹

Under the presidency of Ronald Reagan in the 1980s, this diabolical combination of, on the one side, theoretical arguments pleading for a thorough reorganization of the welfare state model provided by liberal intellectuals and, on the other side, the coalition of ideas originating from neoliberal economists and neoconservatives, started to determinate US public policy in a wide variety of socioeconomic domains: Poverty reduction and social security, inheritance tax and property tax, student loans and, above all, healthcare policy, the latter moreover strongly influenced by the AIDS epidemic.²⁰

Regarding health policy, this has had a disastrous effect: According to one study, in the first half of the 1980s, New York hospitals were forced to close around 1800 beds at a time when AIDS infections were increasing at an alarming pace.²¹ As a result of austerity measures, combined with institutional inertia, grassroots AIDS service organizations were almost fighting alone during the first half decade of the AIDS epidemic. Because of this, in cities hardest hit by HIV—such as New York,

¹⁸Trappenburg (2019), pp. 292–293.

¹⁹Cooper (2017), p. 185.

²⁰Cooper (2017), p. 188; Trappenburg (2019), p. 293; Byttebier (2017), pp. 180–184; Byttebier (2018), pp. 92–96; Byttebier (2019), pp. 69–75.

²¹Cooper (2017), p. 191.

San Francisco, Washington and Los Angeles—gay men, lesbian women, transgender men and women, and their allies, marshalled vast amounts of unpaid labour to confront the urgent healthcare, housing and social service needs of the HIV-infected while at the same time having to start nation-wide prevention campaigns.²²

Rather than relying on sound economic reasoning, US politics of shaping the new neoliberal society thus was based on a mixture of ideas that hardly made any economic sense at all, but that nevertheless would create a new socioeconomic model in which the welfare state model got gradually diminished and the care that it had provided in the past, got increasingly replaced by free market models of providing services in a wide variety of socioeconomic domains, such as education and health and elderly care.

5.1.2.3 The Marriage Between Left-Wing, Neoliberal and Conservative Ideas on Healthcare in Western Europe

A similar merging of the ideas of left-wing critics, neoliberal economists and neo-conservatives occurred throughout Western-Europe.²³

As a result, as of the 1980s, a covenant of neoliberal, conservative and communitarian ideas saw fit to reform the Western European welfare state model. Here, classical and left economic schools—and on a practical level, political parties—were taken aboard to the extent that they could provide many of the ideas to reshape the welfare state model in accordance with the doctrine of neoliberalism.²⁴

In Western Europe, the Dutch care system for example had already been bombarded by left-wing criticism during the heydays of the welfare state—the 1960s and 1970s.²⁵

A first criticism concerned the financing of the healthcare system. In many West-European countries, most of the population since World War II got insured through state organized health insurance, financed through mandatory—state-imposed—financial contributions from both employers and employees, next to similar contributions from self-employed people, all such contributions imposed by compulsory legislation. Moreover, citizens with an above average income could insure themselves privately (in addition to the public health insurance systems). However, as these systems had grown organically, the resulting inequalities, by the end of the 1960s, had become a thorn in the eye of left-wing politicians who sought to rationalize these systems.²⁶

Secondly, there was criticism on the working methods of healthcare institutions themselves. By the end of the 1960s, these especially focused on medieval excesses

²²Cooper (2017), p. 192.

²³Trappenburg (2019), p. 293.

²⁴Trappenburg (2019), p. 293.

²⁵Trappenburg (2019), p. 294.

²⁶Trappenburg (2019), p. 294.

characterizing publicly financed institutions for the mentally ill and physically disabled.²⁷ While this kind of criticism was obviously well-intentioned, it would at the same time give these institutions a bad name, creating a further common cause for reshaping the healthcare sector in accordance with the (profit-driven) logic of neoliberal economics.²⁸

Thirdly, as had been the case in the United States, there was increasing criticism on healthcare professionals. Throughout Western-Europe, the paternalist attitude of healthcare workers in deciding what was good for the patient, without the patient himself having much say in this, became subject of a broad societal debate. Critics also accused healthcare professionals of being more interested in their wallets than in caring for their patients. Professionals were considered not so different from entrepreneurs or shopkeepers, thus disregarding the basics of their professional ethical code (even going back to oath of Hippocrates). Strangely enough, after the neoliberal reorganization of the healthcare sector as of the 1980s, this characteristic of the healthcare sector would be strengthened even more, to the extent that through these neoliberal changes, the whole healthcare sector became subject to neoliberal logic and, through this, either subjected to the working methods of the corporate organization model (especially in the case of nursing homes), or to a far-reaching extent "marketized" by using other methods (e.g., the hospital sector).²⁹

Finally, a last radical criticism pointed to the fact that both healthcare professionals and institutions, rather than curing sick people, made them chronically dependent on the healthcare system itself (and, through this, made people even sicker than before). In a broader sense, the idea that society is what makes people sick, gained popularity, and the "paternalistic" healthcare sector was considered to be a huge factor in this.³⁰

The fourfold criticism resulted in a search for alternative financing systems for the healthcare sector, based upon: (1) more income solidarity, (2) the patient's "emancipation principle" (seeing patients more and more as "clients", intellectually capable of making their own healthcare choices, thus at the same time being considered as "consumers", rather than as sick to be taken care of), (3) more participation and control, next to (4) the democratization of healthcare and the search for systems of limiting the power of professionals.

²⁷Trappenburg (2019), pp. 294–295.

²⁸Trappenburg (2019), p. 295.

²⁹Trappenburg (2019), p. 295.

³⁰Trappenburg (2019), p. 296.

Also this criticism gradually started resonating in political programs, in present times still resonating in the neoliberal attitude (which, throughout Western Europe, still inspires numerous neoliberal politicians and policymakers) that people cannot possibly be ill for a long time. It is hereby assumed that long-term ill people are just *mala fide* "shirkers" out to profiteer from the social security system, which is of course deemed unacceptable. As a result, neoliberal healthcare got increasingly reshaped in order to ensure that the sick can go back to work as quickly as possible, since the entire neoliberal societal organizational model is based on the idea that everyone, sick or not, must work as much and as long in life as possible.

As we shall explain hereafter, to the extent that the neoliberal remedy for dealing with these criticisms would turn out to be way worse than the problems of the past ever had been, the critics of the healthcare system of the 1970s and early 1970s, in the end, made things even worse.³¹

5.1.2.4 Neoliberal Reform of the Healthcare Sector as of the 1980s

Until well into the 1960s, an increase in healthcare expenditure was considered both acceptable and desirable. With the growth of medical options, it was considered logical that expenditure on healthcare would also increase,³² moreover given the fact that economies and societies were growing as well.

The economic crisis of the 1970s put an end to this approach. From the early 1970s on, the rising healthcare budget—and, through this, health and elderly care themselves—became, to an increasing extent, a problem.

While many economists rejected neoliberal claims of overfunding in health services, the narrative of "overfunding" was nevertheless, gradually, reinforced by neoliberal economic schools, self-interested private organisations and neoliberal governments.³³

A first answer to that problem was "planning", aimed at better organizing the growth of the healthcare sector.³⁴

Moreover, the behaviour of private health insurers changed drastically in the late 1970s and early 1980s. During the heyday of the welfare state model, private insurers had always adhered to a kind of gentlemen's agreement not to compete for the healthy patient. Under the influence of neoliberal ideas, this was one of the first things that started changing. E.g., private insurers gained much more insight in the strong connection between healthcare costs and the age of the insured. In addition, private health insurers were facing stricter regulations on the (financial) reserves that they had to hold to be able to meet their obligations. To keep premiums affordable, private insurers thus started intensely competing for young, healthy policyholders whom they could offer a health insurance for a low premium against a high deductible. Once this dynamic had started, no private insurer could escape from the competitive battle that followed. As a result, young, healthy "customers" started opting more and more for (additional) private insurance policies, while older insured kept relying on systems of public health insurance. Policymakers sought solutions by relying ever more on the private markets (e.g., through tax incentives) and by making access to the public social security systems more and more

³¹Trappenburg (2019), p. 296.

³²Trappenburg (2019), p. 298.

³³Barnett and Bagshaw (2020).

³⁴Cf. Cooper (2017), pp. 188–209.

conditional. This led to a growing revitalization of voluntarism as one of the main ideas driving neoliberal health reforms.³⁵

As a result, a growing number of social security systems were (in whole or in part) transferred to private insurers. Under the influence of neoliberal ideas, many policymakers even started to believe that traditional, public healthcare systems, in particular the health insurance systems, did not provide sufficient incentives for effective policy, use and action. This was attributed to the lack of market mechanisms and separation of financing and planning. This would in its own turn incite new regulatory changes, through which the public health insurance systems themselves became subjected to mechanisms originally developed for the private insurance sector. As a result, both private and public health insurance became more and more based on free market logic, rather than on providing care based upon an idea of mutual solidarity.³⁶

Ultimately, this would lead to a streamlining of the packages in "compulsory" systems of public health insurance in various Western European countries. This aimed to guarantee every citizen a minimal basic package, to be supplemented with additional private health insurance. As a result, the (private) health insurance package became an important part of the compensation with which (large) companies started rewarding their staff. Obviously, this led to even more inequality, as highly profitable companies with large workforces had the means to offer attractive private insurance packages, leaving the workforces of small(er) companies and the self-employed out in the cold. In doing so, the private health insurance systems themselves became a system that contributed to social inequality. In countries such as the United Kingdom and the United States, this created dire situations in which the lower classes barely had access to, e.g., dental care. As a result, dental care is in said countries in many cases not part of the basic public package, nor is it usually offered to them in the form of an additional private package financed by an employer.³⁷

Health insurance in this manner increasingly became a playing field of inequality in healthcare opportunities.

This inequality has—obviously—been a relevant factor during the Covid-19 pandemic. We shall readdress this topic in Chap. 10.

5.1.2.5 Some Further Ideas from After the Year 2000

After the turn of the century, the idea of the "mutually caring society" gained ground in a number of Western Europe countries. The "mutually caring society" approach was based upon a neoliberal right-wing idea of an ideal social model in which people rely on public resources as little as possible.

³⁵Cooper (2017), p. 190.

³⁶Cooper (2017), p. 190.

³⁷Byttebier (2018), p. 77.

For conservatives, communitarians and Christian Democrats, this idea leaned on an assumed, self-evident concern for family, partners, and the small community to which one belongs. For the left, the new way of thinking implied a farewell to institutional care: People with disabilities would no longer have to live in care institutions but remain in their neighbourhood and preferably also be employed in a normal workplace. This was seen as a strengthening of the patient's position. E.g., via systems of "care cheques" (or "vouchers"), the patient himself (or his parents or other relatives) had to take care of the practical organization of the healthcare he needed, which at the same time ensured that he did not spend more than the amounts allowed by such care checks (read: that he did not "profiteer" too much from the social security system).³⁸

This approach has also been called "the intrusive model", implying that people should start taking care of one another in family or other small community assemblies.³⁹ As due to neoliberal austerity social service budgets were whittled back, neoliberals and neoconservatives started embracing the virtues of community empowerment through self-care as an essential part of a plan to "give health policy back to the people".⁴⁰

The result of all this—albeit with great differences between countries—has been that, throughout the Western world, social insurance has become a "multiple-lay-ered" system:⁴¹

- (1) Resilient citizens with good jobs continued paying a relatively large amount of taxes and premiums (whether or not through their employers), but got relieved in return: To the extent that they do not have to take care of mentally handicapped or chronically ill family members, they can still call upon professional, often institutional healthcare, the bills of which are for the most part paid by the (public) social security system.
- (2) Many professionals are employed by the institutionalized health sector where they offer care, help and healing, in exchange for a (good) salary.
- (3) In such a model, it were mostly the vulnerable citizens who ended up with the "left-wing part" of the new approaches: "the inclusive society" (basically a nice way of saying that they have to rely on themselves).⁴² The resilient citizens got

³⁸Cooper (2017), p. 190.

³⁹In the United States, this idea had before also been appealing to the Reagan administration that envisaged volunteer labour performing a similar transformative role in the healthcare and non-profit sectors. (Cf. Cooper (2017), p. 190.)

⁴⁰Cooper (2017), p. 190.

⁴¹Cooper (2017), p. 190.

⁴²Incidentally, this more-speed approach gained a much broader scope than just healthcare, but has gradually started to cross the whole social security and public services system of the Western world—albeit again with large differences from country to country. E.g., bearing in mind the leftwing ideals, vulnerable people are nowadays allowed to attend ordinary schools; they live in ordinary neighbourhoods and should work for ordinary companies and organizations. However, these promises are not always realized: ordinary schools and ordinary bosses do not stand in line for pupils, students and employees with (serious) disabilities or behavioural problems. Furthermore, the

5.1 Theoretical Debate

the caring society, and the professionals, to a growing extent, got employed in accordance with the market forces of neoliberal economics.

(4) Finally, the rich to extremely rich organize their healthcare on their own, either through financing it directly themselves, or through relying heavily on expanded private health insurance coverage.

Providing informal, "de-institutionalized" care to elderly parents and children with disabilities, however, soon faced a variety of other, often severe problems: E.g., there are indications that informal carers are overloaded and do not always succeed in combining their care duties with a paid job or life of their own. The long-term nursing homes which previously provided care for people who were mildly or moderately dependent on financial contributions from the social security system, started gradually to disappear, while it is not easy for informal carers and wellmeaning family members or neighbours to make up for this lack. Here too, policy started to go both ways. On the one hand, there were attempts to facilitate and reward informal care; on the other hand, there were cautious pleas for the reintroduction of a normal amount of institutionalized nursing homes. Moreover, because of decades of marketizing the healthcare sector, it became more and more difficult for institutionalized care organizations and professionals to provide continuity of care. Hospitals and nursing homes got to an increasing extent subjected to market logic, even with an expectancy of similar profits as other private enterprises. Such organizations, in the recent past, even started going bankrupt or had to merge as a result of market forces. Since the healthcare sector increasingly became subjected to market logic, financial risks and the need for private investments increased significantly as well. As a result, in recent years, these started to heavily rely on loans for their financing. Especially in the aftermath of the financial crisis of 2008, banks would, however, become a lot more reluctant to provide extra money. This has made hospitals even more susceptible to financial problems in case of setbacks. It has, hence, become increasingly difficult to get the kind of private investments off the ground that are desirable for the quality, accessibility and affordability of hospital care, with riskbearing private investors only willing to come up with money if there will be a reasonable compensation in the form of profit distribution, again undercutting affordable care.43

in-part 'de-institutionalization' of the inclusive model also often leads to loneliness. Without institutional care, some desperate disabled or psychiatric patients even commit suicide. Outside the institution, people with intellectual disabilities also run an expanded risk of becoming victims of criminals who hasten their carts. Research also showed that many people with intellectual disabilities are constantly overly challenged by normal society, and the frustration that this produces leads to aggression, which may subsequently lead to imprisonment. (Cf. Cooper (2017), p. 190.)

⁴³Cooper (2017), pp. 190–191.

5.1.2.6 The Result: Towards a "Marketized" Health Care System

As a result of the combination of these approaches, healthcare in neoliberally reformed countries has, to an increasing extent, been turned into a particular kind of economic commodity—one that is governed by market principles.⁴⁴ This policy approach has even been promoted by international financial institutions such as the IMF and the World Bank, as well as by the EMU, which especially happened in the aftermath of the financial crises of the past decades, and has in part been justified as a necessary step to increase economic growth (and thus generate revenue to pay off foreign debt). Such a neoliberal policy, obviously, had adverse effects on health care itself.⁴⁵

Viens has pointed to a wide variety of negative consequences of such a neoliberal policy approach in the domain of health care. According to this author, the underlying policy idea for establishing a marketized health care system is that it maximises the instrumental value of health services, thus purportedly attributing to more efficient and innovative health care, certainly when compared to the way health services, in an allegedly inefficient way, are organized under a welfare state system.⁴⁶ However, this shift from public health care to (more) free market-based health care, as well as the "commodification" and/or "marketisation" of health services this has implied, had the side-effect that health care (besides the socioeconomic determinants of health themselves, such as education and housing) is no longer considered as "a right" in itself, but rather a commodity that is provided by the market to be acquired under free market conditions, i.e. against the payment of a market price. Health is thereby no longer considered as "something special"; it is just one more instrumental good to be acquired on the market, which implies that it has also become the mere subject of consumer choices, at the same time making it exchangeable for other (supposedly equivalent) goods or services. Needless to say that such an approach has resulted in huge health inequalities, especially on the preventive side of health care, which in most cases happened to the detriment of the least advantaged.⁴⁷ (Cf., furthermore, Chap. 10.)

The fact that health increasingly became considered as a commodity provided under free market conditions, whereby individuals themselves are moreover free to choose the desired amount and types of health care goods and services they want to have access to, had as a further result that the emphasis on responsibility for the health of people has shifted away from the collective level (i.e., the government, or public institutions) to the individual level. This, by definition, implies that neoliberal states take a much lighter stance on helping people achieve better health,⁴⁸ as they no

⁴⁴Viens (2019).

⁴⁵Assa and Calderon (2020).

⁴⁶Viens (2019).

⁴⁷Viens (2019).

⁴⁸Viens (2019).

longer consider it their task to do so.⁴⁹ Instead, neoliberal states resort to other, more indirect techniques to guide and control individuals towards the best health care choices, but without taking on responsibility for the matter themselves. In line with their aspiration to privatise health care, neoliberal states thus started to base their health care on the idea of "individual responsibility". This approach implies that the state's only role is to make its citizens aware that they should regard health risks and possible outcomes, such as illness or disease, their own individual responsibility. Such approach to health has, obviously, also caused a huge policy shift, whereby the problem of health governance is no longer a concern for the neoliberal state itself, but rather became framed as a domain based on individual self-insurance and selfcare. This trend has, furthermore, been characterized by neoliberal states' ongoing policy preference for less restrictive health related interventions in the form of awareness and education campaigns. This neoliberal preservation of individual autonomy and the promotion of individual responsibility in all matters relating to health are, hereby, increasingly pursued in an almost dogmatic manner, despite scientific evidence showing the central role of more structural determinants of health beyond the individual's knowledge or control, implying that under neoliberal health policy, health consumers are largely on their own in making ill-informed health choices.⁵⁰

At a more institutional level, the result of this policy shift has been an actual reduction in public funding for health services. According to Barnett and Bagshaw, during the past decades, the health care sector has thus become gradually underfunded, which obviously implies that in many countries the sector started facing a huge understaffing problem. The result of neoliberal public policy has thus been that the health sector has become increasingly characterized by a demoralised workforce of poorly paid health workers employed in understaffed institutions, and with hospital doctors and nurses in many countries reporting stress, burnout and "intense, unrelenting workloads".⁵¹

This approach provided a clear synthesis of the three schools of thought that had incited it since the 1960s, namely (1) the criticism of liberals (in the United States) and left-wing intellectuals (in Europe) regarding the overly paternalistic character of the welfare state model, in combination with modern arguments for more intrusive care models; (2) the purportedly ethical considerations from a more conservative angle that had argued against society having to bear the costs of treating diseases that are contracted because of immoral behaviour, and (3) the neoliberal vision that states should be subjected to austerity policy measures, in particular by cutting funding in the sectors of public services in general and public health (or other) care in particular.

⁴⁹Viens (2019).

⁵⁰Viens (2019).

⁵¹Barnett and Bagshaw (2020).

Needless to say, in such a neoliberal or marketized healthcare system, the rich gained better access to certain healthcare services than the poor.⁵²

5.1.2.7 The Impact of Neoliberal Politics on the Quality of Healthcare

According to Barnett and Bagshaw, research shows how, on a global scale, poor health outcomes are related to a deterioration in the socioeconomic determinants of health. These socioeconomic determinants of health include income, housing, food security, employment, stress and educational opportunities. According to the same authors, these poor socioeconomic conditions are by no means accidental, but rather the result of neoliberal policy choices that in this manner not only affect mortality, but also lethal diseases, such as obesity, mental health disturbances, and a wide variety of other health risk behaviours.⁵³ We shall readdress this topic in more detail in Chap. 10.

Besides the poor economic performance associated with austerity, there is also a negative relationship between "austerity" and health. First, there is a "social risk effect", or more precisely a "risk-shifting" effect, where those already disadvantaged on a socioeconomic level (i.e., by having a bad job, poor housing, deprivation of educational opportunities...), also have to endure the health related consequences of the deterioration of said socioeconomic determinants of health. The second is through the direct impact on health services itself. E.g., after the financial crisis of 2008, health outcomes for countries where health budgets had to be reduced because of neoliberal policy imperatives, obviously compared unfavourably with countries that managed to maintain their spending on public services.⁵⁴ The latter effect can even be identified within the EU itself. Especially in the in the aftermath of the financial crisis of 2008, a lot of EU member states, notably Portugal, Ireland, Italy, Greece and Spain—also referred to as the "PIIGS" of the EU—all were forced to implement tough austerity packages. Blyth has in this regard identified "Greece's bloated public-sector debt", "Spain's overleveraged private sector", "Portugal's and Italy's illiquidity" and "Ireland's insolvent credit institutions", as the main reason why, during and in the aftermath of the financial crisis of 2008, the banking sector of these countries ended up being bailed out by their respective states, which caused huge public debts and deficits. The answer neoliberal EU came up with for addressing these countries' problems, could be summarized in one word: "austerity": Cut the government budget, reduce public debt, and all socioeconomic problems will automatically melt away.⁵⁵ This implied that PIIGS cut their public budgets, but

⁵²According to Cooper, beyond the charmed circle of the privately insured family, healthcare was no longer readily available, unless one took care of oneself. Personal responsibility was invoked nowhere more forcefully than at the margins. (Cf. Cooper (2017), p. 193.)

⁵³Barnett and Bagshaw (2020). Cf., furthermore, Byttebier (2018, 2019).

⁵⁴Barnett and Bagshaw (2020).

⁵⁵Blyth (2015), p. 3.

without achieving the aspired effect: as these countries' economies shrank due to a decrease in government spending, their tax income decreased as well while their debt loads got bigger, and unsurprisingly, their credit rating declined, making their interest payments increase and thus their debt position even more problematic. So, what neoliberal austerity accomplished was not the aspired aspect of reducing public debt and deficit and promoting economic growth, but instead making government bonds riskier and, to the extent that European commercial banks hold a lot of those, also big commercial banks riskier themselves.⁵⁶ This in its own turn helps explaining why monetary authorities resorted to the technique of quantitative easing (cf. Chap. 3.), basically implying that monetary authorities themselves have become the ones financing some of the(ir) ailing states (within the EU, in this manner coming close to resorting to monetary financing).

Within the EU itself, one of the sectors that has been severely affected by this EU austerity in the aftermath of the financial crisis of 2008, has notably been the healthcare sector, which was in this manner, in many countries, forced into a transition from being "mostly public" into becoming "mostly private". This was done through a wave of privatization and marketization movements (which we shall explore in more detail throughout this chapter and Chap. 6.).

5.1.2.8 Some (Scarce) Further Data on the Impact of Neoliberal Policy Choices

In what follows, the reader is asked to bear in mind that it is not easy to get a clear view on the effects of marketization and privatization of healthcare in Europe. Assa and Calderon have indicated the following reason for this:⁵⁷

Much of the literature on the privatization of healthcare involves case studies, and there is thus a lack of comparative studies across countries in this area.

This also explains why regarding the matters dealt with in this chapter (and the following Chap. 6 as well), the empirical and further research material is rather scarce. This also explains why in said two chapters, there had to be relied on the results of but a few such (empirical and other) studies. Moreover, there has hereafter been strongly quoted from this (scarce) research from other authors and institutions, in full acknowledgment that the authors and institutions quoted are the ones having conducted and authored said research, to which reference is here made in support of our own thesis on the detrimental effects of basing health care policy on neoliberal ideology (and without making any claim that the research results and ideas on the state of the health sector in the territories concerned, as quoted from said studies hereafter, are our own).

⁵⁶Blyth (2015), p. 4. Cf., furthermore, Streeck (2013), p. 87.

⁵⁷Assa and Calderon (2020), p. 1.

Assa and Calderon have in this regard pointed to the fact that some of these other studies have linked neoliberal policies to a decrease in life expectancy, especially in poorer countries, although acknowledging that there is still a lack of research on the effects of the privatisation on health outcomes in all countries—developed, as well as developing.⁵⁸ According to these authors, private and public health care systems have different strengths and weaknesses. Among the reported strengths of private health care institutions are: (1) shorter waiting times, as well as (2) better interaction with staff in comparison with public institutions. According to the same authors, disadvantages of private institutions may include: (1) less accurate diagnosis, (2) less strict adherence to medical management standards, (3) a shortage of lower-level staff (especially regarding assistant-physicians, nurses, pharmacists and midwives, rather than specialists and doctors themselves), and (4) sometimes a tendency of overprescribing antibiotics.⁵⁹ By contrast, an increased spending on public health and on developing universal health care has been leading to higher general well-being.⁶⁰

Again according to Assa and Calderon, privatisation also led to so-called "distributional effects". An example thereof is that private health care institutions often charge a price for their services that the poor cannot afford, which may discourage people from seeking medical support and treatment.⁶¹

Still according to Assa and Calderon, while these negative effects of health privatisation have especially been observed in developing countries, they could also been witnessed in many countries in transition from communism to a free market system, where there has during the past decades equally been a massive privatisation of many socioeconomic sectors, including the health care sector. In these countries, the privatization of the health care sector has led to treatments becoming unaffordable, people with pre-existing conditions being denied services or health insurance, and people's willingness to see a doctor when ill being strongly reduced.⁶² According to the quoted authors, this positive correlation between the privatization of health care and health inequality is confirmed by a variety of further data to which these authors refer, such as data from 147 countries on the effect of inequality on life expectancy (provided by UNDP 2019), and regarding the ratio of private to public health expenditure (provided by WHO 2020).⁶³

What is obviously even more important in the context of this book, is the fact that this positive relationship between inequality and relying more on private (or privatized) healthcare, has been of vital importance in the case of Covid-19 itself, with a variety of research having demonstrated that Covid-19 is a disease that has an unequal impact on more vulnerable populations. Although this matter shall be readdressed in some more detail in Chap. 10, it can already be pointed out that this

⁵⁸Assa and Calderon (2020), p. 5.

⁵⁹Assa and Calderon (2020), pp. 5-6.

⁶⁰Assa and Calderon (2020), p. 6.

⁶¹Assa and Calderon (2020), p. 6.

⁶²Assa and Calderon (2020), p. 6.

⁶³Assa and Calderon (2020), p. 6.

correlation has been pointed out on several levels. First, poorer people have been reported to be more likely to suffer from underlying chronic conditions, and thus of being at higher health related risk of Covid-19 mortality. Secondly, poorer people without public health insurance, or without the means to pay for expensive private health insurance, or for medical expenses themselves, have been reported to also be more likely ignoring social distancing in order to be able to stay at work, both reducing the effectiveness of control measures and making these people more vulnerable of exposure to the Covid-19 virus.⁶⁴

Em. Prof. Dr. Walter Foulon—who was in the past the head of the Department of Obstetrics UZ Brussels (Belgium) and is at present a board member of the "Masereel Fund Vilvoorde"—has pointed to another, important effect of applying neoliberal logic to the health sector.⁶⁵ In addition to market deregulation and the dismantling of public health institutions, a key objective of neoliberal policies has been the reduction of social security expenditure. In order to make "rational" savings in healthcare and not give the impression that cost cuts would come at the expense of quality, the "American Registration System" was introduced to "map the sector". To this end, the DRG (diagnosis related groups) classification system was installed, not surprisingly on the initiative of the Reagan administration.⁶⁶ A code was hereby assigned to

A first resulting legislation of this reform action concerned the "Tax Equity and Fiscal Responsibility act" (TEFRA) of 1982 (Public Law 97-248, 96 Stat 324). TEFRA may be considered as the forerunner of the DRG's. As reported upon by Kenton and Berry-Johnson, TEFRA was developed to reduce the growing federal deficit in various domains, by closing loopholes in the tax system, introducing stricter compliance and tax-collection measures, such as increasing excise taxes on cigarettes and telephone services, as well as increasing corporate taxes. TEFRA also "rescinded" some of ERTA's—by which reference is made to the "Economic Recovery Tax Act" of 1981 reductions in personal income-tax rates that at the time had not yet gone into effect. TEFRA also removed some of the tax breaks businesses received under ERTA, such as accelerated depreciation. Still according to Kenton and Berry-Johnson, TEFRA, furthermore, instituted a 10% withholding tax on dividends and interest paid to individuals who had no certified tax identification numbers. TEFRA at the same time affected a broad range of taxpayers an tax systems, as it modified the rules governing pension plans, life insurances, corporate mergers and acquisitions, the redemption of corporate stock, and safe harbour leases. (Cf. Kenton and Berry-Johnson (2020).)

Shortly after, in February 1983, President Reagan submitted his long-awaited "Health Incentives Reform Program" (HIRP) to the American Congress, which consisted of a multipronged strategy for reducing health costs. One of the components of HIRP that became law was a "prospective payment system" (PPS) for inpatient hospital services based on 468 diagnosis-relate groups (referred to as so-called "Diagnosis-Related Groups" or "DRGs"). On April 20, 1983, after what has been referred to as "a whirlwind passage through Congress", the "Social Security Amendments Act" of 1983 (H.R. 1900, PL 98-21), putting the DRG system into effect, became law (cf. Preston

⁶⁴Assa and Calderon (2020), p. 7.

⁶⁵Foulon (2021).

⁶⁶Cf. Millenson (2010); Ginsberg (1987), p. 64.

In 1982–1983, President Ronald Reagan and a US Congress that at the time was reported to be split between Republican and Democratic control, reached an agreement on a radical new payment scheme for Medicare. According to Ginsberg, it concerned the most far-reaching and critical legislative action in healthcare policy undertaken by the Reagan administration, or any other administration, since the days of Lyndon Johnson. (Cf. Ginsberg (1987), p. 64.)

each disease treated in a hospital, which initially was intended to make it easier to find out which pathologies ended up for treatment in hospitals. However, soon this system allowed to deduce how long a hospital stay was needed for a particular treatment of a well-defined pathology. One could, e.g., also start calculating how many staff members were to be involved for treating a particular pathology, how much the medication was to cost, how long the average surgery time would be for an operation etc. Foulon notes that although such information can on itself be useful and not necessarily needs to be intrinsically harmful or dangerous, the system soon became harmful when it started to get used to propagate further savings in healthcare. As a result, hospital physicians were soon confronted with the concepts of a "responsible duration of stay (in a hospital)" and of "responsible hospital expenditure". Hospitals were even financially rewarded for shorter hospitalizations and penalized for an excessively long hospitalization for a particular pathology. In this manner, the hospitalization duration gradually got shortened for all conditions. Shortening the average length of hospitalization, in its own turn, justified the reduction of the number of "redundant" hospital beds. E.g., In Belgium, there were in 1990 56,327 hospital beds, a number which was progressively reduced to 52,565 by 2019. This amounted to a reduction of 8% (taken into account the population growth). And precisely the shortage of hospital beds (all through the

et al. (1997), p. 147). Under the DRG system, which was by and large following the approach of TEFRA of 1982, the American federal government would still only pay a flat rate for each DRG. (Cf. Ginsberg (1987), p. 66). Before, from 1966 on, when Medicare had begun, until 1982, US hospitals had been reimbursed retrospectively and on the basis of real costs; that is to say that hospitals were reimbursed in full for necessary and reasonable costs expended in service provision. These costs were, furthermore, calculated on a so-called "per diem" basis. The PPS model was meant for replacing this costing regime. PPS was more precisely based upon a set of 467 product lines called "Diagnosis-Related Groups" (DRGs) which classified and grouped together patients with similar principal diagnoses, the assumption being that these diagnoses required similar treatment protocols and, hence, similar amounts of resources. (Cf. Preston et al. (1997), p. 147.) The purpose of this new system was to guarantee the quality of Medicare services and to save money for the government by eliminating unnecessary hospital admissions and by encouraging greater utilization of outpatient services. (Cf. Ginsberg (1987), p. 68.) The DRG system was thus aimed at trimming billions of dollars from the federal budget and at plummeting medical inflation to plummet, while (purportedly) still guaranteeing quality of care. The DRG system led to a permanent change in how both the public and private sector pay for healthcare in the United States, and has, since then, gone curiously unmentioned during health reform debates to follow, to the extent that some have suggested that the topic simply raises too many squirm-inducing questions, inciting political discretion instead of debate. The 1983 DRG system was reported to be conceptually simple: Medicare was more precisely told to pull the plug on paying hospitals whatever they billed the government as their costs, plus an additional profit margin piled on. Instead, Medicare would still only be committed to paying a fixed price linked to each patient's clinical condition, or "diagnosis-related group" (DRG). That price might vary somewhat due to adjustments such as regional wage levels, but it was in essence a price set in advance; hence the term "PPS" or "prospective payment system" for describing the underlying methodology. The effect of this system of prospective payment was believed to be felt immediately: Soon after the introduction of the law, the growth in Medicare hospital payments plunged from 16.2% per year from 1980 through 1983, to just 6.5% per year from 1987 through 1990. Between 1982 and 1988, Medicare hospital days plummeted a further 20%. (Cf. Millenson (2010).)

Western world) has been one of the most important reasons for the huge mortality rates of Covid-19 in the Western world (cf. Sects. 5.3.1 and 5.3.2.2.).⁶⁷

Based upon this calculation method for every aspect of treating any disease, savings were also accomplished in the staffing of hospitals. At the beginning of 2021, the nursing supervision in Belgium was 1 per 9.4 patients, while it is generally assumed that a safe level of supervision requires minimum one nurse per eight patients. Raising the number of nurses has since then become increasingly difficult, moreover given the relatively low salaries and heavy workload.⁶⁸

Because of such approaches (such as "austerity" on a macro-level) and "DRG"reporting systems (or similar systems) on a micro-level, neoliberal health policy has mainly been about reducing costs. As a result, staffing must be kept as small as possible in all hospital services. According to Foulon, in many hospital departments throughout the EU, there is already a problem when a staff member is unexpectedly absent. According to the same author, one does, of course, not necessarily build out a healthcare system with the assumption that a pandemic is permanently at hand, but neoliberal policy of extreme downsizing the entire healthcare sector, has made the European healthcare systems extremely vulnerable to the slightest overload. For Foulon, it is clear that the inadequacy of the healthcare systems of the Western world to deal with a pandemic such Covid-19, has as one of its most important causes the neoliberal health policy of recent years.⁶⁹

5.1.2.9 Further Research Methodology

In the next Sect. 5.2, we shall try to elaborate upon the question what the foregoing has meant, in practice, for the organization of healthcare in general and that of the hospital sector in particular, in both (Western) Europe and the United States. Thereafter, in Sect. 5.3, it will be investigated to what extent the European and US "marketized" healthcare sectors have been able to cope—or not—with the impact of the Covid-19 pandemic.

⁶⁷Foulon (2021).

⁶⁸Foulon (2021).

⁶⁹Foulon (2021).

5.2 Practical Outlook of the Healthcare Sector Before Covid-19

5.2.1 The EU

5.2.1.1 General Characteristics of the European Healthcare Sector in 2018

5.2.1.1.1 Introduction

Notwithstanding the previously cited remark by Assa and Calderon (cf. Sect. 5.1.2.8.), thanks to a relatively recent report by the OECD and the EU Commission working together, a fairly good picture of the state of affairs in European healthcare in 2018 is available.⁷⁰

This 2018 special report entitled "Health at a Glance: Europe 2018", provides an in-depth, comparative analysis of the health status of EU citizens and the performance of the health systems of the 28 EU Member States, 5 candidate countries and 3 EFTA countries. The authors themselves considered the report a first, important step in the "State of Health in the EU cycle of knowledge brokering".⁷¹

The report is in two parts: Part I consists of two thematic chapters, the first of which is devoted to the need for joint efforts to promote better mental health, and the second—which can hardly be surprising, given the EU neoliberal health policy's emphasis on "austerity"—on "outlining possible strategies for reducing wasteful health expenditure". Part II of the report covers what the EU Commission considers to be the "most recent trends in key indicators of health status, risk factors and health spending", together with a discussion of progress in "improving the effectiveness, accessibility and resilience of European health systems".⁷²

The EU's emphasis on austerity measures is already evident from the first pages of the 2018 report.

In the following overview, we shall refer to and discuss a number of elements of this 2018 report that are relevant in light of the aims of this book. This does not preclude the whole of the report from being commendable literature, not only because of the richness and detail of the data provided, but also because it exposes how proud the supra-national, neoliberal institutions behind this report (in particular, the OECD and the EU Commission) are of their many neoliberal austerity achievements of the past decades. Indeed, the common thread that appears throughout the 2018 report concerns the extent to which the healthcare sector has, in the recent past, been the object of increasingly stringent austerity measures.

Even the modern-day models of "inclusive healthcare"—basically aimed at keeping (poor) people out of healthcare facilities as much as possible, to the extent

⁷⁰Cf. OECD and European Commission (2018).

⁷¹Cf. OECD and European Commission (2018).

⁷²OECD and European Commission (2018), p. 11.

that medical treatment in such facilities is simply too expensive, and neoliberal authorities prefer especially poor people to be sick at home and be cared for (or not) by relatives or by the local neighbourhood, so no expensive treatments are wasted on them—are dealt with in a detailed manner in the 2018 report (on the theoretical arguments for this so-called intrusive healthcare model; cf. Sect. 5.1.2.5.).

It is also remarkable that, notwithstanding the very high degree of thoroughness of the 2018 report which aimed to provide a detailed overview of the overall state of affairs of health policy in Europe, not a single word is said about the subject "prevention or preparation for an epidemic or pandemic". Indeed, despite prominent, international businessmen (such as Bill Gates) had been calling for years on the governments of (Western) countries to start preparing for the possibility of outbreaks of epidemics or pandemics,⁷³ it does not appear from the 2018 OECD/EU report that this was a theme that had already captivated the interest of the EU leadership. In view of neoliberalism's aversion to any form of planning (the so-called "laissez-faire, laissez-passer" principle; cf. Sect. 2.2.4.), this is hardly surprising at all.

The list of special "risks factors" to which special attention was paid in the 2018 report speaks volumes:⁷⁴

- (1) Smoking among children.
- (2) Smoking among adults.
- (3) Alcohol consumption among children.
- (4) Alcohol consumption among adults.
- (5) Illicit drug consumption among children.
- (6) Illicit drug consumption among adults.

⁷³In a 2015 TED talk, Microsoft co-founder, billionaire and self-proclaimed philanthropist Bill Gates cited lessons from the 2014 West Africa Ebola virus crisis, saying that the United States and other (Western) countries had even in the aftermath of this crisis basically remained unprepared for any future pandemic that was bound to hit them. "If there is anything that kills more than ten million people in the next few decades, it is most likely a highly contagious virus rather than a war," Gates had said. "Not missiles, but microbes." Bill Gates noted that many countries have worked for years to reduce the risk of nuclear war, and that they should pay the same attention to mass mobilisation against a deadly virus. "We have actually invested very little in a system to stop an epidemic," he said, echoing warnings in recent years from infectious disease doctors. "We are not ready for the next epidemic." "A virus "like the Spanish flu of 1918," Gates had added, "would spread around the world very, very quickly. And you can cf. that over 30 million people died from that epidemic. So this is a serious problem. We have to be concerned." "Individual countries, the World Health Organisation and others need to set up medical attack teams that train like military soldiers, conduct simulated pandemic exercises and prepare to move quickly into areas where pandemics are starting to test and treat victims," Gates had added. "Governments also need to invest much more in medical equipment, research on vaccines and other ways to prepare. Now I don't have an exact budget for what this would cost, but I'm pretty sure it's very modest compared to the potential damage," Gates had also said. "The World Bank estimates that if we have a global flu epidemic, global wealth would fall by more than \$3 trillion and we would have millions and millions of deaths." "There is no reason to panic," Gates had, furthermore, said in conclusion. "We don't need to hoard cans of spaghetti or dive into the basement. But we do need to get going, because time is not on our side." (Cf. Rogers (2020).)

⁷⁴Cf. OECD and European Commission (2018), esp. Chapter 4 "Risk factors", pp. 111–130.

- (7) Obesity among children.
- (8) Obesity among adults.
- (9) Mortality due to air pollution and extreme weather conditions.

For wealthy Europe, which prides itself on being one of the strongest economies on the planet, characterized by a perceived deep—albeit untruthful—concern for the interests of its citizens, it is significant that the specific "risk factors" of public health which were deemed of importance in 2018, all encompass luxury problems—such as drugs, alcohol, obesity and pollution—caused by what Galbraith,⁷⁵ in the past, has described as "the affluent societies", i.e. societies that are completely subject to the capitalist working methods and in which the generic population but serves to support the capitalistic "production-for-production's sake-machinery" (and, therefore, the "consumption-for-the-sake-of-consumption" model),⁷⁶ where the view on man is that of what Herbert Marcuse has, in the past, described as the "one-dimensional man", a "being" which only serves the interests of an economic model, without any aptitude and ability for critical thought and oppositional behaviour whatsoever.⁷⁷

Such a "one-dimensional human being" still only exists in a socioeconomic dimension, thereby primarily fulfilling the following societal functions:⁷⁸

- (1) The function of "working" from morning till evening, with little time for anything other than working, until as old an age as possible.
- (2) The function of working for one central external purpose, namely for making the shareholders of the entrepreneurial sector as rich as possible.

⁷⁵Galbraith (1974).

⁷⁶On this, cf. Byttebier (2017), p. 200.

Particularly interesting is Galbraith's remarks on "created wants", one of the systems through which the capitalist machinery makes sure that it can keep going on: "So it is that if production creates the wants it seeks to satisfy, or if the wants emerge pari passu with the production, then the urgency of the wants can no longer be used to defend the urgency of the production. Production only fills a void that it has itself created. The point is so central that it must be pressed. Consumer wants can have bizarre, frivolous or even immoral origins, and an admirable case can still be made for a society that seeks to satisfy them. But the case cannot stand if it is the process of satisfying wants that creates the wants. For then the individual who urges the importance of production to satisfy these wants is precisely in the position of the onlooker who applauds the efforts of the squirrel to keep abreast of the wheel that is propelled by his own efforts. That wants are, in fact, the fruit of production will now be denied by few serious scholars. And a considerable number of economists, though not always in full knowledge of the implications, have conceded the point. In the observation cited at the end of the preceding chapter, Keynes noted that needs of "the second class," i.e., those that are the result of efforts to keep abreast or ahead of one's fellow being, "may indeed be insatiable; for the higher the general level, the higher still are they." And emulation has always played a considerable role in the views of other economists of want creation. One man's consumption becomes his neighbour's wish. This already means that the process by which wants are satisfied is also the process by which wants are created. The more wants that are satisfied, the more new ones are born". (Cf. Galbraith (1974), pp. 96-97.)

⁷⁷Marcuse (1964).

⁷⁸Byttebier (2021), pp. 127–128.

- (3) The function of "consuming" as much as possible, as all one's income should be spent on paying for the goods and services provided by the capitalist "production for production's sake" economic model, notwithstanding the fact that many such goods and services are intrinsically useless and, often, harmful to both humanity and the environment.
- (4) The function of "credit taker", which helps to ensure that: (1) people consume more than their income allows for; (2) the prison of one's "duty to perform labour" is ever-more fortified (as credit taken has to be paid back); and (3) that one's income is certainly not spent on anything else than expenses that make the rich of the planet ever richer.
- (5) The function of eternal "taxpayer", as states obtain their income mainly by taxing the working classes.
- (6) The function of being employed by a repressive (capitalist) state, i.e., of being part of a bureaucracy that helps perpetuate such a (capitalist) socioeconomic order.

The function of being (medically or otherwise) cared (and generally looked out) for, obviously, does not appear on this list, as under the logic of neoliberalism every individuals are themselves responsible for their healthcare and that, at best, society could start organizing intrusive care systems.⁷⁹ (Compare Sect. 2.1, where it has been described in some more detail how this ideological approach has gradually conquered Western health policy as of the 1960s.)

Suffice here further by referring to the following quote of the work "One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society" of Herbert Marcuse, bearing in mind that this was written already in 1964:⁸⁰

The productive apparatus and the goods and services which it produces "sell" or impose the social system as a whole. The means of mass transportation and communication, the commodities of lodging, food, and clothing, the irresistible output of the entertainment and information industry carry with them prescribed attitudes and habits, certain intellectual and emotional reactions which bind the consumers more or less pleasantly to the producers and, through the latter, to the whole. The products indoctrinate and manipulate; they promote a false consciousness which is immune against its falsehood. And as these beneficial products become available to more individuals in more social classes, the indoctrination they carry ceases to be publicity; it becomes a way of life. It is a good way of life – much better than before – and as a good way of life, it militates against qualitative change. Thus emerges a pattern of *one-dimensional thought and behavior* in which ideas, aspirations, and objectives that, by their content, transcend the established universe of discourse and action are either repelled or reduced to terms of this universe. They are redefined by the rationality of the given system and of its quantitative extension.

The above-mentioned "elements" or "health risks" of concern that drew the attention from the 2018 OECD/EC report's authors are almost all generated by capitalism itself, and in particular by excessive consumption of things that, in a more normal world, would most likely not even be produced or traded to begin with

⁷⁹Cf. especially in the works of Ayn Rand. (Cf. Rand (1982, 1992, 2008).)

⁸⁰Marcuse (1964).

(e.g., cigarettes, alcohol and industrially prepared food). Many of these products are, moreover, so-called "created wants", consumed simply as a form of escapism, to cope with unhappiness. Not only does ruthless capitalism ensure that these products are massively produced and traded, but the system is also very aware that these products lie at the root of numerous diseases and broader societal ills.

In light of the content of the 2018 OECD/EC report and the consequences of neoliberal health policy it reveals (in particular, decades of sustained austerity, in addition to an emphasis on the development of "inclusive models of healthcare", basically a polite way to say that those who are poor and sick, have to take care of their own), it is hardly surprising that when, at the end of January 2020, Covid-19 reached the European continent, no policy level or healthcare institutions were actually prepared for this: Not the EU (through the EU Commission, or one of the many European institutions, albeit all manned with an army of well-paid civil servants), not the national governments of the EU member states (nor those of the United Kingdom that had recently departed from the EU itself; cf. the so-called "Brexit"), not the numerous regional, local or community administrations to which neoliberal central authorities had "detached" many specific tasks of healthcare over the years, and not even the hospitals and nursing institutions themselves, to the extent that these had, in many countries, suffered way too much for many years under a sustained austerity policy.

In fact, if all these many governing authorities and healthcare institutions have one thing in common, it is that none of them had given much attention to crisis prevention and preparation at all.

We shall take a closer look at the neoliberal public policy, with its emphasis on austerity measures, which has caused all of this, in Sect. 5.2.1.2 below. But first, let us take a closer look at some of the findings of the health policy assessment regarding the EU and its member states as made in 2018 by the OECD (and the EU Commission itself) and as based upon the findings of their above-quoted report.

5.2.1.1.2 Health Insurance Coverage

By and large, the financing of a universal health coverage can happen through two main models that prevail in Europe:⁸¹

- (1) The social democratic or "Nordic" model, in which health insurance—as most other public services—is funded predominantly from taxation. This model prevails in countries such as Norway, Finland, Sweden, Denmark and Iceland. Not by coincidence, these countries also count among the happiest on Earth. (Cf. Sect. 2.1.3.)
- (2) The social insurance or "Bismarckian" model, in which health insurance besides a wide variety of other social security systems, such as income

⁸¹Banett and Bagshaw (2020).

support—is largely funded through employer and personal (mandatory) contributions.

According to the 2018 OECD-EC report, in 2018, most European countries had universal (or semi-universal) health care that at least covered basic health care services, such as consultations with doctors, tests and examinations and hospital admittance.⁸² However, in practice, coverage of these "core services" might not have been as "universal" in some countries.⁸³

Still, in three European countries (notably Cyprus, Bulgaria and Romania), at least 10% of the population was still not universally covered for health services by 2018.⁸⁴

The basic coverage of primary health care in most EU Member States included a well-defined set of services, but in many cases based upon a model of "shared costs". In some countries, supplementary health insurance could be taken out via private insurance in order to (1) cover costs remaining after the basic coverage (= so-called "complementary insurance"), (2) add additional services (= so-called "supplementary insurance"), or (3) provide faster access or a wider choice of health care providers (= so-called "duplicate insurance"). In most EU countries, only a small proportion of the population had opted for one or more forms of such additional private health insurance. But in five countries (France, The Netherlands, Slovenia, Belgium and Croatia), half or more of the population had reportedly opted for such additional private coverage.⁸⁵

⁸⁴OECD and European Commission (2018), p. 174.

⁸⁵OECD and European Commission (2018), p. 174.

In France, almost the entire population (96%) was reported to have supplementary private health insurance to cover the costs of the social security system. The Netherlands had the largest supplementary market (87% of the population), with private insurance paying for dental care not

⁸²OECD and European Commission (2018), p. 174.

⁸³OECD and European Commission (2018), p. 174.

According to the OECD/EC report, in Ireland, e.g., only about 50% of the population was covered (at the time of the report) for the cost of GP visits. In Greece, a new law in 2016 (Law 4368/2016) provided universal health coverage for the entire population, closing the coverage gap for the 10% of the population who had previously been uninsured. These previously uninsured people have since legally recognised access to a wide range of services and goods (including hospital care and prescription drugs). (Cf. OECD and European Commission (2018), p. 174.)

According to the OECD-EC report, in Bulgaria, the percentage of the population that was insured had fallen after 2010, when a tightening of the law implied that people lost their social health insurance if they did not pay their contributions. However, it was common for uninsured people who needed medical care to go to hospital emergency departments, where they were encouraged to get insurance (without paying a financial penalty for not having had insurance before). Still according to the same report, in Romania, although social health insurance was mandatory, only 89% of the population was insured in 2017. The uninsured population mainly included people working in agriculture, the self-employed or unemployed who were not registered for unemployment or social security benefits, as well as Roma who did not have an identity card (which prevented them from registering in the social security system). These uninsured had access only to a minimum package of benefits, which included emergency care, treatment of communicable diseases and care during pregnancy. (Cf. OECD and European Commission (2018), p. 174.)

The development of private health insurance was linked to several factors in the 2018 OECD-EC report, including gaps in access to publicly funded services, government interventions targeting private health insurance markets, as well as historical development.⁸⁶

5.2.1.1.3 Extent of Healthcare Coverage

One of the first matters that have been investigated in the above-mentioned 2018 report from the OECD and the European Commission and that have been quoted in this book, deals with the extent of healthcare coverage that was achieved throughout the EU by 2018.

From said study, it appeared that across the EU, inpatient services provided in hospitals were among those most comprehensively covered than any other form of medical care in 2018. It, more precisely, appeared from this study that, across the EU, 93% of all the costs related to such inpatient care were borne by public authorities or by mandatory insurance schemes. In many countries, patients even had access to completely-for-free acute inpatient care. This appeared to be the case, e.g., in Denmark, Hungary, Poland, Spain and the United Kingdom, where the government and/or mandatory health insurance systems covered more than 90% of these inpatient costs at the time. In The Netherlands, these inpatient services were also free once an annual general excess was reached. However, in Cyprus, Greece and Ireland, the financial coverage of the costs related to hospital inpatient care was by contrast lower than 70%.⁸⁷

Regarding outpatient care expenditure, it appeared from the same study that, in 2018, more than 75% of the costs were borne by public authorities and/or mandatory healthcare financing Schemes (77%). When excluding Bulgaria and Cyprus, it appeared that at least half of all the costs for outpatient medical care in EU countries were paid for by mandatory third-party payers. There were even a number of EU countries where all outpatient primary and specialist medical care was generally free "at the point of service", implying that a physician affiliated with the mandatory program had to be consulted at a fixed co-payment. In this group of countries, user fees borne by the patient himself, moreover, still applied for specific services and/or when consulting unqualified providers. Such a system, e.g., applied in Denmark, where 92% of the total outpatient medical cost was covered by the mandatory health programmes, but charges were still made for visits to health providers functioning outside these mandatory schemes, such as psychologists and physiotherapists. A

reimbursed by the government. Duplicate private health insurance, which provides faster access to medical services in the private sector when there are waiting times in the public systems, was highest in Ireland (45%). The population covered by private health insurance had in some countries substantially increased over the preceding decade, notably in Denmark, Slovenia and Belgium. (Cf. OECD and European Commission (2018), p. 174.)

⁸⁶OECD and European Commission (2018), p. 174.

⁸⁷OECD and European Commission (2018), p. 176.

similar system applied in the United Kingdom (84%), where outpatient care outside the services ordered under the NHS system was not covered.⁸⁸

Government or mandatory health insurance coverage for medicines was in the EU generally less extensive than coverage for costs for inpatient and outpatient medical care. According to the study from the OECD and the CE, across the EU, about 64% of all medicine costs were born by government and/or mandatory health insurance schemes in 2018. So-called "over-the-counter medicines"—which are obtainable without a prescription from a physician, and which are usually not covered by a government or otherwise mandatory health insurance scheme—were of major importance in some EU countries. E.g., in Cyprus and Bulgaria, less than 20% of all medication costs fell under public or mandatory health insurance schemes. By contrast, in Germany, this percentage amounted to 84%, with only moderate cost-sharing requirements in accordance with which patients generally had only to pay a co-insurance rate of 10% for each prescribed medicine, up to a maximum of EUR 10 per item within an annual co-insurance cap.⁸⁹

5.2.1.1.4 Availability of Doctors

According to the study from the OECD and the European Commission, in (or in the time period preceding) 2018, the number of doctors per capita showed huge differences between EU countries.⁹⁰

According to the study, in 2016, Greece was among the EU countries with the highest number of doctors per 1000 population, namely 6.6. However, the study also mentioned that this number might have been an overestimation, as it included all doctors licensed to practice (including retired physicians and those emigrated to other countries). Other countries that still had high numbers of general practitioners were Austria and Portugal, however in Portugal these numbers were assumed to be an overestimation for the same reason as Greece (even implying that when disregarding this overestimation, the number of practicing physicians in Portugal would probably have been just under the EU average). According to the OECD and CE study, the number of physicians per capita was the smallest in Poland, the United Kingdom and Romania.⁹¹

From the study, it also appeared that, since 2000, the number of physicians per capita had risen in all EU countries, except in France, Poland and Slovakia, where the numbers had stayed stable. On average across EU countries, the number of physicians per capita was reported to have risen from an average of 2.9 doctors per

⁸⁸OECD and European Commission (2018), p. 176.

⁸⁹OECD and European Commission (2018), p. 176.

⁹⁰OECD and European Commission (2018), p. 178.

⁹¹OECD and European Commission (2018), p. 178.

1000 inhabitants in 2000, to 3.6 in 2016. In most EU countries, the financial crisis of 2008 had not been of much impact on the growth figure regarding physicians.⁹²

In many EU countries, there was already for more than a decade a shortage of general practitioners, with concerns that this problem would not be solved in the near future. This was particularly more the case in rural and remote areas than in urban areas. While the total number of physicians per capita had during the years preceding 2018 increased in almost all EU countries, the proportion of general practitioners had in many countries stagnated or even declined.⁹³ Physician density was, moreover, consistently higher in urban regions, reflecting a higher availability of specialized medical services, such as access to surgery, and physicians' own preference for settling in an urban environment. The differences in the number of available physicians between urban and rural regions were reported to be the highest in the Slovak Republic, the Czech Republic and Greece. Many countries also reported having resorted to several forms of financial and other stimuli to attract and retain doctors in such "underserved areas". Examples of such stimuli were one-time subsidies to help general practitioners start their practice, as well as recurrent payment schemes, amongst which income guarantees and bonuses. Some EU Member States also had resorted to a policy of stimulating students from underserved regions to start medical school.⁹⁴

5.2.1.1.5 Availability of Nurses

By 2018, the number of nurses per capita far outnumbered the number of doctors in most EU Member States, with a ratio of on average two to four nurses per physician in most EU Member States. According to the OECD and CE-study, nurses play a crucial role in the delivery of healthcare, not only in hospitals and long-term nursing facilities (such as retirement homes for the elderly), but to an increasing extent also in primary care and home care schemes⁹⁵ (cf. already Sect. 5.1.2.5, re the "inclusive care model", which has during the past decades to an increasing extent been promoted and embraced by neoliberal governments in light of their austerity policies).

Notwithstanding the foregoing, many EU countries were increasingly dealing with likely future shortages of nurses, as the need for (more) nurses was expected to increase in a context of an ageing and retiring "baby boom" population in general, and a generation of "baby boom" nurses in particular. This concern had already by 2018 made many EU countries to resort to measures for improving the schooling of

⁹²OECD and European Commission (2018), p. 178 (cf., furthermore, the report itself for further figures and prognoses on this matter).

⁹³OECD and European Commission (2018), p. 178.

⁹⁴OECD and European Commission (2018), p. 178.

⁹⁵OECD and European Commission (2018), p. 180.

new nurses. Other EU countries even started addressing the nurse shortages by attracting nurses from third countries.⁹⁶

On average, there were 8.4 nurses per 1000 inhabitants in all EU countries in 2016, up from 6.7 in 2000. The number of nurses per number of inhabitants was reported to be the highest in Denmark and Finland. However, about a third of the nurses employed in the two latter countries were at the same time reported to be trained at a less advanced level than general nurses and to be performing lower tasks. Switzerland and Iceland were facing a similar situation. In some other countries, such as Italy and Spain, many so-called "health care assistants" (or "nursing auxiliaries" or "nursing aids") were hired to assist qualified nurses. Greece was reported having the lowest number of nurses per capita among EU countries, but the data available for Greece only included nurses serving in hospitals. Bulgaria, Latvia, Poland and Cyprus also reported relatively low numbers of qualified nurses.⁹⁷

Since 2000, the number of qualified nurses per capita had risen in most EU Member States. Exceptions on this general trend concerned the Baltic countries (Estonia, Latvia and Lithuania), where the number of nurses per capita was reported to have remained stable, and Slovakia, where the number of nurses was reported to have decreased both in absolute numbers and per capita. Most of this decline regarding Slovakia was reported to have taken place between 2000 and 2010.⁹⁸

In other EU countries, there had by contrast been an increase in the number of qualified nurses. This increase in the number of qualified nurses per capita was highest in Denmark, Finland, Germany, Luxembourg, France and Malta. Malta was thereby reported to have resorted to a series of unusual measures for both educating more nurses locally and attracting more nurses from abroad to deal with shortages of the past. E.g., the university training to become a qualified nurse in Malta had become free for students; and after students graduated, they were stimulated to take an educational leave while receiving at least part of their salary.⁹⁹

According to the OECD and CE-study, most nurses in EU Member States serve in hospitals. Relative to the total size of the general population, the number of qualified nurses serving in hospitals, both in absolute numbers and regarding full-time equivalents, had in the decade leading up to 2018 increased in most EU countries (e.g., in Austria, Belgium, Denmark, Germany and Malta). In France, the total number of qualified nurses serving in hospitals per capita had also risen slightly, although the number of full-time equivalents had more or less stayed the same, implying that the average number of laboring hours performed by qualified nurses had decreased slightly. In many EU Member States, the ratio of full-time equivalents to the absolute number of nurses was reported to range from 0.80 to 0.95, with this ratio having remained relatively stable over time. However, this average ratio was

⁹⁶OECD and European Commission (2018), p. 180.

⁹⁷OECD and European Commission (2018), p. 180.

⁹⁸OECD and European Commission (2018), p. 180.

⁹⁹OECD and European Commission (2018), p. 180.

reported of being much lower in Belgium and Germany (0.70–0.75), implying that qualified nurses in these countries worked fewer hours.¹⁰⁰

Many countries also reported a growing number of qualified nurses working in so-called primary care. In response to shortages of GPs, some EU Member States had resorted to introducing or expanding advanced nurse practitioner roles to ameliorate access to primary care. Assessments of experiences with such (advanced) nurse practitioners in Finland and the United Kingdom thereby demonstrated that such schemes could improve access to care and reduce waiting times for medical treatment, while at the same time providing a comparable quality of care as physicians for a range of patients (e.g., patients with minor illnesses or patients requiring only routine follow-up).¹⁰¹

5.2.1.1.6 Hospital Beds

One of the most vital sets of data in light of the Covid-19 pandemic is most likely the number of hospital beds.

This number gives an indication of the means that are generally available for providing health care services to hospital patients. The impact of the availability of hospital beds on the number of hospital admissions has thereby been extensively documented. From this research, it appears that a greater supply of hospital beds, in general, leads to a lower threshold for hospital admission (the so-called "Rohmer's law" that a "built bed is a filled bed").¹⁰²

It must in this regard be underlined that under neoliberal austerity measures of the past decades, EU authorities and EU member state governments aimed at keeping the number of hospital beds as low as still deemed acceptable, which has been one of the most main reasons for the disastrous impact Covid-19 has had in both the countries of the EU and the United Kingdom.

According to the already above-mentioned OECD and CE-study, by 2018, Germany, Austria and Bulgaria still reported the highest amounts of hospital beds per capita, having more than seven beds per 1000 inhabitants in 2016, which was considerably above the EU average of just over five beds per 1000 inhabitants, and more than twice the number of available beds in Sweden, the United Kingdom and Denmark.¹⁰³

Since 2000, in the light of the neoliberal austerity policies that had been strongly geared towards this criterion, the number of hospital beds per capita had drastically fallen in all EU countries. On average, the number was reported to have fallen by no less than $20\%^{104}$ (= which implied that every five beds had been reduced to four).

¹⁰⁰OECD and European Commission (2018), p. 180.

¹⁰¹OECD and European Commission (2018), p. 180.

¹⁰²OECD and European Commission (2018), p. 186.

¹⁰³OECD and European Commission (2018), p. 186.

¹⁰⁴OECD and European Commission (2018), p. 186.

This reduction in the supply of hospital beds had in particular marked in Finland, Estonia, Latvia and Lithuania. The reduction had, moreover, been accompanied by a fall in the number of actual hospital admissions in various EU Member States and by a fall in the average duration of stay in almost all EU countries,¹⁰⁵ which forms but one illustration of how much the EU prefers austerity above the interests of patients (and thus, ultimately, its general population).

Hospital admissions were by 2018 still the highest in the three countries with the largest amount of available hospital beds: Bulgaria, Germany and Austria. While differences in patients' clinical needs may present an explanation for some small part of the differences in admission rates, these variations likely mostly reflected other factors, such as differences in hospital bed supply, clinical practices and payment systems.¹⁰⁶

In all EU Member States, the main diseases resulting into hospital admittance in 2016 were: circulatory diseases, pregnancy and childbirth, injuries and other external causes, diseases of the digestive system, respiratory diseases and cancers.¹⁰⁷

Hospital admittance rates not only varied between EU Member States but even within countries. In various EU countries (e.g., Finland, Germany, Italy, Portugal, Spain and the United Kingdom), hospital admissions (except those for surgical interventions) varied more than twofold between different regions within the same country. This was believed to be due not only to differences in the availability of hospital beds, but also in the supply and quality of primary care services.¹⁰⁸

Hospital bed occupancy rates were, moreover, reported to have risen over time in some EU countries with a relatively low amount of hospital beds. This was particularly the case for Ireland, having a curative (acute) care bed occupancy approaching 100% in 2016, well above the number of all other countries. In countries such as Belgium and Germany, bed occupancy had remained relatively the same since 2000, at around 80%. The EU average had also remained stable at around 77%.¹⁰⁹

Figure 5.1 gives an indication of the number of hospital beds per 1000 population, in 2000 and 2016 (or nearest year) in some European countries. Figure 5.2 gives a similar overview of the occupancy rate of curative (acute) care beds, in 2000 and 2016 (or nearest year).

¹⁰⁵OECD and European Commission (2018), p. 186.

¹⁰⁶OECD and European Commission (2018), p. 186.

¹⁰⁷OECD and European Commission (2018), p. 186.

¹⁰⁸OECD and European Commission (2018), p. 186.

¹⁰⁹OECD and European Commission (2018), p. 186.

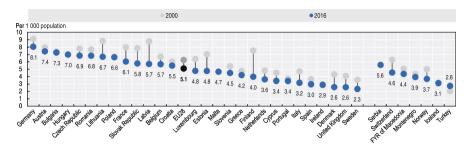


Fig. 5.1 Hospital beds per 1000 population, in 2000 and 2016 (or nearest year) [Source: OECD and European Commission (2018), p. 187]

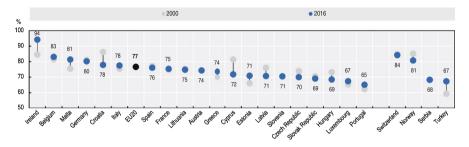


Fig. 5.2 Occupancy rate of curative (acute) care beds, 2000 and 2016 (or nearest year) [Source: OECD and European Commission (2018), p. 187]

5.2.1.2 Impact of EU Neoliberal Austerity

5.2.1.2.1 EU Monetary and Fiscal Policy as a Method of Inciting EU Member States to Take Austerity Measures Regarding Their Healthcare Sector(s)

In March 2020, Gerrit Zeilemaker made his own, more critical assessment of the past decades of neoliberal policy applied to the EU healthcare sector.¹¹⁰

This author started his assessment by pointing out how, for more than a decade already, the EU Commission in its "country-specific recommendations", insisted that EU member states should continue reducing healthcare costs and expenditures.¹¹¹ According to Zeilemaker, through this policy of austerity "recommendations", healthcare in EU countries, over the past years, has become completely subordinated to the so-called "Maastricht (budgetary) convergence criteria". The budget constraints imposed on EU countries as part of the Growth and Stability Pact (cf. Sect. 4.2.2.2.) have in this manner been increasingly used as a leverage to cut

¹¹⁰Zeilemaker (2020).

¹¹¹Zeilemaker (2020).

 Table 5.1
 The four Maastricht convergence criteria [Source: https://ec.europa.eu/info/businesseconomy-euro/euro-area/enlargement-euro-area/convergence-criteria-joining_en#the-four-conver gence-criteria]

What is measured	Price stability	Sound and sustainable public finances	Durability of convergence	Exchange rate stability
How it is measured	Harmonised con- sumer price inflation	Government deficit and debt	Long-term interest rate	Exchange rate developments in ERM II
Convergence criteria:	A price perfor- mance that is sus- tainable, next to average inflation not more than 1.5 per- centage points above the rate of the three best performing member states	Not under excessive deficit proce- dure at the time of examination	Not more than 2 percentage points above the rate of the three best performing member states in terms of price stability	Participation in ERM II for at least 2 years, without severe tensions, in par- ticular without devaluing against the euro

down on healthcare. According to Streeck, such a policy is a manifestation of an increasing willingness shown by the EU, to decouple its fiscal and monetary policy form national democracy, as demanded by the financial markets.¹¹²

In 1992, said convergence criteria had been put in place to measure progress in countries' preparedness to adopt the euro, and defined as a set of macroeconomic indicators, which focus on:

- Price stability.
- Sound public finances (with a policy emphasis on keeping these "sustainable").
- Exchange-rate stability aimed at demonstrating that an EU and euro area member state can manage its economy without recourse to excessive currency fluctuations.
- Long-term interest rates, which are an indication for assessing the durability of the convergence.

Table 5.1 gives a schematic overview of the main characteristics of the four Maastricht convergence criteria.

The Treaty on the Functioning of the European Union (TFEU, Article 140^{113}) stipulates that, at least once every 2 years, or at the request of a Member State with a

¹¹²Streeck (2017), p. 128.

¹¹³ Article 140 (ex Articles 121(1), 122(2), second sentence, and 123(5) TEC) states as follows: "1. At least once every two years, or at the request of a member state with a derogation, the Commission and the European Central Bank shall report to the Council on the progress made by the member states with a derogation in fulfilling their obligations regarding the achievement of economic and monetary union. These reports shall include an examination of the compatibility between the national legislation of each of these member states, including the statutes of its national central

derogation (not participating in the euro area), the European Commission and the ECB must report to the EU Council on the progress made towards convergence.

Article 140(1) TFEU requires these reports to include an examination of the compatibility of national legislation, including the statutes of the national central bank, with Articles 130 and 131 TFEU and the Statute of the European System of Central Banks and of the European Central Bank (also referred to as "ESCB/ECB Statute"). The reports must also examine whether a high degree of sustainable convergence has been achieved in the Member State concerned, by reference to the fulfilment of the convergence criteria (i.e., price stability, public finances, exchange rate stability, long-term interest rates), and by taking account of the other factors mentioned in the final subparagraph of Article 140(1) TFEU. The four convergence criteria are developed further in a Protocol annexed to the Treaties (cf.; Protocol No 13 on the convergence criteria).

The most relevant convergence criterion, (purportedly) justifying the EU's severe neoliberal austerity policy, is the one dealing with public finances and is defined in the second indent of Article 140(1) TFEU as:

the sustainability of the government financial position; this will be apparent from having achieved a government budgetary position without a deficit that is excessive as determined in accordance with Article 126(6).

bank, and Articles 130 and 131 and the Statute of the ESCB and of the ECB. The reports shall also examine the achievement of a high degree of sustainable convergence by reference to the fulfilment by each member state of the following criteria: - the achievement of a high degree of price stability; this will be apparent from a rate of inflation which is close to that of, at most, the three best performing member states in terms of price stability, - the sustainability of the government financial position; this will be apparent from having achieved a government budgetary position without a deficit that is excessive as determined in accordance with Article 126(6), - the observance of the normal fluctuation margins provided for by the exchange-rate mechanism of the European Monetary System, for at least two years, without devaluing against the euro, - the durability of convergence achieved by the member state with a derogation and of its participation in the exchange-rate mechanism being reflected in the long-term interest-rate levels. The four criteria mentioned in this paragraph and the relevant periods over which they are to be respected are developed further in a Protocol annexed to the Treaties. The reports of the Commission and the European Central Bank shall also take account of the results of the integration of markets, the situation and development of the balances of payments on current account and an examination of the development of unit labor costs and other price indices. 2. After consulting the European Parliament and after discussion in the European Council, the Council shall, on a proposal from the Commission, decide which member states with a derogation fulfil the necessary conditions on the basis of the criteria set out in paragraph 1, and abrogate the derogations of the member states concerned. The Council shall act having received a recommendation of a qualified majority of those among its members representing member states whose currency is the euro. These members shall act within six months of the Council receiving the Commission's proposal. The qualified majority of the said members, as referred to in the second subparagraph, shall be defined in accordance with Article 238(3)(a). 3. If it is decided, in accordance with the procedure set out in paragraph 2, to abrogate a derogation, the Council shall, acting with the unanimity of the member states whose currency is the euro and the member state concerned, on a proposal from the Commission and after consulting the European Central Bank, irrevocably fix the rate at which the euro shall be substituted for the currency of the member state concerned, and take the other measures necessary for the introduction of the euro as the single currency in the member state concerned".

Furthermore, Article 2 of the Protocol on the convergence criteria states that this criterion implies that:

at the time of the examination the member state is not the subject of a Council decision under Article 126(6) of the said Treaty that an excessive deficit exists.

The assessment of convergence in the fiscal area is hereby directly linked to the excessive deficit procedure as specified in Article 126 of the Treaty and further clarified in the Stability and Growth Pact (cf. in particular the excessive deficit procedure, as reinforced by the 2011 reform of the Stability and Growth Pact).¹¹⁴ The details of the excessive deficit procedure are set out in Regulation 1467/97, as amended in 2005 and 2011, which establishes how government deficit and debt are to be assessed in order to determine whether an excessive deficit exists, in accordance with Article 126 TFEU. The assessment on fiscal convergence is thus made on the basis of whether the Member State is the subject of a Council decision under Article 126(6) on the existence of an excessive deficit.¹¹⁵

5.2.1.2.2 Methods of Deploying EU (Monetary and Fiscal) Austerity Policy in Practice

5.2.1.2.2.1 General

According to the Corporate Europe Observatory, there are many (both formal and informal) routes "from Brussels to EU capitals" based on the above-quoted EU principles and regulations. Consequently, the enforcement of economic and fiscal policy rules is carried out through a plethora of procedures, with the health sector having been forced to deal with all of them in recent years.¹¹⁶

Even the European Commission itself reported that the pressure to cut healthcare costs can be most clearly seen in loan agreements, such as those between the EU and Greece and Portugal in the aftermath of the financial crisis of 2008.¹¹⁷ E.g., in Portugal's 2011 loan agreement (i.e., a "Memorandum of understanding"), the reduction of costs in the health sector was high on the list of demands of EU creditors. As a result, staff expenditure in the Portuguese health sector was reduced by as much as 27% between 2010 and 2012.¹¹⁸ In the same vein, in Greece, three consecutive loan-linked adjustment programmes between 2010 and 2016 led to a similar sharp drop—by about 40%—in per capita health expenditure (according to World Bank data).¹¹⁹

¹¹⁴Cf. European Commission (2020), pp. 33–34.

¹¹⁵European Commission (2020), pp. 33–34.

¹¹⁶Corporate Europe Observatory and Tansley (2021), p. 18.

¹¹⁷Corporate Europe Observatory and Tansley (2021), p. 18.

¹¹⁸European Commission (2020), pp. 33–34.

¹¹⁹European Commission (2020), pp. 33–34.

5.2.1.2.2.2 A Letter from the ECB to Italy on 5 August 2011

Italy, though severely impacted by the financial and economic crisis of 2008, had not immediately been subject to an EU fiscal adjustment program by e.g., the European Commission or the EU Council. Instead, it was the European Central Bank (ECB) itself that would start putting pressure on the Italian government to reform health care spending. This happened under the form of a letter from the ECB addressed to the Italian government, of 5 August 2011 that urged for swift reforms, including austerity measures in healthcare.¹²⁰

Said letter has been described as "a government program", and a "diktat", yet there have also been those who questioned its existence at the time. The "secret" letter sent to the Italian government on 5 August 2011 by the (at the time) president of the ECB, Jean-Claude Trichet, and by his successor "in pectore", Mario Draghi (the later governor of the "Banca d'Italia"—the Italian central bank¹²¹), was reported to have soon afterwards inflamed the political debate of the summer of 2011, as it implied a public finance manoeuvre never seen before in the history of the Italian Republic. The letter concerned a "strictly confidential" document, which was also intended to remain confidential. Still, the newspaper "Corriere della sera" managed to obtain a copy of the letter and published in its original English text, as well as in an Italian translation, so that everyone could get a clear idea of the (dictatorial) working methods applied by some of the highest EU officials. The letter is uncharacteristically precise and punctual compared to the classical scheme of the liturgy of central banks.¹²²

To clearly demonstrate how, through its monetary and fiscal policy, the EU (in this case through the ECB) may call for "marketization" and "privatization" reforms, even in policy domains completely outside the scope of its competences, the letter has been quoted hereafter (in full) in its English version:¹²³

Frankfurt/Rome, 5 August 2011.

Dear Prime Minister,

The Governing Council of the European Central Bank discussed on 4 August the situation in Italy's government bond markets. The Governing Council considers that pressing action by the Italian authorities is essential to restore the confidence of investors.

The euro area Heads of State or Government summit of 21 July 2011 concluded that "all euro countries solemnly reaffirm their inflexible determination to honour fully their own individual sovereign signature and all their commitments to sustainable fiscal conditions and

¹²⁰European Commission (2020), pp. 33–34.

¹²¹For a short biography, cf. https://www.ecb.europa.eu/pub/conferences/ecbforum/previous_fora/2014/html/biographies/draghi.nl.html (Accessed on 15 May 2021.).

¹²²Sensini (2011) and Rose (2011).

¹²³For the English version of this letter, cf. https://www.corriere.it/economia/11_settembre_29/ trichet_draghi_inglese_304a5f1e-ea59-11e0-ae06-4da866778017.shtml. Cf., furthermore, https:// www.voltairenet.org/article171574.html. (Both sites accessed on May 15, 2021.)

For the Italian version, cf. https://www.corriere.it/economia/11_settembre_29/trichet_draghi_ italiano_405e2be2-ea59-11e0-ae06-4da866778017.shtml. (Accessed on 15 May 2021.)

structural reforms". The Governing Council considers that Italy needs to urgently underpin the standing of its sovereign signature and its commitment to fiscal sustainability and structural reforms.

The Italian Government has decided to pursue a balanced budget in 2014 and, to this purpose, has recently introduced a fiscal package. These are important steps, but not sufficient.

At the current juncture, we consider the following measures as essential:

1. We cf. a need for significant measures to enhance potential growth. A few recent decisions taken by the Government move in this direction; other measures are under discussion with social partners. However, more needs to be done and it is crucial to go forward decisively. Key challenges are to increase competition, particularly in services to improve the quality of public services and to design regulatory and fiscal systems better suited to support firms' competitiveness and efficiency of the labour market.

a) A comprehensive, far-reaching and credible reform strategy, including the full liberalisation of local public services and of professional services is needed. This should apply particularly to the provision of local services through large scale privatizations.

b) There is also a need to further reform the collective wage bargaining system allowing firm-level agreements to tailor wages and working conditions to firms' specific needs and increasing their relevance with respect to other layers of negotiations. The June 28 agreement between the main trade unions and the industrial businesses associations moves in this direction.

c) A thorough review of the rules regulating the hiring and dismissal of employees should be adopted in conjunction with the establishment of an unemployment insurance system and a set of active labour market policies capable of easing the reallocation of resources towards the more competitive firms and sectors.

2. The government needs to take immediate and bold measures to ensuring the sustainability of public finances.

a) Additional-corrective fiscal measures is needed. We consider essential for the Italian authorities to frontload the measures adopted in the July 2011 package by at least one year. The aim should be to achieve a better-than-planned fiscal deficit in 2011, a net borrowing of 1.0% in 2012 and a balanced budget in 2013, mainly via expenditure cuts. It is possible to intervene further in the pension system, making more stringent the eligibility criteria for seniority pensions and rapidly aligning the retirement age of women in the private sector to that established for public employees. Thereby achieving savings already in 2012. In addition, the government should consider significantly reducing the cost of public employees, by strengthening turnover rules and, if necessary, by reducing wages.

b) An automatic deficit reducing clause should be introduced stating that any slippages from deficit targets will be automatically compensated through horizontal cuts on discretionary expenditures.

c) Borrowing, including commercial debt and expenditures of regional and local governments should be placed under tight control, in line with the principles of the ongoing reform of intergovernmental fiscal relations.

In view of the severity of the current financial market situation, we regard as crucial that all actions listed in sections 1 and 2 above be taken as soon as possible with decree-laws, followed by Parliamentary ratification by end September 2011. A constitutional reform tightening fiscal rules would also be appropriate.

3. We also encourage the government to immediately take measures to ensure a major overhaul of the public administration in order to improve administrative efficiency and business friendliness. In public entities the use of performance indicators should be systematic (especially in the health, education and judiciary systems). There is a need for a strong commitment to abolish or consolidate some intermediary administrative layers (such as the provinces). Actions aimed at exploiting economies of scale in local public services should be strengthened.

We trust that the Government will take all the appropriate actions.

Mario Draghi, Jean-Claude Trichet.

29 September 2011 08:27.

The message from the ECB top officials to the State of Italy left little to the imagination, not to say that, by their letter, they practically summoned the Italian government to immediately comply with the dictates of EU bureaucracy, and already imposed a blueprint for far-reaching, socioeconomic reforms that Italy was instructed to undertake, amongst other things regarding its healthcare sector.¹²⁴

E.g., the secret letter of 5 August 2011 underlined the need to tighten the criteria for obtaining retirement pensions and to extend the retirement age of women in the private sector, in light of budgetary savings already to be accomplished in 2012. The letter also 'imposed' to "significantly" reduce the costs of the public service sector, by strengthening the rules on turnover and, "if necessary, by reducing wages". In order to accelerate the growth of the Italian economy, Trichet and Draghi also explicitly recalled the need to review the rules on the hiring and dismissal of employees in private enterprises.¹²⁵ These policy dictates clearly resonate with the classical "Iron Law of Wages"—the idea that the wages of the members of the working class should be kept as low as reasonably possible—one of the corner stones of both eighteenth century liberal and present-day neoliberal economic thinking.¹²⁶

But even that was not considered enough. According to Trichet and Draghi, economic growth requires a "full liberalization" of professional associations and local public services, providing for their "large-scale privatization". Next to a "serious commitment" to abolish or consolidate some intermediate administrative levels, "such as the Provinces".¹²⁷ In view of the severity of the at the time prevailing financial market situation, the imposed upon measures were, moreover, to be included in a decree law to be passed as soon as possible and approved in Italy's Parliament by the end of September 2011.¹²⁸

Trichet and Draghi did not go as far as calling for the assembly of the Italian Parliament themselves, albeit coming very close in doing so.

¹²⁴Sensini (2011).

¹²⁵Sensini (2011).

¹²⁶Cf. Byttebier (2018), p. 158; Byttebier (2019), pp. 102–103.

¹²⁷Sensini (2011).

¹²⁸Sensini (2011).

All these "interventions" were considered of an "essential" nature in order to strengthen the reliability of the sovereign signature, the value and the creditworthiness of Italian government bonds.¹²⁹

In the following years, the Italian government did precisely what it had been instructed. At first with some reservation, the Italian government then quickly summoned the Italian social partners, making known the existence of the letter of 5 August 2011 however without revealing it. And on Saturday, 13 August 2011, only a week after, the Italian government went ahead with drafting a balanced budget in accordance with the dictates of the EU central bank leadership. Three days later, when the markets reopened, the ECB and the European system of central banks, whose governors had been immediately informed of the letter and its contents, intervened on the Italian markets.¹³⁰

The type of letter Trichet and Draghi send to the Italian government on 5 August 2011 demonstrates that, once a member state needs monetary or fiscal support, it is no longer its democratically elected parliament—or the government that such a parliament has appointed—but the ECB (as itself driven by the financial markets) that starts determining the socioeconomic policy of such a member state.¹³¹

One legacy from this era of austerity has been the lowering of the number of hospital beds and ICU beds in Italy: Indeed, in light of the austerity policy dictated by the EU, the number of hospital beds for acute medical care per 100,000 inhabitants had dropped by 13% in the period from 2010 until 2015, a trend that was still ongoing when Covid-19 started hitting Italy.¹³² This fact is, obviously, of severe importance for the Covid-19 pandemic, as higher hospital bed capacity has been considered one of the main conditions for lower Covid-19 mortality rates.¹³³ One simply has to compare the numbers of Covid-19 deaths in countries with a high number of hospital beds (e.g., Germany) with countries with a lower number of hospital beds per 1000 inhabitants in 1990 (Italy 7, Germany slightly higher), after 10 years of post-2008 crisis EU austerity, in which Italy's health budget had been slashed to comply with EU fiscal rules, the number of hospital beds in Italy had dropped to 2.6 per 1000 inhabitants, while the number of hospital

¹²⁹Sensini (2011).

¹³⁰Sensini (2011).

¹³¹This delivers yet another argument that there is a need for a thorough rethinking of the monetary and budgetary logic that drives the world, starting with a rethinking of the systems of money creation, including their submission to transparent and democratic control systems. (Cf., furthermore, Chap. 11.)

But the latter is clearly not something that will be accomplished in the near future. At present, because of Covid-19, we have on the contrary all been confronted with the disastrous consequences such neoliberal, dictatorial austerity policy may have, which, e.g., in the case of Italy, has taken the form of the disastrous scenario that rolled out in late February-early March 2020 in Lombardy, curtesy of the neoliberal EU austerity policy (as initiated by the ECB).

¹³²European Commission (2020), pp. 33–34.

¹³³European Commission (2020), pp. 33–34.

beds in Germany had remained well above 6. During that same period, from 2008 until 2018, Germany had moreover nearly doubled its total public healthcare expenditure (in nominal terms, i.e. including inflation effects), while Italy's total healthcare expenditure had only increased by 5.3%.¹³⁴

5.2.1.2.2.3 European Semester

The economic governance procedure that affects all EU countries in the most direct manner concerns the so-called "European Semester". This system for deploying EU fiscal policy had already been set up during the early stages of the financial crisis of 2007–2008. The European Semester was thereby intended as a policy tool for guiding the economic and fiscal policies of the EU Member States. The system of the European Semester, more precisely, implies that the EU Commission draws up recommendations for each Member State on an annual basis (except for those Member States that already have an adjustment programme, e.g., linked to a loan agreement, cf. Sect. 5.2.1.2.2.1.). The drafting of this document is then followed by a discussion in the EU Council, which is tasked with adopting the final recommendations. This usually happens in June or July. In practical all cases, these final recommendations are identical or similar to those of the EU Commission (and thus also to those of the EU bureaucracies on which it relies).¹³⁵ For the governments of fiscally compliant Member States, these recommendations are usually of little importance, but for others-countries that are facing economic or fiscal problems-they can contain very serious messages.¹³⁶

The European Semester is considered as an important policy tool enforcing the EU's "economic governance". It is primarily designed to prevent EU Member States from breaching fiscal rules on topics as: public deficits, public debt and the public-debt to GDP ratio, besides a variety of so-called "macroeconomic imbalances", for some of which the EU Commission can even impose a fine. Usually it is EU Member States whose economies are for some reason in a bad state that receive recommendations, specifically addressing the problem areas these countries are facing. This usually involves bringing public spending under control through austerity, but it can also involve implementing labour market reforms in order to make collective bargaining less feasible. This was e.g., the case for France in 2016.¹³⁷

Especially the restructuring of the healthcare sector has reportedly been an important and recurring topic since the first European Semesters were issued in 2011. It has in this regard, e.g., been observed that, by mid-2020, the EU Commission had already issued 107 recommendations concerning the health (care) sector in a broad sense of the word (including "long-term care (or nursing)"). Taking into consideration that each EU member country usually receives four to five

¹³⁴Corporate Europe Observatory and Tansley (2021), p. 18.

¹³⁵Corporate Europe Observatory and Tansley (2021), p. 18.

¹³⁶Corporate Europe Observatory and Tansley (2021), p. 19.

¹³⁷Corporate Europe Observatory and Tansley (2021), p. 19.

recommendations per year, the foregoing demonstrates that health care (and especially the marketisation and privatisation of health care service providing) is an issue high on the agenda of the EU authorities. In practically all EU recommendations, health is said to have been a standard theme, and when ranking the EU proposals, health sector reforms, together with those of the pension system (which are treated as one cluster), they have ranked third or fourth every year since the start of the European Semester system in 2011 (preceded by "tax reforms" and "business environment/regulation").¹³⁸ Again according to the Corporate Europe Observatory, 76 out of 107 European Semester recommendations adopted between 2011 and 2019 proposed to improve the "cost-effectiveness" of the healthcare system or simply to make cuts in public spending of health care. As in many other areas of socioeconomic life, the most frequent recommendation is one relating to the so-called "cost-effectiveness" of the healthcare system, a recommendation that the EU Commission is reported to have proposed and adopted 39 times as of 2011. By contrast, in the list of areas considered for more investment, health care has appeared in a very limited number of cases. In the opinion of the Corporate Europe Observatory, this suggests that the term "cost-effectiveness" is in most cases little more than a "call for cuts" in public spending-as has appeared on many occasions and from many events.139

Also regarding the example of Italy, whose as of 2011 ever shrinking hospital system would shortly afterwards be completely overwhelmed during the first wave of the Covid-19 pandemic (cf. Sect. 5.2.1.2.4.1), the EU Commission in its "2019 Joint Report on Healthcare and Long-Term Care Systems and Fiscal Sustainability" made the following strict austerity recommendations:¹⁴⁰

The analysis above shows that a range of reforms have been implemented in recent years, for example, to strengthen primary care provision and its use, to improve efficiency, to improve data collection, information and monitoring systems and the use of ICT solutions, to control overall expenditure and pharmaceutical expenditure while delivering quality healthcare. They were to a very large extent successful and, therefore, Italy should continue to pursue them. The main challenges for the Italian healthcare system are as follows:

- To continue increasing the efficiency of healthcare spending, promoting quality and integrated care as well as a focusing on costs, to tackle the impact on spending due to population ageing and non-demographic factors.
- To extend the possibilities of hospitals to provide ambulatory and day care as well as to transfer more healthcare services into the ambulatory sector in order to reduce the number

¹³⁸Corporate Europe Observatory and Tansley (2021), p. 19.

Documents released by the European Commission also show that it regularly consults with private healthcare providers when drafting its country reports as part of the European semester. E.g. as part of a Commission fact-finding mission to Paris in November 2018 (in the context of drafting the 2019 macro-economic imbalances reports and 2019 country report on France), DG ECFIN and DG SANTE invited the French private hospitals lobby FHP, alongside the French public hospitals association FHF, to share its views.

¹³⁹Corporate Europe Observatory and Tansley (2021), p. 19.

¹⁴⁰European Commission (2019), pp. 51–52.

of inpatient care treatments, as well as to strategically direct more resources towards providers of lower levels of care, to increase efficiency.

- To tackle unwarranted regional variation in waiting times and resource distribution. In particular, monitor and correct potential uneven distribution of hospital beds (follow-up and long-term care), to free-up capacity in acute settings as a driver of lower waiting times. To the same end, further develop ICT solutions to increase service efficiency of operations.
- To re-think the current mix between doctors and nurses, to favor solutions that relying less heavily on doctors, in the cases where nurses can represent a substitute, consistently with a more primary-care oriented system.
- To further the efforts in the field of pharmaceuticals by considering additional measures, both on the side of patients and of healthcare professionals, to improve the rational prescribing and usage of medicines. The policies could help reducing the high level of out-of-pocket payments and improving access to cost-effective new medicines by generating savings to the public payer.
- To ensure a greater and nationally coordinated use of health technology assessment to determine new high-cost equipment capacity, the benefit basket and the cost-sharing design across medical interventions.
- To implement the National Health Information System across all regions and sub-regional levels which has a strong potential to monitor and relate expenditure with activity and with outcomes and in identifying good practices and areas for improvement.
- To encourage debate, information exchange, and peer reviews between regions once the system is fully implemented. In this context, the patient e-card (*Tessera Sanitaria*) should be fully exploited.
- To continue to monitor regional expenditure policies making regions showing deficit in the health sector budget restore the balance and ensure efficiency and appropriateness in the provision of LEAs. To continue to improve accountability and governance of the system and identify possible cost-savings in the health sector administration, as it currently involves national and regional institutions.
- To further the efforts to support public health priorities and enhance health promotion and disease prevention activities, i.e. promoting healthy life styles and disease screening.

A similar conclusion (including a set of recommendations) was reached regarding Italy's (at the time prevailing) systems of long-term care/nursing (including the sector of the nursing homes for the elderly).¹⁴¹ We shall readdress the latter in Chap. 6.

5.2.1.2.2.4 Further Implementation of the Neoliberal Austerity Agenda on Healthcare

The EU's direct intervention in domains of socioeconomic life for which it has, as such, no defined authority, e.g., the healthcare sector, is hardly surprising. It is but one of the many illustrations of how the EU bureaucracy is fixated on implementing a neoliberal agenda throughout all of its member states.

As some academics, quoted in the above-mentioned report of the Corporate Europe Observatory, already had remarked in a paper of 2015:¹⁴²

¹⁴¹European Commission (2019), pp. 398–400.

¹⁴²Corporate Europe Observatory and Tansley (2021), p. 20, referring to Azzopardi-Muscat et al. (2015).

The hierarchy and subordination of policies within the European institutions is not something new and has been reported elsewhere confirming the observed tendency of linking health goals more closely to the EU's economic growth narrative rather than valuing the health policy objectives in their own right. Despite the existence of official documents supporting the need to invest in health, investments in health infrastructure and human resources as a prerequisite for economic growth do not feature as a priority.

According to the Corporate Europe Observatory, the EU fiscal policy deployed in the past decades has had enormous consequences for the socioeconomic impact of Covid-19. The European Corporate Observatory even claims that if European health systems had been better equipped to deal with a pandemic, the health and socioeconomic consequences of Covid-19 would most likely not have been so severe. E. g., better-equipped health facilities, with sufficiently trained nurses, hospital beds, PPE, etc., would obviously have been at less risk of being overwhelmed. This would in turn have reduced the need for strict lockdowns, reducing their disastrous economic consequences. However, in the opinion of the Corporate Europe Observatory, precisely the establishment of such well-equipped public health facilities had actively been discouraged under the neoliberal, short-sighted policy approach as laid down in the European semester reports of the past decade, which have all been characterized by a policy approach that insists on solutions that keep expenditure from rising, and on cutting back on expenses even if this goes to the detriment of public health services.¹⁴³ The significance of the European Semester hereby largely depends on how a EU member country is generally doing with the rules on public debt and deficits, besides a variety of other macroeconomic indicators that have been determining the content of the European Semester in the past.¹⁴⁴

This policy objective of reducing (public) health care expenditure is often explicitly mentioned in the semester-reports: again according to the information provided by the Corporate Europe Observatory, in the recent past, six EU member countries had been explicitly asked to restrict access to early retirement, while an explicit recommendation to reduce hospital costs (e.g., by reducing hospital treatment and by replacing it with outpatient care, or by introducing activity-based financing) had been issued to four countries (Lithuania, Bulgaria, Romania, and Ireland).¹⁴⁵

On a practical level this implied that when Covid-19 first hit the European continent, many EU Member States had shortly before been reducing the amount of their hospital beds: according to Eurostat, between 2012 and 2017, the number of hospital beds in the EU-28 had fallen by 3.3%, in some cases at a very fast pace.¹⁴⁶

Spain is one of the most telling examples of how far-reaching the impact of the European Semester can be: A 2012 loan agreement, entered into to support the country's financial sector, required the Spanish government to "fully implement the recommendations to address macroeconomic imbalances under the European

¹⁴³Corporate Europe Observatory and Tansley (2021), p. 20. Likewise Foulon (2021).

¹⁴⁴Corporate Europe Observatory and Tansley (2021), p. 21.

¹⁴⁵Corporate Europe Observatory and Tansley (2021), p. 20.

¹⁴⁶Corporate Europe Observatory and Tansley (2021), p. 21.

Semester". This short and innocent sounding sentence in reality opened the door for years of very direct interference from the part of the European Commission with decision-making in Spain, including on the health budget. Recommendations in 2013 and 2014 urgently called for more "cost-effectiveness" in the Spanish health sector, a policy approach that would have nasty consequences: E.g., in 2012, the Spanish government submitted a law to reduce public spending in the health sector (cf. Royal Decree Law 16/2012). The preamble of this law, more precisely, stated that the immediate application of the law was "necessary, in the prevailing socioeconomic context", and that the measures resorted to by the law were necessary to respond to a variety of factors, including the "viability required by the European Union". Between 2012 and 2014 alone, this policy approach subsequently resulted into a reduction of no less than 28,500 staff members in the Spanish public health sector (whereas the total number before that time had amounted to around 477,000 such staff members). This also has been of fundamental significance during the Covid-19 crisis, where a lack of staff members has been indicated as one of the main problems the overwhelmed Spanish hospitals have been dealing with throughout the Covid-19 pandemic, ultimately attributing to Spain's high mortality rates.¹⁴⁷ (Cf. Sect. 5.3.1.2.3.)

Moreover, the Corporate Europe Observatory explicitly shared its belief that the days of the European Semester's interference with the health policies of EU Member States are far from over. An indication for this was derived from a recommendation issued by the EU Council of June 2020, hence of the midst of the Covid-19 pandemic. In this recommendation, the EU Council stressed that the suspension of the most binding rules on public budgets, debts and deficits, had been of a temporary nature only. This implied that, once the Covid-19 crisis would be over, the "moratorium" on neoliberal austerity would be lifted again, with EU Member States again having to go back to "normal" and to start working on keeping public debt and deficits within the EU targeted ranges, a policy that will most likely imply cutting on public services. What the EU Council seems to have implied is that when European countries would again emerge from the Covid-19 pandemic, albeit in a poor economic shape, the EU's economic governance rules would again be reactivated in full, which will likely require more cuts in public spending, including in the health sector. However, in the opinion of the Corporate European Observatory, if the Covid-19 pandemic has taught one lesson, it is that exactly the opposite needs to be done, especially considering that scientists globally started warning that further pandemics may be very likely due to a variety of factors, such as variants of the Covid-19 virus itself, as well as the rate of destruction of biodiversity which may lead to new virus outbreaks (cf. Sect. 2.2.2.).¹⁴⁸

¹⁴⁷Corporate Europe Observatory and Tansley (2021), p. 21.

¹⁴⁸Corporate Europe Observatory and Tansley (2021), p. 21.

5.2.1.2.3 The Resulting Outlook of the Healthcare Sector (by the Time Covid-19 Hit the European Continent)

Although health(care) is as such not a formal competence of the EU, the EU has, through the fiscal policy tools mentioned above, at least indirectly, considered it to be an economic activity, thus at the same time justifying its subjection to EU internal market rules (in particular the principles of free movement of goods, persons, capital and services, besides public procurement and state aid rules).¹⁴⁹

Moreover, as has been made clear in the previous Sects. 5.2.1.2.1 and 5.2.1.2, the healthcare sector has been subject to severe scrutiny in the context of EU austerity measures for at least the past decade.

This has, furthermore, attributed to an increasing degree of "marketisation" and privatisation of health care, which in turn started to further erode the public character of health care. The public health sector was opened up to a variety of further (neoliberal) practices, such as outsourcing, encouraging competition among different providers, public-private partnerships, besides a wide variety of other marketisation and privatisation policies, ultimately even going as far as selling public hospitals and nursing or care homes to private investors.¹⁵⁰ Private marketoriented reforms such as the People's Health Movement (PHM) were hereby "undertaken under the guise of increasing efficiency and quality through competition and choice", but, again in the words of the Corporate Europe Observatory, in reality "contributed to a significant rise in inequalities in health and access to health care" and "weakened the public healthcare systems".¹⁵¹

The Corporate Europe Observatory even made the remark that, as part of this EU-initiated marketization and privatization gulf, private for-profit providers started to lobby for what they referred to as a "level playing field" for both private and public health care providers. This implied that the new generation of private health care providers started making claims for their "fair" share of public funds. This was partly due to a wrong assessment from the start, as policymakers assumed that private health care has to be sufficiently profitable, apart from a select minority of rich clients that are sufficiently wealthy to pay for the full costs and private sector profit margins. This does not comply well with the fact that those who need health care the most, are often the ones least able to pay the "market price" for it.¹⁵²

¹⁴⁹Corporate Europe Observatory and Tansley (2021), p. 6.

¹⁵⁰Corporate Europe Observatory and Tansley (2021), p. 6.

¹⁵¹Corporate Europe Observatory and Tansley (2021), p. 6.

¹⁵²Corporate Europe Observatory and Tansley (2021), p. 6.

According to UEHP, inequality only occurs in cases that the public sector refuses to pay private hospitals for patients' care, leaving patients with high co-payments. And that, in the opinion of the UEHP, is the fault of the public sector gatekeepers, not of the private hospitals themselves. UEHP has, therefore, stated that it is essential that the system would start treating private and public hospitals equally. This has even become one of the main demands of the private hospital group lobby: they basically want (more) public money to be used for patients admitted to private hospitals, in this manner taking more taxpayer money away from chronically underfunded public hospitals in

Several of the neoliberal governments of EU member states, for their part, made use of the frenzy provided to them by the neoliberal, EU austerity policy in order to push unpopular savings policies in their country even further. The result for the healthcare sector has been: (1) continuous cutbacks (including on staff members), (2) increased workload compared to lower wages for the remaining medical staff (esp. nurses), (3) fewer and fewer available hospital beds (cf. Sect. 5.2.1.1.), (4) bankruptcies of hospitals (and care and nursing homes), and (5) ever-more privatizations in the EU healthcare system.¹⁵³

In recognition of the need to "improve access" to care outside of hospitals, many EU countries also started taking desperate steps to increase the availability of so-called "primary" and "community" care, as well as to introduce new models of so-called "intermediate care", as alternatives for (often more decent) medical care provided in hospitals or care and nursing homes.¹⁵⁴ (Cf., furthermore, Sect. 5.1.2.5, on the theoretical background for this so-called "inclusive model" of health care.) One of the perceived problems of the past years had been that many people started reporting to hospitals because their primary care providers were unavailable (or were over-demanded).¹⁵⁵ A growing number of EU countries thereby started to adhere to the opinion that, in order to remain able to effectively respond to the needs of their ageing population, characterized by an increasing burden of chronic diseases, further efforts would be needed both to improve access to primary care and to provide more continuous and coordinated care outside hospitals and nursing homes.¹⁵⁶

EU austerity policy, furthermore, started to focus on "measuring and addressing overuse in hospitals". This was based on a growing belief that many medical services provided for in hospitals only result in modest benefits for patients, or for only a limited number of patients.¹⁵⁷ Another comparable trend for both justifying and implementing EU austerity measures was based on the notion of "unlocking the potential of outpatient surgery". It was assumed that outpatient surgery may help reduce the (ab)use of hospital resources, with the added belief that most patients prefer outpatient surgery anyhow, as it allows them to go home on the same day of their medical procedure. Advances in surgical and anaesthetic techniques also

favour of profitable private hospitals. The coverage of a UEHP event by a lobby group called "Health First Europe" (whose secretariat is run by lobbying consultancy "Instinctif Partners" of which UEHP itself is also a member) has in this regard noted that although a significant decline in the number of hospital beds can be observed in several EU Member States, the private hospital sector itself has increased from 17.56% to 20.45% of the total number of beds in the EU (from 2007 to 2015). According to the Corporate Europe Observatory, this dynamic has been important due to the fact that, while national and EU austerity measures cut public health budgets, resulting in public hospitals being closed or sold to private companies, private hospitals (as well as PPPs and PFIs) started flourishing. (Cf. Corporate Europe Observatory and Tansley (2021), p. 6.) ¹⁵³Zeilemaker (2020).

¹⁵⁴OECD and European Commission (2018), p. 49.

¹⁵⁵OECD and European Commission (2018), p. 49.

¹⁵⁶OECD and European Commission (2018), p. 49.

¹⁵⁷OECD and European Commission (2018), p. 49.

played a role here, but we cannot ignore the significant institutional factors supporting a marked increase in the use of day surgery in all EU countries during the past decade. Still, the spread of this preference for day surgery varies, with some countries leading the way in advocating day surgery as an easier and faster alternative to ever more complex medical interventions.¹⁵⁸ This practice, in its own turn, became a further argument for reducing the number of hospital beds even more (with all the adverse consequences this entails).

The effects of economic recessions on health inequalities also differ according to the policy response of national governments. E.g., countries such as the United Kingdom, Greece, Italy and Spain, that implemented severe austerity measures in the aftermath of the financial crisis of 2008 (amongst others, through significant cuts in health and social protection budgets), experienced far worse health outcomes than countries, such as Germany, Iceland and Sweden, that had chosen to keep relying on public health care spending and social safety nets. Older research has, in a similar manner shown that countries with a high level of social protection (such as Sweden) did not experience an increase in health inequalities during the economic recession of the 1990s. Similarly, in the United Kingdom, old age pensions were protected from austerity in the aftermath of the financial crisis of 2008, and this has prevented health inequalities among the elderly population. Such findings are consistent with other research on the effects of public sector and welfare state retrenchment and expanding trends in health inequalities, as seen in countries such as the United Kingdom, the United States and New Zealand. It has, e.g., been pointed out that inequalities in premature mortality and infant mortality by income and ethnicity in the United States had declined during the period of wealth expansion (i.e., the so-called "war on poverty" era between 1966 and 1980), but had again risen during the Reagan-Bush period (from 1980 until 2002) when under the impulse of the neoliberal wave, welfare provisions and health coverage had been scaled back. Similarly, in England, inequalities in child mortality rates had decreased as child poverty had declined during a period of public sector and welfare state expansion (i.e., mostly between 2000 and 2010), to drastically increase again as soon as austerity measures were implemented, with child poverty rates increasing again from 2010 until at least 2017.¹⁵⁹

According to Sumonja, economic neoliberalism has gradually entered an "authoritarian" phase after 2008. As a result, it has broken with elements of formal democracy and even started to violate fundamental rights (or at the very least stopped caring about these).¹⁶⁰ The evolution of the healthcare sector is a clear example of this evolution. This is undoubtedly at the same time one of the main socio-economic factors that contributed to the disastrous way in which the EU and its Member States responded to the Covid-19 crisis. We shall look at this in more detail in the next sections.

¹⁵⁸OECD and European Commission (2018), p. 54.

¹⁵⁹Bambra et al. (2020), p. 967.

¹⁶⁰Sumonja (2020).

5.2.1.2.4 Further Data on the Impact of EU Austerity Policy in the Healthcare Sector in Some EU Member States

5.2.1.2.4.1 Italy

In 2011, the EU applied its austerity-driven approach to Italy, only providing ECB-support against normal interest rates if severe cuts were made in the healthcare sector.¹⁶¹ (Cf. Sect. 5.2.1.2.2.)

The Italian government implemented these EU imposed reductions, resulting in the closing of 15% of Italian hospitals in a mere decade. After this savings operation, Italy was left with 3.2 beds per 1000 inhabitants, while Germany still had 8 and France still 6. Since then, Italy spent less than USD 3500 per year per person on healthcare, to which the government contributed only about USD 2500, the lowest amount in Western Europe.¹⁶²

Zeilemaker has pointed out that, when, at the end of February 2020, Italy was as one of the first European countries faced with the outbreak of Covid-19 on its territory (cf. Sect. 2.4.2.3.1.), the country immediately asked the EU for support for its healthcare under the argument that this had been "over-rationalized" during the preceding years at EU insistence. No aid whatsoever followed. No European country responded by sending urgently needed medical equipment or medical staff. An explicit emergency call from the Italian ambassador to the EU remained completely ignored. Christine Lagarde, President of the European Central Bank, furthermore, refused to cut interest rates to help Italy; it was a statement that many Italians perceived as a sign of utter contempt. Neither the EU, nor other EU member states, showed any willingness to help Italy, although part of the problems the country was facing had been the direct result of EU policy. The Czech Republic and Poland even kept for themselves medical urgency equipment provided by Russia and destined for Italy. Germany, for its part, held back 800,000 face masks ordered by Italy in China for two weeks because of "customs control".¹⁶³

5.2.1.2.4.2 Spain

In the recent past, also Spain had to commit to a severe EU imposed austerity program. (Cf. Sect. 5.2.1.2.2.) As a result, healthcare costs had to be decreased by 5.7% in 2012 alone. Spain thus became one of the four EU member countries that had to cut and privatize healthcare the most in the aftermath of the financial crisis of 2008. While at the beginning of 2020, the country spent on average, 3300 EUR per inhabitant on healthcare, that figure amounted to 6000 EUR in Germany. In Spain, 30.1 per 1000 inhabitants worked in medical facilities and hospitals; in Germany this number amounted to 71. And while Spain had 9.5 intensive care places per 100,000

¹⁶¹Zeilemaker (2020).

¹⁶²Zeilemaker (2020).

¹⁶³Zeilemaker (2020).

inhabitants, in Germany there were about 34. Moreover, many of Spain's retirement homes for the elderly had been privatized in the aftermath of the financial crisis of 2008, often falling into the hands of investment funds. Zeilemaker has illustrated the severity of this situation by pointing to the fact that when Covid-19 hit Spain in March 2020, most nursing home operators simply remained silent for weeks about the circumstances in these homes. When shortly after the military started disinfecting retirement homes, soldiers were reported to have found not only seriously ill people, but also dead people lying unattended in their beds.¹⁶⁴

We shall come back to this disaster in the Spanish nursing homes for the elderly in the next Chap. 6. (Cf. Sect. 6.2.1.3.2.)

5.2.1.2.4.3 Greece

Obviously, Greece is known to have been among the countries hit the hardest by the financial crisis of 2008. According to Zeilemaker, Greece became because of this subject to a severe austerity program implemented by both the EU and the IMF, resulting in government contributions to the health sector being cut in half, from 16.2 billion EUR, to 8.6 billion EUR between 2009 and 2016. In this period, more than 13,000 physicians and more than 26,000 other healthcare workers were simply fired. 54 of the country's 137 hospitals were closed, and the budget for the other hospitals was reduced by 40%. Between 2011 and 2016, on a population of 11 million Greeks, more than 3 million found themselves completely outside the scope of any health insurance protection. According to Zeilemaker, the message "Austerity kills," was painted on a wall in the Athenian city centre. At a time when entrepreneurs still received substantial government support in Greece, workers and civil servants were asked to give up half of their wages.¹⁶⁵

Notwithstanding outstanding official figures on both the Covid-19 contamination and death cases, the real impact of Covid-19 in Greece remains unclear. Upon the arrival of Covid-19 in Greece, the country completely locked down, but testing in remained minimal because of a lack of testing material. Results were often delayed or simply not provided. It is therefore assumed that the official (and very low; cf. Sect. 2.4.2.1.2.) Covid-19 contamination numbers may be of a merely symbolic nature. In private clinics, on the other hand, there were enough Covid-19 tests available for those who could afford them. The Greek neoliberal government even made 30 million EUR available for testing in private hospitals alone. The same government also increased the reimbursement for the use of intensive care beds in private clinics from 800 to 1600 euros per day. In the meantime, state hospitals did not receive any testing material at all.¹⁶⁶

¹⁶⁴Zeilemaker (2020).

¹⁶⁵Zeilemaker (2020).

¹⁶⁶Zeilemaker (2020).

5.2.1.2.4.4 Germany

According to Zeilemaker, not only southern European countries suffer from a broken healthcare system. In Germany as well, trade unions, professionals and patient associations have been reporting nursing staff shortages going back to 2008. Against the background of a general decline in healthcare, nursing staff was believed to have been reduced by approximately 50,000 staff members. This also implied that the number of patients per care provider increased and working conditions deteriorated, all due to an increasing shortage of nurses. After the outbreak of Covid-19, Germany also faced a shortage of protective gear and testing equipment.¹⁶⁷ (Cf. Sect. 2.4.2. 1.3.)

5.2.1.2.4.5 Ireland

Zeilemaker, furthermore, pointed out that, under pressure from the same EU, also Ireland became the victim of severe cuts in healthcare during the past decade. In reaction to the Covid-19 outbreak, the Irish state simply decided to nationalize private clinics, following a similar example of Spain, in order to make sure that a minimum of healthcare would still be provided.¹⁶⁸

5.2.1.2.4.6 Belgium

Foulon has pointed to the fact that Belgium's healthcare system has long been well regarded. However, based on several health indicators from 2015, this does not appear to be the case (anymore). According to Foulon, the statistics speak for themselves. E.g., mortality within 30 days of hospital admission after a heart attack or stroke is in Belgium above the European average. Belgium also has less than average nurses per hospitalized patient. Belgium is, moreover, characterized by a high rate of suicides and an alarming use of antidepressants, both factors indicating that the situation in Belgium is not as rosy as people are made to believe. Note a telling statistic: the average life expectancy at birth in Belgium is also below the European average.¹⁶⁹

Foulon has, furthermore, pointed to the fact that the proportion of care that patients have to pay themselves (= the so-called "patient contribution") is in Belgium quite high compared to other European countries, while the intended health effect of this co-payment system, namely to reduce overconsumption, is small. According to Foulon, the latter is due to the overlooked fact that overconsumption often originates with the healthcare provider, and not with the patient. The Belgian

¹⁶⁷Zeilemaker (2020).

¹⁶⁸ The Irish Health Minister Simon Davis announced: "During this crisis, the state will take control of all private hospital facilities and manage all resources for the benefit of all our people. There is no room for public versus private when it comes to a pandemic". ¹⁶⁹Foulon (2021).

healthcare system also lacks all openness about the quality of healthcare providers and hospitals to guide healthcare choices.¹⁷⁰

A recent element that has been detrimental in the development of European healthcare in general and the one of Belgium in particular, has been the rising costs. Both countries that based their healthcare system on private insurance, such as Switzerland, as countries which have resorted to collective health insurance and health insurance funds, such as Belgium, have been subjected to this increase. While this phenomenon is often attributed to the ageing population in European countries, this is only true to a limited extent. The real causes for the rising costs of healthcare all over Europe, are new treatments and the use of new medicines.¹⁷¹ According to Foulon, also regarding drug pricing, there is a clear lack of transparency. E.g., pharmaceutical companies that bring a new drug to market can freely determine its price as long as the patent is running. The cost price of some innovative drugs is hereby in most cases not proportional to the development cost.¹⁷²

A further element of the Belgian situation that, still in the opinion of Foulon, needs to be reconsidered is how the government determines the budget reserved for healthcare. Often budgetary works start from the existing expenditure of preceding years to which 1% is simply added or subtracted. For Foulon, this system does not work properly. There should be an open societal debate about the size of this government budget, where the priorities should lie and where exactly savings can be made if necessary.¹⁷³

5.2.1.2.5 Some Specific Facts and Opinions on the Impact of the Austerity Policy in the Healthcare Sector of the United Kingdom, as Assessed by Viens

As reminded by Viens, neoliberal economic policy is based on the idea of perpetual economic growth,¹⁷⁴ implying that austerity measures resorted to in times of economic difficulty (mainly by cutting on social expenditure), are explained as a natural

¹⁷³Foulon (2021).

¹⁷⁰Foulon (2021).

¹⁷¹Foulon (2021).

¹⁷²Foulon (2021).

The basis for a social and fair financing of healthcare is a solidarity-based collective health insurance, with as main, underlying purpose to ensure healthcare for all. In the opinion of Foulon, all medically necessary services need to be part of a system based on this principle of solidarity. The health of the population must remain a task of public services, and not be turned into one more means of private profit making. It is time to make it clear to the general public that at no time and in no place has the private sector ever proven that it can provide better care to all segments of the population. Moreover, it is an illusion to think that privatization is equivalent to defending free medicine. Nowhere is freedom of diagnosis and treatment more restricted than in private managed care systems. However, a system based on solidarity also implies that the efficiency of healthcare is improved, and that all policy choices should be made in a transparent manner. (Cf. Foulon (2021).) ¹⁷⁴Cf., furthermore, Byttebier (2017), pp. 228–231, and Byttebier (2018), pp. 133–134.

response that has to be put in place for the economy to recover. According to this author, this neoliberal viewpoint has been clearly showing in much of the policies of the Conservative government(s) in the United Kingdom during the past decade(s).¹⁷⁵

Still according to Viens, while the pervasiveness of the ideology of economic neoliberalism, as adhered to by the governments of many Western countries, makes a resort to austerity seem completely inevitable, it is nevertheless but a political choice guided by a given political morality, or, to phrase it in another manner, by a given ideology.¹⁷⁶ For Viens, the conclusion from this insight is clear: neoliberal austerity is a huge policy failure, and its consequences are totally morally reprehensible, especially because of its direct and indirect detrimental effects on a wide variety of social issues, amongst which health and health equity. This is, moreover, not only true in the United Kingdom itself, but for the whole capitalist world.¹⁷⁷

The pains caused by neoliberal austerity are, simply put, not distributed in a fair manner throughout society, and not even in such a manner that the burden of such austerity would fall mostly on those best able to bear it, namely the rich. Instead, in countries, such as the United Kingdom, that have suffered the most from the doctrines of economic neoliberalism during the past decades, it is precisely the economically and socially most deprived who have suffered the most. This happened after the financial crisis of 2008, but, as Viens shows, this kind of policymaking can be traced back much earlier in UK history, all the way back to the neoliberal governments of Thatcher¹⁷⁸ that had stifled economic growth, cut tax revenues (to the benefit of the rich), increased public deficits and, on health care, cut funding for the National Health Service.¹⁷⁹

Needless to say that, even before the outbreak of Covid-19, the impact of austerity in the United Kingdom on health and health equity has been devastating. According to Viens, the following effects, amongst others, of neoliberal healthcare policy have occurred: (1) mortality rates have risen (including so-called "preventable deaths"), (2) life expectancy has stagnated, (3) social and health care in general became grossly underfunded, (4) child and pensioner poverty has been dramatically on the rise, (5) the number of homeless people has increased dramatically, and (6) dependence on food banks has increased drastically.¹⁸⁰ Moreover, the effects of both past cuts in social expenditure and current public deficits continue to have a negative impact on health and well-being.¹⁸¹

While the cuts in social expenditure are a clear illustration of the characteristics of the neoliberal determinants for health and health (in)equity, the neoliberal political

¹⁷⁵Viens (2019).

¹⁷⁶Viens (2019). Cf., furthermore, Byttebier (2018), pp. 37–44; Byttebier (2019), pp. 65–75.

¹⁷⁷Viens (2019). Similarly, as regards the United Kingdom in particular, cf. Byttebier (2017), p. 184; Byttebier (2019), pp. 74–75.

¹⁷⁸Byttebier (2017), p. 184; Byttebier (2019), pp. 74–75.

¹⁷⁹Viens (2019). Cf., furthermore, Byttebier (2018), p. 186; Byttebier (2019), pp. 124–132.

¹⁸⁰Viens (2019).

¹⁸¹Viens (2019).

approach in the United Kingdom, even beyond these cuts, has taken a significant and extremely worrying toll on the country's health systems. Neoliberal agendas for cutting taxes (to the benefit of the rich) drive up public debt and deficits even further which, under the logic of economic neoliberalism, then justifies the need for more austerity, as well as the need for charging user fees (for public services that in the past were for free) or for the acceleration of privatization programmes, with the poor at the same time continuously being told that the United Kingdom can no longer afford health and social programmes. According to Viens these are all factors designed to strengthen the insidious political morality hidden under the ideology of economic neoliberalism.

5.2.1.3 Provisional Conclusions

It is clear from the foregoing that the catastrophic EU neoliberal austerity measures of the past decade have dangerously weakened healthcare in Europe. Even after the financial crisis of 2008, much to the surprise of a wide variety of academics and leftwing politicians who believed that the events of 2008 would make people think and look for other solutions than those presented by crisis-prone neoliberalism,¹⁸³ neoliberal policy has, regretfully, been further propagated.¹⁸⁴ Because of

This is, e.g., expressed in a 2019 opinion piece from Joseph Stiglitz. (Cf. Stiglitz (2019)). Stiglitz started this opinion piece with the question "What kind of economic system is most conducive to human wellbeing?" According to Stiglitz, precisely this question is defining the current era, because, after four decades of implementing economic neoliberalism in the United States, as well as in other advanced economies, we know what does not work: "The neoliberal experiment—lower taxes on the rich, deregulation of labour and product markets, financialization, and globalisation—has been a spectacular failure. Growth is lower than it was in the quarter-century after the second

¹⁸²Viens (2019).

¹⁸³Cf. especially Byttebier (2015a, b, 2017, 2018).

Cf. e.g., at Byttebier (2018), pp. 282–284: "This cocktail of economic factors would already in 2007–2008 culminate in probably the worst financial crisis the Western world has known since the depression of the 1930s, where it can be observed that especially the financial sector has been able to remain on the ground thanks to a massive state support (known as "bail-outs"), causing that the financial deficits which were created by the financial institutions have largely been shifted towards the government budgets. This in its own turn provided a new excuse for those adhering economic neoliberalism to dismantle welfare states even further, an approach that, strangely enough, has hardly met any noteworthy societal turmoil. (...) There is, in other words, above all need for a new way of "socio-economic thinking". This should mainly come down to resolutely abandoning the value choice made by capitalism which alleviated egoism, selfishness, and greed to be the determining socio-economic principles, in favor of choosing for altruism and mutual affection as the new driving forces of the socio-economic order, and of (finally) activating the dynamics of democracy in order to put these in practice. (...) One can, hence, conclude that the noble ideas to establish a more just society are conceptually perceivable, albeit it remains an open question if there will be ever a sufficient willingness to put them into practice. Without any doubt, this will at the very least require a fundamental reversal of the "sclerosis of the heart" caused for decades already by the doctrines of economic neoliberalism". (Byttebier (2018), pp. 282-284.) ¹⁸⁴Zeilemaker (2020).

Covid-19, the populations of entire countries have now been able to experience how they are all paying the price for this politically and economically elitist and morally wrong socio-economic model;¹⁸⁵ perhaps this time, it will make people think if they still want to adhere to it.¹⁸⁶

Nevertheless, no matter how bad the crises caused by economic neoliberalism may become, there seems to remain great disinterest for socio-economic themes that among the populations of Western countries. Just as the 2008 financial crisis failed to bring about such a sufficient drive for change, it cannot be assumed that post Covid-19, the neoliberal socio-economic model will be sufficiently questioned.

We shall come back to this under Chap. 11.

5.2.2 Looking for an Equilibrium Between Marketization and Governance Aid in the United States

5.2.2.1 Healthcare in the United States Before 2008

In the 1980s, one of the biggest, earliest exercises in implementing the ideology of economic neoliberalism concerned so-called "Reaganomics," especially President Reagan's 1981 "Program for Economic Recovery" and "the Economic Recovery Tax Act". Under these socioeconomic policies, the Reagan administration reduced both government spending and regulation, while at the same time cutting taxes to the benefit of (big) corporations and the rich.¹⁸⁷

Since this early-day implementation of neoliberal policies as of the 1980s, one of the sectors affected most by neoliberal ideology has undoubtedly been the healthcare sector. More specifically, under Reagan-era policies, the US healthcare industry was largely marketized and partly privatized, and this is how it has remained ever since.¹⁸⁸

This marketization of healthcare in the United States was aimed at giving people the freedom for choosing their own physicians, while at the same time accomplishing shorter waiting times, as well as (purportedly) better health care facilities. In reality, marketized healthcare soon left 15% of the Americans without healthcare. It also resulted in higher costs for individuals and households and created

world war, and most of it has accrued to the very top of the income scale. After decades of stagnant or even falling incomes for those below them, neoliberalism must be pronounced dead and buried". (Stiglitz (2019).)

¹⁸⁵Zeilemaker (2020).

¹⁸⁶Cf. already before Byttebier (2017), p. 491; Byttebier (2018), p. 283; Byttebier (2019), p. 237.
¹⁸⁷Sahoo (2018). On Reaganomics, cf., furthermore, Byttebier (2017), pp. 180–184.

¹⁸⁸Sahoo (2018).

huge inequalities between rich and poor regarding access and quality of health care.¹⁸⁹

According to some, since the Reagan era, the United States, has become of the few industrialized countries in the world that almost completely relies on private, largely investor-owned corporations for providing a wide variety of healthcare services. The United States, in this manner, became one of the first industrialized countries that started treating healthcare like any other free market commodity, instead of as a public or social service.¹⁹⁰ Through this, healthcare in the United States largely started functioning in accordance with free market principles.¹⁹¹

As a first consequence of subjecting healthcare to Reaganomics, healthcare no longer got distributed in accordance with medical need, but rather in accordance with financial capability of the patient who moreover got gradually referred to as "the consumer of health care services". This, obviously, created a fundamental mismatch between medical need on one side and actual access to and availability of medical treatment on the other side. This policy approach, moreover, implied that, in many cases, those with the greatest need of medical care were at the same time those least able to pay for it.¹⁹²

In the opinion of Sahoo, although free markets may be good for some things, they are not a good method for distributing healthcare. The simple truth is that businesses' first aim is to increase revenues and maximize profits (to the benefit of their shareholders).¹⁹³ A symptom of this fact is that corporate hospitals in the United States, e.g., often advertise their services. This is not a coincidence, but rather because, like all businesses, corporatized hospitals want more, not fewer customers—but only if the latter can pay their increasing bills. According to this author, submitting healthcare to these principles has, obviously, resulted in a completely unfair—and even unethical—healthcare distribution: As an example the author points to the fact that, especially before the enactment of the ACA (cf. Sect. 5.2.2.4.), people who are wealthy, or well insured, are in the United States likely to get an MRI (i.e., a "Magnetic resonance imaging") upon request, even if they do

¹⁸⁹Sahoo (2018).

¹⁹⁰Angell (2008).

¹⁹¹Angell (2008).

¹⁹²Angell (2008).

¹⁹³ As Galbraith has phrased it (cf. Galbraith (1967), p. 109): "The market has only one message for the business firm. That is the promise of more money. (...) It must try to make money and, as a practical matter, it must try to make as much as possible. Others do. To fail to conform is to invite loss, failure and extrusion. Certainly, a decision to subordinate interest in earnings to an interest in a more contented life for workers, cows or customers would, in the absence of exceptional supplementary income, mean financial disaster. Given this need to maximize revenue, the firm is thus fully subject to the authority of the market". (Cf. Galbraith (1967), p. 109.)

Cf., furthermore, Galbraith (1992), p. 55; Bakan (2005), p. 256; Simonet (1970), p. 47; Byttebier (2018), pp. 23–24.

not need it, whereas those without money and insurance, are as likely not to get an MRI that they actually do need. $^{194}\,$

Since the United States first started to subject health care to free market methods, in practice, most Americans under 65 who have a (good) job (still) receive (tax-free) health insurance from their employers. Employers usually choose the insurance companies, as well as the health insurance programmes that will be provided to their employees. Employers usually have to pay a part of the insurance premiums. The employees (i.e., the insured) in most cases do not have much say in this, but are still expected to pay their own share of the premiums, based on a "take-it-or-leave-it" approach. Furthermore, offering such insurance benefits happens on a strictly voluntary basis as there is no legal duty to do so, as a further consequence of which not all employers want to commit to this "best practice". When they do, benefits may in some cases be incomplete as employers want to keep the costs for insuring their personnel within (in their eyes) reasonable boundaries. One evolution in this regard has been that, in order to cut expenses, employers started capping the contributions that they are willing to pay themselves, implying that the burden of rising insurance costs in most cases falls on the employees themselves. The latter, in turn, may be inclined to turn down such health benefits in cases that they cannot afford to pay their own (increasing) part of the insurance premiums.¹⁹⁵

At the other side of the contractual spectrum, the private insurers with whom employers conclude insurance contracts are usually for-profit companies owned by private investors who are after a return on their investment. As private insurers try to keep premiums low and profits high by limiting risks, this business model may have serious detrimental effect on the access to medical services. In reality, the best way for private insurers to remain competitive on the private market, is to not insure highrisk patients. This practice of avoiding high-risk people as clients has been referred to as "cherry picking" or "cream skimming", and is often rationalized by claiming that this is the only method for limiting the costs of insuring other illnesses. As a consequence, a lot of the insurance programs offered by employers to their employees exclude (rare) illnesses (both for the insured employee himself as for his dependents) for which the treatment requires expensive medical services, such as a bone marrow transplantation. Moreover, the whole insurance system, including the choice for the insurance programme actually offered, is in general based on marketing, bookkeeping and taxation practices, under which a substantial part of the actual costs for medical treatment is still passed on to patients under the form of deductibles, co-payments and denied claims.¹⁹⁶ This brought Angell to the observation that one even could have the impression that-certainly before the introduction of the ACA-the United States actually had/has a healthcare system based on avoiding that (too) sick people get access to it.¹⁹⁷

¹⁹⁴Angell (2008).

¹⁹⁵Angell (2008).

¹⁹⁶Angell (2008).

¹⁹⁷Angell (2008).

The American private insurance-based health care system also greatly increases administrative overhead costs, because a system based on private insurers requires a lot of paperwork between all contracting parties concerned. Private insurers also need creative marketing in order to select and attract the wealthy and healthy as their clients, and to avoid the poor and ill.¹⁹⁸

5.2.2.2 Medicare

5.2.2.1 General Characteristics of Medicare

Before the presidency of Barack Obama, the best-known and probably most popular part of the American healthcare system has been the government-managed system for Americans over the age of 65 years, called "Medicare".

On its own website,¹⁹⁹ Medicare is described as the federal health insurance programme for:

- (1) People who are 65 years of age or older.
- (2) Certain young people with disabilities.
- (3) People with End-Stage Renal Disease (i.e., permanent kidney failure requiring dialysis or organ transplantation, also known as "ESRD").

When it was first installed, Medicare clearly answered a practical need: as explained in the previous Sect. 5.2.2.1, for people under 65 who are still working, it is assumed that their employer will provide for an adequate private insurance. In this sense, Medicare was intended as an alternative system for people who are no longer working and in most cases are not sufficiently well-off to be able to finance private insurance themselves, while on the other hand, the age of 65 is the age from which medical care becomes increasingly necessary.

Although managed by the federal government, Medicare is still, in essence, a single-payer health coverage programme that is subjected to free market logic. It is at

¹⁹⁸Angell (2008).

Based on information from 2008, Angell estimated what happens to a healthcare dollar on its way from employers to physicians, nurses and hospitals that provide medical services. According to this author, private insurers in most cases skim a significant portion of the income out of premiums (about 15%–25%) for their administrative costs, marketing and profit margins. The rest is often channelled into what said author has described as a veritable array of satellite companies that have sprung up around the healthcare sector. These include brokers to close deals, disease management and utilisation review companies, drug management companies, legal services, marketing consultants, billing agencies, as well as information management companies. They also are responsible for siphoning off a large portion of the premiums, including enough for covering their own administrative costs, marketing and profit margins. According to Angell, it has been conservatively estimated that in 1999, 31.0% of all health care expenditures in the United States went to overhead, almost twice as much as the 16.7% similarly estimated at the time in Canada. (Cf. Angell (2008).) ¹⁹⁹Cf. https://www.medicare.gov/. Cf., furthermore, https://www.cms.gov/Medicare/Medicare-General-Information/MedicareGenInfo.

⁵²⁷

the same time considered to be one of the most efficient parts of the American healthcare system, with estimated government overhead of only about 2%. The system includes as good as everyone over the age of 65. It also grants everyone who subscribes to Medicare the full range of benefits offered, as the system cannot be manipulated to avoid the high-risk or chronically ill.²⁰⁰

5.2.2.2. A Brief History of Medicare

In the United States, the discussion about installing a national health insurance programme open for all Americans already dates back to the presidency of Theodore (Teddy) Roosevelt. When Roosevelt, who had been president from 1901 until 1909, had again run for president in 1912, his election manifesto had included general health insurance. As Roosevelt did not get re-elected, the idea of a general, national health care program for all Americans would again be buried, until it would be picked up by President Harry S. Truman (president from 1945 until 1953).²⁰¹ More precisely, on 19 November 1945, just seven months into his presidency, President Truman sent a message to the American Congress in which he called for the creation of a national health insurance fund that would be open for all Americans. The plan that President Truman proposed was to provide health insurance for individuals and would cover all typical medical expenses, such as visits to or from physicians, hospital visits, laboratory services, dental care and nursing care.²⁰² Although Truman worked hard to pass a bill for implementing his plan during his time in office, he regretfully did not succeed.²⁰³

President John F. Kennedy was the next president (from 1961 until 1963) to make his own failed attempt to establish a national health care programme, although his plan was less ambitious and remained limited to senior Americans. Kennedy launched this proposal after it had appeared from a national study that 56% of the American people over 65 had no health insurance at all.²⁰⁴

But it was not before 1966 that Medicare finally took effect. This occurred after President Lyndon B. Johnson (1963–1969) on 30 July 1965 signed the "Medicare law" or "H.R. 6675", in Independence, Missouri. During the signing ceremony, former President Truman was presented with the very first Medicare card, and his

²⁰⁰Angell (2008).

²⁰¹Norris (2020).

²⁰²Norris (2020).

²⁰³Norris (2020).

After the presidency of Truman, it would take yet another 20 years before some slimmed-down new plan for installing national health insurance would finally be turned into reality. Reference is made to "Medicare" itself that however did not address all Americans, but only those aged 65 and over, in addition to certain disabled young people. (Cf. Norris (2020).) ²⁰⁴Norris (2020).

wife Bess with the second. In 1965, the first budget for Medicare amounted to approximately USD 10 billion.²⁰⁵

Since then, of course, numerous changes have been made to Medicare.²⁰⁶

The introduction in 1965 of Medicare (for elderly American residents) and Medicaid (for some low-income American residents) managed to reduce the percentage of uninsured people by about half. Despite initial expectations that a sequence of additional reforms to the Medicare law would gradually result in a real "universal health system" (UHC), the election of President Reagan in 1980 and the neoliberal agenda that his presidency pushed through, would completely destroy these hopes. Instead, Reagan's health policy has even been qualified as foreshadowing the attempts of President Trump to completely privatise Medicare and Medicaid, cut services in low-income communities, and generally deregulate health and medical care provision. Under Reagan himself, a mix of government spending cuts and pro-free market policies was touted as the miracle cure for what was referred to as medical inflation. In reality, healthcare spending would increase during the Reagan presidency, with a variety of treatments becoming inaccessible for the poor, while the American health care system in general started at the same time to drastically diverge from that of other high-income countries that managed to uphold the principles of the welfare state model to a much larger extent.²⁰⁷

President Clinton's (1993–2001) attempt to expand health insurance coverage in 1994 again failed. This would stifle any further progress regarding the creation of a universal health care system, until the election of President Obama in 2008. Under Obama's presidency, the Democrats finally succeeded, albeit only after fierce discussions in Congress and under harsh resistance from Republican legislators, in passing the so-called "ACA" (cf. Sect. 5.2.2.4.).²⁰⁸

Over time, Medicare has proved successful and became one of the cornerstones of American health policy, while the main problem remained that it was only accessible to people aged 65 and older (in addition to certain other people with specific diseases or disabilities). Pleas for a universally accessible federal healthcare system have been made ever since, but this was met with stubborn resistance from conservative politicians (especially Republicans).

Nevertheless, at the beginning of 2019, it was reported that there were 60.6 million people receiving health coverage through Medicare. Medicare spending was reported to have amounted to USD 705.9 billion in 2017, which equalled about 20% of total healthcare spending in the United States in that year.²⁰⁹ Although Medicare spending projections are said to fluctuate over time, in 2018, Medicare spending was

²⁰⁵Norris (2020). For a detailed report on the signing ceremony, cf. https://www.ssa.gov/history/lbjsm.html.

²⁰⁶For an overview, cf. Norris (2020). Cf., furthermore, for a more detailed historical overview https://www.ssa.gov/history/ssa/lbjhistory.html.

²⁰⁷Norris (2020).

²⁰⁸Woolhandler et al. (2021), pp. 723–724.

²⁰⁹Norris (2020).

projected to account for 18% of total federal spending in the year 2018, up from 15% in 2017.²¹⁰ Per capita Medicare spending was also reported to have grown, albeit at a much slower pace in recent years, averaging 1.5% between 2010 and 2017, as opposed to 7.3% between 2000 and 2007. This per capita spending was however expected to grow faster in the next decade, but not as fast as during the first decade of the twenty-first century.²¹¹ In February 2019, there were approximately 60.6 million people enrolled under Medicare. This implied a huge increase compared to the year 2014, when fewer than 50 million people had been enrolled. One of the main reasons for this huge increase has been that people belonging to the baby boom-generation started to turn 65.²¹²

However, Medicare is by no means perfect and has, moreover, suffered from changes brought about by the Bush and Trump administrations. E.g., by 2008, out-of-pocket costs for Medicare beneficiaries were significant and still rising. In addition, because Medicare payments are made in a market-based private insurance system, it experiences many of the inflationary forces that affect private insurance in general. Regarding health insurances, these e.g. concern profit-maximising physicians working in (large, for-profit) hospitals or in physician groups. Moreover, physicians' fees remain structured in such a manner that highly paid specialists are rewarded for performing as many expensive procedures as possible. Because of this, inflation endured by the Medicare system is said to be as high as other private insurance forms, and equally unsustainable.²¹³

5.2.2.3 Medicaid

Medicaid ("Title XIX of the Social Security Act") was created in 1965, along with the Medicare programme ("Title XVIII") itself, but with a different purpose.²¹⁴

On the one hand, the Medicare program was set up as a federally funded and managed health insurance program for retirees (i.e., people over the age of 65), disabled workers and their spouses and dependents. On the other hand, Medicaid was set up as a joint federal-state program through which states, the District of Columbia and the territories, have access to federal financial means intended for sharing the costs for providing health and long-term care services to low-income families and individuals that are federally eligible for this kind of support.²¹⁵

²¹⁰Norris (2020).

²¹¹Norris (2020).

²¹²Norris (2020).

²¹³Angell (2008).

²¹⁴U.S. Department of Health & Human Sciences (2005).

²¹⁵U.S. Department of Health & Human Sciences (2005). Cf., furthermore, https://www.medicaid.gov/about-us/program-history/index.html.

Before Medicaid was created, limited federal payments were made to states for health care services they purchased for recipients of public assistance. In 1960, Congress authorized unlimited federal payments to states for health care services for indigent elderly. Yet in the early 1960s, states

Medicaid was, phrased differently, intended to expand access to regular health care for low-income individuals and families. The underlying idea was that the federal government would grant money to states to cover half or more of the costs of providing medical and health care services to these eligible beneficiaries. The programme was at the same time designed to grant states considerable leeway in designing their more specific medical assistance programmes.²¹⁶ The Medicaid programme accomplishes these goals by combining federal mandates with options chosen by the states themselves as to who is eligible for receiving services and for defining what services can be offered.²¹⁷

Over the past decades, there have, obviously, been many changes to the Medicaid law as well. These include changes regarding eligibility, benefits, payment arrangements and a wide variety of other administrative details. The effect of these alterations—in combination with states' own decisions about the scope of their programmes—has been that Medicaid got expanded beyond its original focus on providing primarily acute care services to those eligible for public assistance. As a result, Medicaid has also become the primary public funder of long-term care for people suffering from disabilities. Despite many such changes in the federal law, the fundamental organisational nature of the programme, namely its relationship between the federal government providing financial assistance and the states defining eligibility, has not changed substantially.²¹⁸

By September 2018, nearly 73 million people had been enrolled in Medicaid. By 2017, the programme was reported to account for 17% of national healthcare spending.²¹⁹ Medicaid hereby covers the most common forms of medical and health care. Medicaid is said to cover at least the same health care services as Medicare, besides some other services targeted at people suffering from disabilities that Medicare does not cover. Medicaid can also pay Medicare premiums, deductibles and co-payments for people who are enrolled under both programmes. A separate section of Medicaid covers long-term nursing home care. The income and asset rules for these long-term home care programs are usually more relaxed than those applying to regular Medicare programs.²²⁰

still varied widely in the extent of the health services they funded for low-income individuals and families. (Cf. U.S. Department of Health & Human Sciences (2005).)

²¹⁶U.S. Department of Health & Human Sciences (2005).

States wishing to participate in the programme had to provide a basic package of health services to recipients of public assistance. They were also allowed to offer additional services at their discretion and could choose to help medically needy individuals who were not receiving assistance. (Cf. U.S. Department of Health & Human Sciences (2005).)

²¹⁷U.S. Department of Health & Human Sciences (2005).

²¹⁸U.S. Department of Health & Human Sciences (2005).

²¹⁹Caring.com (2021).

²²⁰Caring.com (2021).

5.2.2.4 Obamacare

5.2.2.4.1 Enactment of the ACA/Obamacare

To address some of the major shortcomings of the American healthcare system, the Obama administration developed the so-called "Obamacare" legislation in 2010.²²¹ This led to the "Patient Protection and Affordable Care Act" (generally abbreviated as "ACA") of 2010, commonly known as "Obamacare", a federal law that aimed to (1) extend health coverage to most Americans, (2) reduce costs, and (3) improve the quality of already existing health care systems. As of 1 January 2014, most US citizens are required to have a basic level of health coverage under the said ACA.²²²

The main goal of President Barack Obama's reform initiative was to make healthcare more affordable for every American citizen, especially by reducing costs for those who could not afford them. A second goal of the ACA was to ensure universal access to medical care. Before the ACA, insurance companies could, e.g., exclude people with pre-existing medical conditions; the ACA aimed to end these exclusionary practices.²²³ Also before the ACA, poor people—often those most in need of health care-sometimes had to abstain from getting insured, or settle for an insurance policy that did not cover a pre-existing medical condition. Because these people could in many cases not afford regular doctor's visits as well, they often showed up in hospital emergency rooms and, in many cases, could not pay for the cost of the treatments they needed. In order to deal with this huge societal problem, the ACA required everyone to have health insurance, or pay a tax penalty. At the same time, the ACA aimed to make health insurance costs more affordable for people with low incomes, based upon programmes for subsidising these costs.²²⁴ These subsidies were mainly made available through "premium tax credits" that reduced costs for households whose income ranged between 100% and 400% of the official federal poverty level.²²⁵ One of the further objectives of the ACA was to curb the rising costs of health care in general.²²⁶

Under the ACA, Medicaid was expanded to people earning up to 138% of the official federal poverty level.²²⁷ However, by 2020, 14 states had chosen not to

²²¹H.R.3590—Patient Protection and Affordable Care Act—111th Congress (2009–2010) For the full text cf. http://housedocs.house.gov/energycommerce/ppacacon.pdf.

²²²Amadeo and Brock (2020).

²²³ Amadeo and Brock (2020).

²²⁴ Amadeo and Brock (2020).

²²⁵https://www.healthcare.gov/glossary/affordable-care-act/.

²²⁶Amadeo and Brock (2020).

²²⁷The poverty line usually rises each year to keep pace with inflation. People who earn too much for Medicaid get a tax credit if their income is below 400% of the poverty line. The credit is applied monthly, rather than as an annual tax credit. They also pay lower co-payments and deductibles.

expand Medicaid, in this manner limiting access for their residents. These states were mostly Southern states.²²⁸

In order to ensure that insurance companies could afford to grant insurance to people with pre-existing medical conditions, the ACA also aimed to ensure that healthy people would participate as well, by initially requiring everyone to take health insurance for at least nine of every 12 months, or, by means of a penalty for non-compliance, to face a tax (the so-called "mandate"). In this manner, it was ensured that the risk pools of the private insurers would be sufficiently diversified to amount to sound business models. However, in December 2017, the US Congress repealed this penalty, effective 2019, through the so-called "Tax Cuts and Jobs Act". Although, since that time, the ACA mandate no longer applies, some other taxes related to Obamacare still remained in effect.²²⁹ Although by repealing the mandate, the US Congress has cut one of the legs under the ACA, people can still benefit from the parts of the ACA that are still in force.²³⁰ E.g., the so-called "health insurance exchanges"—considered of being the most important part of the ACA—have remained open for enrolment between 1 November and 15 December of each year.²³¹

Under the presidency of Donald Trump, the American Congress made some further major changes to Obamacare (or tried to do so). Still, the ACA is believed to stand strong.²³² Perhaps this is the reason why, in June 2020, the Trump administration requested the Supreme Court to simply overturn Obamacare. The Supreme Court's decision on the matter was on 15 May 2021 not yet announced.²³³

5.2.2.4.2 Main Impact of Obamacare on the US Healthcare System

The ACA is widely believed to have drastically changed the American healthcare system, especially by extending health insurance to 20 million Americans and in this manner having saved numerous lives.²³⁴

Starting in 2010, the ACA led to one of the largest increases of health care coverage in American history. In 2010, 16% of all Americans were reported to be uninsured; in 2016, this number was already down to 9%. An estimated 20 million additional Americans are reported to have gained health insurance since the ACA went into effect. This, moreover, happened across all income levels and to the benefit

²²⁸ Amadeo and Brock (2020).

²²⁹Amadeo and Brock (2020).

²³⁰Amadeo and Brock (2020).

²³¹Amadeo and Brock (2020). Registration is via the website https://www.healthcare.gov.

²³²Amadeo and Brock (2020).

²³³Amadeo and Brock (2020).

²³⁴Rapfogel et al. (2020). Cf., furthermore, Robert Wood Johnson Foundation (2016).

of both children and adults. The ACA also reduced coverage disparities among racial and ethnic groups.²³⁵

Two of the ACA's largest coverage expansion provisions came into effect in 2014: the expansion of "Medicaid" on one side, and the launch of the "health insurance marketplaces for private coverage" on the other side. By 2020, these two programmes together were reported to cover tens of millions of Americans. In 2019, considered on a national level, 11.4 million people had enrolled in coverage plans through the ACA health insurance marketplaces. By 2020, the Medicaid expansion covered an additional 12.7 million people who had become eligible through the ACA for the first time.²³⁶

The ACA also aimed at ending the practice of "medical underwriting". This practice, that was common before the enactment of the ACA, implied that private insurers routinely set prices and insurance conditions regarding the exclusion of benefits, and denied coverage to people based on their health status. On a practical level, this had as a result that, to the extent that nearly one in two non-elderly adults in the United States suffers from a pre-existing medical condition, half of the adult population was discriminated against on the basis of their medical history if they sought insurance on their own.²³⁷

Evidence has shown that better affordability has effectively translated into more and better access to medical care services. In short, according to Rapfogel et al., the ACA has ensured that millions of Americans obtained access to insurance coverage. This programme was not only lifesaving, but lifechanging for millions of people

²³⁵Rapfogel et al. (2020); cf., furthermore, Robert Wood Johnson Foundation (2016), pp. 3–4.

According to calculations made by the Robert Wood Johnson Foundation, an estimated 11.2% of the nearly 274 million Americans under the age of 65 were uninsured in 2015. The 2015 uninsured rate was, moreover, already significantly lower than the 18.0% uninsured rate in 2010 (i.e., before the ACA had been enacted). The adjusted uninsured rate for 2010, which took into account shifts in the composition of the population from 2010 to 2015, was 18.2%. Furthermore, nearly 19.2 million Americans gained insurance coverage between 2010 and 2015, representing a change in the uninsured rate of -38.4%. Americans in every age, gender, and race/ethnicity group surveyed by the Robert Wood Johnson Foundation were reported by the latter to have experienced an increase in health insurance coverage between 2010 and 2015. (Cf. Robert Wood Johnson Foundation (2016), pp. 3–4.)

²³⁶Rapfogel et al. (2020).

²³⁷Rapfogel et al. (2020).

The ACA added a number of important new protections for people with pre-existing conditions. Among the reforms were changes to the rating rules, which no longer allow insurers to vary premiums based on gender or health status and limit their ability to vary premiums based on age. The ACA also introduced guaranteed issue, meaning insurers must issue policies to everyone and can no longer refuse people based on their health status. Another crucial protection for people with pre-existing conditions is the ACA's requirement that plans must cover categories of essential health benefits, including prescription drugs, maternity care and behavioural health care. This prevents insurance companies from effectively excluding patients with higher costs by excluding basic benefits from coverage. The law also prohibits insurers from setting annual and lifetime limits on benefits, which previously denied some of the sickest people access to necessary care and provided Americans with insufficient financial protection against catastrophic medical episodes. (Cf., furthermore, Rapfogel et al. (2020).)

who were previously uninsured, had lower incomes, or had pre-existing medical conditions.²³⁸

Yet major gaps in insurance coverage and access remained: at the time of Donald Trump's election, 28 million people were still uninsured, a fact that has been held responsible for an estimated 37,000 premature deaths in 2017. Moreover, the ACA also failed to stop a growing trend of "underinsurance" (i.e., insurance coverage with such high cost-sharing conditions that enrolees are still unable to pay off medical care). As a result, in 2016, still more than one-third of adults under the age of 65 (including 25% of those insured) suffered problems with medical bills or medical debt, and a similar proportion of the American people reported waiving necessary medical care because of the costs involved. Meanwhile, bankruptcies due in whole, or in part, to illness remained commonplace even after the ACA had been implemented.²³⁹

5.2.2.5 The General Outlook of the US Hospital Sector

In the 1980s, hospitals in the United States were still largely not-for-profit institutions that generally operate in accordance with a set of professional and ethical standards that restrict their behaviour for the benefit of patients.²⁴⁰ The hospital sector in the United States had not yet been subject to an as far-reaching degree of "corporatisation" as the nursing home sector.

By 2021, most hospitals in the United States were still of a non-profit nature. Their (in most cases) tax-exempt status generally requires them to offer communitybased health programmes, and to assist all patients, regardless of their financial status.²⁴¹ Of the approximately 5200 non-federal hospitals, about 3000 belong to this group of not-for-profit hospitals.²⁴² These non-profit hospitals mainly serve people who need ambulatory surgical care, inpatient surgery, or other usual hospital services.²⁴³ The concentration of not-for-profit hospitals varies by geographic location. In general, there are more not-for-profit hospitals in the West, Northeast, Southwest and Midwest compared to the South. While for-profit hospitals have to put the interest of their shareholders and investors first, a not-for-profit institution can, by contrast, put the interests of its patients first.²⁴⁴

The large number of not-for-profit hospitals, which are considered charitable by the IRS (under the condition that they meet the guidelines for non-profit

²³⁸Rapfogel et al. (2020).

²³⁹Woolhandler et al. (2021), p. 724.

²⁴⁰Hawes and Phillips (1986).

²⁴¹Healthcare Management (2021).

²⁴²In 2019, there were about 5141 community hospitals in the US. The majority of these hospitals were non-profit, while only about 1233 were for-profit. (Kahn (2019)).

²⁴³Healthcare management (2021).

²⁴⁴Healthcare management (2021).

organisations, such as providing certain benefits to the community), do not pay federal income tax or state and local property tax. Moreover, in keeping with their charitable purpose and community focus, non-profit hospitals are often affiliated with a particular religious denomination.²⁴⁵ As one would expect, non-profit hospitals, on average, provide more unrelated care than for-profit hospitals. Contrary to what one might expect, however, for-profit hospitals also tend to serve lower-income populations, while not-for-profit hospitals tend to be located in communities with less poverty, higher incomes and fewer uninsured patients.²⁴⁶

On the other hand, for-profit hospitals are more specialised in the latest medical technologies and are thus often better suited for advanced care. E.g., in Florida, Nevada and Texas, for-profit hospitals make up more than 50% of the facilities.²⁴⁷ For-profit hospitals are usually owned by private investors or by a publicly traded company.²⁴⁸ In many of these for-profit hospitals, private equity investors resort to economies of scale for increasing efficiency. This has led to corporate chains buying up multiple hospitals in order to consolidate back-office functions, such as sending out bills and accounting. On the downside, such investor-owned hospitals show a tendency of offering a narrower range of medical services and of sending patients with particular or complex medical needs to non-profit facilities that still provide such non-profitable care. E.g., many for-profit hospitals no longer offer neo-natal intensive care or perform organ transplants, as such services are too expensive and do not generate profits. Another problem reported regarding to for-profit hospitals is that they do not always succeed in attaining the level of required efficiency; in such cases, they will often simply dispose of facilities when these have become too leveraged without generating the aspired for profits. Fraudulent billing has been indicated as another major problem, as for-profit hospitals may try to make a profit by overbilling third payers such as Medicare or private insurers.²⁴⁹ (Illegal) practices that have been reported in the past, include the systematic referral of patients with diseases that are not profitable enough, besides exploiting Medicare loopholes for making claims for unearned payments in the hundreds of millions.²⁵⁰

Like all capitalist businesses, investor-owned hospitals, moreover, aim to maximise profits and minimise costs. However, such strategies that increase profitability often degrade efficiency and quality. In addition, managers of for-profit institutions in many cases are mostly concerned with reaping princely rewards, diverting money from healthcare services themselves. These huge CEO incomes explain part, but not all, of the high administrative costs which in investor-owned healthcare companies are usually much higher than in not-for-private institutions. This implies that investor-owned hospitals may spend much less on nursing than not-for-profit

²⁴⁵School of Business at the George Washington University (2020).

²⁴⁶School of Business at the George Washington University (2020).

²⁴⁷Healthcare management (2021).

²⁴⁸School of Business at the George Washington University (2020).

²⁴⁹Kahn (2019).

²⁵⁰Woolhandler and Himmelstein (2004).

hospitals, while their administrative costs are generally higher (presumably due to their closer attention to financial details).²⁵¹

According to Woolhandler and Himmelstein, even for honest for-profit institutions, the careful selection of lucrative patients and medical services is the key to success, while meeting the general needs of the community may often pose a threat to profitability.²⁵² In recent years, encouraged by the ACA imposed shift to valuebased purchasing, large health institutions have increasingly bought up independent hospitals and physician practices, in order to use their thus acquired monopoly power to negotiate higher service rates. However, as a result of such large mergers and acquisitions, hospital profits have risen, while the availability of primary care and other services has declined, promised quality improvements have not materialized, and overall patient experience has deteriorated.²⁵³

In February 2021, investor-owned for-profit healthcare companies were reported to employ tens of thousands of doctors. The market share of for-profit hospitals, moreover, increased by 8 percentage points over the past 15 years. By February 2021, most outpatient haemodialysis centres, nursing homes, psychiatric inpatient facilities, health maintenance organisations, and even hospices in the United States were reported to be for-profit organisations.²⁵⁴

Meanwhile, data on the clinical and cost implications of private investor ownership are worrying. E.g., mortality rates in for-profit dialysis facilities are reported to be higher than in not-for-profit facilities, with the differences implying that for-profit ownership is associated with up to 3800 additional deaths per year in the United States. Research also suggests that quality of care is, in general, inferior in for-profit nursing homes and home health agencies, and that for-profit hospitals still have a tendency of shunning unprofitable patients. Venture capital and private equity firms have been reported of forcing the dermatologists they employ to increase their income by promoting (unnecessary) cosmetic procedures, introducing billing

²⁵¹Woolhandler and Himmelstein (2004).

²⁵²Woolhandler and Himmelstein (2004).

In the United States, there are, e.g., specialised for-profit hospitals that only offer cardiac or orthopaedic care. Most of these hospitals duplicate services available at nearby not-for-profit general hospitals, but the newcomers avoid money-losing programs such as geriatric care and emergency rooms (a common entry point for uninsured patients). The profits thus generated go to the investors of the private for-profit hospitals, where the losses go to the non-profit hospitals, and the overall cost to society increases due to the unnecessary duplication of expensive facilities. It has in this regard been pointed out that a real market would require multiple, independent buyers and sellers, with free access to the market, while in practice many hospitals exercise virtual monopolies. A city's only hospital cannot compete with itself but can use its market power to boost its revenues. It is, therefore, not surprising that for-profit hospital companies in the United States have concentrated their purchases in areas where they can acquire a large share of the local market. (Cf. Woolhandler and Himmelstein (2004).)

²⁵³Woolhandler et al. (2021), p. 727.

²⁵⁴Woolhandler et al. (2021), p. 727.

practices that saddle emergency patients with huge and unexpected bills, and closing urban hospitals sitting on valuable real estate.²⁵⁵

5.2.2.6 Further Decline of the Healthcare Sector Under President Donald Trump

5.2.2.6.1 General Assessment of Trump's Healthcare Policy

At the time of President Donald Trump's inauguration, in January 2017, the health of the American population was reported to be in a downward spiral for the first time in almost a century. Average life expectancy in the United States had, more precisely, fallen from 78.9 years to 78.7 years between 2014 and 2018, a time period that included the first 3-year drop in life expectancy since World War I and the flu pandemic of 1918.²⁵⁶ Health progress in the United States had thus stalled during the longest period of sustained economic expansion (i.e., between June 2009 and March 2020) in American history, which implied an unprecedented disconnect between the health of the general population and GDP growth.²⁵⁷

For much of its history, the United States has been characterized by a far more even distribution of income and wealth than most of Europe. Since the 1980s, however, inequality between socioeconomic classes has widened, as high-paying manufacturing jobs disappeared in the wake of trade liberalization and the resulting delocalization of industries, trade unions had been stifled, and tax and social policies increasingly started favouring the rich to the detriment of the rest of society. Despite a booming stock market and low unemployment rates, many people in the United States were forced into meagre jobs with low pay and no or insufficient (health) benefits. The resulting income inequality, obviously, also increased inequality of access to health care.²⁵⁸

Although in the opinion of Woolhandler et al., Donald Trump's rise to power was driven by a mix of irrational tendencies appealing to man's dark side, such as racism, nativism and fear of deprivation, his policies themselves were a well thought out, deliberate and intensified attack on both the health and general well-being of people in the United States and elsewhere. (Cf. Sect. 2.1.4.) In the best of neoliberal traditions, one of Trump's most important legislative achievements, namely a trillion-dollar tax cut for the rich, caused a hole in the American public budget, that then served as a further argument for justifying the cutting in food and housing subsidies that had before in recent history been installed to prevent malnutrition and homelessness for millions of people throughout the United States; as a result, the

²⁵⁵Woolhandler et al. (2021), p. 727.

²⁵⁶Woolhandler et al. (2021), p. 707.

²⁵⁷Woolhandler et al. (2021), pp. 706–707.

²⁵⁸Woolhandler et al. (2021), p. 707.

number of homeless schoolchildren alone increased by 150,000 during the first year of Trump's presidency.²⁵⁹

Between 2002 and 2019, the share of spending on public health in the United States fell from 3.21% to 2.45% (which amounted to about half the share of public health spending in Canada or the United Kingdom). Meanwhile, funding for the "Public Health Emergency Preparedness Programme" (which has been indicated as the main source of federal support for public health emergency capacity at the state and local level) fell by a third. As a result of these funding shortfalls, state and local public health authorities lost 50,000 jobs, which represented a 20% reduction in the front-line workforce for combating epidemics.²⁶⁰

Since 2003, the resources, but also the independence and the scientific authority of the Centers for Diseases Control and Prevention (CDC) have been gradually eroded, initially by the instalment of a business model and the resulting departure of experienced scientists from the agency, as well as by a 10% (inflation-adjusted) budget cut. A further recruitment freeze in 2017 simply left hundreds of CDC positions for researchers and officials vacant. In 2018, cutting measures deployed by Trump's administration went as far as simply transferring the already partially depleted "Strategic National Stockpile" of drugs and medical supplies from the CDC, to the Office of an Assistant Secretary of the Department of Health and Human Services.²⁶¹

In the early years of Trump's presidency, the public health emergency response capabilities of several other federal agencies were also drastically eroded. In 2018, e.g., the White House scrapped the National Security Council Directorate for Global Health Security and Biodefence, an agency that had been established as recently as 2014 in order to coordinate reactions to the Ebola virus and similar global disasters. Moreover, in 2019, almost half of all scientific leadership positions in federal agencies remained vacant. (Cf. Sect. 2.1.4.3.)²⁶²

Access to medical care, which—as has been explained in the previous sections has never been fully adequate in the United States in the first place, continued to shrink even more during the Trump administration. As a result, one million healthcare workers and a large (but undetermined) number of migrant workers at high risk of Covid-19 exposure, were un- or underinsured at the start of the Covid-19 pandemic in February 2020.²⁶³

In 2017, the Trump administration also halted the Occupational Safety and Health Administration's nearly completed effort to develop airborne infection control standards for workplaces, which were to be released in October 2017.²⁶⁴

²⁵⁹Woolhandler et al. (2021), p. 707.

²⁶⁰Woolhandler et al. (2021), p. 708.

²⁶¹Woolhandler et al. (2021), p. 708.

²⁶²Woolhandler et al. (2021), p. 708.

²⁶³Woolhandler et al. (2021), p. 708.

²⁶⁴Woolhandler et al. (2021), p. 708.

All of these problems caused by the policy of the Trump administration during the first years of Trump's presidency, would be exacerbated even more by the Covid-19 pandemic. Woolhandler et al. have attributed this to the following factors:²⁶⁵

- (1) An insufficiently coordinated federal leadership led to delayed or inconsistent guidelines for both national and local response.
- (2) Due to the dependence on free market forces for the supply of all essential equipment to both prevent (e.g., face masks and protective gear) and treat (e.g., respiration devices) Covid-19, states and hospitals had to compete with each other, and sometimes even with the federal government itself, for acquiring such material.
- (3) The Trump administration rejected test kits from the WHO in anticipation of the production of American tests. This obviously hampered both testing itself and testing capability. Other bottlenecks (e.g., insufficient capacity to carry out and analyse diagnostic tests) further delayed the policy response to Covid-19.
- (4) Public health authorities were continuously discredited by senior government officials, amongst which the president himself, leading to: (i.) an increasing disregard for scientific expertise, (ii.) misleading public communications, (iii.) official (i.e., originating from President Trump himself, and/or from the US Food and Drug Administration) approval of therapies without any proof of efficacy, (iv.) the promotion of unproven theories about Covid-19, and (v.) President Trump's refusal to wear a face mask, engage in physical distancing or avoid mass meetings (cf. Sect. 2.5.).
- (5) In an unprecedented show of distrust for scientific advice, many states did not follow recommendations provided by the CDC and instead joined multi-state coalitions from April–May 2020 to actively proclaim policies to reopen the economy and schools.
- (6) Many people lost their health insurance due to the loss of jobs as a result of the Covid-19 pandemic.
- (7) ...

According to Woolhandler et al., the combination of these policy problems caused by the Trump administration and the structural inequalities of the American health care system, have caused that the death and the misery of Covid-19 has fallen most heavily on the following categories: people of colour, workers in low-paid jobs where physical distance was challenging, people in prison, and nursing home residents and others of poor health.²⁶⁶

We shall come back to this in Sect. 5.3.2.

²⁶⁵Woolhandler et al. (2021), p. 708.

²⁶⁶Woolhandler et al. (2021), p. 708.

5.2.2.6.2 ACA Under Trump

5.2.2.6.2.1 Neoliberal Healthcare Policy of the Trump Administration in General

In 2014, a year before Donald Trump announced his presidential candidacy, one of the most important achievements of his predecessor Barack Obama, the ACA, had been successfully implemented.²⁶⁷ (Cf. Sect. 5.2.2.4.) By the time Donald Trump became president in January 2017, as a result of the ACA, 20 million additional American residents had enlisted for new health coverage, although 28 million were still uninsured.²⁶⁸

According to Woolhandler et al., it was against this backdrop that President Trump's health care policy—in essence aimed at limiting health coverage—may at first glance seem like an aberration, more precisely as a diversion from the path to greater health protection. However, still in the opinion of Woolhandler et al., the truth is more complicated: Although Trump's policies vary from those of several previous administrations, they have in essence picked up with the neoliberal traditions of deregulation, privatisation and austerity (for low-income communities) that had already been established as of the 1980s.²⁶⁹ President Donald Trump's efforts to reform the health sector are, therefore, much closer to the ideological underpinnings of President Ronald Reagan's neoliberal policies of the 1980s, than to the continuation of the efforts of predecessors, such as Presidents Bill Clinton and Barack Obama, to establish universal health coverage.

5.2.2.6.2.2 Attempts to Repeal the ACA

The debate over abandoning the ACA had already been ongoing before President Trump's inauguration.²⁷⁰ The ACA had, more precisely, never been taken for granted by right-wing elements of the American society. Going back to the architects of American neoliberal thinking, the idea of a universal, public healthcare system was by some even considered an aberration: Under their ideology—and even general life philosophy—everyone must take care of himself, also regarding matters of healthcare (e.g., by resorting to private health insurance, instead of depending on publicly installed health insurance systems). This had, for instance, been the popular line of thought of Ayn Rand, whose influence on the public policy of the Reagan administration had been huge. (Cf. Sect. 2.5.2.) Rand was, in general, completely opposed to the idea of a public insurance system, even though, when she suffered from cancer at a late age because of years of heavy chain smoking, she still

²⁶⁷Woolhandler et al. (2021), p. 723.

²⁶⁸Woolhandler et al. (2021), p. 723.

²⁶⁹Woolhandler et al. (2021), p. 723.

²⁷⁰Woolhandler et al. (2021), p. 724.

approached the public health services herself in order to have her medical treatment financed.²⁷¹

In the assessment of Jones on this apparent contradiction between Rand's teachings and her actions:²⁷²

In the simplest terms, Rand discovered at the end of her life that she was only human and in need of help. Rather than starve or drop dead — as she would have let so many others do — she took the help on offer. Rand died in 1982, as her admirer Alan Greenspan had begun putting her ideas into practice in Reagan's administration, making sure (...) that the system was "more favorable to the creators and entrepreneurs who were more valuable to society," in his Randian estimation, "than people lower down the ladder of success." After well over three decades of such policies, we can draw our own conclusions about the results.

But for right-wing America, these were just details that hardly stood in the way of their ongoing aversion to public service systems in general, and public health systems specifically. This aversion to public health insurance focused particularly on the ACA, which to many Republicans had become the nexus of everything that went wrong in the United States. Hence, it is no surprise that, already before the presidency of Donald Trump, US Republicans had repeatedly introduced bills to repeal the ACA, even dating back to President Obama's own time in office, although the assurance of a veto from the part of President Obama had rendered these past initiatives purely symbolic. It was against this background that (the proposal for) the "American Healthcare Act" (abbreviated as "AHCA") which the Republicans initiated in March 2017, for the first time posed a real threat to the efforts previously made towards a universal healthcare coverage. E.g., if the AHCA would have become law, it would especially have reduced federal Medicaid expenditure by USD 839 billion over the period of one decade, slashed subsidies to low-income households and individuals for acquiring private insurance, and decreased protections for people with pre-existing medical conditions.²⁷³ The "Congressional Budget Office" (abbreviated as "CBO") at the time made an estimation that the enactment of the AHCA would nearly have doubled the number of people without health insurance.²⁷⁴

In May 2017, the AHCA successfully passed the American House of Representatives. However, its counterpart bill was defeated by narrow margins in the US Senate after a last-minute defection by some Republican senators. This defection was inspired by the bill's unpopularity among the American people (as it, e.g., had appeared from a poll that only 17% of the American population was in support of the AHCA), in addition to a wave of "grassroot" opposition: in one dramatic moment,

²⁷¹Cf. Jones (2016).

²⁷²Cf. Jones (2016).

²⁷³Woolhandler et al. (2021), p. 724.

²⁷⁴The funds freed up by these cuts were to be redirected to cover the cost of tax breaks for corporations and the elimination of the ACA's surtax on high-income individuals, granting them a USD 172 billion windfall. (Cf. Woolhandler et al. (2021), p. 724.)

disabled activists had to be dragged out of the offices of Republican members of Congress while still in their wheelchairs.²⁷⁵

After the AHCA had failed, the Republicans abandoned their attempts to reform the American healthcare system through one sweeping piece of legislation. Instead, they started resorting to executive action and to small legislative steps with the overall intent of gradually weakening the ACA and bringing forward a more free market-oriented view on healthcare issues.²⁷⁶

In 2016, then-presidential candidate Donald Trump had conducted his electoral campaign on a promise that, if elected, he would already start repealing the ACA on his first day in office.²⁷⁷ Therefore, on 20 January 2017, the day President Donald Trump effectively took office, he signed his first of several presidential, executive orders²⁷⁸ on health care financing (cf. Table 5.2). This concerned "Executive Order 13,765", entitled "Minimizing the Economic Burden of the Patient Protection and Affordable Care Act Pending Repeal" a title that clearly made reference to the president's campaign promises. It was, moreover, the first executive order signed by Trump in his capacity of American president, a fact that further underlined the symbolic importance of the measure. The presidential order not only confirmed the Trump administration's persistent intention to repeal the ACA,²⁷⁹ but, in addition, gave the head of the US Department of Health and Human Services (abbreviated as "HHS"), besides the heads of several other federal agencies, broad powers to grant waivers, deferrals and/or exemptions, all with the overall attempt to delay parts of the ACA that could result in what the Trump administration referred to as "fiscal or regulatory burdens on individuals, providers or government entities".²⁸⁰ The presidential order confirmed Trump's intent to simply disregard parts of the ACA until it would no longer be law, while at the same time looking ahead to a "free and open market in (...) health care services and health insurance".²⁸¹

Already in the same year 2017, the Trump administration abruptly put an end to the funding of governmental advertising that encouraged the general public to enrol

²⁷⁵Woolhandler et al. (2021), p. 724.

²⁷⁶Woolhandler et al. (2021), pp. 724–725.

²⁷⁷Rasmussen (2017). "Obamacare must be replaced," Trump had declared in a speech on 1 November 2016. "And we will do it and we will do it very, very quickly. It is a catastrophe." (Cf. Rasmussen (2017).)

²⁷⁸In particular, Presidential Executive Order 13765.

²⁷⁹Section 1 of Presidential Executive Order 13765 held the following: "section 1. It is the policy of my Administration to seek the prompt repeal of the Patient Protection and Affordable Care Act (Public Law 111-148), as amended (the "Act"). In the meantime, pending such repeal, it is imperative for the executive branch to ensure that the law is being efficiently implemented, take all actions consistent with law to minimize the unwarranted economic and regulatory burdens of the Act, and prepare to afford the States more flexibility and control to create a more free and open healthcare market".

²⁸⁰Rasmussen (2017).

²⁸¹Woolhandler et al. (2021), p. 724.

20, 2017 ing the of the and Ad Oct Presid 12, 2017 Order Health Comp United	der of action	Key provisions	Effects
12, 2017 Order Health Comp United	tecutive Order Minimiz- g the Economic Burden the Patient Protection d ACA	Announces Trump's inten- tion to repeal the ACA; instructs government agencies to avoid implementing ACA provi- sions (within the confines of the law) and work toward a free and open market in health-care insurance and services.	ACA repeal efforts (failed); efforts to rollback provisions of the ACA and implement market- based reforms.
	esidential Executive rder Promoting ealthcare Choice and ompetition Across the nited States	Expand use of tax advantaged HRAs, includ- ing for non-group cover- age; loosens ACA rules that had restricted two types of plans exempt from the ACA's coverage rules: (1) AHPs, which allow employer associations to offer exempt insurance, and (2) STLDI, previously limited to <3 months but now allowed for up to 3 years.	Tax federal rule on AHPs and STLDI is issued in August 2018; AHP expansion challenged and invalidated in federal court and is currently under appeal; STLDI expansion likely to increase enrolment in such plans by 1.4 million (some states banned STLDI, limiting its effect).
	iding CSRPs	CSRPs are subsidies (along with premium sub- sidies) paid to insurers to reduce out-of-pocket costs for low-income people purchasing ACA market- place plans; after a court ruling that Congress had not explicitly appropriated funding for CSRP, the Obama administration continued the payments pending appeal; the Trump administration abruptly ended the payments in 2017.	Many people feared that ending CSRPs would damage the ACA market- places; paradoxically, the ACA plans' affordability to low-income enrolees improved, because insurers increased their premiums, triggering automatic increases in premium subsidies. Only high-income people pur- chasing unsubsidized insurance on the ACA marketplaces faced highe costs, as did the federal treasury, which will bear additional costs of nearly USD 200 billion over a decade, according to a 2017 CBO estimate.
1, 2019 and Pa Annot	20 Medicare Advantage d Part D Rate mouncement and Final all Letter Fact Sheet	Allowed Medicare Advan- tage plans, but not tradi- tional Medicare, to offer incentives for enrolment;	Gave private Medicare Advantage plans a com- petitive edge over pub- licly administered

 Table 5.2
 Examples of executive orders and actions on health-care financing during the Trump era

 [Source: Woolhandler et al. (2021), p. 726]

(continued)

Date	Order of action	Key provisions	Effects
		increased Medicare Advantage payments rates by 5.62% (1.02% above the rate increase calculated previously); similar increases were granted in two previous years (2017 and 2018).	Medicare; increased over- payments to Medicare Advantage plans.
June 24, 2019	Executive Order on Improving Price and Quality Transparency in American Healthcare to Put Patients First	Announces plans to increase price transparency to encourage patients to shop for health-care services via: (1) requiring hospitals to publicly post both charges and negoti- ated payment rates for selective services, (2) con- sideration of a rule to inform consumers of their possible out-of-pocket costs to patients, and (3) expand use of high- deductible health plans, and use of HSAs, by increasing the amount of HSA funds that can be rolled over to the following year, and permitting funds to be used for direct pri- mary care (also known as concierge care) and health- care-sharing religious ministries.	Rule released on Nov 15, 2019, requires hospi- tals to make public all charges and negotiated payments, for at least 300 selected services; on Nov 15, 2019, the admin- istration released a pro- posed rule that would require insurers to provide information about cost- sharing to enrollees.
Oct 3, 2019	Executive Order on Protecting and Improving Medicare for Our Nation's Seniors	Contends that Medicare for All could cause the failure of the Medicare program; calls for so-called value- based payment methodol- ogies within Medicare; calls for more plan choices for older enrollees via: (1) expanded use of medi- cal savings accounts, (2) permitting Medicare Advantage plans to pay beneficiaries cash rebates, (3) ensuring that traditional Medicare has no advan- tages over Medicare Advantage, and	Intended to weaken tradi- tional Medicare and accelerate the privatiza- tion of coverage for older enrollees; likely to increase costs for older people and taxpayers in the long-term

Table 5.2 (continued)

(continued)

Date	Order of action	Key provisions	Effects
		(4) exploring ways to make traditional Medicare pay- ments resemble those of commercial insurers and Medicare Advantage plans; calls for relaxing network adequacy require- ments for Medicare Advantage plans and pre-emption of state laws restricting hospital expan- sions; calls for reducing barrier to licensing of non- US-trained physicians, participation of non-physician providers, and reducing payment dif- ferences between physi- cian and non-physician providers; revocation of unnecessary barriers to private contracts between Medicare beneficiaries and providers; calls for allowing older enrollees to easily opt out of Medicare coverage for inpatient care; calls for market-based pricing of services in tra- ditional Medicare.	
Nov 12, 2019	Proposed Rule: Medicaid Fiscal Accountability Regulation	Bans federal Medicaid match of funds states col- lect from taxes on health- care providers and insurers.	Would reduce federal Medicaid spending by USD 28.3 billion and total (federal and state) Medic- aid spending by USD 44.0 billion annually
Sept 13, 2020	Executive Order on Low- ering Drug Prices by Put- ting America First	Declares that Medicare will pay no more for cer- tain prescription drugs than OECD nations with com- parable GDP per capita, calls for HHS secretary to develop model program to implement (and study) this approach for select high- cost drugs.	International index pric- ing would reduce drug prices; however, execu- tive order has no immedi- ate effect and will face court challenges; in December 2019, Trump promised to veto an index pricing bill.

 Table 5.2 (continued)

in ACA programmes.²⁸² Starting in 2017, Trump also began subjecting the ACA to relentless—and often factually incorrect—rhetorical downsizing. Woolhandler et al., even made the observation that, during the period from January 2017 until April 2019, President Trump made 662 misleading or outright false statements about the American healthcare system, nearly half of which concerned downsizing the stability of the ACA and/or the need for repealing it as soon as possible.²⁸³ President Trump additionally shortened the length of enrolment periods for ACA insurance during the years 2017–2018. The president also cut funding for so-called "navigators" (i.e., agencies that assist individuals in navigating the ACA's complicated enrolment process).²⁸⁴

Another central executive order by which President Trump aimed to further "marketize" health insurance coverage concerned the Presidential Executive Order 13,813, which was signed on October 12, 2017.²⁸⁵ With this directive to federal agencies that only counted approximately 1100 words, President Trump laid the groundwork for a growing collection of health insurance products, primarily (1) comprehensive plans to be offered through small employer associations, besides (2) a greater reliance on the use of short-term medical coverage. This presidential order was the first attempt since efforts to repeal the ACA had failed in the American Congress, that Trump undertook for implementing his vision on how to rebuild the American health care system by resorting to executive presidential powers. Said Presidential Executive Order 13,813 immediately sparked a debate over whether the measure would fatally undermine the ACA's marketplaces or imply welcome alternative choices for consumers who had complained about too high insurance premiums and too little choice.²⁸⁶

Section 1(b) of Executive Order 13,813, furthermore, provided that of the myriad areas where the prevailing ACA regulations limited both choice and competition, the Trump administration would prioritize three areas for improvement in the near future: (1) association health plans (AHPs), (2) short-term limited-duration insurance (STLDI), and (3) health reimbursement plans (HRAs). Similarly, Executive Order 13,813 stated in its section 1(c) that the Trump administration would continue to focus on promoting competition in healthcare markets and on limiting excessive consolidation in the healthcare system.²⁸⁷

One of the basic premises of Executive Order 13,813 was that individuals and small businesses would be allowed (and encouraged) to group together to insure themselves, or to buy a large group health insurance policy. Presumably, this would help small enterprises in overcoming a competitive disadvantage that the ACA had imposed on them, by allowing them to enhance the terms and conditions of their

²⁸²Woolhandler et al. (2021), pp. 724–725.

²⁸³Woolhandler et al. (2021), p. 725.

²⁸⁴Woolhandler et al. (2021), p. 725.

²⁸⁵Cf. Executive Order 13813. Cf., furthermore, Pear et al. (2017).

²⁸⁶Pear et al. (2017).

²⁸⁷Webb (2017).

health insurance policies. The Executive Order was also aimed at helping small enterprises in circumventing certain burdensome ACA requirements. Most importantly, the Trump administration saw AHPs as a means of providing more affordable health insurance options for poor Americans, whereby these groups would be able to negotiate better health insurance terms because of a greater ability to spread risk and share administrative costs.²⁸⁸

In practice, the Presidential Executive Order 13.813 implied that the Department could grant employers operating in the same industries more flexibility to offer group insurance to their collective employees across state lines, giving them access to a far wider range of insurance policies at lower rates.²⁸⁹ Another practical implication of the Presidential Executive Order 13,813 was that, although shortterm limited duration insurance (STLDI) was intended to function as transitional coverage—e.g., to the benefit of workers finding themselves between jobs—an increasing number of Americans simply began using this possibility as an alternative to traditional, long-term insurance products.²⁹⁰ A final priority area outlined in the Presidential Executive Order 13,813 dealt with so-called Health Reimbursement Arrangements (HRAs). These HRAs were to be distinguished from Health Savings Accounts (HSAs), the latter indicating the most widely promoted products in conservative health policy circles. Basically a payment mechanism for health care, HRAs were in fact tax-advantaged accounts that offered employers an enormous degree of flexibility. In these HRAs, employers had the greatest possibilities for recovering healthcare costs, through a wide range of options, such as choosing eligible expenses, deciding whether or not funds could be carried over, and

²⁸⁸Webb (2017).

Critics of the AHPs model pointed to a series of unintended consequences for patients and for the market as a whole. First, it was felt that the use of AHPs could lead to market segmentation that could threaten the viability of other insurance products, making it more difficult for high-cost individuals and groups to obtain coverage. Second, there were concerns that AHPs could circumvent state protection of patients, such as access to certain services (e.g. emergency rooms and specialists) or state solvency requirements. Third, some noted that AHPs would be unlikely to receive lower provider payment rates than larger insurance companies, but rather would have to "rent" provider networks and pay associated access fees—at the expense of the potential savings they could achieve. (Cf. Webb (2017).)

²⁸⁹Luhby and Liptak (2017).

²⁹⁰Back in October 2016, the Obama administration had made an attempt to curtail the use of such temporary plans as primary insurance, by limiting their duration to 90 days (instead of 364 days). By contrast, in Executive Order 13,813, the Trump administration highlighted the ACA non-compliant nature of these temporary plans as part of their appeal. As purportedly viable, alternative mechanisms for obtaining insurance, without having to comply with the mandates and regulations of the ACA, the Trump government hoped to extend the total length of time during which policyholders could have STLDI plans, as well as the number of times they could resort to such policies. Ultimately, support for a longer "short term" (364 days versus 90 days) would prove to be centred around the idea that STLDI was an attractive insurance alternative for some Americans, and that eliminating it through regulation—as a means of protecting or improving the ObamaCare health insurance exchanges—would amount to unfair government intervention. (Cf. Webb (2017).)

considering whether or not to fund the accounts in the first place. It was the Trump administration's further intention to propose even more lenient regulations and/or to revise the manual on how to make it easier for employers to offer such HRAs to their employees.²⁹¹ One of the ultimate ideas behind this all was to expand on the ability for employers to simply give employees an amount of money through such HRAs in order to allow them to buy their own coverage on the market.²⁹²

But while Presidential Executive Order 13,813 was in fact the Trump administration's preliminary thinking document on expanding choice on the insurance market, a purportedly much more impactful action on the insurance marketplace was launched through a press release issued by the Department of Health and Human Services (HHS). The referred decision to immediately stop paying cost-sharing reductions (CSRs)²⁹³ would not only have significant implications for the open enrolment period, but also for the wallets of some of the most vulnerable Americans.²⁹⁴

In response to these measures, six renowned physician groups, including the American Academy of Family Physicians expressed their concerns that:²⁹⁵

²⁹⁵Pear et al. (2017).

²⁹¹Webb (2017).

²⁹²Luhby and Liptak (2017).

²⁹³The two health insurance marketplace subsidies created by the ACA are the "premium tax credit" and the "cost-sharing subsidies". The cost-sharing subsidies reduce out-of-pocket expenses (deductibles, co-payments and coinsurance) for marketplace participants with incomes from 100% to 250% of the federal poverty line who are enrolled in a silver plan. These CSR payments cost the federal government USD 7 billion in 2016, and seven million people-or 58% of all Obamacare enrolees—were eligible for these CSR subsidies for 2017. After the ACA was passed, the Obama administration began determining how it would pay for the cost-sharing reduction payments. While the Treasury's permanent allocation for tax credits could be used for premium tax credits, Treasury advisors determined in 2012 that this allocation could not be used for CSR payments. After initially requesting an annual allocation of USD 4 billion for CSR payments in the FY 2014 budget, the Obama administration later withdrew this appropriation request, arguing that it was legally authorised to fund the CSR programme through the premium tax credit account. The House of Representatives filed a lawsuit against the Obama administration in July 2014, challenging government reimbursements to health insurers for CSRs on the grounds that Congress had not appropriated the money to fund them. In May 2016, the District Court for the District of Columbia ruled in favour of the House of Representatives, saying that the cost-sharing programme spent money not appropriated by Congress. Nevertheless, the court ruled that Congress had in fact authorised the creation of the programme. Although the Court's ruling would have prohibited the CSR grants until there was a valid appropriation, the judge suspended the ban and allowed the grants to continue pending the appeal. After the election of President Trump, the appeal was stayed while the House and the Trump Administration attempted to negotiate a settlement. In February 2017, the House of Representatives and the Trump administration's Justice Department asked the court to temporarily postpone a court ruling on the appeal to allow time for other solutions, including possible legislative action. After Congress failed to pass legislation to repeal/replace the ACA, the government decided to go ahead with the district court's determination that the payments were unlawful, terminate the appeal, and immediately cease CSR payments. (Cf. Webb (2017).)

²⁹⁴Webb (2017).

allowing insurers to sell narrow, low-cost health plans likely would cause significant economic harm to women and older, sicker Americans who stand to face higher-cost and fewer insurance options.

By contrast, many health insurers simply remained silent on the measures contained in the Executive Order 13,813. Only a small minority of health insures expressed their concern that the approach laid down in the Executive Order 13,813 could destabilise the whole market.²⁹⁶

However, most of the changes brought along by the Presidential Executive Order 13,813 could only be made through further regulations decided upon by federal agencies for its implementation. This implementation process, which includes a period of consulting the public for comments, was expected to take months. This at the time implied that the Presidential Executive Order was unlikely to still affect insurance coverage for 2018, albeit it could lead to major changes as of 2019.²⁹⁷

To undermine some of the ACA's basic requirements that private insurers must cover essential benefits and enrol applicants regardless of health status, the Trump administration also widened certain loopholes that exempted some insurance plans from those rules. These "exempt plans" (cf. Table 5.2) allowed for the charging of lower premiums and for offering meagre coverage (e.g., excluding maternity care). These exempt plans tended to attract more healthy enrolees who expected to need little medical care, soon raising concerns that the exempt plans would ultimately pull such healthy enrolees away from the ACA marketplace, thus destabilising its risk pool. The Trump administration additionally tried to end payment schemes for compensating ACA marketplace insurers for the cost-sharing subsidies they had to offer to eligible low-income enrolees (a move that was however blocked by the courts). Meanwhile, the then Republican-controlled Congress eliminated the ACA penalty for remaining uninsured, i.e. the so-called "mandate", the part of the legislation that also provided new tax breaks to high-income individuals and enterprises, including pharmaceutical companies.²⁹⁸

Fortunately, the Trump administration's various attacks on the ACA had less effect than had been feared when Trump had initiated his attempts of bringing the ACA down. E.g., the elimination of the individual mandate and the expanded availability of substandard, exempt insurance forms and plans did not end up luring a large amount of people away from the regular ACA marketplaces. This is probably because subsidies continued to make marketplace premiums sufficiently attractive. Nevertheless, all of these deregulatory actions revealed Trump's underlying, neoliberal agenda of wanting to establish a transformation of healthcare into a free market commodity available to those who can afford the price for it, rather than at

The Trump approach "would draw younger and healthier people away from the exchanges and drive additional plans out of the market," warned Ceci Connolly, the chief executive of the Alliance of Community Health Plans. (As quoted by Pear et al. (2017).)

²⁹⁶Pear et al. (2017).

²⁹⁷Pear et al. (2017).

²⁹⁸Woolhandler et al. (2021), p. 725.

establishing a universal health care system, supported and funded by the entire American community, as some of Trump's predecessors had pursued.²⁹⁹

Table 5.2 gives an overview of some examples of executive orders and actions on health-care financing during the Trump era.

5.2.2.6.2.3 Attacks of the Trump Administration on Medicaid

Unfortunately, Trump's attempts to undermine Medicaid would prove to be far more consequential than his largely failed attempts to repeal the ACA.³⁰⁰

In March 2017, government officials reportedly sent a letter to the country's governors urging them to make alterations to Medicaid that previous governments had banned. These alterations included imposing new out-of-pocket costs for low-income enrolees, besides a requirement that adult enrolees, notwithstanding their disability, should perform work amounting to at least 80 h a month, or else actively seek employment.³⁰¹ In response to this letter by the Trump government, many states applied for and effectively obtained waivers under the Medicaid law, allowing them to implement these alterations. At the same time, however, the work-related requirements were blocked by the courts.³⁰²

In the period before the Covid-19 pandemic, the Trump administration had already proposed to cut USD 920 billion from Medicaid over the decade to come. The Trump administration was also on the verge of imposing a series of onerous eligibility checks and tightened standards under which older working people with disabilities could still apply for Medicaid support. The Trump administration also hoped to replace indefinite federal funding commitments by far stricter block grants in some states.³⁰³

During the first 3 years of Donald Trump's presidency, the number of American residents without coverage increased by 2.3 million, mainly due to a reduction in the Medicaid coverage itself. The trend for coverage of children (<19 years) especially raised concern, to the extent that an additional number of 726,000 children had become uninsured. Even before the outbreak of the Covid-19 pandemic, the CBO had projected a steady increase in the number of uninsured Americans to 35 million by 2027. However, this projection did not consider the millions of Americans who lost their jobs and/or work-related coverage due to the Covid-19 pandemic itself.

²⁹⁹Woolhandler et al. (2021), p. 725.

³⁰⁰Woolhandler et al. (2021), p. 725.

³⁰¹Woolhandler et al. (2021), p. 725.

³⁰²Woolhandler et al. (2021), p. 725.

In Arkansas, the only state to implement these rules before the courts intervened, the new rules have created great confusion and bureaucratic obstacles for low-income beneficiaries, almost all of whom should have remained eligible for Medicaid. About 18,000 people were excluded from coverage without an increase in work participation. (Cf. Woolhandler et al. (2021), p. 725.) ³⁰³Woolhandler et al. (2021), p. 725.

This implies that, since then, the exact extent of coverage loss has remained unknown. $^{\rm 304}$

It was, moreover, feared that even more people would lose their coverage if the US Supreme Court would decide to invalidate the ACA. In a former 2012 decision, the Supreme Court had upheld most of the ACA, reasoning that the US Congress' constitutional power to tax also allowed it to impose tax-based fines for not purchasing insurance. However, after the US Congress had reduced this fine to USD 0, a federal court in Texas had ruled that the entire ACA was unconstitutional. The case was still on appeal to the US Supreme Court by 15 May 2021, with Trump's Justice Department having jumped in to support the position of Texas.³⁰⁵

5.2.2.6.2.4 Trump's Healthcare Financing Vision and Some Further Implications of Trump's Healthcare Marketization Efforts

The further healthcare reform plans of President Trump, as based upon a mixture of conservative and neoliberal ideas, were set out in a little-noticed October 2017 white paper that advocated "choice and competition in health-care markets", rhetorical

³⁰⁴Woolhandler et al. (2021), p. 725.

³⁰⁵Cf. Center for Budget and Policy Priorities (2021).

According to the Center for Budget and Policy Priorities, based upon an estimation by the Urban Institute of October 2020, the striking down of the entire ACA would drastically increase the number of uninsured Americans by 21 million, or 69%. Striking down the ACA would not only end the ACA's major coverage expansions—such as Medicaid expansion, premium tax credits, and health insurance marketplaces—but other important protections as well. This would harm tens of millions of people. Among the negative effects of striking down the ACA, the Center for Budget and Policy Priorities mentioned the following: "• Insurers could again resort to putting annual and lifetime limits on insured coverage, including for people with employer plans. • Young adults would no longer be allowed to stay on their parents' insurance plans up to age 26. • Insurers would be allowed to reimpose cost sharing with regard to preventive services, including under employer plans and Medicare. • Reversing the ACA's alterations to how Medicare pays plans and providers, and to how state Medicaid programs determine eligibility, was expected to cause massive disruption. • Medicare beneficiaries would face higher prescription drug costs due to the Medicare "donut hole" reopening".

By contrast, higher-income households would receive very large tax cuts from repeal of the ACA's revenue measures, for an estimated average of USD 42,000 per year for those with incomes over USD 1 million. (Cf. Center for Budget and Policy Priorities (2021).)

If the Supreme Court would throw out only parts of the ACA, the result could still be nearly as devastating. E.g., allowing insurers to again discriminate based on health status (including pre-existing medical conditions) would jeopardize coverage for millions who could be charged more, denied coverage for certain illnesses, or blocked from individual market coverage alto-gether—a particularly dire consequence during an ongoing pandemic. Eliminating ACA protections could also allow insurers to charge higher premiums to women and people in certain occupations, reimpose pre-existing condition exclusions in employer coverage, and make premium tax credits nearly impossible to administer. (On these concerns, cf. Center for Budget and Policy Priorities (2021).)

cover for a policy aimed at deregulation, privatization, marketization and commercialization of health services.³⁰⁶

This White paper was intended to complement Trump's healthcare budget proposal of 2017.³⁰⁷

The White Paper focused on (1) Medicare reforms; (2) Medicaid reforms, and (3) FDA activities. The bulk of the reforms that were proposed in the white paper related to the Medicare and Medicaid programmes.³⁰⁸

Regarding Medicare, the Trump administration's proposals largely focused on (1) aiding beneficiaries who face high out-of-pocket costs, and (2) redirecting incentives to change prescription practices and reimbursement policies.³⁰⁹

Trump's White Paper also called on the government to expand the supply of physicians, hospitals and other healthcare providers, by deregulating the sector (e.g., by relaxing professional licensing standards). The White Paper similarly called for a far-reaching deregulation of the private insurance sector, under the assumption that the exorbitant cost of healthcare in the United Sates was mainly caused by state and federal government requirements (notably the ACA itself) that were criticized for forcing private insurers to provide excessively generous benefits (a neoliberal claim that was hard to comprehend by America's more than 41 million uninsured residents). To combat this wasteful use of health care, the White Paper suggested to limit benefit packages, increase coverage rates, and encourage patients to seek cheaper providers.³¹⁰ President Trump also wanted to remove subsidies to health insurance companies for helping to pay the out-of-pocket costs of people on low incomes.³¹¹ Without these subsidies, insurance markets would have quickly unravelled. Insurers responded by saying that these proposals would result in higher premiums and that they might pull out of the insurance exchange markets set up under the ACA if the subsidies were to be ended.³¹²

During the following years of Trump's presidency, the Trump administration gradually advanced its free-market-based agenda, e.g., leading to attempts to use funds from the Veterans Health Administration (abbreviated as "VA") for purchasing private care programmes for veterans and, even more strikingly, by continuing what has been referred to as "the creeping privatization" of Medicare that had already decades before been initiated by the Reagan administration (in an attempt to mirror British strategies of undermining Britain's National Health Service, as these strategies had been deployed by Margaret Thatcher in the 1980s). In the end, many American government officials simply hoped to replace Medicare's uniform

³⁰⁶Woolhandler et al. (2021), pp. 725–726. Cf., furthermore, Pear et al. (2017).

³⁰⁷US Department of Health and Human Services (2021).

³⁰⁸Sachs (2018).

³⁰⁹Sachs (2018).

³¹⁰Woolhandler et al. (2021), p. 726.

³¹¹The subsidies, known as "cost-sharing reduction payments", totaled USD 9 billion in 2018, and a projected amount of nearly USD 100 billion over the 2017–2027 period. (Cf. Pear et al. (2017).) ³¹²Pear et al. (2017).

benefit guarantee with a (far cheaper) system of vouchers that would allow older enrolees to shop around for private health insurance, with affluent seniors being able to top up their vouchers through their savings in order to buy broader coverage and preferential access to care.³¹³ (Cf. Sect. 5.1.2.5, on the underlying ideological ideas that form the basis for such a voucher system.)

As damaging as Trump's healthcare policies have been, Woolhandler et al., have, in light of the foregoing, assessed them as a merely more aggressive continuation of decades-old neoliberal tendencies towards deregulation and towards deploying free market-based alternatives for public services. Obviously, such a policy approach favours large private organisations and drives up costs for the consumers making use of these marketized services which, ultimately, benefits the shareholders of the private service providers.³¹⁴

To conclude this section, we refer to the following quote from the study from Woolhandler et al., of 2021, titled "Public policy and health in the Trump era", who have summarized the legacy of the health care policy of the Trump administration in the following catching manner:³¹⁵

The Trump administration's regulatory rollbacks have increased disease, injury, and death among workers in the USA.

(...)

Ironically, the negative effects of the Trump administration's environmental and occupational rollbacks have taken their largest toll in states whose voters heavily supported President Trump in the 2016 election. By contrast, comparatively progressive states that have maintained robust state-level protections have lessened the effect the rollbacks have had on health (...).

The adverse health effects of the Trump administration's deregulatory actions are concentrated in the states and demographic groups most affected by rollbacks in health insurance coverage. Therefore, these harms are compounding one another and are widening disparities in health by race, social class, and geography.

³¹³Woolhandler et al. (2021), pp. 726–727.

³¹⁴Woolhandler et al. (2021), p. 727.

³¹⁵Woolhandler et al. (2021), pp. 733–734.

5.3 Impact of Covid-19

5.3.1 The EU: When the Free Market Becomes a Killing Machine—Part 1

5.3.1.1 The Devastating Impact of EU Neoliberal Austerity on Private Hospitals' Lesser Use in Fighting Covid-19

5.3.1.1.1 ICU Beds Shortages and Their Causes

In light of the above, it is not surprising that when Covid-19 hit the European continent, one of the biggest problems the EU hospital sector immediately faced was a shortage of hospital beds in general, and of ICU beds more in particular.³¹⁶

This bed shortage had as one of its main causes the EU's neoliberal austerity policy of recent years, which had, on average, forced the EU Member States to gradually reduce their number of hospital beds by one fifth, although there have been EU member countries in which the decrease of hospital beds has even been bigger.³¹⁷

Already in 2012, Rhodes et al., had warned that a shortage of critical care capacity in European hospitals was likely to occur in the near future in many countries.³¹⁸ These authors had also pointed out that more research on the topic was needed, as most countries were not even able to quantify the shortage problem accurately. The future increase in demand for care capacity predicted at the time was, according to said authors, to be attributed to a number of factors, including (1) significant alterations in the size and age of the European population, (2) an increasing prevalence of relevant comorbidities, and (3) changing perceptions of what critical care can provide.³¹⁹ The same authors had also pointed to the large differences between countries, from which they had drawn the conclusion—largely confirmed

³¹⁶Assa and Calderon (2020), p. 17.

³¹⁷Rhodes et al. (2012) surveyed the situation in Europe from July 2010 to July 2011. The authors came to the conclusion that there were at the time 2,068,892 acute care beds and 73,585 (2.8%) critical care beds across Europe. The authors however noted that, due to a heterogeneous description of these beds in the individual European countries, it was not possible to distinguish between intensive care and intermediate care beds in most cases. On average, there were 11.5 intensive care beds per 100,000 inhabitants, with large differences between countries (Germany 29.2, Portugal 4.2). The authors also found that the number of critical care beds per country, adjusted for population size, was positively correlated with GDP ($r^2 = 0.16$, p = 0.05), the number of acute care beds adjusted for population size ($r^2 = 0.59$, p < 0.0001). These figures were however not correlated with the share of GDP spent on health care. Already at that time, the authors concluded that the number of emergency care beds varied significantly between countries in Europe and that a better understanding of these numbers was needed to enable better planning of emergency care capacity and use in the future. (Cf., furthermore, Rhodes et al. (2012).)

³¹⁸Rhodes et al. (2012).

³¹⁹Rhodes et al. (2012).

by the Covid-19 crisis itself—that the different levels of capacity between European countries were bound to have a major impact in practice, and thus presumably on health outcomes themselves. Based upon a more detailed comparison between Portugal and Germany, Rhodes et al., had considered it impossible that a same number of patients could be admitted to intensive care in Portugal, as in Germany. The implication was, therefore, that either patients in Portugal needing critical medical care would not be able to receive it, or that Germany was providing too much intensive care capacity to its population.³²⁰

Secondly, under neoliberal impulses, especially private hospitals had started to prioritise the most "suitable" patients—by which is meant: the patients most likely to bring profits. This had led to a policy of prioritising chronic diseases and day surgery, rather than focusing on emergency care or intensive care units (ICUs). As a result, when the Covid-19 crisis hit in early 2020, the private hospital sector in particular faced a general shortage of hospital beds—especially ICUs—in large parts of Europe. And, as research has pointed out, increased hospital capacity (in beds, especially ICU beds, per 1000 people) was a crucial requisite for reducing the Covid-19 mortality rate.³²¹ This even went so far that private hospitals, which generally had

³²⁰Rhodes et al. (2012).

³²¹Corporate Europe Observatory and Tansley (2021), p. 7.

In their study, Rhodes et al., found that in many countries precise and easily accessible data on the number of ICU beds were simply not available. In some countries, such as the United Kingdom, there was government census data. In others, data were available through national associations (e.g., Germany). In others, no data were available and local clinicians had to count the beds themselves (e.g., Portugal). There were also clear differences in the design of intensive care services between countries: in some countries, intensive care services were separate from intermediate care services, while in others, both services were managed flexibly within one service. Some countries also had a higher level of care in acute general wards, e.g., the Czech Republic. For the period July 2010–July 2011, the authors found a total of 2,068,892 acute care hospital beds in Europe, with clear differences in the total number of beds, as well as in the number of adjusted beds per 100,000 inhabitants between countries. On average, there were 409 acute care beds per 100,000 capita. For the whole of Europe, a total of 73,585 intensive care beds had been identified. This corresponded to an average of 11.5 beds per 100,000 inhabitants for Europe as a whole. The country with the highest number of beds was Germany (23,890), and the country with the lowest number of beds was Andorra (6). When the total number of beds per country was adjusted for population size, the differences became less pronounced, but were still present. Germany remained the country with the highest number of beds (29.2/100,000), while Portugal had the lowest number of beds (4.2/ 100,000). The total number of intensive care beds per country, adjusted for population size, was, furthermore, positively correlated with population size ($r^2 = 0.69$, p < 0.0001), but only weakly correlated with the country's gross domestic product (GDP) (in millions of US dollars) ($r^2 = 0.16$, p = 0.05), the proportion of GDP spent on health care ($r^2 < 0.0001$, p = 0.91) or the proportion of elderly patients in the population ($r^2 = 0.04$, p = 0.31). On average, there were 2.8 emergency care beds for every 100 acute care beds in Europe. Again, however, there were large differences, with Germany and Luxembourg having the highest rate at 5.1/100,000 and the Czech Republic the lowest (1.3/100,000). The number of acute care beds was correlated with the number of acute care beds adjusted for population size ($r^2 = 0.12$, p = 0.05) and also with the percentage of acute care beds relative to emergency care ($r^2 = 0.59$, p < 0.0001). (All this quoted information being provided by Rhodes et al. (2012).)

Country	Cases per one million people on March 27, 2020	Hospital Beds per 1000 (year preceding Covid-19)	GNI per capita (\$PPP)—2018
USA	250	2.9	63,690
China	57	4.2	18,170
Hong Kong	60	4.9	67,810
Japan	11	13.4	44,380
South Korea	180	11.5	40,090

 Table 5.3
 Some countries' number of hospital beds compared to other data on 27 March 2020
 [Source: Assa (2021)]

fewer (ICU) beds than their public/non-profit counterparts, were in some countries practically useless for dealing with Covid-19.

Table 5.3 shows that, on a more global scale, at the time Covid-19 hit, the countries characterized by more inequity had, ceteris paribus, fewer beds per 1000 people. But, in the opinion of Assa, the correlation is neither perfect nor deterministic. E.g., while the United States and China showed similar average levels of inequality in the period from 2011 until 2018 (showing Gini coefficients of 41.2 and 40.1, respectively), China still had 4 beds per 1000 inhabitants, while the United States only had 2.9. Serbia and Russia qualified as being only slightly more equal (with Gini coefficients of around 39 for both), but still had 5.7 and 8.4 beds per 1000 inhabitants respectively. Japan and Korea, which had been the early epicentres of the Covid-19 pandemic, had since then coped very well with the Covid-19 crisis, most likely, at least in part, because they had 13.4 and 10.9 beds per 1000 inhabitants respectively. In other words, the latter two countries had three to four times more hospital capacity than the United States, despite the fact that their per capita income was about one third lower (even using PPPs).³²²

5.3.1.1.2 Some Further Findings of the Corporate Europe Observatory

From a cross-country analysis that has been undertaken by the "United Nations Development Programme" (abbreviated as "UNDP") in order to examine the impact of health care privatisation on Covid-19 and that has been quoted by the Corporate Europe Observatory, it appeared that a 10% increase in private health expenditure was associated with a 4.3% increase in Covid-19 incidence, and a 4.9% increase in Covid-19-related mortality. Phrased differently: greater privatisation of health care significantly increased the rates of Covid-19 prevalence and Covid-19 related mortality across countries. In the opinion of the Corporate Europe Observatory, this may be attributed to the fact that privatisation policies are more costly and

³²²Assa (2021).

deadly because of the long-term damage they can do to countries' ability to cope with a rapidly spreading infectious disease, such as Covid-19.³²³

The Corporate Europe Observatory has also described how, after the first wave of the Covid-19 territories had hit their territories in a disastrous manner, commentators from Italy and Spain started describing how badly privatization had affected their healthcare and long-term care systems, in this manner having contributed to the disastrous impact of Covid-19 in both countries.³²⁴ In its January 2021 report, the Corporate Europe Observatory, e.g., quoted Professor Vittorio Agnoletto, who described private nursing homes being paid (apparently USD 150) by the region of Lombardy to take Covid-19 patients from its overwhelmed hospitals. As we shall see further in Chap. 6, the subsequent spread of the Covid-19 virus among the vulnerable elderly residents of these nursing homes would have a devastating impact.³²⁵ As we shall also see in Chap. 6, similar practices of refusing admission elderly residents of nursing homes into hospitals because of a shortage of hospital beds, would be applied in Belgium about a month later. And also in Spain, overcrowded hospitals, confronted with a shortage of beds, were in a similar manner forced to turn away patients from nursing homes, and guidance was even issued by the government telling nursing homes not to refer residents with Covid-19 to hospital.326

According to sources in the sector quoted by the Corporate Europe Observatory, there is much resistance to making the mortality figures in hospitals public, because there are large differences between hospitals and regions. In some hospitals, things are said to have gone seriously wrong, with many more deaths than one would normally have expected from Covid-19.³²⁷

The Corporate Europe Observatory noted with some irony, that notwithstanding all neoliberal, ideological rhetoric that privatization and marketization would ease pressure on public budgets and deficits, the UEHP—a European lobby organization for private hospitals—had shortly before the outbreak of the Covid-19 pandemic started making claims that private hospitals should get more access to public money. These demands had been underpinned by the application to healthcare of certain principles on which the EU internal market is based, such as the non-discrimination principle. The effects of the Covid-19 crisis have even been used for adding to this argument.³²⁸

³²³Corporate Europe Observatory and Tansley (2021), p. 8.

³²⁴Corporate Europe Observatory and Tansley (2021), p. 11.

³²⁵Corporate Europe Observatory and Tansley (2021), p. 11.

³²⁶Corporate Europe Observatory and Tansley (2021), p. 12.

³²⁷Bossaert (2021).

³²⁸Corporate Europe Observatory and Tansley (2021), p. 9.

In April 2020, UEHP even had dared to write to EU institutions emphasizing that private hospitals' engagement in the public health Covid-19 crisis had shown that they were an "indispensable element" and "should be acknowledged as partners with equal rights". The Covid-19 pandemic was thus being used as another argument for why private for-profit hospitals should be on a level playing field with public hospitals in terms of receiving public funds. UEHP had also been

5.3.1.1.3 Some Further Research Results on the Detrimental Impact of Neoliberal Policy

Several other authors have similarly pointed to the devastating impact of neoliberal policy in general, and neoliberal austerity more in particular, on the European health care sector.

In the opinion of Alfredo Saad-Filho, the Covid-19 pandemic struck Europe after four decades of economic neoliberalism had done its job of: (1) exhausting the EU state capacities for providing public services in the name of a presumed "superior efficiency" of the free market, (2) accomplishing a far-reaching degree of "deindustrialization" against the background of a far-reaching "globalisation" of production.³²⁹ as a result of which everything useful for fighting a pandemic could no longer be produced in Europe itself, and (3) building a fragile financial framework that dominates the entire socio-economic order, while only being secured by "magical thinking" and state guarantees. This had, moreover, all happened in order to enhance the short-term profitability of the corporate sector for its rich shareholders.³³⁰ On a practical level, this resulted into a disintegration of the world economy, which had reduced the richest and most uncompromising neoliberal economies (the United States and the United Kingdom, besides these of several other Western economies) to being unable to produce any useful material for fighting the Covid-19 pandemic themselves. This truth especially applied to: (1) face masks, (2) personal protective equipment (PPE) for the health personnel of hospitals and nursing homes, and (3) respirators to keep the hospitalised Covid-19 patients alive. Still in the opinion of Saad-Filho, these shortcomings were not so much the result of a lack of production capacity because of changing technologies, or because of China's bigger trade capacity, but rather of deliberate neoliberal policies deployed by Western governments themselves: from universities, to laboratories, to industries, economic neoliberalism had actively caused and promoted the fragmentation and dismantling of a wide range of production facilities throughout the Western world. This had especially happened by submitting individual companies to the neoliberal doctrine that emphasises the making of short-term profits above both long-term planning and respect for any other societal values than money-earning itself.³³¹ As a further result, based upon neoliberal treaties and legislation that actively stimulated the free movement of capital and labour, many companies had simply moved their

lobbying as part of EU Health Coalition (whose members include pharma lobby "EFPIA" and biotech lobby "Europabio") to ensure that the EU's multi-billion Covid-19 recovery plan would prove profitable enough to them. The EU Health Coalition particularly welcomed the Recovery Plan for Europe's second strand, which aims to support "more efficient and inclusive health systems". It also made reference to the Commission's "European Semester" Country Specific Recommendations, which has historically been a tool pushing cuts to public healthcare expenditure (cf. Sect. 5.2.1.2.). (Cf. Corporate Europe Observatory and Tansley (2021), p. 10.)

³²⁹Cf. Byttebier (2017), pp. 71 and 215-217.

³³⁰Saad-Filho (2020).

³³¹Cf. Byttebier (2017), pp. 184–206.

production capacity to territories where wages were lower and social requirements lesser.³³²

According to Saad-Filho, these shortcomings of neoliberal economic theory were even more exacerbated by a deliberate destruction of the state's planning capacity and the resulting incapability and unwillingness of Western neoliberal governments, at the outbreak of the Covid-19 pandemic, to use all necessary means to mobilise industry, labour and private capital in the general interest, ergo for fighting the pandemic by all possible means.³³³ Still in the opinion of Saad-Filho, economic neoliberalism has in this manner appeared to have effectively eroded, fragmented and (partially) privatised health care systems throughout the Western world, while also having created a both precarious and impoverished working class that is deprived of all savings capacity. At the outbreak of the Covid-19 pandemic, working classes of neoliberalised countries were therefore extremely vulnerable to both disruptions in their earning capacity, as well as to health threats, because of a combination of: (1) low savings, (2) poor housing, (3) inadequate nutrition, (4) pre-existing diseases, and (5) working patterns and conditions incompatible with being able to conduct a healthy life. (Cf., furthermore, Sect. 7.11.1 and Chap. 10.) Meanwhile, the deliberate destruction of the trade union movement and the deliberate erosion of the once powerful social-democratic left, had at the same time stripped the working classes of political and socioeconomic protection. Still according to Saad-Filho, at the outbreak of the Covid-19 pandemic, these processes culminated in unseemly brawls to acquire the products still produced by (state-run) Chinese factories: under the leadership of Donald Trump, the United States acted like "a drunken gangster" in stealing face masks, protective gear and respiratory devices it could no longer produce or buy itself, and "insulting other countries for being too weak to do anything about it".³³⁴

Assa and Calderon's research has, in addition, shown that the privatization and marketisation of health care (instead of investing in public health care) has significantly increased the prevalence and mortality of Covid-19 in all countries, even after eliminating the effect of other factors, such as income, urbanisation, demographic structure, exposure to globalisation and political system. According to said authors, these findings add to existing research that has pointed to the inadequacy of private health systems for tackling infectious diseases, such as tuberculosis, and—as of 2020—Covid-19 itself.³³⁵ According to Assa and Calderon's research, in particular the reduction in the number of hospital beds per 1000 people, which has been

³³²Cf. Byttebier (2017), pp. 216–217.

³³³Under the pressure of the pandemic, services were changed beyond recognition; online working became the norm in countless areas in a matter of days instead of the years this transition would normally have taken, while the neoliberal worship of consumption dissolved into empty supermarket shelves, fights over hand sanitiser, pasta and sardines and fistfights over toilet paper. (Cf. Saad-Filho (2020).)

³³⁴Saad-Filho (2020). This author adds to these observations that this plundering strategy deployed by the United States seriously damaged the legitimacy of the American Empire.

³³⁵Assa and Calderon (2020), p. 17.

caused by neoliberal austerity policies, has proven crucial for the high Covid-19 morbidity rates in several countries, as understaffed hospitals lacking sufficient capacity were overwhelmed with workload, and infected patients urgently needed access to specific medical equipment and treatment that was simply not available.³³⁶

5.3.1.2 Situation in Some European Countries

5.3.1.2.1 Belgium

In January 2021, a study was published on Covid-19 mortality in the intensive care units of Belgian hospitals during the first wave of the Covid-19 pandemic. Said study appeared in a regional edition of the professional journal "The Lancet". From this study, it became clear that there were huge differences between Belgian hospitals. In some hospitals, the death of a Covid-19 patient admitted to the hospital's ICU department turned out to be almost three times more likely than average. By contrast, in other hospitals, this probability was almost two times less than average. Although the study did not actually focus on the differences between care institutions, the authors did refer to it explicitly in one paragraph and they themselves considered it an "important finding". The average mortality rate in Belgian hospitals for Covid-19 nationally was 21.8%. This implies that on average one in five patients did not leave the Belgian hospitals alive.³³⁷

According to Foulon, when the images of the Italian hospitals started to reach Belgium, it had been decided to do everything possible—even not to treat the elderly part of the population in hospitals—in order to avoid ending up in a similar situation. Hospital capacity was thus rapidly scaled up and emergency departments significantly expanded. But it soon became clear that a shortage of beds and respirators would not be the main problem for Belgian hospitals.³³⁸ A lack of adequately trained staff due to years of unrelenting, neoliberal policy of cuts in healthcare posed a much greater bottleneck. When Covid-19 hit Belgium, both doctors and nursing staff had to give their best to keep the situation more or less manageable. Residential care centres (e.g., nursing homes for the elderly) were largely left on their own, while their residents were even being refused admittance to the hospitals in a systematic manner in order to keep a sufficient number of beds free for the rest of the Belgian population (cf. Sect. 6.2.1.3.1.), resulting in the needless deaths of thousands of

³³⁶Assa and Calderon (2020), p. 17.

³³⁷Bossaert (2021).

³³⁸The question is, however, to what extent this estimate itself is entirely accurate and adequately takes into account that the fact that there were no shortages of ICU beds (during the first wave of the Covid-19 pandemic) was also the result of elderly people being systematically denied access to hospitals in order to die at home or in their retirement homes instead. (Cf. Sect. 6.2.1.3.1.)

elderly people who got locked up in nursing homes where there was a lack of professional supervision, expertise, resources and trained staff.³³⁹

Foulon's estimate is confirmed by figures published by the "Federal Healthcare Knowledge Centre". According to a special report the latter Centre issued in 2020, the Belgian hospital landscape was then characterized by a large number of hospitals and hospital beds: While the OECD countries had an average of 3.7 acute beds per 1000 inhabitants, Belgium ranked sixth highest with 5 acute beds per 1000 inhabitants. Belgium moreover had 17.4 intensive care beds per 100,000 inhabitants, putting it on the fourth highest place (compared to an average for the OECD countries of 12 intensive care beds per 100,000 inhabitants). This number is important because the number of intensive care units has been one of the main bottlenecks for the treatment of the most severe Covid-19 patients in hospitals throughout the world. However, while beds were deemed to be sufficiently available, Belgium had only 11 practicing nurses per 1000 inhabitants. Albeit higher than the OECD average of 8.8 nurses per 1000 inhabitants, the Belgian number of Covid-19 patients per nurse in the ICU units of hospitals nevertheless appeared to be among the highest in Europe: In 2019, a Belgian nurse had to care for an average of 9.4 patients. From this, it appears that Belgium was facing a shortage of high-trained nurses in ICU units. Belgium also had relatively few doctors. The number of practicing physicians was 3.1 per 1000 population, compared to the OECD average of 3.5 physicians per 1000 population.³⁴⁰

Consequently, the problem of Belgium was not so much a shortage of beds/ rooms, but rather a shortage of medical staff capable of functioning within ICU-departments. This also explains why, at a given point, even personnel infected with Covid-19 were called to work anyway.

By July 2020, the NGO "Doctors Without Borders" ("Artsen zonder Grenzen"/ "Médecins sans frontières") released a staggering report entitled "Left to their Fates"³⁴¹ (quoted in more detail in Sect. 6.2.1.3.1.), dealing with the subject of the situation in the Belgian nursing homes during the first wave of the Covid-19 pandemic. For Foulon, this report shows "nail-bitingly" how the nursing home sector had been completely neglected during (the first wave of) the Covid-19 pandemic, with staff inadequately trained and prevention absent. In order to keep enough beds free for other categories of the Belgian population, the referral of elderly people to hospitals was curbed. Chaos reigned in many nursing homes. The lack of policy was reported as a complete lack of basic respect from policymakers for Belgium's elderly population.³⁴²

³³⁹Foulon (2021).

³⁴⁰Federaal Kenniscentrum voor de Gezondheidszorg (2020).

³⁴¹Médecins sans frontières (2020).

³⁴²Foulon (2021).

Still according to Foulon, the problem with the nursing homes during the first wave of the Covid-19 pandemic, has not been limited to Belgium, but has occurred in most European countries. For years already, there had been a shortage of both resources and qualified personnel in this whole sector. Nursing homes had in many cases become at the mercy of private investors who are mainly

In the opinion of Foulon, the disaster that Belgium has been experiencing during the Covid-19 pandemic has mainly been the result of years of cuts in healthcare. As a result, hospitals got overburdened, and nurses and doctors physically exhausted. The Covid-19 pandemic has shown how weak Belgian society has become to protect its own people. The reason is clear: everything is driven by profit maximisation, shareholder value and austerity. According to Foulon, it is time to remember that running a society and its health sector is mainly about other values.³⁴³

5.3.1.2.2 Italy

Italy's capacity of acute care beds was already below the European average for years. Moreover, the number of acute beds per 1000 people had decreased even further, from 7 in 1990, to 2.6 in 2015, mainly due to EU austerity measures. Figures further show that, just before the outbreak of the Covid-19 pandemic, 68% of all acute hospital beds in Italy were "public", 4% "private not-for-profit", and 28% "private for profit". For ICU beds in particular, the situation was even more disastrous: Of the 5300 ICU beds available in Italy, only 800 belonged to private hospitals. This implied that while private hospitals owned 30% of the total number of acute beds, they only owned 15% of the ICU beds. Consequently, the ability of private hospitals to contribute in the fight against Covid-19 has been minimal. Through the earlier American example, private hospitals had become accustomed to leaving these forms of non-profitable medical care in the hands of public hospitals.³⁴⁴

At the beginning of March 2020, Lombardy—Italy's richest region—was all over the world news, allowing everyone on the planet to witness the disastrous impact of the Italian first wave of the Covid-19 pandemic, with hospitals overflowing, the army being mobilized to collect dead bodies from hospitals, and medical staff describing the situation in Lombardy as akin to "a world war". (Cf. Sect. 2.4.2.3.1.) In April 2020, Italian doctors interviewed mainly blamed the Italian healthcare system "in which private and public clinics compete(d) for taxpayers' money".³⁴⁵

According to the Corporate Europe Observatory, the situation of the Italian hospitals at the beginning of the Covid-19 outbreak could be described as follows:³⁴⁶

out to make profits. The fact that there are more elderly people because of an increased life expectancy, is hereby clearly no longer seen as a positive fact by European, neoliberal policymakers. For them, the elderly have become a too expensive burden on society. The Covid-19 pandemic has made this very clear. (Cf. Foulon (2021).) In Belgium, it has even become easier for an elderly person to get euthanized, than to be cared for, while many of the elderly people themselves have been given the feeling that they are but a burden to society, and that euthanasia is in this regard basically an act of kindness bestowed on them by the best of (neoliberal) societies... ³⁴³Foulon (2021).

³⁴⁴Corporate Europe Observatory and Tansley (2021), p. 7.

³⁴⁵Corporate Europe Observatory and Tansley (2021), p. 7.

³⁴⁶Corporate Europe Observatory and Tansley (2021), p. 7.

The system in place when COVID-19 hit was "skewed in favour of the private sector" as patients were eligible for care in either private or public facilities, giving private clinics the best of both worlds, receiving both insured and uninsured patients, "foisting the burden of the free treatments on the taxpayer, at a higher cost". As a result, privatisation had boomed: the share of public funds captured by private facilities jumped from 30 per cent to 50 per cent between 2010 and 2020.

Over the same period public facilities waned, even as they were forced to compete for public funds against private "rivals that offered 'customer first' patient experiences – better bedlinen, better food, more in-ward entertainment – over the less market-friendly considerations of community healthcare". Community healthcare, which plays a crucial role in an epidemic and helps to keep people out of hospital, was depleted by "years of 'patient-focused' care" that made trips to hospital the go-to whatever the illness. When COVID-19 hit, this enabled its rapid spread through hospitals which, soon overwhelmed thanks to a reduced number of beds, sent symptomatic people home to spread the virus further, and even discharged COVID-19 patients to elderly care homes, with devastating results (...).

One academic described what happened in Lombardy as "the logical endpoint of a system" which had allowed profit "incentives to distort healthcare priorities over a long period of time".

Commentators in Italy have condemned Lombardy's health system for putting "profit over prevention", and transforming "health into a commodity". As the New Statesman investigation concluded: "preparing for a pandemic involves spending money in the hope that it is not needed. This is something that only the public sector, freed from the motive of profit, can accomplish".

Italian health care policy in force when Covid-19 struck Italy, was predominantly in favour of the private sector. As a result, the privatization of the hospital sector was on the rise. Between 2010 and 2020, the share of public funds that went to private institutions had increased from 30% to 50%, although the number of private institutions was much smaller than the number of non-private hospitals.³⁴⁷ This was a clear indication that Italy was going through efforts to privatise its health care (as had been mandated by the ECB itself; cf. Sect. 5.2.1.2.2). During the same period, the share of public health care facilities was gradually decreasing, amongst others, because they had to compete for public funds with private rivals that offered the patient a "customer-oriented" experience, based on purportedly better bedding and food, besides more entertainment in the facility, rather than on the less consumer-friendly accommodations with which community health care was associated. Community health care, which is vital for fighting a pandemic and for keeping people out of hospitals, had thus been completely depleted by years of "patientcentred" care, as a result of which, regardless of the disease, admittance into a hospital had become the general practice in the region. When Covid-19 struck, a mentality of going immediately to a hospital prevailed. It is believed that this has contributed to the extremely rapid spread of Covid-19 originating from hospitals which, overwhelmed by the numbers of Covid-19 cases while at the same time facing a shortage of hospital beds, began to send even symptomatic patients home, where they could further spread the Covid-19 virus, and even (as would happen in

³⁴⁷Corporate Europe Observatory and Tansley (2021), p. 7.

Belgium less than a month later) started to discharge Covid-19 patients to elderly rest homes, all adding to a crushing spread of the Covid-19 virus.³⁴⁸

The catastrophe that occurred in Lombardy in March 2020 has since been described as the logical end point of a (neoliberal) system that had allowed profit to distort healthcare priorities for too long. Several commentators in Italy, hence, condemned the Lombardy healthcare system for having put "profit before prevention", and for having turned "health [into] a commodity", all practices that, for decades, had been prescribed by neoliberal doctrine and imposed through EU austerity measures.³⁴⁹

By March 2020, the disastrous consequences of Italy's adaptation to economic neoliberalism (cf. especially Sect. 5.2.1.2, in which it has been described how Italy was forced to "rationalise" its hospital sector as of 2011) had, hence, become clear for the whole world to witness.

During the second wave of the Covid-19 pandemic, the infectious diseases department of Milan's Sacco hospital again warned that the situation was once more "largely uncontrollable". Italy's National Association of Internal Medicine at the time stated that Italian hospitals in the worst affected northern part of the country were, once again, on the verge of collapse due to the number of Covid-19 patients being admitted. In an open letter published by Italy's ANSA news agency, the association declared that hospitals were still confronted with medical staff shortages and a lack of beds "in the face of an abnormal influx of patients due to the rapid and staggering spread" of Covid-19.³⁵⁰

5.3.1.2.3 Spain

From a recent survey regarding Madrid, undertaken just before the Covid-19 outbreak and referred to by the Corporate Europe Observatory, it had appeared that the workload of nurses employed in private health care was substantially higher than that of nurses employed in public facilities, with nurses employed in private hospitals treating an average of five more patients per day. By contrast, salaries in the private sector were 20–25% lower. Moreover, 82% of the nurses employed in private hospitals and other healthcare centres were of the opinion that their complement of medical staff was insufficient to still perform a quality job. Amnesty International was quoted by the same Corporate Europe Observatory describing how a decade of austerity policies (introduced in part to comply with EU fiscal rules; cf. Sect.

³⁴⁸Corporate Europe Observatory and Tansley (2021), p. 7.

³⁴⁹Corporate Europe Observatory and Tansley (2021), p. 7.

³⁵⁰Dettmer (2020). According to this author, the National Association of Internal Medicine also called for a total national lockdown, urging that the situation, which it described as "dramatic", was not be trivialized.

5.2.1.2.2.) had led to a decrease of public spending on healthcare by 11.2% between 2009 and 2018, even as Spain's GDP had grown by 8.6%.³⁵¹

When Covid-19 struck Spain, primary care services were soon overstretched. They appeared to be both understaffed and underfunded, which left health workers with an impossible workload, personal risks, fatigue, and stress. In the assessment of the Spanish anti-privatisation movement "Coordinadora Antiprivatización de la Sanidad", the lack of investment in public health services had been to the benefit of private pockets: two out of every ten euros spent on health care in Spain was said to go to public-private partnerships.³⁵²

5.3.1.2.4 The United Kingdom

A similar disaster scenario occurred in hospitals throughout the United Kingdom.³⁵³

According to data provided by the NHS, as quoted and interpreted by Campbell and Barr, in England, more than 40,600 people have in the course of 2020 been likely infected with Covid-19 while being treated in hospital for another reason, raising concerns about the NHS's inability to protect them. In one in five UK hospitals, at least a fifth of all patients diagnosed with the Covid-19 virus, had caught it while being an inpatient in a hospital. The North Devon district hospital in Barnstaple was reported for having the highest rate of such cases among acute trusts in England, at 31%. The NHS England figures, furthermore, revealed stark regional differences in patients' risk of catching the Covid-19 virus during their stay in hospital. Just under a fifth (19%) of those in hospital in the north-west of the country had become infected while an inpatient, almost double the 11% rate in London hospitals. "Hull University teaching hospitals trust" and "Lancashire teaching hospitals trust" had the joint second highest rate of patients—28%—who had become infected while inpatients under their care. The former has had 626 such cases, while the latter has had 486. However, the big differences in hospitals' size and the number of patients they admitted, implied that the rate of hospital-acquired infection was a more accurate reflection of the success of their efforts to stop transmission of the potentially lethal virus. The trusts with the next highest rates were Stockport (28%— 386 cases), Brighton (367 cases—27%) and James Paget in Norfolk (27%—319 cases). At least one in four of all inpatients having contracted the Covid-19 virus in hospital became infected at 10 of England's 127 acute trusts.³⁵⁴

Across England as a whole, one in seven (15%) of all patients treated for the Covid-19 virus between August 2020 and March 2021, got it while in hospital. Data showed that hospitals in England estimated that a total of 40,670 people probably caught Covid-19 while in hospital under their care during that time. Both physicians

³⁵¹Corporate Europe Observatory and Tansley (2021), p. 10.

³⁵²Corporate Europe Observatory and Tansley (2021), p. 10.

³⁵³Campbell and Barr (2021). Cf., furthermore, Otte (2021).

³⁵⁴Campbell and Barr (2021).

and hospitals suspected that many of the infections were caused by the NHS's lack of beds and limitations posed by some hospitals simply being old, cramped and poorly ventilated, as well as health service bosses' decisions that hospitals should keep providing normal care, while the second wave of Covid-19 was unfolding, despite the potential danger to those inpatients receiving non-Covid-19 care. NHS England did not publish figures showing how many of those deemed likely to have caught Covid-19 as a hospital inpatient later died. But experts in hospital-acquired infections pointed out that many of those being admitted for other reasons—such as an operation, or after a fall or flare-up of an existing medical problem—were frail and vulnerable and had underlying poor health, so would have been more likely to die if they did get Covid-19. Dr. Rob Harwood, at the time chair of the British Medical Association's consultants committee, commented on this as follows:³⁵⁵

The NHS went into the current pandemic underfunded, understaffed and overstretched. The knock-on effects – particularly limited bed and workforce capacity – has unfortunately meant that controlling the spread of Covid-19 within hospitals has been more difficult than necessary.

What Dr. Harwood has in fact pointed out is that decades of neoliberal austerity in healthcare has come at the expense of quality in healthcare, rendering the UK health care industry unable to cope with the outbreak of a pandemic. The neoliberal EU and UK policymakers are in this manner responsible for tens of thousands of sick people and who knows how many additional deaths. The question arises whether this is of any real concern to them, as austerity targets (both in the United Kingdom and the EU) continue to prevail over any other socio-economic value.

Again during the second wave of the Covid-19 pandemic, UK hospitals were once more embattled by surging cases. In the Midlands of England, hospitals were near capacity with little wiggle room left. Coventry's University Hospital, e.g., had to operate at 96–98% capacity as it battled the second wave of Covid-19.³⁵⁶

5.3.2 The United States

5.3.2.1 Introduction

Already from the early start of the Covid-19 outbreak on American soil, it appeared that a prolonged underfunding of federal, state and local public health agencies had left the American health sector ill-prepared for the challenges Covid-19 imposed, the first evidence of this being the occurrence of a complete Covid-19 testing fiasco.³⁵⁷ (Cf. Sect. 2.5.4.1.)

³⁵⁵Campbell and Barr (2021).

³⁵⁶Dettmer (2020).

³⁵⁷Gaffney (2020).

A second problem the United States faced upon the outbreak of Covid-19 on American soil, concerned a lack of (ICU) bed availability. The problem the United States faced did not concern capacity as such. Indeed, while the American overall hospital bed coverage was at the moment of the Covid-19 outbreak relatively low, its ICU bed supply per capita still ranked among the highest in the world.³⁵⁸ However. those (ICU) beds were often not where they needed to be: already from a study that had been published in the "Journal of American Medical Association" of 2010, it had appeared that the United States was characterized by large regional disparities regarding the availability and distribution of ICU beds. Already then, there had been warnings that in the face of a major epidemic, some areas might end up with empty beds, while others would have too few ICU beds available. In line with the general characteristics of the American healthcare system (cf. Sect. 2.1.4.), these discrepancies in distribution were, moreover, far too often driven by market logic, rather than by health needs.³⁵⁹ From another study of 2012, it had, moreover, appeared that the future provision of critical (ICU) care in the United States was unlikely to be able to meet the estimated demands.³⁶⁰

Thirdly, soon after the Covid-19 hit the United States, it appeared to what extent healthcare in the country was both uncoordinated and ungoverned. E.g., from the early beginning of the Covid-19 epidemic, hospitals and city and state governments started waging bidding wars over crucial supplies and ventilators. It was, basically and in best neoliberal tradition, every hospital and/or city for itself: Some started making pleas to the community for donations of masks; while, presumably, others were well-stocked. The already above (cf. Sect. 2.5.4.1.) quoted advice that US President Donald Trump gave to state governors at the time speaks volumes:³⁶¹

Respirators, ventilators, all of the equipment - try getting it yourselves.

Further difficulties in responding adequately to Covid-19 have been attributed to two further main characteristics of the American health insurance system.

A first and more general problem the American health care system was facing, concerned the extremely low level of social and health care protection for the working classes. The quality of life of the American working classes in general had deteriorated enormously during the preceding decades as a result of an increase in what has been referred to as "precariousness" characterizing the American labour market. This, in its own turn, had subjected many working class people to a need to have multiple jobs in order to still have a decent income.³⁶² This, obviously, had a

³⁵⁸This had already been the case in the period July 2010–July 2011. The overall number of critical care beds for Europe was in that period 11.5/100,000 head of population. This was in marked contrast to the number for the United States, which was found to be 28/100,000 in 2010. (Cf. Rhodes et al. (2012).)

³⁵⁹Gaffney (2020).

³⁶⁰Rhodes et al. (2012).

³⁶¹Gaffney (2020).

³⁶²Navarro (2020).

negative impact on overall health, directly attributable to decades of neoliberal policymaking.

According to a study by the "Brookings Institution" that was published in 2019, 44% of workers in the United States (i.e., a percentage equalling more than 53 million employees) were reported of having (too) low salaries. The average salary amounted to less than USD 18,000 per year. The report, therefore, concluded that almost half of US workers earned a salary that is insufficient to provide socioeconomic security. This percentage of underpaid working people had, moreover, risen significantly under the presidency of Donald Trump. These underpaid employees in most cases also lack decent social security. A key indicator of the scarcity of social protection in the United States is that most workers have no sick leave, implying that if they are unable to work due to illness, they do not receive an alternative income or financial assistance—whether private (i.e., provided by their employer or by a private insurer) or public (out of social security money). This finding is more than a mere academic observation, as it has been one of the main reasons for the huge spread of the Covid-19 virus in the United States. This characteristic of the American labour market, more precisely, explains why, after the Covid-19 virus had struck on American soil, workers who tested positive for the virus and/or started exhibiting Covid-19-related symptoms, were in many cases themselves among those most resistant to stop working, or to take some time off, as this would have halted their income.³⁶³ This also helps to explain why many individuals belonging to the working classes who became ill with Covid-19, in the United States simply continued to work, in this manner infecting others and contributing to the spread of the Covid-19 virus.³⁶⁴

A second, even more dramatic aspect of the scarcity of social protection in the United States at the moment when Covid-19 hit, was that large parts of the American population still did not have access to health care insurance, and through this, to affordable health care itself. Even years after the ACA had entered into force (cf. Sect. 5.2.2.4.), almost 30 million adult people in the United States still had no health insurance at all, and another 27 million only had an extremely inadequate health insurance coverage. Navarro attributes this to the fact that the United States has no universal health care coverage system that would have guaranteed such a universal access as a matter of civil rights. By contrast, most health care for working adults in the United States was still based on private insurance, with a view on health care as a free market commodity, an approach that under Trump's presidency had even expanded more in line with neoliberal ideology (cf. Sect. 5.2.2.6.).³⁶⁵

A third factor that was as good as unique to the United States (in addition to, e.g., Brazil) and that has stood in the way of an adequate response to the Covid-19 outbreak was the strategy deployed by President Donald Trump's administration of simply denying that there was a health problem going on, and of accusing the

³⁶³Navarro (2020).

³⁶⁴Navarro (2020).

³⁶⁵ Navarro (2020).

Democratic Party of having fabricated a non-existent epidemic (a so-called "hoax"), with Trump himself usually dismissing it as "fake news".³⁶⁶ At the beginning of the outbreak of Covid-19 on American soil, the Trump administration had even seen fit to order the CDC (whose yearly budget had only shortly before been cut by $18\%^{367}$) to prohibit Covid-19 testing by any entity other than the CDC itself. This policy has, obviously, kept the number of Covid-19 tests, and hence the number of registered Covid-19 contamination cases itself, to a bare minimum: between 3 January and 11 March 2020, the period during which the Covid-19 virus rapidly spread all over the United States, only 26 tests per one million population had been conducted in the United States, while, by contrast, South Korea had conducted 4000 tests per one million population during the same period.³⁶⁸ Still, notwithstanding this initially deployed strategy of denial, the high level of public unrest in the United States that was brought along by Covid-19, would ultimately force even President Donald Trump to acknowledge that the Covid-19 pandemic did indeed exist, although it is assumed that he recognised this fact more because of the extreme drop in stock market prices, than because of the increased suffering of the American population itself.369

5.3.2.2 Shortages

It has already been pointed out in Chap. 2 how the complete lack of preparedness of the (neoliberal) Western world in general, and of the United States more specifically, to properly respond to the outbreak of a virus-based pandemic, among others, appeared from the American (and Western) health sector's strict adjustment to contemporary capitalism's "long-chain" and "just-in-time" delivery systems, developing a preference for reduced storage regarding all possible medical equipment and protective gear.³⁷⁰ In a similar sense, a "buy-from-the-cheapest-source" mentality

³⁶⁶Navarro (2020).

³⁶⁷President Donald Trump had, more generally, at that time suspended 20% of the federal programmes for infectious emergencies and at the same time disbanded the National Security Council's pandemic response team (cf. already Sect. 5.2.2.6.). As a result, the National Security Council had started to focus its activities exclusively on military security and to abandon its security activities related to the general well-being of the American population. President Donald Trump had in a similar manner severely cut back on the research funds and activities of the National Institutes of Health, including research on coronaviruses (of which the Covid-19 virus itself forms a strain). It is hereby assumed that if the National Institutes of Health would have been allowed to continue or complete their research, this would have helped to prevent or at least contain the Covid-10 pandemic. (Cf. Navarro (2020).)

³⁶⁸Navarro (2020).

³⁶⁹Navarro (2020).

³⁷⁰Nelson (2020).

had become globalized,³⁷¹ leading to a diminished manufacturing capacity in the Northern hemisphere during the latter half of the twentieth century. In many cases this implied sole dependence on a few (foreign) suppliers, often located on the other side of the world. This was especially true for the American markets, as many of these supply systems had been conceived in the United States itself, in the context of neoliberal economic doctrines that generally favour extreme short-term strategies (aimed at increasing corporate profits by cutting on all kinds of costs) over any form of long or medium-term planning.

Hence, it should by no means come as a surprise that immediately after the outbreak of Covid-19 on US soil, the hospital sector—having no stock of medical gear and equipment themselves, nor having access to suppliers who would have had such stock—started facing serious challenges,³⁷² such as:

- (1) Shortages of test supplies in combination with extreme long waiting times for test results: Already shortly after the Covid-19 outbreak, American hospitals had reported that they were facing extreme shortages of test supplies, as well as long waiting lists for test results. This was indicated as one of the main reasons why hospitals were as good as unable to monitor the health of both patients and members of medical staff. Several hospitals in particular indicated that they could not comply with the demand for Covid-19 testing due to the fact that there were no complete test kits available. There was, similarly, also a complete lack of individual parts and supplies needed for performing Covid-19 tests. In addition, several hospitals throughout the United States reported waiting times for receiving test results of on average 7 days or more. A side-effect of this has been that, when patients' hospital stays had to be extended upon waiting for test results, the shortage of hospital beds, PPE supplies and staff members was put under even more pressure.
- (2) Widespread PPE shortages: Upon the outbreak of Covid-19, hospitals throughout the United States reported widespread PPE shortages. They also immediately noted that these shortages were extremely risky for both members of medical staff and hospital inpatients. Hospitals thereby also pointed to a more intensive use of PPE than usual because of Covid-19, which added even more to the PPE shortages. Hospitals, in addition, observed that the lack of a robust supply chain was crucial for delaying PPE deliverances, which prevented hospitals from replenishing the PPE needed to protect patients and staff members even more. Hospitals finally reported an ongoing uncertainty about the availability of PPE from federal and state sources, while at the same time pointing out that, because of increased demand and shortages of supply, prices for PPE from private suppliers continued to rise sharply.

³⁷¹ As we shall explain further in the text, as of the end of 2020, this "buy-from-the-cheapest-source mentality" has also been one of the factors explaining the complete "fiasco" of the European vaccination strategies. (Cf., furthermore, Sect. 9.4.)

³⁷²U.S. Department of Health & Human Services Office of Inspector General (2020).

- (3) Difficulties in retaining members of staff and for providing staff support: Upon the outbreak of Covid-19, American hospitals reported that they were in many cases no longer able to retain sufficient staff, and/or to provide their remaining staff members with adequate support. A common remark concerned a shortage of specialised medical staff members needed to manage the increasing inflow of Covid-19 patients. Another recurrent concern was that staff exposure to the Covid-19 virus could itself exacerbated staff shortages and overwork for the remaining staff members. Hospital directors also shared their concern that fear and uncertainty were taking a huge emotional toll on staff members, both professionally and personally, and that they lacked the means for adequately dealing with this problem.
- (4) Difficulties in maintaining and expanding hospital capacity in order to be able to treat patients: Already shortly upon the outbreak of Covid-19, capacity concerns were reported due to the fact that hospitals were overwhelmed, or were expecting to be so, by an influx of Covid-19 patients in need of ICU beds and separate rooms for treating and containing infections. Many hospitals also reported that post-acute care facilities required a negative Covid-19 test before being allowed to discharge them, which implied that some patients who no longer required acute care, were taking up valuable bed space while awaiting discharge.
- (5) Shortages of essential supplies, materials and logistical support: Upon the outbreak of Covid-19, American hospitals reported that shortages of essential supplies, materials and logistical support, which would have allowed for more beds, were affecting their ability to care for patients. Hospitals hereby reported a need for a wide variety of items for supporting a patient room, such as intravenous therapy (IV) poles, medical gases, bedding, toilet paper and food. Others hospitals reported shortages of infrared thermometers, disinfectants and cleaning supplies. Isolated and smaller hospitals reported that they were facing an especially difficult time in keeping up with needed supplies and replenishing them quickly when they ran out.

Assa has made a direct connection between the extreme shortages in American hospitals in the first period after the outbreak of Covid-19 on American soil, and the extreme neoliberal "laissez-faire, laissez-passer" policy that American authorities on various levels relied on. According to this author, the extreme neoliberal policies of the United States over the past four decades had weakened the public health system, while at the same time having brainwashed millions of voters to view public initiative as evil. In the opinion of Asa, this is the main reason why, when Covid-19 broke out, the United States, although being one of the most prosperous countries on Earth, faced shortages of everything from face masks, testing equipment, respiratory ventilators, hospital (ICU) beds, and even medical personnel. In the words of this author, "Laissez-faire" ("let happen"), in the extreme, had thus come down to "Laissez-mourir" (or "let die"): This comes down to the simple fact that numerous

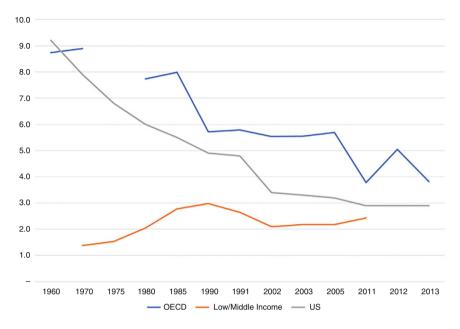


Fig. 5.3 Hospital beds (per 1000 people) [Source: Assa (2021)]

people have died because public services had been destroyed under years of neoliberal austerity.³⁷³

As shown in Fig. 5.3 developed by Assa (based on World Bank data), in 1960 the United States had still been the world leader with 9.2 beds per 1000 people (compared to 8.7 in the OECD group of industrialised countries). By the second decade of the twenty-first century, this ratio had dropped to 3/1000 in the United States (which came down to a two-thirds drop), while the OECD had an average of around 4/1000. Meanwhile, poor and emerging countries had increased their hospital capacity from 1.4/1000 beds in 1970, to 2.4/1000 in 2011.³⁷⁴

5.3.2.3 Looking for Solutions

As the Covid-19 pandemic unfolded, the overburdened healthcare system in the United States further suffered numerous practical problems for which the Trump administration did not provide immediate solutions, if any at all.

In April 2020, as the Covid-19 pandemic continued, the term "delayed care" began to catch on in healthcare circles. This term referred to the fact that many people started avoiding visiting a doctor's office or hospital for any medical

³⁷³Assa (2021).

³⁷⁴Assa (2021).

procedure that was not urgent. However, the AJMC reported a Gallup poll that pointed to a darker side to this phenomenon: From this pool, it had appeared that one in seven Americans had declared that they would not seek medical care in case of a fever or dry cough—both classic symptoms of Covid-19, in some cases because of concerns about the costs for medical care, and in other cases out of concern for losing one's job when having to report sick. The people most likely to avoid medical treatment for said symptoms were young people under the age of 30 and who had an income of less than USD 40,000 on a yearly basis.³⁷⁵

Around 5 months after the Covid-19 pandemic had been declared a national emergency in the United States, 49% of low-income areas (especially rural areas) reported that their hospitals had no free ICU beds anymore. Hospitals even reported being forced to transfer their sickest Covid-19 patients to care facilities located in wealthier areas. Among the counties most affected, those of the Southwest and West were facing a particularly difficult bed shortage.³⁷⁶ By 17 August 2020, Covid-19 had become the third main cause of death in the United States. In a span of just 4 days, there had at the time been a 3.2% increase in Covid-19-related deaths, bringing the total number of deaths to 170,434. This had put the Covid-19 disease in third place for causing death, after cardiovascular disease in the first place and cancer at number 2. The number of deaths on a daily basis then exceeded 1000 per day, while there were more than 5.4 million contamination cases nationwide.³⁷⁷

In general, American hospitals responded to these combined challenges by first trying to obtain the necessary PPE, equipment and supplies themselves, as their president had advised them to do. In order to obtain the necessary PPE, equipment and supplies, hospitals also reported turning to new, sometimes unverified and non-traditional sources of supplies. E.g., in an attempt to try to maintain existing supplies of PPE, hospitals reported uncommon practices as: (1) preserving and reusing single-use or disposable PPE, (2) using (or exploring to use) ultraviolet (UV) light for sterilizing used masks, and/or (3) bypassing sanitary guidelines by having medical staff place surgical masks over N95 masks. Hospitals also reported using non-medical PPE, such as construction masks or handmade masks and aprons. Still, hospitals expressed their belief that these approaches were likely to put their medical staff at risk.³⁷⁸

Secondly, hospitals tried to ensure adequate staffing to treat patients with Covid-19, by training and/or reallocating other medical staff members, such as anaesthetists, hospital physicians and nurses from other departments, to help care for ICU patients put on ventilators.³⁷⁹

Thirdly, hospitals started to support their medical staff members in accessing a variety of (time-consuming) services, such as childcare, laundry, grocery services

³⁷⁵AJMC Staff (2021).

³⁷⁶AJMC Staff (2021).

³⁷⁷AJMC Staff (2021).

³⁷⁸U.S. Department of Health & Human Services Office of Inspector General (2020).

³⁷⁹U.S. Department of Health & Human Services Office of Inspector General (2020).

and even hotel accommodation to facilitate the separation of elderly family members. $^{\rm 380}$

In order to control patient inflow and hospital capacity, some hospitals also started to provide outpatient care to patients with less severe symptoms. Hospitals also started offering telehealth services, where possible, and setting up "alternative facilities", ranging from fairgrounds, empty student houses and closed penitentiaries, as additional spaces for providing patient care.³⁸¹

Fifthly, as the need for respiratory equipment increased, hospitals tried to obtain additional capacity by renting general ventilation equipment, purchasing single-use ventilation equipment to be deployed in emergency transport, and/or obtaining ventilation equipment through an affiliated facility. Some hospitals even started converting other medical equipment, such as anaesthesia equipment, for use as respiratory ventilators.³⁸²

On 28 March 2020, the Centers for Medicare & Medicaid Services (CMS) announced that it would start making prepayments to hospitals and other health care providers, and on 30 March 2020, CMS announced a series of regulatory measures meant to increase the flexibility of hospitals and other health care providers in responding to the Covid-19 pandemic, including changes to support facility capacity and staffing.³⁸³

Around 23–27 March 2020, hospitals themselves began to submit requests for assistance to the US Department of Health and Human Service (HHS) in which they expressed their own suggestions. Most of these requests related to: 384

- (1) Tests, supplies and PPE: Many hospitals observed that they had to compete with other consumers, in many cases other hospitals or healthcare facilities, for limited supplies. They suggested that government intervention and coordination would be able to deal with this problem at a federal level. Hospitals in addition suggested that the federal government would ensure access to testing material (such as test kits and swabs). They, moreover, requested the federal government to speed up testing procedures, e.g., by allowing more agencies to conduct and produce tests. They also requested that the federal government would help hospitals in obtaining PPE supplies and other equipment, such as respirators.
- (2) Allocation of staff: Various hospitals asked the federal government to allow for the transfer of qualified professionals and for a reallocation of tasks if necessary. These requests were aimed at obtaining more flexibility from qualified medical professionals practicing in another state, and at obtaining more relief from regulations that may limit the use of contracted staff or doctors in other facilities.

³⁸⁰U.S. Department of Health & Human Services Office of Inspector General (2020).

³⁸¹U.S. Department of Health & Human Services Office of Inspector General (2020).

³⁸²U.S. Department of Health & Human Services Office of Inspector General (2020).

³⁸³U.S. Department of Health & Human Services Office of Inspector General (2020).

³⁸⁴U.S. Department of Health & Human Services Office of Inspector General (2020).

- (3) Facility capacity: Hospitals asked for more flexible rules on issues such as bed allocation, the possibility of establishing additional facilities in non-traditional settings, and telehealth. These requests, moreover, concerned flexibility in the categorizing of services, service providers and modalities eligible for reimbursement.
- (4) Financial assistance: Various hospitals, especially small rural hospitals, expressed their need for financial assistance, including faster and higher Medicare payments, in addition to loans and grants.
- (5) Communication and information: Hospitals made calls for more centralised communication and public information, including evidence-based guidance, reliable data and predictive models. Hospitals similarly called for the establishment of a central repository for all Covid-19-related guidance, data and information.

5.4 Trump's Disregard for Workers' Health During the Covid-19 Pandemic

In Chap. 7, we shall explain in more detail how the so-called "reopening of the economy" that, under the impetus of the Trump administration, already was called for in late April 2020, has been one of the main reasons for the Covid-19 pandemic to reach such proportions in the United States (as well as in, e.g., many European countries that would similarly reopen their economies too early). In line with neoliberal tradition, the Trump administration indicated that it essentially did not care about the lives of the members of the working classes. According to Woolhandler et al., the adverse health effects of the Trump administration's deregulatory actions in reopening the economy too early were, moreover, concentrated in states and focused on demographic groups that had already been most affected by rollbacks in health insurance coverage. As a result, both categories of harms were reinforcing one another, in this manner especially widening disparities in health according to race, social class, and geography.³⁸⁵ (Cf., furthermore, Chap. 10.)

However, the Trump administration's complete disregard for the health and safety of the members of the working classes, has also been particularly evident in dealing with the Covid-19 pandemic itself.³⁸⁶ E.g., despite having received nearly 18,000 complaints from employees concerning Covid-19-related hazards in their workplaces (as of 4 July 2020), the Occupational Safety and Health Administration (as of 15 September 2020) reportedly took action against only one of the involved employers.³⁸⁷

³⁸⁵Woolhandler et al. (2021), p. 734.

³⁸⁶Woolhandler et al. (2021), p. 733.

³⁸⁷Woolhandler et al. (2021), pp. 733–734.

Another example that we shall readdress in more detail in Chap. 7, is that in April 2020, President Donald Trump made the unprecedented decision of qualifying meat processing factories as "essential infrastructure" for purposes of national security, which compelled the meat processing industry's workers (many of them immigrants) to return to their physical working places although their safety, and by extension that of the general public, could not be guaranteed. As will be elaborated upon in more detail in Chap. 7, this decision was made despite numerous and clear evidence that employers in the meat processing industry were failing to maintain personal hygiene and physical distancing among their employees. Because of this, as of mid-September 2020, 42,606 meat-packing workers were reportedly infected with Covid-19, and 203 people had died. This at the same time turned the meat processing industry into a nexus of contagion across the country.³⁸⁸

The Trump administration's complete disregard for human life was as evident regarding the medical and nursing staff who had been pre-eminently putting their own lives and health in service of the fight against Covid-19. This sacrifice however, did not impress neoliberal leaders around the world. Their attitude undoubtedly contributed to the American government's anaemic and incompetent efforts to ramp up the supply of personal protective equipment, as well as to its non-existent oversight of infection control practices. As a result, in the United States alone, there were officially 2921 Covid-19-related deaths of health-care workers as of 26 December 2020.³⁸⁹

5.5 Conclusions

5.5.1 Assessment by the Corporate Europe Observatory

The Corporate Europe Observatory has shone a bright light on the disastrous consequences of four decades of neoliberal health policy. The consequences of cutting back on public health systems through austerity, and of privatization and commercialisation of public health services have been shown to be disastrous. In the wake of the biggest pandemic since the Spanish flu came a total inability of the private, for-profit health sector to provide even the most basic medical treatment in times of need. Meanwhile, critically underfunded public hospitals struggled to fill the gap.³⁹⁰

³⁸⁸Ironically, the negative effects of the Trump administration's environmental and occupational rollbacks have taken their largest toll in states whose voters heavily supported President Trump in the 2016 election. By contrast, comparatively progressive states that have maintained robust state-level protections lessened the effect the rollbacks have had on health. (Cf. Woolhandler et al. (2021), p. 734.)

³⁸⁹Woolhandler et al. (2021), p. 734.

³⁹⁰Corporate Europe Observatory and Tansley (2021), p. 22.

To illustrate this point, the Corporate Europe Observatory made special reference to the events that, in March 2020, occurred in Italy, one of the countries hardest hit by the Covid-19 pandemic. As explained before, years before the Covid-19 pandemic, EU enforced cutbacks in the Italian health system resulted in an inconceivable reduction in beds and personnel. Hospital beds were reduced by 50% between 1997 and 2015, and qualified hospital personnel saw their numbers cut by 46,000 between 2009 and 2017. Although Italy was an extreme example of neoliberal EU austerity, it was certainly not the only one. Add to these systematic downsizing practices, the outsourcing of certain medical services in search of cutting down on personnel costs, not to mention the lack of policy measures and incentives ensuring that health companies invest emergency preparedness—e.g., by always keeping enough hospital beds empty, by supplying hospital rooms, or floors, with sufficient face masks and gloves, and/or by permanently investing in the development of vaccines and/or in researching undetected viruses and other disease-causing factors (cf., furthermore, Sect. 9.2.)—and the result has been a global public health crisis that had not occurred in more than a century,³⁹¹ most notably in Western, neoliberally oriented countries.³⁹²

Covid-19 has exposed the dramatic consequences of economic neoliberalism in general, and of neoliberal austerity in particular, especially concerning the extreme degree to which vital health care services (in the broad sense of the word), have been turned into a free market commodity, especially since the 1980s (in the United States) and the 1990s (in many European countries). According to the Corporate Europe Observatory, while states should not be relieved of their human rights obligations when transferring core public services to the free market, the reality throughout the Western world has been just that. People who used to have public rights, were turned into the clients (or consumers) of private enterprises that are only out to maximise corporate profits and that are not accountable to the general public, but only to their shareholders.³⁹³

This assessment is not just another attack on neoliberal ideas, but concerns a matter of life and death. Indeed, there is growing evidence that the commercialisation and privatisation of healthcare has contributed to a greater spread of, and more deaths from, Covid-19. People have died during the Covid-19 pandemic because of neoliberal policy, which implies that fighting the neoliberal-inspired techniques of privatising or marketizing health care services is, literally, a fight to save lives.³⁹⁴

Still, as has already been explained before (in Chap. 4), in November 2020, the EU Commission presented its first proposal for a "European Health Union". This European Health Union has as main purpose to give the EU more power over health policy. The proposal includes a series of measures that could be achieved without

³⁹¹Sumonja (2020).

³⁹²Corporate Europe Observatory and Tansley (2021), p. 22.

³⁹³Corporate Europe Observatory and Tansley (2021), p. 22.

³⁹⁴Corporate Europe Observatory and Tansley (2021), p. 22.

changing the EU Treaties, ranging from an EU-wide pandemic readiness plan to a proposed new EU agency for health emergencies.³⁹⁵ (Cf. already Sect. 4.2.3.3.2.)

Under the logic of the European Treaties which deal primarily—if not exclusively—with economic matters, health policy is primarily a responsibility of the Member States, with the EU institutions themselves only having limited formal powers. There is a strong need for more and better cooperation between EU governments in dealing with pandemics. However, it is as important to consider what the EU would do with more power over health policy. After all, the EU's combined policy concerns, especially those related to the application and monitoring of the E(M)U monetary convergence standards (cf. Sect. 5.2.1.2.1.) have been one of the main causes of weakening public health systems. At the same time, the EU has left the growing private health sector largely untouched (cf. e.g., the completely lack of European quality or supervision rules regarding the private health care sector).³⁹⁶ The various ways by which the EU has dealt with the Covid-19 pandemic raises some serious doubts as well.

To reiterate, the EU has:

- Stimulated a far-reaching privatization and marketization, to a large extent eroding the health care sector—besides, as we shall examine further in Chap. 6, the nursing home sector as well—as a result of which this sector was totally unprepared for a pandemic;
- (2) Abstained from any significant action during a month and a half at the outbreak of Covid-19 on European soil in January–February 2020 (cf. Sect. 2.3.);
- (3) Turned the start and first months of the European vaccination campaign into a complete fiasco, as we shall investigate further in Chap. 9.

One may seriously wonder what to expect of a centralized, European health policy, at least as long as the EU keeps adhering the ideology of economic neoliberalism.

Still, the EU is already proceeding with its plans to make health an EU policy matter. As the Union keeps pushing the neoliberal agenda, consequences for the lives of European citizens could be dire.

As has already been addressed in some more detail in Chap. 4, the EU Commission's health reform plans include an EU health crisis/pandemic preparedness and response plan, with measures including:³⁹⁷

- (1) Improved reporting by Member States on their preparedness and response plans.
- (2) Stress tests to be carried out regularly at a national and EU level in the area of public health.

³⁹⁵Corporate Europe Observatory and Tansley (2021), p. 22.

³⁹⁶Corporate Europe Observatory and Tansley (2021), p. 22.

³⁹⁷Corporate Europe Observatory and Tansley (2021), pp. 22–23.

(3) Supporting Member States to strengthen the resilience, accessibility and effectiveness of their health systems through cooperation, training, technical assistance and funding from EU programmes.

As elaborated in more detail in Chap. 4, the EU has already launched a multibillion "EU4Health" funding programme for the period 2021–2027, "to build resilient health systems in the EU to better equip us for the future". (Cf. Sect. 4.2. 3.3.3.3.2.) Besides proposed measures to tackle cross-border health threats and making medicines more available and affordable, EU4Health also includes a third pillar of "strengthening health systems". Under this point, the EU Commission wants to "improve accessibility, efficiency and resilience of health systems "and "reduce inequalities in accessing healthcare".³⁹⁸

However, what is still noticeably lacking in the EU plans is any recognition of the importance of maintaining, or even strengthening, "public" and "non-profit" healthcare systems, or even better, a recognition that health care services should exclusively be kept in the public and non-profit policy domains.³⁹⁹

All of this does not come as a surprise, as the EU Commission has traditionally (and wrongly), usually equated "greater efficiency" with greater reliance on the free market (or, put in another way: with less public initiative and less "public good").

In the opinion of the Corporate Europe Observatory, in order to strengthen Europe's health systems, the EU should at the very least put an end to its neoliberal policy-agenda, e.g. the monetary and fiscal policy that lead to harmful budget cuts and created pressure to privatise or marketize health care and elderly care systems, thereby weakening Europe's preparedness for any future epidemic, pandemic or similar public health crisis.⁴⁰⁰ According to some more specific and practical proposals of the Corporate Europe Observatory, the EU should:⁴⁰¹

- (1) Put an end to austerity, by at the very least starting with a commitment not to return to the pre-Covid-19 austerity rules, including the SGP.
- (2) Remove all pressures for (neo)liberalising, marketizing, commercialising and/or privatisation public health care systems.
- (3) Stop diminishing the domain of the general good and undermining the welfare state model.
- (4) Ensure that Covid-19 recovery funds are used to strengthen public facilities and the public health care system, rather than private for-profit hospitals.
- (5) Protect public services from being further opened up by the EU's trade and investment agenda and make sure that other areas of the European health agenda—ranging from digitalization, to integrated care—are not (entirely) taken over by private for-profit enterprises only seeking to increase private profits and market share.

³⁹⁸Corporate Europe Observatory and Tansley (2021), p. 23.

³⁹⁹Corporate Europe Observatory and Tansley (2021), p. 23.

⁴⁰⁰Corporate Europe Observatory and Tansley (2021), p. 23.

⁴⁰¹Corporate Europe Observatory and Tansley (2021), p. 24.

5.5.2 Taking the Reform Debate One (Big) Step Further

In view of all the foregoing, it should come as no surprise that numerous authors also increasingly advocate the abandonment of the tenets of economic neoliberalism, especially regarding their application to the health care sector in the broad sense.

E.g., in the opinion of Viens, there are very convincing empirical and moral objections against economic neoliberalism in general and austerity in particular, especially when applied to health care.⁴⁰² In the similar opinion of Assa and Calderon, in order to make health care sustainable, there is an urgent need to reconsider neoliberal policy choices, especially those on privatising health care.⁴⁰³ Likewise, the American researchers Reinhart, Dawes and Maybank argued that in order to protect public health in the United States, the prevailing inadequate welfare and worker protection systems should start to be seen as ethical and political failures urging to do much better.⁴⁰⁴ Reference can also once more be made to Saad-Filho who has expressed similar ideas.⁴⁰⁵

The opinion of these authors is, moreover, fully in line with what we ourselves have written in some of our earlier work. 406

What is abundantly clear is that the Covid-19 health crisis in the West, especially when compared to the much more efficient Covid-19 responses deployed in the East (cf. Sect. 2.4.2.4.), has demonstrated that radical neoliberal administrations are unable—and probably even unwilling—to perform the most basic functions of governance: protecting human lives and securing livelihoods.⁴⁰⁷

In the further opinion of Viens, the time has come to start radically looking for alternative approaches to organizing societies than those developed under economic neoliberalism.⁴⁰⁸

We have already come up with ideas in this regard in some of our earlier work.⁴⁰⁹

Under the "new international monetary system" that we have proposed in our previous books,⁴¹⁰ it would become possible to finance a care state model under a much fairer and more just socio-economic order than would ever be possible under the rule of unbridled capitalism. Even the classical welfare state model could be surpassed, to the extent that states are still dependent on capitalist financing methods such as taxation and predatory capital markets. By contrast, under this future monetary system, state financing would no longer occur by taking away profits

⁴⁰²Viens (2019).

⁴⁰³Assa and Calderon (2020), p. 19.

⁴⁰⁴Reinhart et al. (2021).

⁴⁰⁵Saad-Filho (2020).

⁴⁰⁶Cf. Byttebier (2017, 2018, 2019, 2021).

⁴⁰⁷Saad-Filho (2020).

⁴⁰⁸Viens (2019).

⁴⁰⁹Cf. in particular Byttebier (2017, 2019).

⁴¹⁰Cf. Byttebier (2017), Chapters 4 and 5 (pp. 353–487). Cf., furthermore, Byttebier (2019), Chapter 5 (pp. 137–180).

earned by enterprises, or from income earned by working people. "Taxes" and similar "contributions" or "duties", such as state-imposed "social security contributions" would be replaced by a newly proposed system of money creation, managed by a Monetary World Institute (MWI)—this could obviously be the IMF, after having altered its working rules, as established in its Articles of Agreement—which would attribute periodical allocations to the countries participating to this new international monetary order.⁴¹¹ (Cf., furthermore, Sect. 11.3.)

Although such a system could, to some extent, already start happening within the prevailing international monetary order—which however would imply that the IMF would actually start using its power to attribute Special Drawing Rights (SDR's) to its member states in a far more systematic manner than is presently the case⁴¹²—the proposal that was formulated in our previous work would take Keynesian thinking a step further, by installing a system in which all the member-states would obtain the entirety of their financial means out of such (periodical) allocations.⁴¹³ Under such a system of financing states it would become possible to withdraw the public domain from the power of private money creation and, therefore, from the collectively of the private, financial institutions and markets that in the current monetary order dictate the whereabouts of everyone, including states. This would, phrased differently, imply that states should no longer be "tax states" and/or "debt states".

This newly proposed monetary system has been extensively described in our previous work, to which further reference is made here.⁴¹⁴

In the treaties establishing this proposed new international monetary order, the contours of this new welfare/care state model could be worked out in more detail, for example by providing lists of the public services and social security systems that should be made universally accessible based upon the financial means each state will obtain out of said allocations.⁴¹⁵

⁴¹¹Compare Saad-Filho (2020): "States must secure jobs, incomes and basic services, including the rapid expansion of the health system. This is not merely for reasons of economic policy but as part of efficient health policies: guaranteed jobs and incomes make it possible for more people to stay at home, which will ease the load on the health system, speed up the end of the pandemic and accelerate the recovery. In order to do this, the banking system should be nationalized to secure the flow of credit and prevent speculation and Central Banks should ensure that there is enough liquidity to keep the economy afloat. Key services should be taken over by the state to ensure that basic needs are served and if the central authorities can give tens of billions to the airlines, the railways, health providers and supermarket chains, the public might as well own them". (Cf. Saad-Filho (2020).)

⁴¹²Cf. International Monetary Fund (2021).

⁴¹³As explained in Byttebier (2019), pp. 164–169, such a system of financing states could imply that, each (working) year, each of the participating states would obtain a working budget out of the hands of the in Chapter 5 of Byttebier (2019) proposed (N)MWI that should enable it to install and maintain a new type of state model, thus turning the "repressive state model" presently prevailing under the yoke of capitalism, into a "care state model" based upon a view on society that all people should be willing to take care of each other.

⁴¹⁴Cf. especially Byttebier (2015a, 2017).

⁴¹⁵Cf. Byttebier (2019), pp. 186–187.

While in neoliberal states, funding healthcare happens through a range of mechanisms, such as taxes, semi-taxes, health insurance funds and private sources,⁴¹⁶ under the proposed new monetary order, it would become far easier to provide states all over the world with the necessary funding to establish a universal healthcare system within their respective jurisdictions. These would be healthcare systems in line with the WHO's commitment to "the fundamental right of every human being to the enjoyment of the highest attainable standard of health, without distinction of any kind".⁴¹⁷ Such an approach would, moreover, substantially contribute to reducing, or even completely ending, the health inequalities prevailing under the present neoliberal, socio-economic order.⁴¹⁸

We shall readdress these proposals in some more detail in Chap. 11 (containing the final conclusions to this book).

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Galbraith has defended this approach in his usual (brilliant) way: "But merely to list them is to cf. that all are, in substantial measure, at public cost. Thus the problem: rather than take on that cost, it is far easier for the comfortable to find flaws in the character of those who make up the underclass and increasingly also in the immigration law and their enforcement. And to find social virtue in a seemingly principled resistance to taxation and the invasive state. And, as trouble looms, to call for more police and more stringent jail sentences or to move to the suburbs". (Galbraith (1995), p. 265.) ⁴¹⁶World Health Organization (2014), p. 23.

⁴¹⁷Global Conference on Primary Healthcare (2018), under point I.

⁴¹⁸Cf. Byttebier (2019), pp. 192–194 (as regards healthcare) and pp. 196–197 (as regards elderly care). Cf., furthermore, World Health Organization (2014), p. 23.

By granting states the means to focus on prevention, the costs for such a universal healthcare could even be kept within very reasonable boundaries. (Cf. World Health Organization (2014), p. 23.) According to the WHO, the per capita cost for a preventive universal healthcare would be representing only an annual investment of under USD 1 in low-income countries, USD 1.50 in lower middle-income countries and USD 3 in upper middle-income countries. Also according to the WHO, these figures represent just 1–4% of current health spending. (Cf; World Health Organization (2014), p. 23.)

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Chapter 6 Covid-19 and the Sector of the Long-Term Nursing Homes



6.1 The Long-Term Nursing Home Sector Before Covid-19

6.1.1 Europe

6.1.1.1 European Privatization Climate as of the 1990s

It is perhaps an understatement to hold that the Covid-19 crisis rekindled the debate about the efficiency and quality of the—strongly privatized—long-term nursing home sector.

The privatization of state-owned enterprises, or other types of public institutions, hinges on orthodox, neoliberal hypothesis that private ownership brings greater efficiency and more rapid economic growth.¹ In addition, privatization—purportedly—increases output and lowers costs, while adding to reduce public internal and external debt (= the so-called "austerity" argument, within the EU also relevant in applying the so-called "ESA2010-standards"), and to promote individual initiative by rewarding entrepreneurship. By implementing this policy, states express their belief that they will improve overall economic performance and growth, and increase rational choice for consumers, thus contributing to a more performant socioeconomic order. Although usually rationalized in the name of greater efficiency, privatization has as main, true effect that it concentrates wealth even more in the hands of a few and makes the public pay more for what it needs. While privatization has been very crucial in deploying neoliberal, public policy, it is increasingly becoming a debated issue whether it indeed improves the economy or actually makes it worse.²

The main argument deployed for the privatization of healthcare and long-term nursing homes, is the one that has been used for rationalising privatization in general.

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¹Cf. Streeck (2017), p. 138.

²UKEssays (2018).

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Privatisation is supposed to lead to more economic efficiency, to enhance the quality of products and services, to generate less waste, and to improve customers' and patients' choices. These purported positive effects of privatization are attributed to the fact that, when operating on the free markets, economic actors are assumed to allocate scarce resources (more) rationally and in a more optimal manner than can be accomplished in a public environment.³

According to Mercille, privatization of nursing homes in Europe became a significant policy approach after the election of the Thatcher government in the United Kingdom, and has proceeded apace ever since.⁴ As of the 1990s, neoliberal governments all over the EU started conducting rounds of privatization of nursing homes to meet deficit reduction objectives imposed by the EU (under the rules of the Maastricht Treaty of 1992; cf. Sect. 5.2.1.2.1).⁵ As concerns the latter factor, in general, euro area countries are constrained by rules of European law that prohibit member states' budgets from exceeding 3% of their Gross Domestic Product (GDP) and that dictate that they must keep their budgets balanced over the medium term. During the past decades, severe cutbacks in the healthcare and long-term nursing sector have been one of the methods to achieve this goal, thus also further feeding the privatization debate (cf. already Sect. 5.1.).

The pressure that the EU has put on several of its member states to push for a privatization and marketizing of various sectors of socioeconomic life, notably the healthcare and long-term nursing sectors, can hardly be underestimated. The arguments that have been used to justify this privatization and/or marketization of the healthcare sector (esp. hospitals) have already been set out in Chap. 5. These same arguments have also been deployed to achieve the privatization and/or marketization of the long-term nursing home sector, both sectors often being dealt with as one regulatory category.

A possible difference between the two sectors has been that the privatization of long-term nursing institutions has gone much further than that of the hospital sector, probably because hospitals need to rely more on highly qualified medical staff than long-term nursing homes, which made it easier for the latter category to be subjected to free market organization.

As such, the EU does not have direct competence to regulate both these sectors. However, the EU has in an indirect manner used its monetary and fiscal competence to steer its member states towards a higher degree of privatization and marketization. (Cf. Sect. 5.2.1.1) This especially applied to EU member states that experienced financial problems—e.g., in the aftermath of the financial crisis of 2008—which made them more vulnerable to far-reaching EU austerity measures, as European monetary or financial support from either the ECB or the Stability Pact was often made dependent on conditions of liberalizing (e.g., through privatization or similar techniques) the healthcare and/or long-term nursing sector.

³Mercille (2017), p. 5.

⁴Mercille (2017), p. 3. Similarly Blakeley and Quilter-Pinner (2019), p. 5.

⁵Mercille (2017).

Among many other examples, reference can again be made to the (extreme) example of Italy. It has already been pointed out in Chap. 5. (cf. Sect. 5.2.1.2.2) how, when Italy became dependent on European monetary and fiscal support in 2011, the country also came under severe pressure from the European institutions to implement far-reaching reforms, including privatizations. This was already discussed in the letter from the ECB leadership to the Italian government of 5 August 2011 quoted in Chap. 5., which pointed out the need for liberalization of various public services. These policy instructions would later become even more clear in the "2019 Joint Report on Healthcare and Long-Term Care Systems and Fiscal Sustainability", in which the following conclusion on the necessity for severe austerity measures were reached about the long-term nursing sector:⁶

Italy has a system of long-term care that focuses on cash benefits as much as on residential and home care. Based on the current features, the main challenges of the system appear to be:

- Improving the governance framework: to establish a coherent and integrated legal and
 governance framework for a clear delineation of responsibilities of state authorities
 concerning the provision of long-term care services; to strategically integrate medical
 and social services via such a legal framework; to define a comprehensive approach
 covering both policies for informal (family and friends) carers, and policies on the formal
 provision of LTC services and its financing; to establish good information platforms for
 LTC users and providers; to deal with cost-shifting incentives across health and care.
- Improving financing arrangements: to determine the extent of user cost-sharing on long term care benefits; to extend means- testing to cash benefit provisions, to include assets in the means-test used to determine individual cost-sharing (or entitlement to public support) for B&L costs better reflects the distribution of economic welfare among individuals.
- Providing adequate levels of care to those in need of care: to adapt and improve long term
 care coverage schemes, setting a homogenous need-level triggering entitlement to
 coverage; the depth of coverage, that is, setting the extent of user cost-sharing on long
 term care benefits; to provide targeted benefits to those with highest LTC needs.
- Supporting family carers: to establish policies for supporting informal carers, such as
 through flexible working conditions, respite care, carer's allowances replacing lost wages
 or covering expenses incurred due to caring, cash benefits paid to the care recipients,
 while ensuring that incentives for employment of carers are not diminished and women
 are not encouraged to withdraw from the labour market for caring reasons.
- Ensuring coordination and continuity of care: to establish better co-ordination of care
 pathways and along the care continuum, such as through a single point of access to
 information, the allocation of care co-ordination responsibilities to providers or to care
 managers, via dedicated governance structures for care co-ordination and the integration
 of health and care to facilitate care co-ordination.
- To facilitate appropriate utilisation across health and long-term care: to arrange for adequate supply of services and support outside hospitals, changing payment systems and financial incentives to discourage acute care use for long term care; to create better rules, improving (and securing) safe care pathways and information delivered to chronically-ill people or circulated through the system; to steer long term care users towards appropriate settings.
- Improving value for money: to invest in ICT as an important source of information, care
 management and coordination; to invest in assistive devices, which for example, facilitate self-care, patient centeredness, and co- ordination between health and care services.

⁶European Commission (2019), pp. 398–400.

- Prevention: to promote healthy ageing and preventing physical and mental deterioration of people with chronic care; to employ prevention and health-promotion policies and identify risk groups and detect morbidity patterns earlier.
- Improving administrative efficiency.

6.1.1.2 Methods Deployed for Privatizing Public (Health) Institutions in General

On a legal-technical level, privatization has been qualified as a rather "loose concept". A possible definition could be that reference is made to the direct sale to a private party, or the private market listing, of the entire, or a substantial part, of a state enterprise or public institution. According to neoliberal theory, such state enterprises, or other public institutions providing services, ought to be dismantled and turned over to the private sector, because of their assumed constraining effects on the freedom of individuals to conduct business, while other strands of neoliberal theory argue that market mechanisms, amongst which free competition, offer more guarantees for ensuring correct pricing and economic efficiency. Whatever the approach, neoliberalism urges for such public enterprises or institutions to be turned over to free market players.⁷

According to Mercille, "privatization" is in any case a "multi-layered" process that may be accomplished through several channels and by resorting to a wide variety of legal instruments, including:⁸

- 1. Ownership (e.g., when public assets, such as nursing home ownership and/or ownership of shares of companies running nursing homes, are transferred to private persons).
- 2. Financing (e.g., when sources of financing public assets and/or services become private thus replacing public funding).
- 3. Management (when, e.g., based upon government concessions or similar legal instruments, private entities start managing and operating public assets).
- 4. Production (e.g., when private enterprises start delivering a good or service, often after outsourcing by the public sector).

According to Eurofound, the division and definition of public and private services of healthcare institutions (in the broad sense of the word) can be made according to criteria such as legal status, ownership and economic activity. For private service providers, an important factor is whether their services have been contracted out by the public sector or are part of public policy in some other way, as the conditions in which services are provided is similar to public provision.⁹

As data on the number of subsidized places in private nursing homes are limited, this makes the distinction between public and private status of nursing home mainly

⁷Wikan (2015), p. 3.

⁸Mercille (2017), p. 3.

⁹Eurofound (2017), pp. 3-4.

defined and differentiated by type of ownership, legal status, and/or economic activity. The definitions of public and private used by Eurofound, are, moreover, similar to those of the European Commission's study on social services of general interest (SSGI).¹⁰ Hence, the notion "public providers" refers to organizations in which public authorities (e.g., Ministries, municipalities) either directly manage or have the power to appoint management, while "private service providers" are defined as providers which are not public authorities, or other bodies governed by public law.¹¹ Private providers of service can be either "for-profit" or "non-profit". Non-profit, private providers are defined in the Commission's SSGI study as institutions or organizations created for the purpose of producing goods and/or providing services but whose status does not permit them to become a source of income, profit or other financial profit for the units that establish, control or finance said institutions or organisations.¹² In practice, this can include organizations the board of directors of which is composed by volunteers, as well as organizations that are managed or owned by religious or civil societal entities (e.g., trade unions, political parties, cooperatives, churches...).¹³ Private for-profit providers include organizations that are controlled by shareholders, or that are in another manner privately owned.¹⁴

Mainstream explanations for the privatization of nursing homes claim that private nursing homes are more economically efficient than their public counterparts. This is to a large extent rebutted by critical scholars who have demonstrated that the evidence on this matter is far from conclusive and even, as has been made clear during the Covid-19 pandemic (cf. Sect. 6.2), points to the opposite.¹⁵ Financial performance may in some cases improve after a privatization, but through implementing severe austerity measures, staff working conditions (including

¹⁰European Commission (2011).

¹¹European Commission (2011), p. 312, mentioning the following definition of "private service providers": "Providers which are not public authorities or other bodies governed by public law. Private service providers can be non-profit of for-profit providers. A "body governed by public law" means anybody: (a) established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character, (b) having legal personality; and (c) financed, for the most part, by the State, regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities, or by other bodies governed by public law." Cf., furthermore, Eurofound (2017), p. 4. ¹²In European Commission (2011), p. 312, non-profit providers are being defined as: "Institutions or organisations created for the purpose of producing goods and services whose status does not permit them to be a source of income, profit or other financial gains for the units that establish, control or finance them." Cf., furthermore, Eurofound (2017), p. 4.

¹³Eurofound (2017), p. 4.

¹⁴Eurofound (2017), p. 4.

¹⁵Mercille (2017), p. 3.

Stiglitz (2008), p. xii, has in general observed that the theoretical case for privatization is, at best, weak or non-existent.

wages, working time, vacation rights...), consumer protection, and quality of service all drastically deteriorate. 16

The "new public management" (NPM) discourse that advocates for increased private provision on the grounds that competition between service providers will increase the quality and efficiency of services at a reduced cost to the public sector, puts the emphasis on performance, contractualization and the adoption of management practices from the private sector. In this approach, market mechanisms and quasi-markets are to be introduced, so that different types of providers would compete with one another. These reforms and market mechanisms include tendering, commissioning, user choice, user fees, and vouchers.¹⁷

As of the 1990s, the private sector has determined the outlook of European public healthcare and long-term nursing institutions in multiple ways: through outright privatization in cases where public facilities, such as hospitals or nursing homes, were simply sold off to private investors; through outsourcing of certain services and handing them over to private enterprises, such as cleaning and catering, or even through the creation of internal markets between service providing facilities and buyers of health services.¹⁸

Mercille has, furthermore, pointed out that, in recent years, increasing use has been made of PPP structures for the furnishing of nursing homes.¹⁹ The notion PPP, an abbreviation for "public-private-partnership", typically refers to an operation whereby a state (or other public entity) and a private contractor enter into a long-term contractual agreement (usually ranging between 20 and 30 years) for the building, maintenance and/or exploitation of an infrastructure project, such as a hospital, a nursing home, a road, a school building ... The public partner hereby gradually repays the private contractor (for his commitment of building, maintaining and/or exploiting the facility) over a number of years. In most cases, the private partner has a substantial degree of freedom over matters like project design and inputs. PPP-projects have also been referred to as a form of "spread-in-time" privatization on a contractual basis, to the extent that they imply a form of with-drawal from the part of the state (or another public entity) from a given economic activity and/or public service provision, while the private partner gradually increases its involvement.²⁰ According to Navarro-Espigares and Hernandez-Torres,

¹⁶Mercille (2017), pp. 3–4. This author has, furthermore, pointed to a large empirical study of public services privatisation in the 1990s and 2000s in six European countries (namely Austria, Belgium, Germany, Poland, Sweden and Great Britain) in four sectors (namely electricity, postal services, local public transport and hospitals) based on expert interviews, individual company case studies, and a representative survey of service users, from which it appeared that in: "all the public services sectors and in all the countries under investigation the competitive pressure and privatization has led to cost-cutting through either reduction of employment or increased flexibility." (Mercille (2017), pp. 3–4, with further references.)

¹⁷Eurofound (2017), p. 9.

¹⁸Mercille (2017), p. 4.

¹⁹Mercille (2017), p. 8.

²⁰Mercille (2017), p. 8.

public-private partnerships in the health care sector have taken various forms, with different levels of involvement and responsibility from the side of the private partner, and different levels of risk allocation to the respective public and private partners. PPP-projects in the nursing home sector are, furthermore, usually characterised by the sharing of common, agreed upon objectives.²¹

Another technique concerns the so-called "Private Finance Initiatives" (abbreviated as "PFI") that usually involve a concession agreement. These have been used as a distinct means of financing large capital investments, based upon funding provided by private partners. The technique has especially been used in the United Kingdom, where private consortia often enter into long-term agreements with the government in order to finance, build and, less often, manage new projects in the health and nursing home sectors. This method commonly consists of a private consortium financing the construction of a health facility, that is then leased to the public partner(s).²²

In Europe, PPPs have been resorted to in an increasing extent since they were first developed in the United Kingdom in the early 1990s. According to Mercille, between 1990 and 2015, more than 1800 PPP agreements have been concluded in the EU, for a combined value of more than EUR 350 billion.²³

6.1.1.3 General Public Policy Supporting the Privatization of Nursing Homes

The privatisation and commercialisation of health and long-term nursing care, as well as the pursuit of public-private partnerships in the health care sector and the cuts in public spending, all encouraged under EU economic governance, has put many European countries in an extremely bad position for responding to the Covid-19 pandemic.²⁴

In recent times, neoliberal governments in several European countries not only welcomed private initiatives for establishing nursing homes, but moreover actively encouraged private investors to take up business in the nursing home sector through various fiscal, financial and corporate legal measures. A major corporate law-policy

²¹Navarro-Espigares and Hernandez-Torres (2009).

²²Navarro-Espigares and Hernandez-Torres (2009).

²³Mercille (2017), p. 8.

Reference can also be made to an extensive series of programmes for investment in public nursing home facilities during Ireland's recent history. This involved the establishment of 90 centers across the country between 2016 and 2021. This project included the replacement of 33 existing facilities and the renovation and expansion of 57 others. The investment consisted of EUR 148 million in the HSE's 2016 capital plan, and a further EUR 237 million of capital made available under a governmental multi-year capital plan. The programme included 10 facilities worth EUR 150 million, for which public-private partnerships (PPP) or alternative financing arrangements were considered. (Cf. InfraPP (2016).)

²⁴Corporate Europe Observatory and Tansley (2021), p. 14.

supporting the spread of for-profit private nursing homes has been a scheme of "capital allowances" for expenditure on the construction or refurbishment of private nursing homes (but also hospitals). Such incentives, e.g., encouraged the construction and upgrading of private healthcare facilities by giving tax breaks to investors. In some cases, governments also provided generous subsidies to private investors for building projects in the private healthcare sector.²⁵

Regarding the public initiative itself, fiscal policies initiated by the EU in recent decades (e.g., through the so-called ESA 2010-standards) generally held public investments in a dim view, especially when it concerned infrastructure works.²⁶ As a result, EU member states were in many cases obliged to call upon the private markets if they still wanted to meet certain needs, e.g., building or furnishing nursing homes.

Furthermore, faced with the EU's highly restrictive budget and austerity measures (cf. Sect. 5.2.1.2), EU Member States themselves were in many cases no longer able and/or willing to keep up with rising demand in the public care home sector, often preferring to pay private home operators to make up this shortfall, another phenomenon adding to the factors behind the rapid development of private nursing homes from the 1990s onwards.²⁷

As a result of this combination of public policy incentives, the increased demand for nursing homes has in a vast number of European countries often been met by the private sector. All of this, of course, goes back to neoliberal theories which hold that it is cheaper for states to outsource public services to private operators, than to provide them themselves, especially in cases where this implies investments in the construction and/or maintenance of (new) facilities.

This strategy may be qualified as typically "neoliberal" to the extent that it fully "privatizes" the profits to be made by conducting certain "marketized" activities, while at the same time "socialising" the costs involved. These "socialised costs" may range from financial contributions that have to be paid for the outsourcing of projects, to further human costs, amongst which: (1) the fact that the burden of poorer quality care has to be borne by society, most notably by the patients and their families, and (2) the fact that nursing home staff members employed in the private sector usually suffers under poorer employment conditions, such as lower salaries, in addition to numerous other less attractive working conditions (e.g., extended working hours, less vacation benefits, less sick leave benefits...).²⁸ Public homes,

²⁵Mercille (2017), p. 6.

Interviews with operators in the sector revealed that they widely believed that these tax incentives have been effective in increasing the level of supply of nursing home spaces, justifying the assumption that such a private initiative increase in supply would not have occurred in the absence of these tax incentives. It has, moreover, been suggested that the tax incentives benefitted investors who already were relatively wealthy. (Cf. Mercille 2017, p. 6.)

²⁶This goes all the way back to Regulation (EU) 549/2013, which set up a European System of Accounts 2010 ("the ESA 2010" or "the ESA"). (Cf. Article 1.1. Regulation (EU) 549/2013.)

²⁷Mercille (2017), p. 6.

²⁸Mercille (2017), p. 6.

moreover, usually have more (qualified) nursing staff than private homes, which implies that more nurses and other (qualified) personnel have to be paid. In addition, staff costs (both for nurses and other care staff) are usually higher in the public sector, because public nursing homes have to comply with the better working conditions imposed by public sector employment legislation (e.g., paid sick leave and maternity leave) and because they have to supply the more expensive, unprofitable care not given by private facilities. Similarly, public nursing homes often have to continue to serve geographical areas for which it is not profitable enough for the private sector to establish care facilities (e.g., remote rural areas). This is an important factor in why the costs for society increase due to privatization, as the private sector is only interested in acquiring the profitable market segments, leaving the unprofitable ones in the hands of public entities. Private homes also often outsource certain aspects of their operation (such as cleaning and catering). This is beneficial for shareholders but detrimental for the patients/consumers, to the extent that this often leads to lower quality service.²⁹

These findings are largely confirmed by Eurofound's 2017 study already quoted above, from which it appears that financial pressure on nursing homes has been a major issue (e.g., in the United Kingdom), initiated by the rising number of people in need of elderly care, and the increasing costs of expanding staff and services to guarantee quality care. According to this study, private investors clearly deploy strategies of (1) location and (2) selection towards potential service users. E.g., as nursing homes in rural areas imply bigger costs and/or smaller profits, private investors abstained from locating there. The same applied to the users of services private nursing homes were willing to accept as clients/patients. The types of residents prevalent in each type of nursing home were, hence, influenced by the profitability of the services they required—residents who require less profitable care services were more likely to end up in public nursing homes.³⁰

The private sector is in addition highly "under-regulated", leaving employers with relatively few social constraints. It has even been assessed that under current regulation, those who reduce the workforce to a level they can get away with, are mostly rewarded, ultimately leading to a reduction in the quality of care (a typical race to the bottom- the effect of lowering regulatory requirements). This truth, moreover, not only applies to the working conditions of the staff, but also to (the lack of) rules and regulations applying to conducting a nursing home in general. As a result, the proliferation of new private facilities in recent decades has raised concerns about quality, as some new operators have no background or expertise in the sector, while they are allowed to operate largely unregulated and unmonitored.³¹

²⁹Mercille (2017), p. 7.

³⁰Eurofound (2017), p. 1.

³¹Mercille (2017), p. 7.

In the opinion of Mercille, relying on private rather than on public nursing homes thus had three major consequences (cf. Mercille (2017), p. 7): "(1) Firstly, the lower cost of private nursing homes allows the state to reduce public expenditure on welfare and may help meeting deficit reduction targets and other austerity measures. (2) Secondly, the fact that a large part of long-term care is

In the United Kingdom, where private equity investors of for-profit nursing home operators have been said to have "skimped on operating budgets" in order to maximise private investors' returns, the "Institute for Public Policy Research" has found that private nursing home operators provide less training, pay staff less and employ less staff. These factors add up to a higher staff turnover and to lower quality of care, but also, when the provider goes bankrupt (often due to too much debt), local authorities still have to take on financial responsibility. In the opinion of the Corporate Europe Observatory, this is the classic effect of privatization in the mid-term run: profits have disappeared in private pockets, but when things invariably go wrong, the costs have to be borne by the taxpayer.³²

6.1.1.4 Some Figures

6.1.1.4.1 Public Versus Private Nursing Homes

The ongoing privatisation of the nursing home sector throughout the EU must be situated within the above context. Per the dictates of economic neoliberalism, in many countries, private ownership has grown in importance during the last decades.³³

In the United Kingdom, e.g., 78% of nursing home beds were in private for-profit facilities in 2016, with the public sector reportedly struggling.³⁴ As for Ireland, 2017 data similarly showed that nursing homes had been privatised at an increasing rate over the past few decades (cf. Fig. 6.1). According to Mercille, in the 1980s, public nursing homes still accounted for about 60% of the total number of nursing home beds at a national level, with private for-profit organisations owning about 25% of the number of beds and private non-profit organisations the remaining 15%. Since then, the situation has drastically changed. Data from 2017 showed that public

being transferred to the private sector contributes directly to the "flexibilization" of labour conditions, through which nursing home workers employed in the private sector are subjected to less favourable conditions than those of the public sector. This contributes to setting lower standards for workers throughout the economy, which again implies a traditional "race to the bottom"-effect. Indeed, international research has shown that working conditions in the long-term care sector are difficult and even dangerous, a situation that has been exacerbated by privatisation. It can be added to this consideration that this effect has been appearing during the Covid-19 crisis itself in extreme manners. (3) Thirdly, it can be assumed that the neoliberalisation of the nursing home sector has shifted the health and financial costs onto the patients (who increasingly get referred to as (healthcare) consumers). Indeed, from both a health and a financial point of view, private homes are more expensive for patients. Thus, the profits have been "privatized" and go to the employers, i.e. the (new) owners of the private nursing houses, while the costs are "socialised", i.e. have to be borne by the patients, who, as they grow older, receive a lower quality of care and have to pay extra for basic services."

³²Corporate Europe Observatory and Tansley (2021), p. 13.

³³Mercille (2017), p. 4.

³⁴Mercille (2017), p. 4.

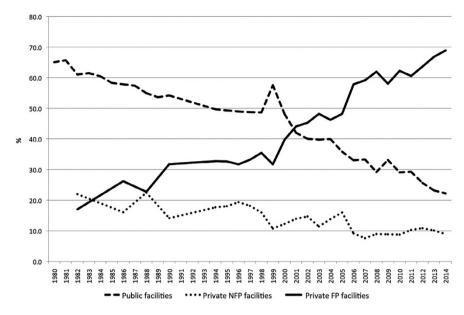


Fig. 6.1 Percentage of total beds by nursing home ownership in Ireland in 2017 [Source: Mercille (2017), p. 4 (further explaining how she collected this data)]

nursing homes only accounted for 22.2% of the total number of nursing home beds, while private for-profit nursing homes provided 68.8% and private non-profit nursing homes provided 9.0%.³⁵

According to the already quoted study of Eurofound, by 2011, long-term nursing homes were almost exclusively privately provided in the Netherlands, Germany, and the United Kingdom (England and Scotland). Around that time, in the Netherlands the law stipulated that nursing home services were to be provided entirely by the non-profit sector. In Germany too, non-profit provision was predominant, although there were significant regional variations. On the other hand, in the United Kingdom (England and Scotland), private provision of nursing home beds was mainly for-profit. Private provision of nursing home beds constituted 20% or less of the total in the Nordic countries, some eastern European countries (namely Estonia, the Czech Republic, Romania and Slovenia) and finally Greece, where the institutionalised provision of long-term care was very limited. Said study of Eurofound also highlighted the lack of cross-sectional data and, moreover, indicated that the data available showed a shift towards the private provision of long-term nursing services, driven by an increase in relying on vouchers and cash benefits.³⁶

Table 6.1 gives an overview of the share of nursing homes provision in Europe in 2017.

³⁵Mercille (2017), p. 4.

³⁶Eurofound (2017), p. 9.

Contractor	Private	Director and the Ct	V	TT 1.	
Country	for-profit	Private non-profit	Year	Unit	
Austria	22%	29%	(No information)	Residential care beds	
Belgium (Wallonia)	32%	29%	(No information)	Residential nursing home beds	
Belgium (Flanders)	12%	49%	2017	Residential care beds	
Czech Republic	16%	The figure of 16% concerns both for-profit and non-profit	(No information)	Residential care places	
Estonia	80%		(No information)	Residential care places	
France	17%	28%	2008	Residential care beds	
Germany	34%	59%	2007	Residential nursing home places	
Greece	App. 1%	The figure of 1% con- cerns both for-profit and non-profit	(No information)		
Hungary	ry 37% The figure of 37% concerns both for-profit and non-profit		2006	Residential care beds	
Ireland	65%	9%	(No information)	Residential care places	
Italy	22%	43%	2005	Residential care beds	
Netherlands		100%	(No information)		
Norway	4%	6%	2008	Long-term care institutions	
Romania	a 17%		(No information)	on) Residential care places	
Spain	27%	27%	(No information)	Residential care service	
Slovenia			2007	Residential care beds	
Sweden	en 17% The figure of 17% concerns both for-profit and non-profit		2009 Individuals living in types of residential a sheltered housing		
United Kingdom (England)	76%	16%	2009	Residential nursing homes	
United Kingdom (Scotland)	om		2007	Residential nursing home places	

 Table 6.1 Share of nursing homes provision in Europe^a

^aSource: Eurofound (2017), p. 9

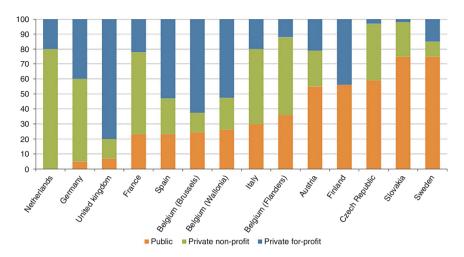


Fig. 6.2 Distribution of providers of nursing homes according to ownership (%)

The study of Eurofound also quoted from another source of data for the year 2012, which had pointed out that the private provision of long-term nursing services was particularly high in the Netherlands (where it was almost entirely non-profit) and in Germany and the United Kingdom (where it was mainly for-profit). This alternative source of data quoted by Eurofound also confirmed that most long-term nursing services in the Nordic countries and in eastern Europe were still provided by the public sector.³⁷

The data of this alternative source are presented in Fig. 6.2.³⁸

From the data gathered and quoted by Eurofound, it, furthermore, appeared that less than one-quarter of the total number of long-term nursing homes in Greece, Germany, the United Kingdom (Scotland), Ireland and Italy were still in public hands. In the case of Greece, there were even only two public nursing homes for elderly in the entire country. By contrast, the public provision of long-term nursing services constituted more than half of the total in the Nordic countries and in central and eastern Europe (with the exception of Croatia, Lithuania and Romania).³⁹

Taking into consideration the changes in the total number and the "market" share of nursing homes over—roughly speaking—the period from 2004 until 2016, the data gathered and referred to by Eurofound demonstrated that the number of public nursing homes had increased considerably in Slovakia (by 39% between 2004 and 2017) and in Romania (by 30% between 2008 and 2014). In both countries, this was at the same time coupled with a much higher growth in the number of homes in the

³⁷Eurofound (2017), p. 10.

³⁸"In Spain, Italy, the Netherlands and Slovakia, only data combining residential and home care are available. In Spain, no clear distinction can be made between for-profit and non-profit providers. No-profit providers include all those with a formal contract with autonomous communities; private for-profit providers include those with an authorisation only" [Eurofound (2017), p. 11].

³⁹Eurofound (2017), p. 12.

private sector,⁴⁰ pointing to the fact that in those countries there was probably a catch-up going on, whereby before elderly people had been more cared for at home or in a family setting rather than being admitted to nursing homes. This took place in Romania, where the number of private nursing homes substantially increased from 42 in 2008, to 141 in 2014. Similarly, Slovakia's 116 private nursing homes in 2004 had ballooned to 267 in 2017. Moreover, in some of these countries, the share of private provision increased: private nursing homes in Romania constituted around one-third of the total in 2008, whereas in 2014 they represented more than half of all nursing homes.⁴¹ The Romanian example points to a public policy stimulating the private provision of healthcare services in general. The astounding 236% growth of the Romanian private care home sector is in part attributable to the reform of Romania's health system in 2009, when health insurance was discontinued for 66 public hospitals due to high operating costs and the low numbers of patients. These hospitals were all closed in April 2011, although some later reopened as ordinary nursing or residential nursing homes for elderly. Of these, 19 were still operational in 2015, with a total of 966 beds and 896 enrolled beneficiaries.⁴² Aside from national policy, European policies regarding structural and investment funds also played an important role in the development of private nursing home facilities in Eastern Europe. E.g., from 2007 onward, several funding opportunities became available to NGOs to "rehabilitate, modernise, develop and equip social service infrastructure"; the eligibility of these NGO private projects had, moreover, been restricted to the north-east and Bucharest-Ilfov regions.⁴³

The number of both public and private nursing homes also grew (albeit to a lesser extent) in Lithuania, Malta, and Spain. In Lithuania, pointing to a similar evolution whereby elderly care was increasingly institutionalized. In these countries, at the beginning of the 1990s, the management of public nursing homes was moreover transferred from the state to local authorities. By 1994, care institutions owned by the state had still accounted for less than 20% of the total number of public nursing homes, with the rest being managed by local authorities. On the other hand, in Malta, while the number of non-profit nursing homes owned by the church decreased slightly as of 2009, the numbers of both private and public homes for elderly were on the increase. By 2016 there was an equal number (15) of church, private and public nursing homes. The rate of growth of the nursing home sector in Spain was very similar to that of Malta. Yet, during the first decade of the twenty-first century, the public nursing homes sector was still increasing more than the private nursing home sector, with the number of public nursing homes reported of increasing by around 25%, with a smaller increase in private nursing homes. Until 2011, the nursing homes sector as a whole increased at a rate of around 6% per annum. However, public budget cuts and decreasing purchasing power resulting from the

⁴⁰Eurofound (2017), p. 12.

⁴¹Eurofound (2017), p. 12.

⁴²Eurofound (2017), p. 14.

⁴³Eurofound (2017), p. 14.

economic crisis limited this increases to just 0.2% between 2010 and 2011, with subsequent decreases afterwards. The crisis particularly hit private centres with "arranged" places (that is, with places in private nursing facilities subsidized with public money).⁴⁴

According to the study of Eurofound, Cyprus was the only country (for which data were available) where there had been an increase in public nursing homes and a decrease in private ones. While public provision increased by around 10%, around one-third of private nursing homes closed, partly due to a reduction in state funding to non-profit providers.⁴⁵

A large group of countries saw a clear decrease in public nursing homes, while the number of private nursing homes was clearly growing: This was, e.g., the case for the Czech Republic, Croatia, Germany and Slovenia.⁴⁶

In Croatia, the number of public "social welfare" nursing homes (mostly established by local and regional authorities) for both older and infirm persons had decreased from 46 in 2003, to 45 in 2014. All new nursing homes in Croatia established between 2003 and 2013 were of a private (mainly for-profit) nature, with the market share of private nursing homes having increased significantly from 15% in 2003, to 27% in 2013. The main driver behind this increase was the lack of capacity in state and other public homes to meet the increased demand for accommodation.⁴⁷

In Germany, the introduction of long-term care insurance in 1994 was followed by reforms inspired by the ideas of "new public management", such as opening the market to private providers in order to increase competition, introducing contractbased management between the state and the service providers, and the allocation of public funds by healthcare insurers who also negotiated agreements with service providers. This policy approach led to an increase in private, for-profit providers within the care sector, and the general restructuring of institutionalised forms of nursing provision—especially in the case of private, non-profit providers. The number of public nursing homes in Germany decreased by 14%, from a total of 649 in 2003, to 555 in 2013. During this period, the number of private, non-profit providers by 29%, and that of private, for-profit providers by 49%. As a result, the total share of nursing homes that were of a private (both for-profit and non-profit) nature grew to 95% of the total.⁴⁸

In Slovenia, the private sector started to provide institutionalized nursing care in 1999, in order to meet the increasing demand for such services that could no longer be met by the public sector. Between 2007 and 2015, the number of public nursing

⁴⁴Eurofound (2017), pp. 14–15.

⁴⁵Eurofound (2017), p. 15.

⁴⁶Eurofound (2017), p. 15.

⁴⁷Eurofound (2017), p. 15.

⁴⁸Eurofound (2017), p. 15.

homes decreased from 74 to 59, while the number of private nursing homes increased from 14 to 39. 49

There was also a last group of countries, where both public and private institutionalised nursing provision declined. This group of countries included France, the United Kingdom (notably Scotland) and Norway (in the latter country with the exception of private, non-profit nursing homes, which grew from 33 to 40 between 2009 and 2015).⁵⁰

In Norway, private non-profit nursing homes (which in the past had mostly been linked to religious institutions) had in most cases become integrated in the municipal healthcare system, with the services these homes provided differing little from those in municipally run nursing homes themselves. Up until 2006, private non-profit providers had struggled when competing with private for-profit providers. This was attributed to the fact that they had to ensure the same level of benefit pensions as public providers, while at the same time facing higher costs.⁵¹

For the United Kingdom (notably England), the Institute for Public Policy Research (IPPR), as quoted and referred to by Eurofound, indicated the evolution of the nursing homes sector as "the story of how deregulation in the financial sector, sometimes referred to as financialization, has transformed not only (the) economy but also (...) public services."⁵² Notably, since the 1970s, when the majority of healthcare was still provided by the state, provision in England inexorably shifted towards the private sector, moreover dominated by for-profit providers. From data gathered by Future Care Capital and (again) referred to by Eurofound, it appeared that this process has been ongoing since then.⁵³

By comparison, in Scotland, between 2004 and 2015, the biggest decreases were in the private, non-profit sector and the public nursing homes sector, with nearly one-quarter and one-fifth respectively of nursing homes closing.⁵⁴

According to another study from the IPPR,⁵⁵ by September 2019, more than eight out of 10 nursing home beds (namely 84%) in the United Kingdom were provided by private, profit-driven companies, in most cases owned by small, local entrepreneurs,⁵⁶ but also more than 50,000 nursing home beds were provided by large operators owned by private equity firms.⁵⁷ In the past, these had considered the care sector as an easy way to get rich fast, although their business model had in many

⁴⁹Eurofound (2017), p. 15.

⁵⁰Eurofound (2017), p. 15.

⁵¹Eurofound (2017), p. 15.

⁵²Blakeley and Quilter-Pinner (2019), p. 3.

⁵³Blakeley and Quilter-Pinner (2019), p. 4.

⁵⁴Eurofound (2017), p. 15.

⁵⁵Cf. Blakeley and Quilter-Pinner (2019).

⁵⁶Blakeley and Quilter-Pinner (2019), p. 4.

⁵⁷Campbell (2019).

Rank	Organisation	Total homes	Total beds	Registered beds as % of all for- profit homes	Cumulative total market share	Ownership
1	HC-One Limited	271	16,266	5.1%	5.1%	Private equity
2	Four Seasons	214	11,856	3.7%	8.9%	Private equity
3	Barchester Healthcare	165	10,559	3.3%	12.2%	Public company with ultimate share- holder register in Jersey
4	Care UK	111	7462	2.4%	14.6%	Private equity
5	BUPA Group	118	6972	2.2%	16.8%	Provident Associa- tion (for profit division)

Table 6.2 Market share and ownership model of the largest care providers (brands) by beds in 2019^a

^aSource: Blakeley and Quilter-Pinner (2019), p. 6

cases started to falter, esp. because of the financial crisis of 2008.⁵⁸ According to Blakeley and Quilter-Pinner, these large private equity-backed providers engaged in long-term nursing, at the same time got increasingly involved in the real estate markets through the ownership of vast amounts of land. Experts estimated that, as of the 1980s, over £30 billion of capital costs had in this manner been invested in the nursing sector. This was especially typical for the "residential care" -model. However, because of this, such providers increasingly got involved in the nursing services market, not because of their specialism in providing nursing services, but because of the advantages of a debt-based real estate boom.⁵⁹

Table 6.2 gives an overview of the market share and ownership model of the largest care providers (brands) by beds in the United Kingdom in 2019.

As a result of this evolution, local councils in the United Kingdom had almost completely withdrawn from this important segment of social care that they hereto-fore dominated.⁶⁰ According to Campbell, private for-profit enterprises owned 381,524 (83.6%) of the 456,545 nursing home beds in England.⁶¹

However, the fact that private equity-backed enterprises had taken over a significant proportion of long-term nursing provision in the United Kingdom was no longer seen as so positive, as these private, for-profit enterprises were increasingly

⁵⁸Blakeley and Quilter-Pinner (2019), p. 4.

⁵⁹Blakeley and Quilter-Pinner (2019), p. 6.

⁶⁰Campbell (2019).

⁶¹These figures are based on research by the IPPR think tank (in collaboration with Future Care Capital), based on analysis of data from the CQC and Companies House.

fuelled by $debt^{62}$ and driven by the prospect of rising property prices and everdecreasing nursing costs, which was believed to put the socially vital long-term nursing sector at increasing risk.⁶³

In contrast, 13% of long-term nursing beds were still provided by the voluntary, non-profit sector and 3% by so-called local councils, which had previously been the main provider of long-term nursing care for vulnerable older people for decades.⁶⁴ However, since 2015, 91% of local councils in the United Kingdom had increased their use of private long-term nursing home beds as an alternative for directly providing these services themselves. Based on analysed trends in nursing bed use by 147 of England's 151 local councils, 133 had resorted to this outsourcing method; by contrast, only 14 had reduced their reliance on privately nursing homes.⁶⁵

Private enterprises thus increased their market position regarding long-term nursing homes in just a few years, while the government itself had repeatedly cut basic public social care funding for local councils. Although the total government spending had increased during recent years, the £21.3 billion that was granted to local councils in 2018 amounted to £700 million less than the £22 billion that had been put into social care in 2010–2011.⁶⁶ The IPPR was said to urge the UK's ministers to make the state a major provider of nursing homes again by spending £7.5 billion to provide up to 75,000 additional beds by 2030, with a focus on long-term nursing provision provided by local councils or private non-profit

⁶⁶Campbell (2019).

⁶²According to Blakeley and Quilter-Pinner, these providers relied heavily on commercial banks and financial markets for their (debt) funding. In the decade following the 2008 financial crisis, when interest rates had become very low, many long-term nursing providers thus became heavily indebted and resorted to borrowing on a limited equity basis to expand their businesses by buying up smaller residential care providers. E.g., when "Three Delta" bought "Four Seasons" in 2006 (before it was further sold on to "Terra Firma" in 2012), 80 per cent of its £1.4bn cost was financed by debt. When "Four Seasons" ultimately went under in 2019, it had £500 m of debt, costing £50 m each year in maintenance. In such debt-based business models, the cost of this debt is usually passed on to healthcare consumers in the form of higher tariffs and/or less quality services. (Cf. Blakeley and Quilter-Pinner 2019, pp. 6–7.)

⁶³Campbell (2019).

⁶⁴Campbell (2019).

Barbara Keeley, then Shadow Cabinet Minister for Mental Health and Social Care, expressed her opinion (as quoted by Campbell) that it was shocking that so much social care was provided by large private providers who put profit before people and where, all too often, the quality of care provided was simply not good enough. Barbara Keeley added to this assessment that social care was in dire need of reform and yet the Tory government had abandoned responsibility for the care needs of older people and people of working age and they had no credible plan to solve what she saw as a health crisis. (Cf. Campbell 2019.)

⁶⁵Campbell (2019).

According to Campbell, Kensington and Chelsea Borough Council in London had experienced the largest increase in outsourcing to the private for-profit sector over the period, this practice being reported of having risen by 50.9%. The next largest increases were seen in Westminster (42.7%), Bracknell Forest in Berkshire (32.6%) and Tower Hamlets in East London (25.5%). (Cf. Campbell 2019.)

organisations. IPPR expected this to be necessary to help cope with an expected sharp increase in the number of people over-75 and over-85 during the decade to follow.⁶⁷

In France, over a 15-year period, financial incentives had been granted to private for-profit enterprises, as well as home care agencies, to enable them to enter the long-term nursing market. Between 2007 and 2011, the share of public and private nursing homes remained stable and unchanged (48% and 52% respectively).⁶⁸

6.1.1.4.2 Available Beds in Nursing Homes

While the aforementioned Eurofound-study provides access to plenty of data on the amount of nursing homes broken down by ownership, similar data on the relative share of available spaces in these homes was a bit scarcer. During the periods mentioned in the Eurofound study, the share of available places seemed similar to the share of nursing homes in most countries, with the exception of Malta, Romania, Slovakia and Slovenia, where the share of places in public nursing homes was significantly higher than the actual market share of the public nursing homes themselves (by more than 10 percentage points). According to Eurofound, this suggests that in this latter group of countries, public long-term nursing homes were larger in size than their private counterparts. In all these countries, the number of places in both public and private nursing homes had increased over the decade in question, with the largest increase occurring in the number of beds in private nursing homes. Most countries for which data was available saw an increase in the number of beds available in both the public and private sectors over the investigated period. This was the case in Belgium, Spain, Malta, Romania and Slovenia. As with nursing homes, the largest relative increase in the number of places in private nursing homes occurred in Romania (from 1538 in 2008 to 5601 in 2014, an increase of 264%). This increased the proportion of places in private nursing homes from 20% to 44%.⁶⁹

The number of places in public nursing homes had increased more rapidly in Malta (by 65% between 2009 and 2016). Despite a decrease in the number of church-owned homes, the total number of beds available in Malta had increased in all categories of nursing homes since 1992.⁷⁰

Between 1996 and 2016, the total number of beds in Belgium in the residential nursing home sector had increased by 35%. The largest increase had been in Flanders, where the market share of private beds had increased by more than 20% between 2003 and 2013. In contrast, the total number of nursing beds in the Brussels region had decreased since 2001, due to an overcapacity of beds (especially in private nursing homes). The only type of beds that increased slightly (by 2%)

⁶⁷Campbell (2019).

⁶⁸Eurofound (2017), p. 15.

⁶⁹Eurofound (2017), pp. 16–17.

⁷⁰Eurofound (2017), pp. 16–17.

between 2003 and 2013, were in non-profit nursing homes. In the Walloon Region, the number of beds in non-profit institutions had also increased (by 17%), while the rest had remained more or less stable.⁷¹

In Spain, reports from the National Institute for Elderly and Social Services (IMSERSO), as again quoted by Eurofound, distinguished between "public places", "private beds based upon public subsidies" ("concertadas") and (fully) "private places". The data for 2010 showed that of the total number of long-term nursing beds available (368,805), 25% had been offered in public facilities, 27% had been publicly subsidised places in private nursing homes, and 48% had been purely private places. The percentage of subsidised places in private centers, compared to the total number of available places, increased from 15% in 2002 to 27% in 2010.⁷²

Another group of countries, referred to in the report of Eurofound, consisted of those where the supply of private beds had increased and the supply of public beds had decreased; this was the case in Austria, France, Ireland, Lithuania, Slovakia and, to some extent, Norway, where the number of private for-profit beds had decreased.⁷³

In Austria, with the introduction of the so-called "long-term care allowance" (or, in German "Pflegegeld") in 1993, the total number of nursing beds had increased significantly, while the number of beds in public and private non-profit nursing facilities had stagnated from 1998 onwards, and the share of private for-profit beds (and profit-making nursing homes themselves) had continued to increase - so much so that in 2010 they accounted for about one fifth of all nursing beds.⁷⁴

In Ireland, the market segment of private providers for nursing home care for the elderly had increased significantly between 2003 and 2014, with the number of private beds having increased by 49%, and the number of public nursing beds having decreased from around 9000 to 6656. This evolution was believed to have been facilitated by tax breaks for the construction of private nursing homes, which had been in force from 1997 to 2009. The aim of these tax breaks had been to increase the overall supply of nursing home beds in order to relieve the pressure on public hospital beds, which were used to care for the elderly in areas with relatively few nursing home beds. Although there was no explicit policy to replace public nursing beds with private ones, the existence of the tax breaks for the private beds, along with the lack of investment in public nursing beds, effectively supported this trend. The increase in the total number of beds was thus mainly due to the expansion of nursing beds provided by the private sector. In 1988, there had almost been 15,000 long-stay nursing beds, almost half of which had been provided by the public sector (such as health council geriatric hospitals and nursing homes). In 2015, the total

⁷¹Eurofound (2017), pp. 16–17.

⁷²Eurofound (2017), pp. 16–17.

⁷³Eurofound (2017), p. 19.

⁷⁴Eurofound (2017), p. 19.

number of nursing places had almost been 30,000, but with only 23% provided by public nursing homes. 75

In Norway, the number of privately operated beds in care homes remained relatively stable, although it increased slightly between 2012 and 2015 due to an increase in the number of beds offered by non-profit providers. However, this stability masked a significant shift from non-profit providers to commercial providers. The number of beds in non-profit nursing homes had evolved little from the 1980s, but eventually declined after 2010. Between 2000 and 2011, 30 nursing homes run by private, non-profit providers were reported to have closed. Municipalities also had the opportunity to enter into long-term contracts with non-profit providers, without having to go through a tendering process. Since the government, NGOs and employer organisations had signed a cooperation agreement in 2012, the number of beds offered by non-profit facilities has stabilised. The growth of commercially run nursing and care homes has since been slower than expected; this was largely due to the fact that the use of public tenders in this area was limited to a small number of municipalities.⁷⁶

From the early 1990s, an increasing amount of nursing beds in UK nursing facilities were provided by the private sector, with the for-profit private sector accounting for the lion's share of said places. The increase in provision in the independent (for-profit) sector was driven by a government policy that called for a "mixed care provision" and the application of the "best value" principle, which-as has already been explained before (cf. Sect. 6.1.1.4.1)—in practice led to more outsourcing of local public goods to the private sector, as this was assumed to bring greater cost savings compared to the care provided by local councils. This policy not only reflected in the numbers of private vs. public homes, but also in the division of places. As a result of these reforms, in 2014 in the United Kingdom as a whole, there were 187,800 places (86% of total capacity) in for-profit nursing homes, 17,600 in not-for-profit nursing homes, and 12,300 National Health Service (NHS) long stay beds. In total, the 25 largest private, for-profit facilities provided 30% of the nursing home beds (with 15% provided by the four largest, private organisations alone: "Four Seasons", "Bupa Nursing homes", "HC-One Ltd." and "Barchester Healthcare"), and the remaining organisations each providing 0.4% or less of the total capacity. In Scotland, over the decade in question, there was a decrease of around 20% in the number of public and not-for-profit beds, while the share in beds of the for-profit sector increased by just under 10%. Given these changes, in addition to the fact that the private for-profit sector was likely to operate larger homes, the proportion of for-profit beds in 2015 was 79% of the total, compared with 73% in 2004.77

Figure 6.3 gives an overview of the changes in the share of private beds in the period 2002–2016 in some European countries.

⁷⁵Eurofound (2017), p. 19.

⁷⁶Eurofound (2017), pp. 19–20.

⁷⁷Eurofound (2017), p. 20.

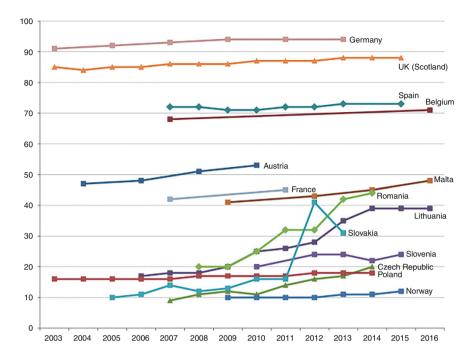


Fig. 6.3 Changes in the share of private beds in the period 2002–2016 (%). [Source: Eurofound (2017), p. 19]

6.1.1.4.3 Size of the Nursing Homes

In the opinion of Eurofound, combining the data on the number of nursing homes and the number of beds gives an idea of the differences in size between public and private nursing homes. In the periods surveyed by Eurofound, public nursing homes in Slovenia and Malta had on average more than twice as many beds as private ones. In Norway, private nursing homes were approximately 50% larger than public ones, while private nursing homes also had a larger capacity in Sweden. On average, all types of nursing homes were smaller in the United Kingdom (notably in Scotland) and in the Czech Republic. The average number of registered places per nursing home in the United Kingdom (Scotland) was 42 by March 2014. Nursing homes were also small in England: in 2010, local authorities operated on average larger residential nursing homes (24 beds) and "common" nursing homes (54 beds) than the private for-profit sector (19 beds and 48 beds respectively) or the voluntary sector (15 beds and 36 beds respectively). In Germany, most public or non-profit nursing homes had between 60 and 150 places.⁷⁸

⁷⁸Eurofound (2017), pp. 20–21.

In terms of changes over time in the average size of nursing homes, most countries for which data were available (Lithuania, Spain, Malta and Romania) saw a decrease in the average number of places in public nursing homes and an increase in the size of private nursing homes. This was the case in the United Kingdom (Scotland), where the average number of places per nursing home increased (38 in 2004) as older homes probably made way for larger purpose-built facilities. Also in Ireland, the number of private nursing home beds increased significantly in the period between 2003 and 2014, from 14,946 beds to 22,343 (an increase of 49%), although the number of homes increased only slightly, from 408 to 437 (by 7%). According to Eurofound, this shows that most new beds had been added by placing additional capacity in existing homes. Some 42% of participants in a survey conducted in Ireland in 2014 planned to expand capacity by an average of 19 beds over the next year. In France, nursing homes have increased their capacity by 5% since 2007. At the end of 2011, the average capacity was 68 (or 719,810 places for 10,481 facilities). In Denmark, there was also a trend towards building larger homes with more residents. However, the opposite trend was seen in Lithuania, where there was a decrease from 202 beds in 1990 to 48 beds in 2015.79

6.1.1.4.4 Number of Staff

In relation to the relevant period(s) covered by Eurofound's study, the size and number of nursing homes also largely related to differences in staffing levels. In Scotland, where most beds and nursing homes were private, 87% of nursing home staff, in 2014, worked in the private sector (the majority in the for-profit sector), compared with 13% employed by nursing homes run by local authorities or the NHS. In England, this percentage was even smaller. In total, there were around 555,000 jobs in nursing homes in 2015, representing 42% of adult social care jobs, or 38% when only nursing homes are considered. Only 4% of the residential care related jobs (26,500) were provided by facilities run by local authorities, and their number had fallen by around 30% between 2011 and 2015. This was mainly due to organisational restructuring, outsourcing and closure provision.⁸⁰

Staff members in residential care were one of the jobs for which demand increased the most in Europe between 2011 and 2015—by 16.2%. Changes over time in employment rates reflected changes in the number of nursing homes and beds.⁸¹

The Eurofound study included some other figures relating to some European countries: $^{\rm 82}$

⁷⁹Eurofound (2017), p. 21.

⁸⁰Eurofound (2017), p. 21.

⁸¹Eurofound (2017), p. 22.

⁸²Eurofound (2017), p. 22.

- (1) Germany: The number of staff in public nursing homes decreased by 11% between 2003 and 2013, while the number of staff members in private non-profit institutions increased by 26% and in private for-profit institutions by 67%.
- (2) Slovakia: Between 2005 and 2013, the number of employees in nursing homes increased by 39%, while the share of employees in non-public providers rose from 10% to 18% of the workforce working in nursing homes.
- (3) Latvia: Nursing homes employed 217 workers in 2014. Of these, 29 (or 13%) were employed in private institutions.
- (4) Romania: The number of staff in private nursing homes increased from 99 in 2008 to 406 in 2013. The effects of the financial crisis from 2008 onwards led to a moratorium on recruitment in public institutions. Although the average size of public nursing homes was larger than that of private homes, public nursing homes had only in large cities (such as Arad, Brasov, Bacău and Iaşi) more than 50 employees.
- (5) Finland: The number of staff members in privately managed institutions for protected living increased from 8353 in 2012 to 11,054 in 2013. This was presumably partly related to the introduction of the "Elderly Facilities Act" in 2012, in addition to a recommendation of a minimum staff-to-resident ratio of 0.5:1. There was also a notable increase in the number of staff members in privately managed homes from 2009 to 2010, and an even steeper decrease from 2012 to 2013, for which the explanation was not clear.
- (6) Croatia: The average number of employees in public social homes for the elderly and sick was 64 in 2003 and 79 in 2014, while the average number of employees in private homes was 17 in 2003 and 22 in 2014.

6.1.1.4.5 Number of Service Users

The largest increase in the number and proportion of residents in private nursing homes over the periods covered by the above-mentioned Eurofound study was observed in Romania, reflecting the increase in private care provision in said country. In Romania, the share of residents in private nursing homes rose from 21% of the total in 2008, to 44% in 2014. The number of users also increased in Finland, Croatia and Poland, both in public and private nursing homes.⁸³ In all these countries, the increase in the number of nursing home residents was greater in the case of private than in the case of public nursing homes. Between 2004 and 2014, Croatia recorded the largest increase in the number of residents in public nursing homes of all countries for which data were available (35%), as well as a significant growth in the number of residents in private nursing homes (119%). In Germany, Hungary, Lithuania, Sweden and Slovakia, the number of residents in public nursing homes increased.

⁸³Eurofound (2017), pp. 22–23.

The number of residents of nursing homes in Lithuania more than doubled between 1990 and 2015. At the end of 2015, there was about 5% of beds free in all types of nursing homes for the elderly in Lithuania.⁸⁴

The decrease in the number of residents in Swedish nursing homes was explained by an increase in the number of people receiving care at home. However, home care only partly compensated for the reduction in the number of residents admitted to nursing homes. The decreasing coverage could, more precisely, also be partially explained by the improved health of the elderly, but overall it had simply become increasingly difficult for elderly people in need of help to get a place in a nursing home (something that was often brought up in policy debates). The increase in the number of residents in private nursing homes could be due in part to the 2009 Law on System of Choice in the Public Sector (the LOV Act), which allowed long-term care users to choose a service provider. As of June 2016, about 158 of Sweden's 290 municipalities had introduced a LOV system in some form; 15 of these had introduced it in an area of special housing for the elderly.⁸⁵

In Cyprus, Greece and the United Kingdom, the number of care home users had decreased. Although no data are available for Greece before 2014, the president of the Greek Nursing Home Association noted that since the start of the financial crisis in 2008, a wave of departures from nursing homes had been registered, especially among non-dependent care users. Before the crisis, these nursing homes were at full capacity with waiting lists.⁸⁶ This suggested that elderly people without need for special care went back to living with their children in order to help their families.

Previous research by Eurofound had similarly shown that, as a result of the 2008 financial crisis, older people in Latvia, Hungary and Portugal moved out of care homes and into their children's homes to support the household financially with their pensions. The number of local authority funded nursing home residents in the United Kingdom (England), in a similar manner, fell to around 213,000 in 2014, representing a 22% decrease between 2004 and 2014. The percentage of local authority funded places provided by the for-profit sector had steadily increased from 88% in 2004 to 96% in 2014. Overall, 50% of nursing home residents in public and not-for-profit nursing homes decreased between 2005 and 2015, while the number of long-stay residents in for-profit nursing homes increased slightly (3%) over that period.⁸⁷

⁸⁴Eurofound (2017), pp. 23–24.

⁸⁵Eurofound (2017), pp. 23–24.

⁸⁶Eurofound (2017), pp. 22–24.

⁸⁷Eurofound (2017), pp. 22–24.

6.1.2 The United States

6.1.2.1 The Changing Structure of the Nursing Home Industry in the 1980s

The first and probably most intensive wave of submitting the American socioeconomic system to neoliberal doctrine, had already been accomplished in the 1980s under Ronald Reagan's presidency. Hence, it should come as no surprise that the reorganization of the long-term nursing home sector was largely accomplished during that period as well, roughly a decade before the countries of the EU started to follow the same path. As a result, from the 1980s onwards, the stay in an American nursing home became to an increasing extent a commodity service that was offered on the free market, rather than a public service.

The efforts of the Reagan administration to "neoliberalize" the US socioeconomic order of the 1980s in general led to an increasing "corporatization" of American healthcare, by some even considered as the most important development in this sector since the enactment of Medicare and Medicaid.⁸⁸ (On the latter, cf. Sect. 5. 2.2) In the opinion of Hawes and Phillips, through this, the for-profit segment of the modern healthcare sector gradually gained prominence, characterised by a rapid growth of proprietary "corporate chains".⁸⁹

Even before Reagan, the US nursing home sector had already been dominated by in-house private providers as early as the late 1960s, with the sector becoming increasingly dominated by publicly held corporations over the decades.⁹⁰ By the 1980s, nursing home care had become big business and was even said to be the third largest segment of the American healthcare sector. At the time, the sector was, moreover, expected to continue to grow due to an increasing life expectancy of the American population, shifts in morbidity and changing socioeconomic patterns regarding family life. The anticipated need for additional long-term care beds at the time was hereby believed to present policymakers with an important opportunity to influence the future of the long-term care system. While for-profit facilities already owned more than 75 per cent of the US nursing homes, they were still expanding rapidly in the nursing home and life care markets. Moreover, the cost of nursing homes was rising at an even faster rate than the cost of hospital care. Discrimination against unprofitable Medicaid recipients—i.e., those with more severe and expensive care needs—was widely acknowledged in this process.⁹¹

By the 1980s, the nursing home industry could generally be considered as an outgrowth of Medicare, albeit with much older and more complex roots. More precisely, the nursing home sector was believed to have formed out of the following factors: (1) a fusion of government funds (through various social security/Medicare

⁸⁸Hawes and Phillips (1986).

⁸⁹Hawes and Phillips (1986).

⁹⁰Hawes and Phillips (1986).

⁹¹Hawes and Phillips (1986).

programmes), (2) a growing need due to both socioeconomic and demographic changes and shifts in disease patterns regarding chronic illnesses, and (3) the interaction of policies directed at other types of care facilities (e.g., poorhouses, psychiatric facilities and acute care hospitals). During the process of growth of the long-term nursing home sector, the industry had also been altered in diverse manners. Some of the most profound changes included an increasingly medical-oriented environment, a shift from smaller to larger institutions, and a shift from governmentowned and/or volunteer homes to third-party owned private homes. The sector had, as said, also witnessed an increasing concentration of ownership in multi-facility corporate chains that diversified both vertically and horizontally.⁹² Especially during the 1970s and 1980s, the long-term nursing home sector had thus become characterised by an increasing concentration and corporatisation of ownership. This transformation was, moreover, enhanced by numerous regulatory impulses, such as changes in public reimbursement (under Medicare and Medicaid programmes), as well as regulatory policies in matters such as health planning and restrictions on bed supply, besides easier access for "corporate chains" to expansion capital and tax incentives.⁹³

As a result, the quality of care and quality of life for the residents of the private nursing homes became increasingly problematic, with a widening gap between the excellent care and opulent luxury offered to the upper crust of pensioners, and the seriously substandard care pushed on everyone else. According to Hawes and Phillips, in many ways, the aforementioned changes in the American long-term nursing home sector but mirrored the developments in the American health care system in general. Throughout the American healthcare system, there was thus an increasing tendency towards "corporatisation". In this way, the emergence of the large, multisystem corporate healthcare providers, as stimulated under neoliberal public policy, heralded a new era for American healthcare.

6.1.2.2 Present-Day Outlook of the Nursing Home Sector

By 2019, the US long-term nursing home market was estimated at USD 443.2 billion. The demand for what was referred to as "long-term care" (abbreviated as "LTC") had increased even more due to the recognition of unmet needs of the elderly that could no longer be met in traditional hospital settings. The US Department of Health and Human Services (HHS) at the time estimated that approximately 69% of the American population would require long-term care for an average of about 3 years during their lifetime, which stimulated demand.⁹⁵ In 2019, both long-term nursing homes and the provision of home care to elderly people continued to be the

⁹²Hawes and Phillips (1986).

⁹³Hawes and Phillips (1986).

⁹⁴Hawes and Phillips (1986).

⁹⁵Grand View Research (2020).

main segments of the American healthcare market. However, at the same time, longterm nursing homes and hospitals were no longer the only options for healthcare for the elderly. Rising healthcare spending in said facilities had turned the provision of nursing care at home into the de facto preferred option for many elderly people in need of special assistance. With an increasing preference and demand for home care, healthcare service providers started to introduce modern technologies and software to expand on the variety and quality of home care.⁹⁶

In 2017, more than two-thirds of the nursing beds in the United States were privately owned for profit, and more than half were owned by corporate chains.⁹⁷

At the time of the Covid-19 outbreak, 70% of nursing homes were profitable institutions. 98

6.2 Impact of Covid-19

6.2.1 Europe: When the Free Market Becomes a Killing Machine—Part 2

6.2.1.1 Why European Nursing Homes Were Unprepared for Covid-19

6.2.1.1.1 The General Landscape of Nursing Homes by 2020

Considering the foregoing, it should not come as a surprise that the highly privatized long-term nursing home sector was hardly prepared when Covid-19 struck the European continent, especially given its problem with a shortage of staff in general, and a shortage of qualified staff more specifically.

In essence, at the moment Covid-19 reached the European continent, there were still two main types of long-term nursing homes for the elderly operating in the various EU countries:

- (1) On the one hand, there still existed "public nursing homes" organized by public authorities. These "public nursing homes" had become increasingly subjected to stringent financial reporting obligations, indirectly enforcing austerity.
- (2) On the other hand, there was the growing sector of private institutions for elderly care, some for-profit, others non-profit.

⁹⁶Grand View Research (2020).

⁹⁷Cf. Mercille (2017), p. 4. Similarly, in Australia in 2017, one third of beds in nursing homes were owned by private for-profit companies and in New Zealand two thirds.

⁹⁸Eaton (2020).

The operation of the private for-profit nursing homes was based on the principles that govern all private companies, in particular the principle of profit maximization and cost minimalization to the ultimate benefit of the shareholders.⁹⁹

In essence, the operation of such nursing homes organized under the legal form of a private (capital) company does not differ from other private companies: Profit is maximized, on the one hand, by realizing as much turnover as possible (in other words, by selling one's own product or service as much and as expensive as possible) and, on the other hand, by driving down costs as low as possible. To achieve the latter objective, a wide variety of methods may be applied such as: keeping the number of staff low; keeping wages as low as possible (cf. the "Iron Law of the Wages"); looking for the cheapest suppliers (e.g., of material, of food, etc.); outsourcing sub-tasks; postponement of investments; saving on non-immediately profitable expenditure (such as prevention material) . . .

The limit to such cost-savings is however twofold: On the one hand, the maintenance of a sufficient degree of attractiveness of the services offered on the market, especially in comparison to what competitors have to offer; on the other hand, external quality requirements, such as government regulation that imposes minimum quality demands. However, the neoliberal sticking point lay especially on the last point. The neoliberal EU has, more precisely, enacted an impressive amount of regulation establishing minimum quality and protection rules in certain "critical sectors of the economy" (e.g., banking, finance, and insurance), but this is in sharp contrast with the scant regulatory interest for the care sector in general, and for the sector of long-term homes for the elderly in particular. Accordingly, the interest of national governments of the EU member states themselves in taking strong regulatory action against the nursing home sector is also low. As a result, the private longterm nursing homes sector are, to a large extent, allowed to function entirely in accordance with the basic principles of capitalism,¹⁰⁰ especially regarding its most crucial working aspects, such as staffing, and therefore also the care service provided.

6.2.1.1.2 Issues with Quality

According to Mercille, research generally shows that private for-profit health systems are generally less efficient, more expensive and less egalitarian, and that they lead to the provision of lower quality of care. According to this author, systematic reviews of homes for the elderly have especially pointed to the fact that private for-profit long-term nursing homes for the elderly provide a lower quality of care, ¹⁰¹

⁹⁹Byttebier (2018), pp. 21–37; Byttebier (2019), pp. 32–53.

¹⁰⁰Cf., in general Byttebier (2019).

¹⁰¹Cf. Mercille (2017), p. 5, further referring to a wide range of studies on nursing homes most of which were in favour of not-for-profit facilities while only a small minority of these studies were in favour of for-profit facilities. In particular, not-for-profit facilities provided higher quality care than

in other words, that they do not fulfil the criterion for their existence. One of the reasons why for-profit homes tend to provide a lower quality of care is that they have to face higher expenses for activities unrelated to care. A prime obstacle are the shareholders. They typically expect a 10–15% return on investment which has to be earned out of the general turnover of the nursing facility and can thus not be spend on guaranteeing quality service. Other elements which may lead to increased costs without resulting in better quality care concern the fact that taxes may be higher than in the non-profit sector or the public sector, and that executives of private, for-profit companies are likely to obtain higher salaries and bonuses than their colleagues in the non-profit or public sector. As a result, for-profit organisations have stronger incentives to cut costs on matters that relate to the care they provide, thus minimising care expenses, ultimately leading to lower quality.¹⁰²

Studies from the 1970s already described how private nursing home operators, at the time mostly still feeding on public money, cut corners to increase their profits, e.g., by providing low-quality food to residents and/or by employing fewer and cheaper, often less-qualified staff.¹⁰³

By contrast, the 2017 Eurofound report, which based its review on a large number of available studies between 2000 and 2017, made no decisive findings on differences in service quality between public and private nursing homes; however, results still varied from country to country.¹⁰⁴ (Cf. Sect. 6.1.1.4.1).

A study by the IPPR of September 2019 regarding the private nursing home sector in the United Kingdom (cf. already at Sect. 6.1.1.4.1) did find evidence that increasing reliance on private facilities led to lower quality of care. The IPPR saw the following indications with possible links between ownership and quality:¹⁰⁵

- Firstly, there was evidence that private providers had less staff training, higher staff turnover and lower wages.
- Secondly, the market for private healthcare had proven to be volatile, with companies owned by private equity investors, expecting a sufficient return on investment, and operating under highly leveraged business models.
- Third, the rise of large private providers contrasted with evidence that small nursing homes provide better care.

The same IPPR survey found that there was a correlation between the size of a provider and the quality of the facility. 89 per cent of both small nursing and residential nursing homes in the United Kingdom were according to the study

for-profits on two quality measures: more or higher quality staff and lower pressure ulcer prevalence. A number of other studies confirmed these findings and suggested that administrative costs might be higher in not-for-profit facilities. It has also been argued that scandals in nursing homes can be partly explained by cost savings in private operators.

¹⁰²Mercille (2017), p. 5.

¹⁰³Mercille (2017), p. 5.

¹⁰⁴Eurofound (2017), p. 43.

¹⁰⁵Blakeley and Quilter-Pinner (2019), p. 2.

rated as good or excellent by the CQC in 2017, compared to only 65% and 72% of the large nursing and residential homes respectively. This was of particular importance given that analysis by the CQC had at the same time indicated that larger long-term nursing homes—including those owned by private equity-backed providers accounted for an increasing share of the nursing homes market in the United Kingdom.¹⁰⁶

According to Eurofound, having a manageable staff-to-service user ratio, generally, increases the potential personal attention given to service users; it also avoids having a high turnover of staff due to excessive workload. According to its study, the latter has, e.g., occurred in France, where excessive workload had become the main reason why nurses and assistant nurses left their job. Nursing facilities facing labour shortages of (qualified) staff are also likely to face higher staff turnover rates. A qualitative study of 2016 (with 51 interviews and participatory observation) conducted by the "Upper Austrian branch of the Chamber of Labour" and quoted in the Eurofound-study itself, found that low staff-to-resident ratios worsened the working conditions of staff in both nursing and residential nursing homes. This was also the case in several other provinces in which the Chamber of Labour conducted similar studies (Vienna, Lower Austria, Styria and Tyrol).¹⁰⁷

One of the main criticisms regarding the private sector is that because nursing services are, by definition, labour intensive, as "nursing" or "care" has to be provided by one human being to another, profit on such nursing or care services can, basically, only be enhanced by reducing wages and staff. Evidence gathered by Eurofound's "Network of European Correspondents" and referred to in the Eurofound-study, indeed showed that the number of employees per resident was in general lower in the private sector in several of the countries analysed in said study.¹⁰⁸ In the United Kingdom in particular, the above-quoted study of the IPPR from September 2019 raised huge concerns over the staff-to-residents ratio in the nursing homes owned by big corporations. There was strong evidence that private providers had lower levels of staffing, higher staff turnover, lower rates of pay and lower levels of training. Numerous studies, including one by the Care Quality Commission, highlighted the link between the quantity and quality of the workforce, and the quality of the nursing and care provision itself.¹⁰⁹

Hence, one of the major problems that healthcare facilities across Europe faced at the outbreak of the Covid-19 pandemic has been a lack of (qualified) staff, not only in long-term nursing homes, but even in general hospitals. For a combination of reasons - including austerity in the public sector, and the sector of private institutions operating on the principle of "the maximization of profits and minimalization of costs" that generally determines the functioning of capitalist enterprises—nursing and care facilities across Europe especially faced a shortage of qualified nurses and

¹⁰⁶Blakeley and Quilter-Pinner (2019), p. 8.

¹⁰⁷Eurofound (2017), p. 34.

¹⁰⁸Eurofound (2017), p. 34.

¹⁰⁹Blakeley and Quilter-Pinner (2019), p. 7.

care givers. This phenomenon was all the more characteristic for nursing and care homes operating in the countries most affected by EU austerity in the aftermath of the financial crisis of 2008 (although the phenomenon also occurred in US private nursing and care homes).¹¹⁰

There was, moreover, a problem with low wages paid by both public and private providers. In 2016, the wages of personal care workers employed in residential care were ranked in the second-lowest quantile (medium to low paid), while the wages of personal care workers in home care ranked in the lowest quintile.¹¹¹ In Germany in particular, in 2014, wages in private nursing homes were, on average, lower than in non-profit and public nursing homes. Due to the high number of low-wage helpers in the care sector, in 2009, the Minister of Labour even extended a collective minimum wage agreement on care assistants ("Pflegehilfskräfte") concluded by the "United Services Union Ver di" and the non-profit organization "Arbeiterwohlfahrt" (AWO). Covering the care assistants/helpers in all residential nursing homes, in 2016 the agreement provided an hourly wage of EUR 9.75 in western Germany and EUR 9 in eastern Germany; the statutory minimum wage was EUR 8.50.¹¹²

From the study of the IPPR of September 2019, it similarly appeared that there was a downward trend on wages of the staff of the UK nursing homes, esp. regarding the for-profit nursing homes which were owned by large private equity-backed providers (cf. Sect. 6.1.1.4.1). According to Blakeley and Quilter-Pinner, the close relationships between financial interests and social care providing in these long-term nursing homes had drastically reshaped corporate governance throughout the sector. In particular, the business model of private for-profit nursing homes created a strong incentive for private companies to focus on the maximalization of shareholder value, rather than focusing on the quality of (public) services rendered (and through this, to the extent that public funding was used to pay for the costs of the stay, taxpayer value). Also according to the findings of these authors, shareholder value maximalisation was in many cases achieved by reducing costs connected to the provision of the nursing or care services itself. Some of these methods for

¹¹⁰Eurofound (2017), p. 35.

Still, according to Eurofound's 2016 "European Jobs Monitor" (EJM), care staff in residential care had a higher average level of education (reaching ISCED level 3) than their counterparts in home care (ISCED level 2). Similar data from the 2010 "European Working Conditions Survey" (EWCS), moreover, showed that the majority of residential care workers (in NACE code 87) felt that their skills corresponded well with their duties. The percentage of workers in residential care who reported they had received employer-paid training was higher than in other sectors. (Cf. Eurofound (2017), p. 35.)

¹¹¹Eurofound (2017), p. 36.

¹¹²On 4 May 2021, USD 1.2 amounted to 1 EUR, implying that hourly wages of EUR 9.75 amounted to 11.74 USD. Although the Eurofound report does not specify whether said wages are gross or net wages, it is nevertheless striking how low the wages in the sector are. By comparison, low-skilled workers in the American Amazon complain bitterly that their wages amount only to +/– USD 15 per hour (cf. Sect. 7.11.2.2), still more than qualified care givers earned in one of the most prosperous countries in the EU...

maximizing shareholders' value were fairly standard, albeit still damaging to society, such as tax avoidance, and putting a downward pressure on wages.¹¹³

Quality of care clearly took a hit in the United Kingdom. From the IPPR research regarding the situation in the United Kingdom in September 2019 (cf. Sect. 6.1.1.4.1), it even appeared that in private nursing homes, which by then accounted for 84% of all nursing home beds, fewer older people received help with basic tasks, such as washing and dressing, than had been the case in 2010. This was mainly attributed to cuts.¹¹⁴

6.2.1.2 Covid-19 Hitting the Sector of the EU Nursing Homes Hard

6.2.1.2.1 General Unpreparedness of the EU Nursing Homes Sector

When the Covid-19 epidemic struck in the EU in March 2020, the nursing home sector in the EU had hardly any preparatory measures in place: There were, in many cases, no contingency or emergency plans, no stocks of protective equipment, no protocols on how to respond to an epidemic or pandemic, no measures regarding visitors, etc.¹¹⁵ Stevis-Gridneff, Apuzzo and Pronczuk even made the suggestion that public health officials around the world largely and deliberately excluded long-term nursing homes from their pandemic preparedness plans, and simply omitted nursing home residents from the mathematical models they used to guide their policy responses.¹¹⁶

In the opinion of Stevis-Gridneff, Apuzzo and Pronczuk, of the countless missteps made by neoliberal governments around the world during the Covid-19 pandemic, few have had such a devastating impact as the complete failure of the EU and its Member States to protect EU long-term nursing homes and their residents. This complete failure of leadership is one of the main reasons why tens of thousands of elderly people in long-term nursing homes were abandoned to die, victims not only of the Covid-19 virus itself, but also of more than a decade of ignored warnings on the vulnerability of long-term nursing homes under neoliberal austerity.¹¹⁷

Moreover, the complete absence of dedicated surveillance systems and the huge differences in testing strategies and capacities, if at all available, between EU member countries may even imply a significant underestimation and underreporting of both the number of contamination cases, as well as Covid-19 related deaths. Especially during the first wave of the Covid-19 pandemic, the latter element most

¹¹³Blakeley and Quilter-Pinner (2019), p. 7.

¹¹⁴Campbell (2019).

¹¹⁵European Centre for Disease Prevention and Control (2020), p. 1. In this ECDC report, nursing homes are referred to as "long-term care facilities" (LTCFs).

¹¹⁶Stevis-Gridneff et al. (2020).

¹¹⁷Stevis-Gridneff et al. (2020).

likely resulted in a general underestimation of both the contamination cases and Covid-19 related mortality rates in the long-term nursing homes for the elderly.¹¹⁸

Be that as it may, even if the actual death toll has been undercounted, European countries were still world leaders in per capita deaths due to Covid-19, a death toll largely attributable to what was happening in long-term nursing homes.¹¹⁹

6.2.1.2.2 Some Elementary Numbers

Already early in the Covid-19 pandemic, Covid-19 has been found to have disproportionately affected older age groups across the WHO European Region - in the early months, people aged 50 and over accounted for about 70% of Covid-19 contamination cases and almost 100% of deaths from Covid-19. However, over the course of the pandemic, and as testing expanded, these numbers would change. By the end of 2020, almost 60% of all Covid-19 infections occurred in people aged 5–48, while those aged 50 and over still accounted for a large proportion of Covid-19 related deaths.¹²⁰

Especially from March 2020 onwards, the impact of Covid-19 on long-term care nursing homes for the elderly proved to be more than disastrous. A large proportion of these nursing homes across Europe—and globally—immediately began reporting severe Covid-19 outbreaks, with high rates of resident morbidity and mortality, in addition to high staff absenteeism because of Covid-19 symptoms. The transmission dynamics of Covid-19, combined with the low availability of testing, had led to a rapid spread within and between long-term nursing home facilities. This was believed to have resulted into high numbers of deaths among nursing home residents.¹²¹

According to Hall, Chazan, et al., at least two of France's big private healthcare enterprises had received early warning of the pending global Covid-19 disaster thanks to their operations in China. Said authors quoted Jean-Claude Brdenk, at the time CEO of Orpea—the world's largest private operator of long-term nursing homes that also runs a long-term nursing home south of Wuhan—in saying that Orpea had been warned by its Chinese teams as early as late January 2020 that a "Sars-type" disease had been rampant in Wuhan. Orpea, which at the time employed a 65,000 staff around the world, in response to this information began closing its 240 French Ehpads to visitors already a week before the French government ordered its first Covid-19 containment measures. Still according to Hall, Chazan, et al., Orpea also organized staff training, issued protocols, sought supplies of medical protective equipment and, in general, braced itself. Yet, even the people living in Orpea nursing homes were not spared. On 12 March 2021, the first positive case in

¹¹⁸European Centre for Disease Prevention and Control (2020), p. 1.

¹¹⁹Stevis-Gridneff et al. (2020).

¹²⁰World Health Organisation Regional Office for Europe (2020), p. 2.

¹²¹European Centre for Disease Prevention and Control (2020), p. 2.

an Orpea nursing home was reported. In total, 2600 of France's 18,500 Orpea inhabitants were reportedly contaminated with Covid-19, 416 of whom died between the beginning of March 2020 and the end of July 2021. After that time, Orpea reported only 16 more Covid-19 deaths.¹²²

In Sweden, overburdened emergency doctors acknowledged that they simply refused elderly patients.¹²³

In the United Kingdom, the government was reported of having send thousands of elderly hospital patients—including some with Covid-19—back to their nursing homes to make space for an expected increase in Covid-19 cases among the rest of the population.¹²⁴

A similar policy was put in place in some US states.¹²⁵

The figures from early May 2020, shortly after the first wave of Covid-19 was slowed down, speak for themselves.

France had set up a special reporting system for Covid-19 in nursing homes. Between 1 March and 11 May 2020, 7469 facilities had reported Covid-19 cases, of which 4367 (66%) had been in long-term nursing homes for the elderly and 2245 (34%) in other nursing homes, such as facilities for the disabled, or for children and young adults. Of the 73,435 reported confirmed and probable Covid-19 contamination cases among residents between 1 March 2020 and 11 May 2020, 13,539 (17%) died, including 3321 in hospitals and 9501 in nursing facilities, representing 50% of all deaths. In addition, 39,294 cases of contamination were reported among staff members.¹²⁶ As of mid-October 2020, 10,856 of the 33,037 Covid-19-related deaths had occurred in nursing homes, according to statistics.¹²⁷

As of 17 May 2020, Germany had reported 22,071 contamination cases from long-term nursing homes for the elderly, disabled, homeless, migrants or people in prisons. Of these, 8536 cases had been among members of staff (of which 42 had died) and 14,740 cases among residents. Of the residents, 2966 (amounting to 20%) had died, which accounted for 37% of all 7914 deaths related to Covid-19 at that time in Germany.¹²⁸

¹²²Hall et al. (2020).

¹²³Stevis-Gridneff et al. (2020).

¹²⁴Lintern (2020). Cf., furthermore, Stevis-Gridneff et al. (2020).

Figures released by NHS England show that 25,060 patients were transferred from hospitals to nursing homes between 17 March and 16 April 2020, when testing was not yet widespread, and amid growing warnings about the lack of preparedness of the social care sector, including shortages of protective equipment for staff. "This was done without any obligation to test those who were made redundant, while normal PPE (personal protective equipment) stocks for nursing homes were requisitioned for the NHS, and without even the semblance of a plan to protect social care." (Cf. Lintern 2020.)

¹²⁵ Stevis-Gridneff et al. (2020).

¹²⁶European Centre for Disease Prevention and Control (2020), p. 3.

¹²⁷Hall et al. (2020).

¹²⁸European Centre for Disease Prevention and Control (2020), p. 3.

Ireland also had a specific outbreak notification system for all infectious diseases, which was used to measure Covid-19 cases during the Covid-19 pandemic. As of 9 May 2020, 418 outbreaks of Covid-19 had been reported in long-term nursing facilities in Ireland (including retirement homes, direct care centres and private homes), with 5698 laboratory-confirmed cases and 727 confirmed deaths associated with these outbreaks.¹²⁹

In Norway, 136 (or 61%) of all 224 deaths due to Covid-19 reported up to 11 May 2020 had occurred in nursing homes or other care institutions.¹³⁰

In Sweden, 212 of the +/– 400 nursing homes in the Stockholm area had reported 1711 cases of Covid-19 as of 11 May 2020, which is 630 (45%) of the 1406 deaths due to Covid-19 in Stockholm. In Stockholm County, 400 nursing homes participated in a survey during the period 12–15 April 2020, with 212 (53%) of them reporting that they had confirmed Covid-19 cases. Of these 212 nursing homes, 123 reported the extent of their outbreaks, with 37% reporting 4–10 cases, and 22% >10 cases. In Sweden, 541 nursing homes were affected and 2866 confirmed Covid-19 cases, with 948 deaths, were reported in residents of nursing homes older than 70 years, amounting to 50% of all Covid-19-related deaths for this age group.¹³¹

In the United Kingdom, the "Office for National Statistics" listed 6997 (21%) nursing home deaths as Covid-19-related in mid-May 2020, out of a total of 33,337 registered Covid-19 deaths in England, and 404 (25%) nursing home deaths, out of a total of 1641 Covid-19 deaths in Wales between 28 December 2019 and 1 May and 9 May 2020, respectively. The "Care Quality Commission" listed 8314 nursing home deaths related to Covid-19, as reported between 10 April 2020 and 8 May 2020, in England, and 350 nursing home deaths in Wales.¹³²

As of 17 May 2020, Scotland indicated that 632 (58%) of the long-term nursing homes for elderly people had reported at least one presumable Covid-19 contamination case, and 463 more than one case of Covid-19, with 5096 possible cases in total. By 10 May 2020, 1438 Covid-19-related deaths had been reported from nursing homes, accounting for 45% of all 3213 Covid-19 related deaths.¹³³

It has been calculated that only about a third of European nursing homes had infection control teams in place before the Covid-19 pandemic. Most did not have in-house doctors, and many did not have arrangements with external doctors to coordinate care.¹³⁴

An important factor that helps explaining the spread of Covid-19 within Europe's long-term nursing homes was related to staff continuing working while infected, including symptomatic, pre-symptomatic and asymptomatic cases. Other contributing factors may have been the fact that many members of staff worked in more than

¹²⁹European Centre for Disease Prevention and Control (2020), p. 3.

¹³⁰European Centre for Disease Prevention and Control (2020), p. 3.

¹³¹European Centre for Disease Prevention and Control (2020), p. 3.

¹³²European Centre for Disease Prevention and Control (2020), pp. 3–4.

¹³³European Centre for Disease Prevention and Control (2020), p. 4.

¹³⁴ Stevis-Gridneff et al. (2020).

one long-term nursing facility, besides a lack of personal protective equipment (PPE), a lack of training and testing, and the fact that in many nursing homes, testing had been kept limited to symptomatic individuals. Limited testing may also have played an important role in underestimating cases. In addition, the high prevalence of neurological disorders, such as dementia and neuropathic conditions, among nursing home residents may have led to atypical clinical presentations of Covid-19, or the absence of obvious signs or symptoms until the patients' condition had worsened.¹³⁵

In general, European leaders, by fixating on saving their hospitals, often abandoned long-term nursing homes and their staff to their fate,¹³⁶ with disastrous consequences.¹³⁷

According to the Corporate Europe Observatory, the consequences of the Covid-19 pandemic will be felt for a long time to come: It is in all our interests to confront the interests and ideologies that have been all too successful in transferring public health care into private hands for profit.¹³⁸

6.2.1.3 Covid-19 Hitting the Nursing Homes of Some Countries

6.2.1.3.1 The Disastrous Impact of Covid-19 on the Belgian Nursing Homes

In the opinion of Stevis-Gridneff, Apuzzo and Pronczuk, few countries epitomise the fatally inefficient response to Covid-19 in their long-term nursing homes more than Belgium, where:¹³⁹

- 1. Government officials bluntly excluded nursing home residents from their testing policy until thousands of them had already died.
- Long-term nursing homes had to wait months for the right face masks and protective gowns.
- 3. When face masks ultimately arrived, they came fare too late and were often themselves either flawed or even outright dangerous.
- 4. Probably worse, during the first wave of the Covid-19 pandemic, nursing home residents were systematically denied access to hospitals, which in many cases meant that they were simply left to die.

Since Belgium is Belgium, it should come as no surprise that when Covid-19 struck, some of the abandoned directors of Belgian long-term nursing homes resorted to the strangest methods in their fight to keep Covid-19 out of their homes. One director of a nursing home, faced with no other alternatives, ordered

¹³⁵European Centre for Disease Prevention and Control (2020), p. 1.

¹³⁶Stevis-Gridneff et al. (2020).

¹³⁷ Stevis-Gridneff et al. (2020).

¹³⁸Corporate Europe Observatory and Tansley (2021), p. 14.

¹³⁹Stevis-Gridneff et al. (2020).

thousands of ponchos after having seen animal-keepers wearing them in a zoo in the countryside. Another nursing home managed to get 5000 decent face masks through a staff member's father who lived in Vietnam. The precious cargo was reported to have arrived via the Vietnamese embassy's diplomatic pouch.¹⁴⁰

In subsequent interviews, Belgian officials stated that refusing decent care to the elderly residing in nursing homes had never been part of an explicit or deliberate policy. In the best of Belgian traditions, things had just happened in the absence of a clear national strategy for dealing with the Covid-19 pandemic, and with regional ministers and other policymakers squabbling over who was in charge. Officials of all possible levels later simply acknowledged that most hospitals and emergency services had to rely on vague advice and guidelines on how to deal with the residents of long-term nursing homes. In many cases, this amounted to simply ignoring their existence and letting them die where they were.¹⁴¹

In March 2020, the situation in many of Belgium's long-term nursing homes was so dire that the medical charity and NGO "Artsen zonder Grenzen"/" Médecins Sans Frontières" decided to dispatch teams of its medical experts, who usually work in war-torn countries in remote and underdeveloped regions, to Belgium itself.¹⁴² Médecins Sans Frontières ("MSF") (or, in English: "Doctors Without Borders") thus undertook a first series of emergency interventions in nursing homes in Brussels, on 21 March 2020, and on later dates in Flanders and Wallonia as well. In addition, MSF established a crisis centre in Brussels in order to provide care to homeless people and migrants with Covid-19 symptoms. MSF, furthermore, started to provide technical assistance, as well as training to hospitals and convalescence homes.¹⁴³

MSF's aid to long-term nursing homes involved deploying mobile assistance teams, that usually consisted of a nurse, a health promoter and, if necessary, a psychologist. These emergency assistance teams were meant to provide technical expertise and training, aimed at increasing the capacity of nursing home staff, for dealing with matters like: infection prevention and control (IPC), organisation of care, testing, classification of nursing home residents into cohorts in accordance with their infection status, besides assistance in restarting activities through lockdowns. As the extreme needs of the Belgian nursing homes became more and more apparent, psychosocial support for the staff members of nursing homes soon became a substantial part of the emergency assistance teams' normal tasks.¹⁴⁴

¹⁴⁰Stevis-Gridneff et al. (2020).

¹⁴¹ Stevis-Gridneff et al. (2020).

¹⁴²Stevis-Gridneff et al. (2020).

¹⁴³Médecins sans Frontières (2020), p. 3.

In order to ensure sustainability, this action was carried out in close cooperation with the various authorities responsible for monitoring long-term care institutions. In Brussels and Wallonia, it also involved mobile teams of volunteers from the Fédération des maison médicales (FMM) and members of the Red Cross. (Cf. Médecins Sans Frontières 2020, p. 3.)

¹⁴⁴Médecins Sans Frontières (2020), p. 3.

An MSF intervention usually consisted of a first visit in order to meet with the head and other key staff members of the nursing home concerned and to assess the situation in said nursing home. Upon such a visit, the MSF assistance team then provided tailored recommendations for the specific circumstances of the nursing home concerned, while afterwards continuing to provide support through follow-up calls and, if necessary, additional visits with the aim of providing further training to staff members. The MSF also developed learning materials created specifically for Covid-19 settings, such as posters, videos, training courses and webinars on a wide variety of topics ranging from IPC measures, screening, mental health, to easing lockdown measures. This information was made available and distributed via websites to reach a broader audience than could be reached through physical support visits.¹⁴⁵

MSF reported that in total 135 Belgian nursing homes benefited from such physical support visits (81 out of a total of 138 nursing homes in the Brussels region, 33/602 in Wallonia and 21/821 in Flanders), with a total of over 3000 staff receiving such advice and practical support from MSF. Specific support requested from the mobile, emergency assistance teams was diverse and, in most cases, reflected the actual challenges and needs faced by the nursing home staff members in adapting to Covid-19, as well as to the changing overall response. An initial MSF visit often served to listen and provide an emotional debrief to the nursing homes management, as well as for providing feedback on the contamination prevention measures already in place within the facility, and even for providing some general reassurance.¹⁴⁶

To illustrate the extent of the extreme scenarios the MSF emergency assistance teams had to deal with, reference can be made to the following quote from an article that appeared in The New York Times from the hand of Stevis-Gridneff, Apuzzo and Pronczuk¹⁴⁷:

On March 25, [2020] when a team arrived at Val des Fleurs, a public nursing home a few miles from European Union headquarters, they were greeted by the stale smell of disinfectant and an eerie stillness, pierced only by the song of a caged canary.

Some staff members showed signs of trauma common in disaster zones, the medical charity found.

When the M.S.F. team arrived, both the director and her deputy were sick with Covid-19.

Seventeen people had died there in the past 10 days. There was no protective equipment. Oxygen was running low. Half the staff was infected. Others showed signs of trauma common in disaster zones, a psychologist from the medical charity concluded.

The director and her deputy were sick with Covid-19, and the acting chief collapsed in a chair, crying, as soon as the team met her.

"I never thought I would work with M.S.F. in my own country. That's crazy. We are a rich country," said Marine Tondeur, a Belgian nurse who has worked in South Sudan and Haiti.

¹⁴⁵Médecins Sans Frontières (2020), p. 3.

¹⁴⁶Médecins Sans Frontières (2020), p. 4.

¹⁴⁷ Stevis-Gridneff et al. (2020).

Ms. Tondeur was horrified at her country's response.

"I feel a bit ashamed, actually, that we forgot those homes."

In February 2020, when Covid-19 took root in northern Italy, Belgian officials had still shown little concern. Maggie De Block, Belgium's federal health minister, had been continuously downplaying the risk of Covid-19 for an entire month. Although trained as a medical physician herself, she did not consider it necessary to worry about hospital capacity or testing options. She was, by contrast, convinced that Covid-19 would be no worse than a seasonal flu.¹⁴⁸ (Cf. Sect. 2.4.2.3.6., on Belgium's initial reaction to Covid-19.)

Even after the WHO had pointed out the importance of drawing up plans for protecting long-term nursing homes, a spokesman of the health authority of the Dutch-speaking region of Flanders had still declared that there was no reason for concern whatsoever. Yet all warning signs were at the time present: To start with, Belgium was characterised by one of the world's largest long-term nursing home populations per capita (cf. Sect. 6.1.1.4.5). In addition, it was a well-known fact, backed by years of scientific research, that respiratory diseases, such as Covid-19 itself, were among the most common illnesses occurring in long-term nursing facilities for the elderly. Data on China, which by then had been made public to the entire global community, had, furthermore, clearly shown that the elderly residing in nursing homes were among those at greatest risk of dying from Covid-19. Finally, internal government reports dating back as far as 2006 had already called for more training on infectious diseases for nursing home doctors, as well as for more government support for stockpiling of protective equipment. Another report dating from 2009, similarly recommended that long-term nursing homes had to be included in Belgium's pandemic plan. However, both these proposals had never been acted upon.¹⁴⁹

All of this implied that, at the beginning of March 2020, when Covid-19 started hitting Belgium, Belgian long-term nursing homes were basically left on their own. In the official emergency documents with regard Belgium's internal risk assessment, long-term nursing homes were not even mentioned as one of the country's major concerns.¹⁵⁰

According to MSF evaluations during their visits to Belgian nursing homes, just over half of the Belgian long-term nursing homes (54%) had sufficient protective gowns, only 64% had sufficient FFP2 masks, and only 42% of staff members in charge of laundry had appropriate PPE protective equipment at their disposal. More than one out of six long-term nursing homes that had been paid a visit by an MSF emergency assistance unit did not have disinfectants capable of killing Covid-19 at

¹⁴⁸ "It isn't a very aggressive virus. You would have to sneeze in someone's face to pass it on," Belgian's Health Minister had said on March 3, 2020, adding (way ahead of the American President Donald Trump), "If the temperature rises, it will probably disappear." (Cf. Stevis-Gridneff et al. 2020.)

¹⁴⁹Stevis-Gridneff et al. (2020).

¹⁵⁰Stevis-Gridneff et al. (2020).

their disposal, while the means for disinfecting medical equipment was inadequate in 19% of all cases. In addition, a mere 53% of the long-term nursing homes felt that their staff members were sufficiently aware of the dangers posed by Covid-19 and its contamination risk. More than three out of ten nursing homes had declared not to conduct any Covid-19 screening at all; only 78% of all nursing homes reported to isolate plausible Covid-19 contamination cases in separate rooms, while more effective isolation or cohort formation of confirmed Covid-19 contamination cases had only taken place in 60% of the cases. Systematic therapeutic plans and end-of-life arrangements had only been available in seven in ten nursing home facilities.¹⁵¹

Many other problems the Belgian long-term nursing homes had been facing, were caused by the completely inefficient administration of Belgium itself. Belgium is divided by languages and has already for decades been extremely difficult to govern. In the opinion of Stevis-Gridneff, Apuzzo and Pronczuk, Belgium has so many layers of bureaucracy that foreigners sometimes call it an "administrative lasagne". At the beginning of March 2020, Belgium had not one, but—depending on the manner of counting—eight¹⁵² or nine¹⁵³ ministers of health, answerable to six

¹⁵¹Médecins sans Frontières (2020), p. 4.

From the MSF-report: "Infection prevention and control measures were so erratic in some nursing homes that, during visits, health workers were seen wearing bin liners as protective aprons, or they were seen dressed in full protective gear but moving from room to room without disinfection, spreading the virus from one room to another. In some places, the floor was so chlorinated that our shoes stuck to the floor, not to mention the toxic fumes that this concentration produced. It was clear that basic hygiene measures were already very weak before the crisis. One day, our team found itself face to face with a rat in a nursing home kitchen." (Médecins sans Frontières (2020), p. 21.) ¹⁵² According to "Knack", on March 2, 2020, there were eight Belgian Ministers competent for healthcare (cf. Engels (2020)), namely: (1) Maggie De Block, federal State. (2) Wouter Beke, Flanders. (3) Christie Morreale, Walloon. (4) Valérie Glatigny, French Community. (5) Bénédicte Linard, French Community. (6) Alain Marron, joint Community commission and Flemish community commission. (7) Elke Van den Brandt, joint Community commission and Flemish community commission. (8) Antonios Antoniadis, German community.

¹⁵³According to the "VRT", on May 26, 2020, there were nine Belgian Ministers competent for healthcare (cf. Arnoudt 2020), namely: "(1) Minister of Health Maggie De Block (Open VLD) on behalf of the federal government. She was at the time in charge of the "Federal Public Service (FPS) Health, Food Chain Safety and Environment", with policy support from the federal research center "Sciensano" and the "Superior Health Council". De Block and the FPS Public Health were responsible for, among other things, the organization of healthcare and the financing of hospitals. (2) Wouter Beke (CD&V) was the Flemish Minister of Welfare and Public Health. Together with the (Flemish) Agency for Care and Health, he was responsible for prevention policy, residential care centers, nursing homes, centers for day care, mental health care, care for people with disabilities, primary care, assistance to the elderly and hospital standards. (3) Christie Morreale (PS) was the Walloon regional minister responsible for health policy. Broadly speaking, she had the same powers as her Flemish colleague Wouter Beke, but on behalf of the Walloon Region, although public health was in accordance with the Belgian Constitution actually primarily a community power. (4) The French Community had no fewer than two competent ministers: Bénédicte Linard (Ecolo) who was responsible as community minister for everything that concerned children, and (5) Valérie Glatigny (MR) who was the French community minister responsible for scientific research and university hospitals. (6) Minister Antonios Antoniadis (SP) was responsible for health in the German-speaking Community."

different parliaments. While the federal government is supposed to play a coordinating role in the event of a pandemic, healthcare facilities in general, and nursing homes in particular, fall under the remit of the regional authorities. So even when Belgian officials had finally become aware of the threat posed by Covid-19, they could not act decisively until they had determined which of them was (most) responsible.¹⁵⁴

By mid-March 2020, when Covid-19 was spreading rapidly across Europe, the Belgian regional governments started advising nursing homes, but remained unhelpful in key areas. E.g., at a certain point in time, government documents started emphasising the importance of face masks, while at the same time stating that they were virtually unavailable,¹⁵⁵ as shortly before the Covid-19 outbreak, the Belgian Federal Minister of Health Maggie De Block had given the order to destroy the Belgian stock, without having taken measures to replace them. Worse still, Belgium was at that time also unable to test even a small fraction of infected persons. The health authorities had, therefore, decided to test only seriously ill, hospitalised patients. All others were simply told to recover at home. For the elderly, this policy implied that infected elderly people were told to remain in or go back to overcrowded, understaffed, inadequately equipped and unprotected nursing homes.¹⁵⁶

When Belgium closed down on 18 March 2020, dozens of residents of long-term nursing homes had already died.¹⁵⁷

There was overall no policy whatsoever for isolating the elderly. Later, it turned out that this had been another decisive factor in the high number of Covid-19 contamination cases and deaths in the Belgian nursing homes for the elderly.

Let us again quote from the article that appeared in the New York Times from the hand of Stevis-Gridneff, Apuzzo and Pronczuk:¹⁵⁸

Belgium went into lockdown on March 18. Dozens of nursing-home residents had already died. Three days later, Jacqueline Van Peteghem, a 91-year-old resident at the Christalain home, was sent to UZ Brussel, a nearby hospital, where she was tested for Covid-19. Within days, her test came back positive.

Shirley and Steve Doyen assumed Ms. Van Peteghem would remain hospitalized for treatment and to prevent the disease from spreading to scores of other residents. But her

In the bilingual Brussels-Capital Region, the picture looked even more complicated, because both the French Community and Flanders have joint competences there. That is why both (7) the French-speaking Alain Maron (Ecolo) and (8) the Dutch-speaking Elke Van den Brandt (Groen) were competent as ministers for, among other things, people with disabilities, hospital policy, policy for the elderly and mental health care. (9) State Secretary Barbara Trachte (Ecolo) was competent for prevention, but only for French-speaking Brussels residents. (Cf. Arnoudt (2020).) ¹⁵⁴ Stevis-Gridneff et al. (2020); Médecins sans frontières (2020), p. 4.

¹⁵⁵Stevis-Gridneff et al. (2020).

¹⁵⁶Stevis-Gridneff et al. (2020).

¹⁵⁷ Stevis-Gridneff et al. (2020).

¹⁵⁸Stevis-Gridneff et al. (2020).

6.2 Impact of Covid-19

symptoms had stabilized, and Mr. Doyen said that a hospital doctor declared her healthy enough to return home.

So, on March 27, paramedics in hazmat suits delivered Ms. Van Peteghem, on a stretcher, to the door of Christalain.

Mr. Doyen greeted them wearing a surgical mask.

"Is this mask all you have?" the paramedics asked, Mr. Doyen recalled.

"Yes," he said.

"Good luck," they responded.

For the next hour, Christalain staff members watched as the paramedics decontaminated themselves and their ambulance. Asked later about the hospital's policies, the chief executive, Prof. Marc Noppen, said infectious patients were not normally returned to nursing homes but that it may have happened in some cases.

No one can be certain if Ms. Van Peteghem's return was the reason, but Covid-19 infections in the home increased. Residents began dying. Ms. Van Peteghem, who initially survived the virus, died last month.

According to Stevis-Gridneff, Apuzzo and Pronczuk, the Belgian authorities were well aware of these and similar problems, as appeared from internal documents. "Some patients have returned from the hospital infected," a government emergency committee was quoted having written on 25 March 2020. "Several hot spots have been caused this way." In response to these problems, the emergency committee simply recommended testing nursing-home residents more, besides installing locations to house Covid-19 patients who otherwise would have been sent to their private or nursing homes.¹⁵⁹

Despite everything that went wrong, Belgium's national and regional authorities still could not agree on clear recommendations for long-term nursing homes, and so—not unusual for Belgium—a mishmash of conflicting policies emerged.¹⁶⁰

For another 2 weeks, while the Belgian government was finally starting to expand the country's testing capacity, specialised health advisers continued to oppose the addition of long-term nursing homes to the national priority list for testing. Said health advisors expressed their concern that even the country's new and expanded testing capacity would not be able to meet the demand of such expanded criteria (again according to official documents and government officials referred to by Stevis-Gridneff, Apuzzo and Pronczuk.)¹⁶¹

Ultimately, testing in long-term nursing homes began on 8 April 2020. When the first testing results were made public, one in five nursing home residents tested positive for Covid-19. At that moment, over 2000 nursing home residents had died already.¹⁶² By 5 May 2020—2 months after Belgian authorities had shown first

¹⁵⁹Stevis-Gridneff et al. (2020).

¹⁶⁰Stevis-Gridneff et al. (2020).

¹⁶¹ Stevis-Gridneff et al. (2020).

¹⁶²Stevis-Gridneff et al. (2020).

signs of taking Covid-19 more seriously—systematic testing of all residents and staff in a selection of Belgian long-term nursing homes with confirmed Covid-19 cases demonstrated that 73% (5695/7751) of PCR-tested positive cases had been asymptomatic.¹⁶³ As of 16 May 2020, 51% of the by then 9052 Covid-19-related fatalities had been identified as nursing home residents, with only 23% of these cases confirmed by laboratory testing. Further systematic testing for SARS-CoV-2 among all nursing home residents showed that 4% (5640/141,089) were positive for Covid-19 and more often symptomatic than asymptomatic (25% and 3%, respectively). Testing was then also conducted on nursing home staff members, which resulted in 3106/136,282 (or more than 2%) testing positive for Covid-19. Overall test positivity for Covid-19 was higher among symptomatic than among asymptomatic staff members (11%, and 2%, respectively). However, the total number of asymptomatic cases among both nursing home residents and nursing home staff members amounted to 75% (6540/8746) of all cases that had tested positive for Covid-19 at these facilities.¹⁶⁴

As the test debate unfolded as of late March and early April 2020, Belgian hospital physicians quietly stopped accepting Covid-19 patients from nursing homes. This policy—although officially qualified as a mere "advice"—took shape in a series of memos originating from Belgian geriatric specialists. According to these memos, extremely vulnerable and terminally ill patients were only entitled to receiving palliative care and were not to be admitted at the hospitals.¹⁶⁵

It is hereby assumed that, by then, the priority of Belgian politicians and policymakers had become to keep overall hospital capacity, at all cost, available for coping with an influx of "regular" (i.e., younger) patients and, thereby, to avoid a worst-case scenario of overcrowded hospitals like the one that had occurred in Italy or Spain. However, according to a report by "Médecins Sans Frontières", this policy at the same time implied that the residents and the staff members in communal housing, such as long-term nursing homes for the elderly or disabled, were simply abandoned to fend for themselves. According to one source, paramedics had even been instructed by their corresponding hospitals not to provide transport services to patients above a certain age, often 75, but sometimes as low as 65. It has even been suggested that high-ranking regional and national officials were fully aware of this policy.¹⁶⁶ Be this as it may, the result of this policy has been that in such long-term care facilities, living quarters had to be turned into improvised hospitals, which obviously lacked all elementary protective and other medical equipment, as well as both sufficient and sufficiently qualified health personnel to wage the unprecedented fight against Covid-19, and/or the knowledge of how to control an epidemic or pandemic in an artificially closed environment.¹⁶⁷

¹⁶³European Centre for Disease Prevention and Control (2020), p. 2.

¹⁶⁴European Centre for Disease Prevention and Control (2020), p. 2.

¹⁶⁵Stevis-Gridneff et al. (2020).

¹⁶⁶Molenberghs et al. (2020).

¹⁶⁷Médecins sans frontières (2020), p. 3.

Belgian nursing home residents with Covid-19 symptoms arriving at hospitals were time and again refused entry, even in cases where they had been referred by physicians who had diagnosed them as possibly infected, but likely to recover, and therefore had recommended to bring them to a hospital. There are no official data on how often this practice has been resorted to by Belgian hospitals, but "Médecins Sans Frontières" noted that about 30 percent of the long-term nursing homes it had worked in during its deployment in Belgium, had formally reported this problem.¹⁶⁸

Government figures, furthermore, speak for themselves. In the first weeks of the Covid-19 crisis, almost two-thirds of the fatalities among nursing home residents took place in hospitals. But when the Covid-19 crisis erupted in full force, and the abovementioned geriatric advisory notes started to circulate within hospitals, that number suddenly dropped. At the height of (the first wave of) the Covid-19 outbreak, only 14% of critically ill nursing home residents still made it to hospital. The rest were abandoned to die in their nursing home, according to official government data collected by Belgian scientists.¹⁶⁹ Before the Covid-19 crisis, the referral of nursing home residents to external medical services amounted to 86%. During the Covid-19 crisis, this number dropped to 57%. Among the long-term nursing homes visited by the MSF emergency assistance teams, just over 70% still received emergency medical intervention if called for. The number of visits by GPs (general practitioners) compared to the period before the Covid-19 crisis, was said to be down by half, which obviously had a huge impact on the medical treatment of nursing home residents, both for Covid-19 symptoms, and various other health problems.¹⁷⁰

In the opinion of Molenberghs et al., is impossible to estimate how many deaths were preventable. However, it was later reported that during the period that nursing home residents were systematically denied admittance, hospitals always had had available space. Even at the height of the first wave of the Covid-19 pandemic, 1100 of Belgium's 2400 ICU beds had remained free, according to Niel Hens, government adviser and professor at the University of Antwerp (as quoted by Molenberghs et al.).¹⁷¹

The emergency assistance teams of Médecins Sans Frontières ended their special nursing home missions in Belgium by mid-June 2020. Some of these team members returned to developing countries. Others went to work in another rich country facing a health crisis due to neoliberal austerity policy: the United States.¹⁷²

In an interview on 28 May 2020, Maggie De Block, Belgium's Federal Minister of Health and, as said, a medical doctor herself, testified about the long-term nursing homes as if they were but an unfortunate detail in an otherwise successful story of

¹⁶⁸Stevis-Gridneff et al. (2020).

¹⁶⁹Molenberghs et al. (2020).

¹⁷⁰Médecins sans frontières (2020), p. 4.

¹⁷¹Molenberghs et al. (2020).

¹⁷²Molenberghs et al. (2020).

government action. The Minister thereby proudly remarked that Belgium had never faced a shortage of hospital (ICU) beds.¹⁷³

The assessment of MSF, on the other hand, was muted:¹⁷⁴

As in many other countries, elderly populations – too frail and old to be a priority – have been overlooked in the emergency response. It is high time that these individuals, and the nursing home staff who have been stretched to the limit, were given the status and respect they deserve, and that action be urgently taken.

By July 2020, the Covid-19 pandemic in Belgium had caused 9731 deaths, mainly because of the disastrous handling of the pandemic by the authorities. Even more worryingly, 64% of these deaths had occurred among residents of long-term nursing homes, and a large proportion (almost 4900) of these deaths had occurred within the walls of these facilities themselves, in many cases under the most appalling conditions.¹⁷⁵

6.2.1.3.2 Spain

6.2.1.3.2.1 Finding the Dead in Nursing Home Beds

At the time of the Covid-19 outbreak, around 75% of the long-term nursing homes in Spain were privately run, although many residents received public funding in order to finance their stay. During the first wave of the Covid-19 pandemic, the army had to be deployed in order to decontaminate 1300 besieged long-term nursing homes located in Madrid, with disturbing reports of residents being found "dead in their beds" where they had simply been left to die.¹⁷⁶

In the Corporate Europe Observatory-report already referred to before, the Patients Defenders group's ombudsman is quoted describing how private longterm nursing homes had already long before the Covid-19-crisis struggled "to carry out savings somewhere to make a profit", further illustrated by a systematic lack of protective equipment and qualified staff. According to an investigation by the BBC, as again quoted by the Corporate Europe Observatory, relatives of residents from the Spanish nursing homes had found that even symptomatic patients had not been put in isolation, and that sick staff members had not been redeployed, which had left the remaining staff members on longer, exhausting shifts while they had no

¹⁷³Molenberghs et al. (2020).

¹⁷⁴Médecins sans frontières (2020), p. 29.

¹⁷⁵Médecins sans frontières (2020), p. 3.

From the MFS-report: "In one of the care homes, we found a man who was dying on his own, without care and without even a single personal belonging around him, because he had been moved into a different room from his usual one. There were faces in the hallway and there was no food in the fridges. A crisis meeting with the relevant parties and authorities took place the next day (MSF Medical Coordinator)." (Cf. Médecins sans frontières (2020), p. 16.)

¹⁷⁶Stevis-Gridneff et al. (2020).

protective material at their disposal.¹⁷⁷ Meanwhile, overcrowded hospitals, faced with a shortage of beds, were forced to turn incoming Covid-19 patients from nursing homes away, while further governmental guidelines were issued in which the nursing homes themselves were instructed not to refer residents suffering from Covid-19 to hospital.¹⁷⁸

In a report from December 2020, Amnesty International observed that the elderly were denied their right to health, as a result of austerity measures and the underfunding this had caused in Spanish healthcare.¹⁷⁹

From the Amnesty International Spain's December 2020 report titled "Abandoned: The lack of protection and discrimination against older people in care homes during the COVID-19 pandemic in Spain", it appeared in general terms that the measures resorted to by the Spanish authorities for fighting the Covid-19 crisis in Catalonia and Madrid, had been mostly both ineffective and insufficient. In addition, these measures themselves reportedly breached at least five human rights of longterm care home residents.¹⁸⁰ The Amnesty International report, furthermore, indicated that a decade of cuts in healthcare and social services had completely undermined the Spanish public health system and that this had worsened access, affordability and quality of health care. Amnesty International underlined that, while most elderly people in Spain were living in private (and often subsidized) retirement homes, this in no way detracted from the State's obligation to ensure the protection of their human rights, including against corporate abuses. In this viewpoint, the far-reaching privatisation of health care and care for the elderly does not diminish the State's obligation to protect its people, especially if this care is still subsided through public money. Still, it even seems that the lessons taught by the first wave of the Covid-19 pandemic were not at all learned. Too many mistakes were inexcusably repeated during the subsequent waves of the Covid-19 pandemic.¹⁸¹

According to Esteban Beltrán, director of Amnesty International in Spain, the human rights that had been violated during the Covid-19 pandemic were: (1) the right to health, (2) the right to life, (3) the right to non-discriminatory treatment, (4) the right to a private and family life, and (5) the right to a dignified death for elderly people.¹⁸²

Especially the denial of the right to health was seen as the result of years of austerity measures and underfunding of the healthcare sector in Spain. A decade of cuts in health and social services was thereby said to have completely undermined the public health system and worsened its accessibility, affordability and quality.¹⁸³

¹⁷⁷Corporate Europe Observatory and Tansley (2021), p. 10.

¹⁷⁸Corporate Europe Observatory and Tansley (2021), p. 12.

¹⁷⁹Corporate Europe Observatory and Tansley (2021), p. 12.

¹⁸⁰UTC (2020).

¹⁸¹Corporate Europe Observatory and Tansley (2021), p. 12; UTC (2020).

¹⁸²UTC (2020).

¹⁸³UTC (2020).

The consequences of undermining the public health care system have in particular been experienced in the long-term nursing homes in Madrid and Catalonia during the culmination point of the first wave of the Covid-19 pandemic (i.e., in March and early April 2020). This was felt in several ways: on the one hand, there was a complete lack of equipment for protecting the staff members of the Spanish nursing homes, who had not been handed out any personal protective equipment (PPE) and who had no access to PCR or other Covid-19 tests. When the Covid-19 pandemic broke out in mid-March 2020, nursing home staff members thus resorted to making their own PPE, from anything they could find, ranging from jackets, rubbish bags, pantyhoses, plastic caps...¹⁸⁴ On the other hand, a huge number of long-term nursing home residents did not get access to adequate medical care. Residents were generally excluded from referrals and admittance to hospitals and did, moreover, not receive the medical help they desperately needed in their nursing homes either, all of this despite the "medicalisation" of the nursing home sector that had been proudly announced by the Spanish authorities. In addition, many long-term nursing home residents were completely cut off from the outside world, as well as from their families, for several weeks.¹⁸⁵

To make things even worse, a lot of these human rights infringements were repeated during the second wave of the Covid-19 pandemic, notwithstanding efforts for improvement in some areas. E.g., family visits could still not be guaranteed in full during the second wave of the pandemic which, in practice, implied that they depended on the good will of individual nursing home staff members. In addition, the regulations on the Madrid and Catalonia hospital referral protocols, kept insisting that Covid-19 contaminated nursing home residents had to be treated in their nursing homes, rather than being transferred to hospitals. Moreover, no adequate measures were taken to increase levels of staff members for nursing homes to meet the needs that arose in light of the high pressure that the Covid-19 crisis put on healthcare services in general.¹⁸⁶

According to the Vice-President of the "Spanish Society of Geriatrics and Gerontology" (abbreviated as "SEGG"), Spain had not been sufficiently prepared for the Covid-19 pandemic, had ignored all scientific information originating from other countries, and had resorted to countermeasures far too late. During the pandemic itself, little further progress was made with regard to informing and training nursing home staff members.¹⁸⁷ The measures adopted by the "Autonomous Community" of Madrid and by the local Government of Catalonia (i.e., the "Generalitat") were conceptually flawed and implemented in an ineffective manner. Said authorities, moreover, adopted diverging measures which added even further to the confusion. The measures were not very helpful either, as, e.g., they did not contain clear criteria for dealing with contaminated people. There was, moreover,

¹⁸⁴UTC (2020).

¹⁸⁵UTC (2020).

¹⁸⁶UTC (2020).

¹⁸⁷UTC (2020).

little or no follow-up. Thus, the measures failed to ensure adequate healthcare and medical services for the elderly stuck in nursing homes.¹⁸⁸

A lack of qualified staff and resources to adequately fight the Covid-19 pandemic, combined with the mandated isolation of nursing home residents, thus resulted in a marked deterioration of the general health situation among nursing home residents.¹⁸⁹

In the assessment of Amnesty International, one of the further reasons why the Covid-19 virus was able to spread so easily and quickly in the Spanish long-term nursing homes was that the undermanned nursing staff had to be in constant contact with all nursing home residents, while they themselves had no access to any protection material. This lack of protection also led to a large number of contaminations and deaths among staff, which diminished the numbers of available personnel even more, thus resulting in a further negative impact on the way elderly people residing in nursing homes were cared for, besides on the management of health care in general.¹⁹⁰

The decision not to refer or admit sick elderly people to hospitals was, moreover, implemented in a rigid, automated manner, with little or no margin for carrying out individual assessments. As a result, most elderly nursing home residents could not get treatment for either Covid-19 infections or any other pathology they suffered from, neither in hospitals nor in the nursing homes themselves. Meanwhile, authorities kept announcing the opposite. Furthermore, in both of the above-mentioned autonomous regions, there were hardly any hospitalization admissions of nursing home residents. The very few referrals that did take place were exceptions to this general practice, and in many cases suffered from fatal delays as well. Amnesty International has qualified this practice as discriminatory and, therefore, as a most fundamental breach of the human rights of the elderly people concerned. In addition, Amnesty International gathered testimonies from which it appeared that the emergency ambulance services (SUMMA and SEM) resorted (and had to resort) to similar discriminatory practices.¹⁹¹ According to Amnesty International, there were even documented cases of nursing home residents suffering from dehydration and malnutrition.¹⁹²

At the height of the Covid-19 pandemic, residents in the nursing homes themselves were locked in their rooms for long periods of time, sometimes for several weeks in a row. The restrictions arising from such de facto confinements within the walls of the nursing homes, which in most cases involved locking elderly people up in their individual rooms for indefinite periods of time, was, furthermore, accompanied by a lack of any effective supervision by the national (i.e., the Public Prosecutor's Office) and regional authorities (i.e., the inspectorates). This implied that the

- ¹⁸⁹UTC (2020).
- ¹⁹⁰UTC (2020).
- ¹⁹¹UTC (2020).
- ¹⁹²UTC (2020).

¹⁸⁸UTC (2020).

human right of the elderly to a decent private and family life was violated merely because of the place where they lived.¹⁹³

The figures for the elderly who died in nursing homes are far from clear:

- (1) According to the January 2021 report of the Corporate Europe Observatory, by the end of April 2020, 6000 people were reported to have died in nursing homes in Madrid alone after having shown Covid-19 symptoms. According to this report, more than half of all deaths due to Covid-19 in Madrid and Aragón, were among people residing in nursing homes. This number even amounted to 86% in La Rioja (as of March 2020).¹⁹⁴
- (2) According to data released by the Autonomous Community of Madrid itself, in the period from 8 March 2020 to 1 May 2020, 5828 people died in nursing homes due to Covid-19 or compatible symptoms. This number represented 43.46% of the total number of deaths up to that date in the Autonomous Community of Madrid (with said data not broken down by age, gender and/or disability).¹⁹⁵
- (3) In Catalonia, according to data provided by the Catalan Government, in the period from 1 March 2020 to 15 November 2020, 7045 elderly people residing in long-term nursing homes died due to Covid-19 or compatible symptoms. This number accounted for 46.9% of all deaths in Catalonia from Covid-19, which in total amounted to 15,013.¹⁹⁶
- (4) The most detailed figures on the number of victims are probably those which the Spanish government (finally) announced on 3 March 2021 and which we shall examine in more detail below in Sect. 6.2.1.3.2.2.

Business analysts had in the past referred to the Spanish long-term nursing home market as a "resilient (investment) sector", i.e., one that is highly profitable and thus ripe for private investment. Business opportunities were enhanced by resorting to capitalist practices such as understaffing, employing underqualified staff, underpayment of staff and outsourcing of certain services, all shortcuts that have proven deadly during the Covid-19 pandemic.¹⁹⁷ An investor outlook dealing with the "Elderly Care Market" and published in early 2020 by real estate firm Knight Frank, had referred to the "growing demand for elderly care properties", with investment volumes "now in excess of €6.5 billion per year". And it was also made clear why the market for elderly nursing homes was advised as being such an interesting private investment opportunity. According to Knight Frank, pre-tax profit margins for private operators "typically range[d] from 25–35%", a figure that was to be achieved by rising service fees and ensuring a high occupancy rate, while

¹⁹³UTC (2020).

¹⁹⁴Corporate Europe Observatory and Tansley (2021), p. 12.

¹⁹⁵UTC (2020).

¹⁹⁶UTC (2020).

¹⁹⁷Corporate Europe Observatory and Tansley (2021), p. 12.

costs related to staff employment were indicated as representing "the main challenge for operators".¹⁹⁸

All of this is obviously significant, to the extent that news reports on how Covid-19 impacted Spanish nursing homes, time and again, focused on the following practices which have all contributed to the rapid and easy spread of Covid-19 in Spanish long-term nursing homes:¹⁹⁹

- understaffed residences,
- a lack of sufficiently qualified staff,
- staff not allowed to take sick leave/reimbursement,
- reports of staff members having to take much longer shifts than allowed under labour law,
- staff lacking training,
- staff not receiving PPE,
- staff doing occasional work in multiple nursing homes (in this manner contributing to the spread of the Covid- virus from nursing home to nursing home).

When advertising private investments in the long-term nursing home sector, Knight Frank also pointed to the advantages of Spain's "largely free market structure" for ensuring a high degree of profitability in the sector.²⁰⁰

When Covid-19 struck in Spain, the French-based "DomusVi" group was the market leader in Spain, owning 135 long-term nursing homes; one of them, in Alcoy, already made the news in March 2020, after 21 people died. By the end of 2020, there had been around 2100 deaths in all DomusVi nursing homes in Spain.²⁰¹

6.2.1.3.2.2 Figures Released on 3 March 2021

Several older studies regarding the numbers of Covid-19 contamination cases and Covid-19 related deaths, had first estimated that around 70% of the Covid-19 related deaths had occurred in long-term nursing homes. Early-December 2020, the central government was expected to publish a report, according to which this percentage would be between 50 and 47%.²⁰² But the exact number of seniors who had died in nursing homes because of Covid-19 remained one of the biggest unknowns of the Covid-19 pandemic in Spain, until, on 3 March 2021, the Spanish government finally released its own official figures. According to data from Spain's regions, systemized and collated by the Social Rights, Health and Science ministries, 29,408 seniors residing in long-term nursing homes had died due to the Covid-19 virus, or with compatible symptoms, as of February 21, 2021. The official number of Covid-19-related deaths in all social service residences, including those for people with

¹⁹⁸Corporate Europe Observatory and Tansley (2021), p. 12.

¹⁹⁹Corporate Europe Observatory and Tansley (2021), p. 12.

²⁰⁰Corporate Europe Observatory and Tansley (2021), p. 12.

²⁰¹Corporate Europe Observatory and Tansley (2021), p. 12.

²⁰²UTC (2020).

	Cases	Confirmed deaths	Deaths with compatible symptoms	Total deaths
Total	86,219	19,549	9859	29,408
Castilla y León	16,717	2894	1093	3987
Catalonia	11,080	3323	2095	5418
Castilla-La Mancha	10,027	1615	1188	2803
Valencia	10,018	1951	0	1951
Andalusia	9648	2085	0	2085
Basque Country	6196	1085	98	1183
Galicia	4192	752	23	775
Extremadura	4029	774	300	1074
Aragón	4014	1292	132	1424
Asturias	2787	701	0	701
Cantabria	1939	275	10	285
Madrid	1431	1478	4709	6187
Balearic Islands	1414	258	9	267
Murcia	1175	318	0	318
Navarre	1009	398	164	562
La Rioja	378	272	31	303
Canary Islands	137	73	7	80
Melilla	21	2	0	2
Ceuta	7	3	0	3

Table 6.3 Impact of Covid-19 in senior residences in Spain (Data from 14 March 2020 to 21 February 2021)^a

^aSource: Sosa Troya (2021)

disabilities and for other collectives, was reported to amount to 29,782.²⁰³ This is further illustrated in Table 6.3 which gives an overview of the impact of Covid-19 in senior residences in Spain (from 14 March 2020 until 21 February 2021).

The data released on 3 March 2021 essentially confirmed the devastating impact of the pandemic on the vulnerable population of elderly nursing home residents.²⁰⁴

According to the on 3 March 2021 released figures, between March and 22 June 2020, 19,835 seniors in long-term nursing homes had died with a confirmed Covid-19 diagnosis, or with compatible symptoms. This amounted to more than double the number reported between 23 June 2020 and 21 February 2021 which amounted to 9573. In addition, a total of 86,219 Covid-19 contamination cases were confirmed in senior residences since the beginning of the Covid-19 pandemic. Of this number, nearly 69,000 had been detected in 2020. According to the same figures, 23.7% of seniors who had tested positive for Covid-19 in 2020, had died. The real number of fatalities, however, is believed to be much higher, to the extent that, especially

²⁰³Sosa Troya (2021).

²⁰⁴Sosa Troya (2021).

during the first wave of the Covid-19 pandemic, many nursing home residents had died without being tested for the Covid-19 virus due to a shortage of tests, as a further result of which they were not included in the official toll. In 2021 so far, 18.7% of the Covid-19 contamination cases in long-term nursing homes for the elderly did not survive the Covid-19 virus.²⁰⁵

According to sources from "Imserso", three key moments of the Covid-19 pandemic are reflected in these data: The first phase of the Covid-19 pandemic in Spain was between March and June 2020, when the long-term nursing homes for the elderly were among the facilities most severely impacted. Afterward, there had been more resources, information provided by authorities had improved, and there was more preventive work undertaken in said long-term nursing homes themselves. As a result, the impact of the Covid-19 pandemic was reduced, yet still remained serious. There was then a third stage starting at the end of January, 2021, 1 month after Christmas, when the impact of the vaccination drive started to be seen.²⁰⁶

According to the Health Ministry report released on 3 March 2021, Spain recorded more than 70,000 official deaths after a positive Covid-19 infection had been detected. It was however, at the same time, indicated that it was difficult to compare this figure to the total death toll in long-term nursing homes due to a systematic underreporting during the first wave of the Covid-19 pandemic. But comparisons could still be made to the period from June 2020, when Spain's diagnostic capacity and reporting had started to improve. The Health Ministry thus reported a total of 38,776 Covid-19 fatalities between June 2020 and 21 February 2021. Of this figure, one in four (9782) were registered in long-term nursing homes.²⁰⁷

Madrid recorded the highest number of Covid-19 related deaths in long-term nursing homes, with 6187 fatalities, according to the 3 March 2021 data. Madrid was followed by Catalonia (5418 Covid-19 related fatalities), Castilla y León (3987 Covid-19 related fatalities) and Castilla-La Mancha (2803 Covid-19 related fatalities).²⁰⁸

The data on Covid-19 related deaths in Spain's long-term nursing homes are, furthermore, believed to reflect the severity of the health crisis Spain had to endure. The healthcare systems in the regions hardest hit by the Covid-19 virus were reported to have been completely overwhelmed, and many senior residents of long-term nursing homes were said to have died without receiving any medical attention at all. As mentioned in the previous Sect. 6.2.1.3.2.1, in Madrid, e.g., there were even official protocols advising against transferring nursing home residents to hospitals.²⁰⁹

²⁰⁵Sosa Troya (2021).

²⁰⁶Sosa Troya (2021).

²⁰⁷Sosa Troya (2021).

²⁰⁸Sosa Troya (2021).

²⁰⁹Sosa Troya (2021).

The general assessment is that Spanish long-term nursing homes for the elderly had been left on their own until very late. Moreover, the protocols designed by the Health Ministry were designed mainly with hospitals in mind, being of only limited use in nursing homes.²¹⁰ Another factor which helps to explain the huge death toll in Spanish long-term nursing homes is the fact that they grouped over-80s, with lots of pre-existing pathologies together, in places that were vectors of transmission because of the continuous coming and going of workers and the communal life of the residents, with shared spaces and utensils.²¹¹

6.2.1.3.3 The United Kingdom

In the United Kingdom, despite the fact that there had been early warnings of the potentially devastating impact of the Covid-19 virus in long-term nursing homes and their residents, the first wave of the Covid-19 pandemic still led to an extraordinary number of excess deaths among long-term nursing home residents. According to Scobie, the scale of mortality in nursing homes laid bare long-standing problems with nursing home service provision, as well as shortcomings in response to the Covid-19 pandemic itself.²¹²

Covid-19 related deaths in the United Kingdom in general rose sharply as of April 2020, and between mid-March 2020 and mid-June 2020, there had already been 19,286 Covid-19 related deaths among long-term nursing home residents.²¹³ However, the number of deaths unrelated to Covid-19 also rose. In the opinion of Scobie, with hindsight, it is very likely that many of these "unrelated" deaths were also from Covid-19 but had not been identified as such at the time. One reason for this was the limited testing capacity in long-term nursing homes at the time. The novelty of the Covid-19 virus, combined with its different symptoms often shown by older people, had made identifying the Covid-19 disease difficult as well.²¹⁴

When looking at the second wave of the Covid-19 pandemic, Covid-19 death registrations began to increase as of November 2020, rising sharply in the first weeks of 2021. Between 31 October 2020 and 5 February 2021, there were 16,355 Covid-19 related deaths registered among people residing in long-term nursing homes.²¹⁵

According to Scobie, comparing the scale of Covid-19 contamination cases and Covid-19 related deaths between the first and second wave of the Covid-19 pandemic remains challenging, the main reason being that there was so little testing during the early months of the Covid-19 pandemic. However, what is clear is that the burden of the Covid-19 virus has, obviously, fallen much more severely on the

²¹⁰Sosa Troya (2021).

²¹¹Sosa Troya (2021).

²¹²Scobie (2021).

²¹³Scobie (2021).

²¹⁴Scobie (2021).

²¹⁵Scobie (2021).

residents of long-term nursing homes (compared to the general population) during the first wave of the Covid-19 pandemic. Of the 48,213 Covid-19 related deaths registered between mid-March 2020 and mid-June 2020, 40% had been among long-term nursing home residents—compared with 26% of the 62,250 Covid-19 related deaths registered from 31 October 2020 until 5 February 2021.²¹⁶

Still according to Scobie, the number of so-called "excess deaths" gives a clearer understanding of the overall impact of the Covid-19 pandemic on long-term nursing home residents. This "excess" is the number of deaths above the "expected number" in comparison to the average death-rate of a given number of preceding years. In the United Kingdom, this was obtained by comparing the number of deaths from all causes, with the average number of deaths over the previous 5 years.²¹⁷

The United Kingdom had 35,067 excess deaths during the first 2 months of the Covid-19 pandemic, with 6331 deaths in the week ending 24 April 2020, alone. Between mid-June 2020 and November 2020, the number of deaths of long-term nursing home residents had been at, or below, the average for 2015–2019, and it was only as of mid-December 2020 that death registrations consistently exceeded the average.²¹⁸

Since the beginning of the Covid-19 pandemic, 86% of the deaths of long-term nursing home residents occurred within the walls of the nursing home itself, compared with 84% over the same period for 2015–2019.²¹⁹ Long-term nursing home residents whose deaths involved Covid-19 were, however, more likely to have died while away from the nursing home. Only 75% of this group had died in the nursing home, compared to 90% of patients without the Covid-19 virus. In other words, three in four nursing home residents were likely to have died in hospital. Deaths from other causes included a high proportion of deaths from dementia or Alzheimer's disease. The lower proportion of these residents who died in the nursing home reflects the limited benefits of hospital treatment at the end of life.²²⁰ The foregoing is further illustrated in Table 6.4 which gives an overview of the place of occurrence of deaths of nursing home residents (from 14 March 2020 until 5 February 2021).

By contrast, the second wave of the Covid-19 pandemic has seen significant excess deaths and confirmed deaths from Covid-19 across the country. Although nursing home residents have not been entirely protected from this, the disproportionate toll of excess deaths among nursing home residents that had occurred during the first wave of the Covid-19 pandemic, did not take place.²²¹ Figure 6.4 gives an

²¹⁶Scobie (2021).

²¹⁷Scobie (2021).

²¹⁸Scobie (2021).

²¹⁹Scobie (2021).

²²⁰Scobie (2021).

²²¹Scobie (2021).

	Deaths of nursing home residents	Deaths occurring in nursing homes	% Resident deaths occurring in nursing homes
Covid-19	37,895	28,319	75%
Other causes	115,829	104,258	90%
All causes	153,724	132,577	86%
Average 2015–2019	121,491	102,480	84%

 Table 6.4 Place of occurrence of deaths of nursing home residents (deaths registered from 14 March 2020 to 5 February 2021)^a

^aSource: Scobie (2021)

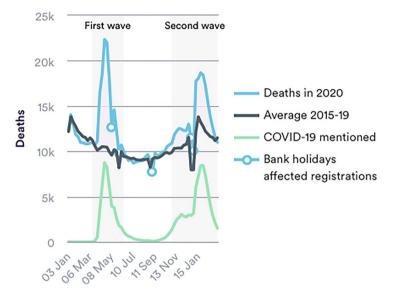


Fig. 6.4 Weekly deaths (England and Wales). [Source: Scobie (2021)]

overview of the weekly death numbers in England and Wales during the first year of the pandemic.

Looking for the reasons of the high death toll among long-term nursing home residents in the United Kingdom, Natasha Curry pointed out that the long-term nursing home sector had already been in a fragile state going into the Covid-19 pandemic and was ill-equipped to cope with a sudden tide of infections caused by an epidemic or pandemic. According to Curry, pre-existing staff shortages, a vast and precarious service provider market, long-standing financial shortfalls, and a lack of robust centralised data about who relied on care, together created a context in which a response to the Covid-19 virus was impossible to coordinate.²²² A slow and uncoordinated response on a national level, furthermore, led to delays in both

²²²Curry (2021).

delivery of PPE supplies and the rollout of Covid-19 testing. The drive to clear hospital beds during the first weeks of the Covid-19 pandemic, in addition, failed to take account of the reality of the settings into which many people were being discharged. Released patients were not always tested before leaving the hospital, and even when their Covid-19 status was known, the discharge wrongly assumed that long-term nursing homes had the space, staff and resources to effectively isolate Covid-19 positive residents.²²³

When the second wave of the Covid-19 pandemic approached, efforts in the United Kingdom were made to roll out faster Covid-19 testing, to deliver more reliable supplies of PPE, and to issue more timely and consistent healthcare advice to the sector, including an advice to reduce staff members working across multiple long-term nursing homes. The extension of the Covid-19 infection control fund until late March 2021 (while initially put in place until September 2020 only) was also a welcome factor for more effectively dealing with the Covid-19 pandemic, as was the pledge to supply the sector with PPE free of charge during the same period.²²⁴

Concerns around the financial stability of a wide variety of long-term nursing homes had already been raised before the Covid-19 pandemic,²²⁵ and the increased costs of PPE and staff sickness, alongside lower occupancy rates, created even more

From a study of the IPPR of September 2019 with regard to the private nursing home sector in the United Kingdom, it appeared that there were indications that a growing reliance on private provision could mean lower quality care. The IPPR saw the following indications with potential linkages between ownership and quality (cf. Blakeley and Quilter-Pinner (2019), p. 2): "(1) Firstly, there was evidence that private providers had less training for staff, higher turnover and lower pay. (2) Secondly, the private care market had proven volatile, with private equity owned businesses operating highly leveraged business models. (3) Thirdly, the emergence of large private providers contrasted with evidence that small nursing and residential homes provided better care."

From the same IPPR study, it even appeared that there was a link between the size of a provider and quality of provision. 89 per cent of both small nursing and residential homes in the United Kingdom were rated as good or outstanding by the CQC in 2017, compared with just 65% and 72% of large nursing and residential homes respectively. This had particular implications given that FCC analysis had shown that larger homes—including those owned by private equity backed providers—made up a growing share of the market. (Cf. Blakeley and Quilter-Pinner 2019, p. 8.)

²²³Curry (2021).

²²⁴Curry (2021).

²²⁵ The announcement that, by September 2019, private companies and corporations in the United Kingdom dominated the nursing home sector (i.a. owning 84% of the nursing home beds) raised concerns because some of the biggest private operators had large debts, were alleged to use tax avoidance schemes and drove down staff pay. The "Care Quality Commission" (CQC) watchdog warned that inadequate staffing levels at nursing homes could lead to elderly residents receiving poor-quality care (cf. Campbell 2019). At the heart of this evolution has been the emergence of astonishingly complex corporate structures, with individual corporations often comprised of multiple different subsidiaries—many offshore—used to minimise tax liabilities. Such structures are used to drive cost savings and profit increases. E.g., Barchester Healthcare was a subsidiary of Grove Ltd., which is registered as a public company in the Bailiwick of Jersey. Meanwhile, Care UK reduced its tax liability by shifting from equity to debt finance (which had risen from 33% of its capital to 85% in a decade). This is estimated to have saved them £25 million a year in tax. (Cf. Blakeley and Quilter-Pinner (2019), p. 7.)

extreme financial pressures. (Cf., furthermore, Sects. 6.1.1.4.1 and 6.2.1.1.2) Although the predicted widespread closure of long-term nursing home providers has not yet occurred, some care organisations only just managed to survive with the increased temporary Covid-19 pandemic support from the government. These might still risk closure in the longer run.²²⁶

6.2.1.4 Aftermath

According to the Corporate Europe Observatory, in July 2020, the "European Public Service Union" (abbreviated as "EPSU"), the "European Disability Forum", and the "Age Platform Europe" urged the European Parliament to investigate the devastating impact of Covid-19 on the long-term nursing home sector. Said institutions pointed to the contribution of "failed policies and underfunding", as well as to human rights abuses, general understaffing of the sector, and a lack of preventive safety protocols. In addition, the argument was raised that the lack of personal protective equipment for staff members employed in long-term nursing homes for the elderly and disabled, had not only killed numerous residents, but had also resulted in a large number of casualties among staff members.²²⁷ Given the importance of this letter, parts of it are quoted below:²²⁸

We are addressing you on behalf of EPSU, the European Federation of Public Service Unions that organises more than 3 million workers in health and social services, AGE Platform Europe, the European network of organisations advocating for the rights of older people, and the European Disability Forum (EDF), the umbrella organisation representing 100 million persons with disabilities in Europe. We are writing regarding to the dire situation in long-term care across Europe, and in particular in residential care facilities, as a consequence of the COVID-19 pandemic. In the light of recent, dramatic developments, we call on the European Parliament to launch an investigation to assess the failures in addressing and managing the crisis in this sector. This would include taking into account what aspects of residential settings have made them so vulnerable to this pandemic.

There is mounting evidence from several countries that a large proportion of infections and deaths have occurred in residential services for older people, persons with disabilities and other social service facilities. The World Health Organisation indicated that half of the deaths related to COVID-19 in Europe have so far occurred in residential care and support services. However, this is likely to be just the tip of the iceberg: the idea that deaths in residential care services are somewhat "normal" or "unavoidable," plus the lacking of proper testing, have led to the refusal in many countries to include those who have died in these services as part of the official statistics on COVID. Nevertheless, death counts for the months of March - April 2020 are significantly higher compared to the average number of deaths from previous years. A number of Member residential care and support services. However, this is likely to be just the tip of the iceberg: the idea that deaths in residential care services are somewhat "normal" or "unavoidable," plus the lacking of proper testing, have led to the refusal in many countries to include those who have died in these services are somewhat "normal" or "unavoidable," plus the lacking of proper testing, have led to the refusal in many countries to include that deaths in residential care services are somewhat "normal" or "unavoidable," plus the lacking of proper testing, have led to the refusal in many countries to include those who have died in these services as part of the official statistics on "unavoidable," plus the lacking of proper testing, have led to the refusal in many countries to include those who have died in these services as part of the many countries to include those who have died in these services as part of the refusal in many countries to include those who have died in these services as part of the refusal in many countries to include those who have died in these services as part of the refusal in many countries to include those who have died in these services

²²⁶Curry (2021).

²²⁷Corporate Europe Observatory and Tansley (2021), p. 12.

²²⁸European Civil Service Union, European Disability Forum and Age Platform Europe (2020).

6.2 Impact of Covid-19

official statistics on COVID. Nevertheless, death counts for the months of March–April 2020 are significantly higher compared to the average number of deaths from previous years. A number of member states have refused to consider the situation in long-term care facilities a priority, resulting in significant delays in responding to this crisis and neglect of the needs of workers and users in terms of protective equipment and safety protocols.

The appalling stories that are emerging draw an extremely worrying picture of both longstanding and contextual failures, revealing a serious lack of preparedness as well as a very poor and delayed management of the outbreak. This has contributed to thousands of preventable deaths and infections among those receiving care and workers. This sector has long been neglected and has had very low social and political consideration due to societies' discriminatory practices towards people in need of care and support. The shortages they face are now more visible than ever before. Workers on the frontline of the fight against COVID-19 have been left exposed by a lack of personal protective equipment, testing kits, training and safety protocols. The exposure of workers to the virus has left many residences critically understaffed, unable to meet basic needs and protect the rights of residents, which has only heightened the risk of fatalities.

To cite just a few examples, in Lombardy, the epicentre of the outbreak in Italy, EPSU's affiliates have encountered serious and worrying deficiencies in the management of the emergency in care for older people. This was due to lack of protocols and personal protective equipment. In some cases, even where protective equipment was available, staff were not allowed to use it because residents were not showing symptoms. Care staff working in residential care and support services and in home services feel as if they, and the people they care and support, are at the bottom of the list for PPE.

In addition, in many countries, despite the details on the number of doctors and other hospital staff that have fallen on duty, the numbers of care workers dead or infected because of COVID-19 are not gathered. Accurate data on the number of older persons and persons with disabilities living in residential care is almost absent in the EU. This makes the monitoring of their situation and accountability for their wellbeing in times of crisis even more difficult. All these elements combined contribute to an incomplete understanding of the situation.

The EU and all its member states are committed to the UN Convention on the Rights of Persons with Disabilities (CRPD), which includes a commitment to a transition from institutionalised to community-based and independent living. EU funding regulations prohibit the EU from funding institutionalisation of persons with disabilities. Community based, person-centred services too have been critically affected by COVID 19. This has left many persons with disabilities without support, forcing them either to rely on family care, or to turn towards other forms of care in institutions, which have become hotbeds of infection.

(...)

Political institutions need to address this failure: workers and users of care and support services are not second class citizens and it is imperative that an official European inquiry is launched into what has been happening in care services and what lessons we need to learn for the future. We owe it to those receiving care and to workers infected, as well as to the victims, to their families and to everyone in Europe.

European citizens expect of the European Parliament, their only direct representative at EU level, to show concern for what happens to them and to address this blatant and pan-European infringements of their rights. The evidence we put forward points to direct breaches of many of their fundamental Rights enshrined in the EU's Charter of Fundamental Rights—first and foremost their rights to life, dignity and health. For this reason we appeal to you to ensure that the European Parliament hears the voices and concerns of millions of

citizens, workers and families: we need you to take a stand and make full use of the Parliament's powers. A European investigation, via an inquiry committee or a special committee with full investigative powers, would be able to independently verify and assess the preparedness plans and the management of the outbreak in the care sector while providing critical information for future decisions and measures to ensure that this will not happen again.

(...)

Hall, Chazan, et al., have partly nuanced this kind of assessment. According to these authors, a variety of French physicians, caregivers and government officials have privately urged that the tragedy of the Covid-19 pandemic among the elderly must be put more into perspective. In the opinion of these authors, in an average year, about 180,000 of the 700,000 people residing in France's long-term nursing homes die from influenza and similar causes. According to the same authors (who thereto referred to information from the statistical institute "Insee"), France's highest daily mortality rate during the deadly 2003 heat wave, by far exceeded the worst days of the Covid-19 pandemic in March and April 2020. This argument, of course, makes little sense to the extent that said heat wave did not last for several months in a row.

However, the further reasoning of said authors remains worth mentioning The authors, more in particular, argued that the real tragedy for the elderly residing in nursing homes was twofold.

On one hand, some elderly died gasping for breath because only few long-term nursing homes had the oxygen equipment needed to treat critically ill Covid-19 patients, pointing to the general unpreparedness of the French long-term nursing home sector to deal with an epidemic or a pandemic (and, by extension, to a similar degree of unpreparedness of nursing homes all over Europe). On the other hand, there had been a huge social drama taking place in France, as survivors, many of whom were already disoriented because of illnesses such as dementia to begin with, had been systematically deprived of family visits and close contact with their loved ones during the last phase of their lives, by measures intended to prevent the spread of the Covid-19 virus. Still, politicians belonging to French opposition parties and some nursing home directors themselves, sharply criticised Macron's administration for its handling of the Covid-19 pandemic, including its narrow focus on hospitals, rather than on the far more vulnerable long-term nursing homes. E.g., Synerpa, a federation representing private long-term nursing homes, was quoted saying it had received "zero response" when it had written a letter to then-Health Minister Agnès Buzyn as early as 4 February 2020, with recommendations on how to tackle the pending health crisis.²²⁹

²²⁹Hall et al. (2020)

6.2.2 The United States

6.2.2.1 Covid-19 in American Long-Term Nursing Homes

6.2.2.1.1 Numbers and Cases

In the United States, according to the European Centre for Disease Prevention and Control, the first registered outbreak of Covid-19 in a nursing home occurred on 28 February 2020 in King County, Washington. According to the same source of information, by 18 March 2020, 167 contamination cases had been identified among residents, staff members and visitors of this nursing home. The hospitalisation rate for residents and staff members of this facility soon amounted to 50%, while the mortality rate among residents even amounted to 34%. Within the time frame of a few weeks only, 30 other long-term nursing homes in King County also reported outbreaks of Covid-19. From a later investigation, it appeared that staff members' mobility between nursing facilities had contributed to this quick and wide spread of the Covid-19 virus to long-term nursing homes all over the county. The study of what had occurred in King County has, moreover, been vital for understanding the spread of Covid-19 by asymptomatic people. The diagnostic study included the testing of both asymptomatic residents and staff members, in order to be able to evaluate the spread within and between the nursing facilities. Once the occurrence of asymptomatic infection had been identified, this allowed for the implementation of facility-wide control strategies, including measures of isolating all nursing home residents, rather than just the ones showing symptoms. From this, it became clear that merely focusing interventions on symptomatic residents and staff members would not have allowed to control Covid-19 transmission in a sufficient manner, as at least half or more of the contamination cases were found to be asymptomatic.²³⁰

By 3 December 2020, at least 106,000 residents and staff members of American long-term nursing homes, besides other long-term care facilities, had died due to Covid-19. On that date, the "US Covid Tracking Project" counted a total of nearly 270,000 Covid-19-related deaths throughout the United States, which implied that nursing home residents and staff members accounted for more than 39% of all Covid-19 deaths in the country.²³¹

According to The New York Times,²³² there had at least been 179,000 deaths due to Covid-19 among residents and staff members of American nursing homes and

²³⁰European Centre for Disease Prevention and Control (2020), p. 4.

²³¹Bondy (2020). Cf., furthermore, Stevis-Gridneff et al. (2020), p. 3.

²³²In the absence of complete data with regard to some states and the federal government, The New York Times had decided to compile its own database of Covid-19 contamination cases and number of Covid-19 related deaths in long-term nursing or care facilities for elderly adults. The latter included nursing homes, care facilities, memory care facilities, retirement and seniors communities, and rehabilitation facilities. Some states, including Colorado, Illinois, Nevada, New Jersey and South Carolina, had at the time regularly released cumulative data on both Covid-19 contamination cases and Covid-19 related deaths in specific facilities. Ohio, Wisconsin and

	Facilities	Cases	Deaths	Share of COVID-19 Deaths ▼
United States	31,000	1,345,000	179,000	33%
New Hampshire	88	6082	876	71%
Rhode Island	133	6855	1635	62%
Minnesota	892	23,706	4272	62%
North Dakota	170	9118	887	59%
Connecticut	347	22,085	4344	55%
Oregon	640	13,579	1277	53%
Massachusetts	645	34,905	8926	52%
Pennsylvania	1575	83,381	12,908	51%
Maine	108	4304	372	50%
Washington	2067	19,223	2558	48%

Table 6.5 Covid-19 cases and deaths, by 31 March 2021, in long-term nursing or care facilities of the 10 states with the highest share of deaths linked to nursing homes^a

The percentage points to the number of deaths in long-term care facilities in relation to the number of all Covid-19 deaths in the United States during the measured period of the pandemic. E.g., for the USA as a whole, this percentage amounted to 33%; for the state of New Hampshire to 71%, etc. ^aSource: Conlen et al. (2021)

In New York, the case count was often the same as the death count, because the state only reported the number of people who had died, but not the number of overall infections. (Cf. Conlen et al. 2021)

other long-term care facilities for elderly adults by 31 March 2021. By that same date, the Covid-19 virus had contaminated more than 1,345,000 people residing in about 31,000 nursing or care facilities.²³³ While only 4% of the country's Covid-19 contamination cases had occurred in long-term nursing or care facilities, the number of Covid-19-related deaths in said facilities amounted to approximately 33% of all Covid-19 related deaths throughout the United States.²³⁴ This is further illustrated in Table 6.5 which gives an overview of the Covid-19 cases and deaths, by 31 March 2021, in long-term nursing or care facilities of the 10 American states with the highest share of deaths linked to nursing homes.

On the same date (31 March 2021), the proportion of deaths associated with longterm nursing or care facilities for the elderly at a state level appeared to be even more stark. In 9 states, the number of deceased nursing home residents and staff members was reported to account for half or more than the total deaths due to Covid-19.²³⁵

Minnesota, amongst others, provided some details on the number of contamination cases in specific facilities—but not on the number of Covid-19 related deaths. And in New York, where Governor Andrew M. Cuomo's administration had been accused of covering up thousands of deaths in nursing homes, state officials did not include staff cases or deaths in their reports. Other states reported aggregate totals for their states but gave no information on where the infections or deaths had occurred. Some states reported very little or nothing at all. (Cf. Conlen et al. 2021.)

²³³Conlen et al. (2021).

²³⁴Conlen et al. (2021).

²³⁵Conlen et al. (2021).

Name	Location	Cases	Deaths ▼
Harris Hill Nursing Facility, LLC	Williamsville, N. Y.	107	107
North Ridge Health and Rehab	New Hope, Minn.	541	99
Fair Acres Geriatric Center	Lima, Pa.	473	96
Hebrew Home of Greater Washington	Rockville, Md.	539	83
Paramus Veterans Memorial Home	Paramus, N.J.	292	82
Parker Jewish Institute for Healthcare & Rehabilitation	New York, N.Y.	81	81
Cedarbrook Senior Care and Rehabilitation	Allentown, Pa.	401	81
Long Island State Veterans Home	Stony Brook, N.Y.	77	77
Conestoga View Nursing and Rehabilitation	Lancaster, Pa.	345	77
Father Baker Manor nursing home	Orchard Park, N. Y.	74	74
Soldiers Home in Holyoke veterans center and hospital	Holyoke, Mass.	161	74
Brighton Rehabilitation & Wellness Center	Beaver, Pa.	496	73
Courtyard Nursing Care Center	Medford, Mass.	72	72
The Plaza Rehab and Nursing Center	New York, N.Y.	71	71
Hialeah Nursing and Rehabiliation Center	Hialeah, Fla.	136	71

Table 6.6 Cases and deaths, by facility^a

^aConlen et al. (2021)

Still according to the same findings of The New York Times, Covid-19 infected people associated with nursing homes also died in larger numbers than the general population. The so-called "median mortality rate"—i.e., the number of Covid-19 related deaths divided by the number of Covid-19 contamination cases - in facilities that provided sufficiently reliable data amounted to 10%, which was significantly higher than the national mortality rate of 2%.²³⁶ There were, moreover, at least 31,000 long-term nursing or care homes which reported one or more cases of Covid-19.²³⁷

Table 6.6 lists the Covid-19 contamination cases and deaths in long-term nursing or care homes where at least 70 cases had been identified.²³⁸

6.2.2.1.2 Causes

According to an AARP report dated 3 December 2020 and referred to by Bondy, there were several causes for the extremely high number of Covid-19 deaths in long-term nursing homes throughout the United States, such as organisational problems of

²³⁶Conlen et al. (2021).

²³⁷Conlen et al. (2021).

²³⁸Conlen et al. (2021).

for-profit homes, a lack of adequate government oversight, and a general lack of accountability in the American nursing home industry.²³⁹

A further primary cause of the high mortality rate, concerned the failure of public health authorities at all levels to prioritise long-term nursing homes in both testing and the provision of personal protective equipment (PPE), failures which left the entire sector ill-equipped to deal with the spread of Covid-19.²⁴⁰ In the opinion of Eaton, the biggest mistake in America's response to the pandemic regarding long-term nursing homes has indeed been the country's failure to provide nursing home residents and staff members with early and widespread access to Covid-19 virus testing material. Without adequate testing, nursing home staff initially only concentrated on isolating nursing home residents and staff members descent who showed symptoms of Covid-19, while asymptomatic residents and staff members could continue spreading the virus.²⁴¹

The nursing home sector itself and its lacklustre organization and working methods have also partly been held responsible. At the time of the Covid-19 outbreak, many (for-profit) nursing homes were simply understaffed and underfunded. The for-profit structure also appeared to have lowered the quality of care in many nursing homes.²⁴²

Older residents of such homes, who were more vulnerable to Covid-19 because of their age, often lived together—with many of them even sharing rooms with a roommate.²⁴³

From an August 2020 report that had been commissioned by the state of Connecticut, it appeared that for-profit nursing homes in the state had about 60 per cent more Covid-19 contamination cases and Covid-19 related deaths per licensed bed than their non-profit counterparts.²⁴⁴

The risks were reported to even have been greater in long-term nursing homes run by private equity firms, the business strategy of which consists of temporarily taking over nursing homes, rationalize their cost structure and then re-sell them at a profit. From a study by the "Americans for Financial Reform Education Fund", it, e.g., appeared that such long-term nursing homes in the state New Jersey experienced a disproportionate number of Covid-19 related deaths.²⁴⁵

Staffing levels have also appeared of being an important factor in the spread of the Covid-19 virus. From a study of JAMA of August 2020, it, e.g., appeared that in eight states, long-term nursing homes employing more staff had fewer Covid-19 cases than facilities employing less staff members.²⁴⁶

²³⁹Bondy (2020).

²⁴⁰Eaton (2020).

²⁴¹Cf. Eaton (2020). Cf., furthermore, European Centre for Disease Prevention and Control (2020), p. 4.

²⁴²Eaton (2020).

²⁴³Bondy (2020).

²⁴⁴Eaton (2020).

²⁴⁵Eaton (2020).

²⁴⁶Eaton (2020).

The already quoted AARP report of 3 December 2020 also revealed that staff members in long-term nursing or care facilities who were underpaid (with an average wage of about USD 13 per hour), had to work in multiple nursing or care facilities in order to make ends meet. By doing so, they were unintentionally transmitting the Covid-19 virus over several nursing or care facilities and throughout their communities.²⁴⁷

In addition, many nursing home staff members did not enjoy health insurance or paid sick leave, which forced some to continue to work even when they had developed Covid-19 type symptoms.²⁴⁸

There were also reports about clear links between the assessed quality of nursing homes and the number of Covid-19 contamination cases and Covid-19 related deaths. E.g., researchers from the University of California, San Francisco, and the University of Rochester Medical Center, found that long-term nursing homes that had been granted a lower quality rating from their regulators before the Covid-19 pandemic, were more likely to have Covid-19 outbreaks than those with a higher rating.²⁴⁹

Another factor that has been held responsible for the huge number of Covid-19 contaminations and deaths, has been the complete lack of preparation by both the federal and state governments before the pandemic hit the United States. When Covid-19 first emerged in China in late 2019, both federal authorities and the states had failed to take any preparations against a possible outbreak in the American nursing home sector. Instead of ensuring that nursing homes had adequate protective equipment and contingency plans at their disposal, nothing had been done. As a result, when Covid-19 first hit the United States, long-term nursing homes were caught by surprise. The federal policy of prioritising critical care hospitals mandated states to purchase their own supplies. As explained before (cf. Sect. 5.3.2.3), shortly after the Covid-19 outbreak, this policy approach caused bidding wars on protective equipment (ranging from face masks to protective gowns, and even respiratory devices), leaving the long-term nursing homes empty-handed in most cases. When the federal government finally resorted to action for helping long-term nursing homes, it often did so with what has been referred to as "glaring incompetence". E.g., during the spring of 2020, the "Federal Emergency Management Agency" (abbreviated as "FEMA") started sending much-needed face masks, surgical gowns and other personal protective equipment to more than 15,000 long-term nursing homes throughout the United States. However, many of the shipments, which had been touted by Vice-President Mike Pence as "vital federal support" to the benefit of the long-term nursing homes, mostly contained unusable items, such as expired or defective surgical masks and surgical gowns without armholes, which were useless for protecting against the Covid-19 virus. Moreover, none of these federal shipments

²⁴⁷Bondy (2020); Eaton (2020).

²⁴⁸Eaton (2020).

²⁴⁹Eaton (2020).

contained what the long-term nursing homes needed the most, namely N95 masks that would have protected staff members from inhaling the Covid-19 virus and from then contaminating the elderly residents.²⁵⁰

Another factor explaining the huge number of Covid-19 related deaths in the American long-term nursing homes has been that the federal Centers for Medicare (CMS) and Medicaid Services had decided to scale back on their regulatory oversight of nursing home facilities early in the Covid-19 pandemic, in March 2020. This decision had increased the risk factors within nursing homes even more.²⁵¹ These altered monitoring rules had been meant to prevent outsiders from bringing in the Covid-19 virus within the walls of nursing homes. But as a result, nursing homes could operate at their own discretion.²⁵²

The CMS had also provided 21 billion dollars in federal support funds to longterm nursing homes, of which USD 2.5 billion was intended for Covid-19 infection containment.²⁵³ The rest of this federal support came with "no strings attached," according to the AARP report itself. As 70% of the long-term nursing or care homes are "for-profit" and were thus linked with higher Covid-19 related death rates,²⁵⁴ this made the AARP wonder whether said money had been put to optimal use for dealing with the crisis.²⁵⁵

6.2.2.2 The United States' Own Aftermath

In August 2020, it was announced that, according to a "Business Insider" review of data compiled by ProPublica, the Centers for Medicare and Medicaid Services (CMS), the Paycheck Protection Program, and Medicare.gov, about 220 long-term nursing homes that had been flagged for a litany of violations, had still managed to benefit to the tune of millions of dollars from Small Business Administration Paycheck Protection Program (PPP) loans (a lending program that was part of the CARES Act; cf. Sect. 4.4.2). Together, the long-term nursing homes cited by the CMS's Special Focus Facility (SFF) Program, as well as hospitals and business entities that own and/or manage those facilities, were said to have received between USD 149 million and USD 427 million.²⁵⁶

E.g., fifteen health citations had been levied against the Commander Nursing Center, which had been fined over USD 288,000 in the preceding 3 years, but nevertheless managed to rake in between USD 1 million and USD 2 million in PPP loans. Reports said that the residents of this nursing home had lost weight

²⁵⁰Eaton (2020).

²⁵¹Bondy (2020).

²⁵²Eaton (2020).

²⁵³Bondy (2020).

²⁵⁴Bondy (2020).

²⁵⁵Bondy (2020).

²⁵⁶Mahbubani (2020).

because of unmet nutritional needs and that they even been exposed to sexual abuse.²⁵⁷ Meanwhile, Kingston Healthcare Center had been cited 39 times and fined more than USD 11,600. Reports described a lack of care plans to protect residents from infections, along with leaking buildings infested with mould. Even so, Kingston was awarded between USD 1 million and USD 2 million in PPP loans.²⁵⁸ A similar situation played out at Mescalero Care Center, which had been cited 30 times and fined about USD 169,000. It nevertheless still managed to receive a PPP loan between USD 350,000 and USD 1 million. Inspectors reported inadequate dental services, physical therapy, and ulcer-prevention measures, while nurse notes indicated that surveyed residents who were receiving hospice care, were bathed only about once a week.²⁵⁹

6.3 Conclusions

A recent academic study²⁶⁰ on long-term care homes in Canada, noted that "[f]orprofit status is associated with the extent of an outbreak of Covid-19 in LTC homes and the number of resident deaths". To quote further from the conclusion of this study:²⁶¹

We did find evidence that for-profit LTC homes have larger COVID-19 outbreaks and more deaths of residents from COVID-19 than nonprofit and municipal homes, and that this finding was mediated by the higher number of for-profit homes with outdated design standards and chain ownership. The COVID-19 pandemic has laid bare long-standing issues in how LTC homes are financed, operated and regulated. As health systems scramble to prepare LTC homes for successive waves of the COVID-19 pandemic and others search for accountability and solutions to the crisis in the sector, it is important to examine all potential explanations for observed differences in COVID-19 outcomes across LTC homes.

In the United States, alarming shortcomings of private caregiving facilities have been documented throughout the Covid-19 pandemic. In one such study referred to by the Corporate Europe Observatory, a preliminary link "between private equity ownership of nursing homes and Covid-19 related deaths" has been identified.²⁶²

Equally alarming was the case of Belgium, where an extremely high Covid-19 mortality rate has been observed in both public and private long-term nursing homes, partly attributed to bad government policy.²⁶³

²⁵⁷Mahbubani (2020).

²⁵⁸Mahbubani (2020).

²⁵⁹Mahbubani (2020).

²⁶⁰Stall et al. (2020).

²⁶¹ Stall et al. (2020).

²⁶²Corporate Europe Observatory and Tansley (2021), p. 13.

²⁶³Corporate Europe Observatory and Tansley (2021), p. 13.

In Sweden, a high proportion of temporary staff (working on zero-hour contracts, and hence not entitled to sick leave or similar social benefits) employed in multiple long-term nursing homes at once, is reported to have been co-responsible for the rapid spread of the Covid-19 virus.²⁶⁴

A wide variety of the problems confronting long-term nursing homes throughout Europe during the Covid-19 pandemic—such as no access to PPE, no replacement for sick staff members, a reliance on staff members employed by more than one nursing home. . .—were not exclusive to for-profit facilities. However, in the further opinion of the Corporate Europe Observatory, there were also several characteristics typical to for-profit nursing homes. The need to make 25–35% of turnover income available as profits for the shareholders, cannot be ignored when considering the ability of such private for-profit nursing homes to adequately respond to the Covid-19 pandemic. Especially problematic is the downward pressure on staff-per-resident ratios, on the number and qualification of staff members, as well as on staff members' wages and their working conditions.²⁶⁵

Another factor that has to be considered are the supposed savings to the public purse offered by marketisation and privatisation of care and nursing services. In the context of Covid-19, this raises the question to what extent public money should still be spent to clean up the mess caused by private nursing homes during the Covid-19 pandemic. This is a question that may deserve a more detailed investigation, however, in the absence of specific empirical data, there are several warnings to take into further consideration.²⁶⁶ E.g., as early as 1986, Hawes and Philips argued that government policymakers have a clear interest in regulating the nursing home industry:²⁶⁷

- (1) First, the government has a fundamental regulatory role due to its capacity of being one of the main purchasers of formal, long-term nursing or care services.
- (2) Secondly, the regulatory system bears an important responsibility for the quality of home care, given the vulnerability of most consumers of these services. Consumers in need of long-term care, in most cases, suffer from a wide array of chronic physical, functional and/or mental illnesses or disabilities. As a result, these "consumers" have little or no influence on the decisions and behaviour of the nursing homes that admit them, implying that the government should take up a far more active role of monitoring this kind of facilities.²⁶⁸

²⁶⁴Corporate Europe Observatory and Tansley (2021), p. 13.

²⁶⁵Corporate Europe Observatory and Tansley (2021), p. 13.

²⁶⁶Corporate Europe Observatory and Tansley (2021), p. 13.

²⁶⁷Hawes and Phillips (1986).

²⁶⁸ Studies dating back to the 1980s have indicated that the average nursing home population was becoming older and more vulnerable, and this trend has continued ever since. According to Hawes and Philips, people having to enter nursing homes have in most cases a limited ability to make a rational choice between long-term nursing providers and the service these provide. They do not have access to accurate information, are unable to evaluate it properly and often have multiple

6.3 Conclusions

- (3) Thirdly, most nursing home residents do not have an advocate to represent their interests, this often being the reason why they have to be admitted to a nursing home in the first place. E.g., a large proportion of nursing home residents does not have a living relative, or do not have relatives living nearby. In the United States, placement decisions on admission to nursing homes are made by social workers and hospital discharge planners. These usually have the patient's best interests at heart, but they may operate under a system of incentives and urgencies in which finding any vacant place takes priority over truly assessing the quality of care that the nursing home provides. Even when the patient still has family members on whom they can rely, they too often suffer from the burden of finding an available place, while having no useful information at their disposal on the comparative merits of the different service providers.
- (4) Finally, the role of government in quality assurance is not only essential, but also crucial. As the Covid-19 pandemic demonstrated, substandard patient care and quality of life within long-term nursing homes remain serious problems through-out the Western world. Among the negative elements reported during the Covid-19 pandemic are: inadequate nutrition, dehydration, overdosing of medication, excessive use of physical restraints, failure to provide prescribed therapies, neglect of the psychosocial needs and ineffective government regulation, besides many other further concerns.

The key question that arises is whether nursing homes for the elderly lend themselves at all to organization by private market players. Many elements plainly argue against this, including, on the one hand, the limited financial capacity of most elderly people admitted to a nursing home, and, on the other hand, the fact that certain matters simply cannot be regarded as just another method for gross monetary gain. The elderly simply have a basic right to adequate care, and it is up to society to provide this. It is not a task that can simply be outsourced to the private corporate sector that is only interested in profit maximization for the benefit of its shareholders. Just like the hospital sector, it is therefore preferrable to leave the sector of nursing homes in the hands of government. A government which, moreover, should be strongly dissuaded from classic, neoliberal austerity policies for the running of this sector. Indeed, Covid-19 has sufficiently proven that neoliberal austerity and the outbreak of a pandemic are anything but a beneficial marriage.

In this regard, the key to running a benevolent public nursing home sector, is sufficient and reliable financial resources, which requires abandoning the current money creation model.

In our earlier books, in particular in "Towards a New International Monetary Order",²⁶⁹ a plea has already been made for conceiving a new system of money creation, whereby, on the one hand, the power to create money would fall under government authority (instead of in the hands of the private banking system) and, on

disabilities that limit their mobility and ability to change providers easily. (Cf. Hawes and Phillips 1986.)

²⁶⁹Byttebier (2017).

the other hand, the budgets of countries would be based on periodic allocations that ensure that each country would have enough resources to carry out a basic package of general tasks.²⁷⁰ Obviously, healthcare and care for the elderly should be part of this package, as already advocated in the aforementioned book itself.²⁷¹ In our earlier book "The tools of Law that Shape Capitalism", some further ideas of implementing such an approach have already been worked out in more detail.²⁷²

To conclude: Monika Van Paemel, a renowned Dutch author, on March 26, 2021, made the following comment on a statement of Belgian columnist Rik Van Cauwelaert who, during a TV-broadcast, had warned that "the moment was near when we will have to accept the human damage because otherwise the economic price will become too high". Monika Van Paemel declared to be shocked by this and said the following:²⁷³

I think of all the people who now live somewhere alone and have contributed their entire lives to our production and have raised children. We are actually the ones who stand on their shoulders. If you start to think that that category is 'ballast', our foundation will disappear, and the young generation will not have good prospects.

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Chapter 7 Covid-19's Impact on Labour



7.1 Introduction

7.1.1 Neoliberalism and Its Disturbed Relationship with Labour: Hence, with Man

In the words of Nelson, the capitalist approach to workers' health mimics 'the management of animals' following plantation slaves. However, in economies based on slavery—e.g., the Roman empire, and more recently, in the seventeenth, eighteenth and nineteenth centuries, the economy of certain American states in the South¹—the health of slaves was of direct concern to their master, as slaves were property (and the rich, to some extent, tend to take care of their property).²

All that changed, however, once workers became "free" within burgeoning capitalism—at the beginning of the nineteenth century–, with issues of health becoming an extraneous matter of a private nature.³

However, the early capitalistic healthcare model in which everyone, including the working classes, had to take care of their own health, would soon turn out to be problematic. A socio-economic model under which exploited labourers were expected to take care of their personal health while lacking both the means and skills to do so, was far from ideal.

¹According to the "History.com editorial", throughout the seventeenth and eighteenth centuries, people were abducted from the African continent, forced into slavery in the American colonies, and exploited to work as indentured servants, as well as in the production of crops such as tobacco and cotton. In the mid-nineteenth century, America's westward expansion and the slavery abolition movement sparked a major debate over slavery that would tear the nation apart in its only civil war. Although the Union victory eventually freed the nation's four million slaves, the legacy of slavery continued to influence American history, from the Reconstruction era to the civil rights movement that emerged a century later. (Cf., furthermore, History.com editors (2021).)

²Nelson (2020).

³Nelson (2020).

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Once this insight became clear to the powers that be, the welfare state model that emerged after World War II started approaching the matter in a more rational and just manner, by ensuring both public health services and installing social security systems which collectivized healthcare costs by imposing systems of mandatory insurance.⁴

Under the doctrines of neoliberalism, however, these systems came under attack from the 1970s onward.⁵ Taking care one's health again became (mostly) a private matter, while costs to state welfare systems had to be avoided as much as possible.⁶

In the opinion of Nelson, these basic aspects of political economy are among the reasons why the United States in 2020 was confronted with one-third of all Covid-19 cases, and that given "a choice between letting people die and closing down "the economy", there was no question which the masters of the empire would choose".⁷ By comparison, in the EU, healthcare was in most member states still based on a universal social security coverage (albeit public hospitals had suffered under austerity, while the private hospital sector, to a large extent, faced similar problems as the one in the United States itself). (Cf. Chap. 5.)

So far, according to Sumonja, there have been roughly three phases in economic neoliberalism's dealing with the interests of the labour force, especially regarding issues such as health and safety:⁸

- (1) Sumonja refers to the first phase as a "vanguard" phase, which, roughly speaking, covered the Reagan-Thatcher era of the 1980s. Economic neo-liberalism in this time frontally attacked organised labour, as the latter was blamed for the corporate profitability crisis of the preceding decade. Economic neoliberalism during this period was further characterised by a policy of austerity and coercion. Neo-liberal policy in this era was, moreover, authoritarian, determined by social conservatism and designed to push egalitarian democracy aside.
- (2) The second, more "progressive" phase started at the end of the Cold War and lasted until the great recession of 2008.

During this second phase, (economic) neoliberalism became both a hegemonic and global societal order. This was, amongst others, made possible by: (1) the conversion to the dictates of economic neoliberalism of traditional centreleft and Christian-democratic political parties in the West, accompanied by the

⁴As explained above (cf. Sect. 5.2.1.1.2), in Europe, two main methods of financing such universal health coverage prevail: (1) The social democratic, or "Nordic" model, in which health insurance— as most other public services—are funded predominantly from taxation. This model prevails in countries such as Norway, Finland, Sweden, Denmark and Iceland. And (2) the social insurance or "Bismarckian" model, in which health insurance—as a wide variety of other social security systems, such as income support (furlough) and a wide variety of other social services—is largely funded through employer and personal (mandatory) contributions.

⁵Cf., furthermore, Brown (2003); Ross and Gibson (2006), p. 2.

⁶Nelson (2020).

⁷Nelson (2020).

⁸Sumonja (2020).

abandonment of the working classes as the basic electorate of political left; (2) the policy of national governments to increasingly cede socioeconomic sovereignty to international financial and trade institutions, such as the IMF, the World Bank, the OECD and the WTO, as well as regional organisations, such as the EMU, and (3) the cultural validation of the dictates of neoliberalism under the libertarian values of the social movements of the 1960s, recruited to denounce all collective identities as oppressive in the name of a hyper-individualised freedom solely to be expressed by market choice (cf. Sect. 2.1.)

(3) Since 2008, in the third "authoritarian" phase, economic neoliberalism has even more explicitly broken with elements of formal democracy and no longer hesitates to openly infringe fundamental rights. In this "authoritarian phase", economic neoliberalism has in a wide range of countries been attempting to subject almost all strata of society to its principles and methods.

In the E(M)U, since the entry into force of the Maastricht Treaty (1992), this has been accomplished, to a very large extent, through a policy of austerity which was, as we saw in Chap. 4,—loosely—based on the so-called "Maastricht convergence criteria" (cf. Sect. 5.2.1.2.).

Since the financial crisis of 2008, the authoritarian approach to implementing the dictates of economic neoliberalism has continuously expanded. All public sectors of life, especially those of EU member states that became dependent on financial support from the EU (and the ECB), were subjected to its principles, as laid down in the abovementioned Maastricht convergence criteria. It was hereby assumed that these convergence criteria give no other option than to give in to the ever-intensifying pressure from the EU institutions to cut public expenditures, and to increasingly abandon the public sector (and public services) to the hands of the free market.

Moreover, in the United States, this neoliberal, authoritarian austerity policy became very closely intertwined with the conservative ideology that especially the Republican party has adopted since the Reagan-era. (Cf. Sects. 2.1 and 5.1.)

One of the main elements of economic neoliberalism, is how it deals with the "human cost"-factor, of people belonging to the lower and working-classes. In the 1980s, free-market policies were hailed as fundamental step towards ensuring general prosperity and broader individual freedoms for all countries in the world that were willing to adhere its policies. Since then, a common criticism of economic neoliberalism has been that the access to and distribution of resources, products and services in free market economies is more inequitable than ever. Neoliberal reform had resulted in huge income and wealth inequalities all over the world,⁹ and free market-liberalizing policies sacrificed civil, social, political and even basic human rights to the interests of economic competitiveness. It has, basically, been the working man who has become the victim of all this, with the lower classes being generally more vulnerable to neoliberal exploitation practices. These practices, nevertheless, affect everyone who is dependent on an income from labour

⁹Cf., furthermore, Byttebier (2018), pp. 54–56.

(as opposed to capital) for their livelihood. As to the functioning of the labour market, this evolution went hand in hand with regressing workers' rights, in order to allow employers—basically enterprises—to function more optimally (e.g., through systems of "flexible labour", referring to labour market conditions which grant lesser and lesser rights to workers, and more and more flexibility to the employers for exploiting their employees).

There have been several layers of policy making and market regulation with the goal of subjecting the working classes fully to the interests of the entrepreneurial sector.¹⁰

Reference can in this regard be made to, e.g., the insights shared by Blanton and Peksen.

First, a key characteristic of economic neoliberalism concerns its friendliness to global trade and investment, through policies such as the dismantling of customs tariffs and the easing of capital movement. Several studies have shown a clear negative relationship between such policies of globalising trade and capital movements on the one hand, and workers' rights on the other. This approach basically implies that efforts to increase involvement in the global economy are accompanied by a reduction in worker protections, to ensure the competitiveness of enterprises in the global market. This, obviously, entails a "race to the bottom" dynamic exerted by global capital on labour rights (and, by extension, on civil and human rights as well).¹¹

Secondly, broader neoliberal policy reforms aimed at establishing a "businessfriendly" regulatory environment, such as ensuring labour flexibility and lower barriers to doing business, also had a negative influence on workers' rights. Such measures have long been a key element of policies aimed at increasing economic competitiveness. It is hereby assumed that workers' rights are counterproductive to economic growth, as according to neoliberal doctrine, these undermine the economic freedom of employers by supporting various kinds of regulation.¹²

Thirdly, so-called "smart money" policies also became detrimental to workers' rights. From a macro-economic point of view, neoliberal policies promoting price stability provide a more favourable environment for trade and commerce, compared to policies protecting labour (and, by extension human) rights. Despite some alleged benefits, such policies, in particular the control of inflation and/or ensuring price stability, at least in a capitalist monetary environment, has however proven to be mostly detrimental to workers' rights. The reason being that, in most cases, it exercises a downward pressure on wage levels, alongside other working conditions, and moreover undermines the power of trade union organisations to protect the wage levels and working conditions of their members.¹³

¹⁰Cf. Lipman (2006), p. 51.

¹¹Cf. Blanton and Peksen (2016). Cf., furthermore, Byttebier (2019), p. 43.

¹²Blanton and Peksen (2016).

¹³Blanton and Peksen (2016).

A fourth key characteristic of pro-free market policies (mainly dating back to the theories of Milton Friedman) is the love of neoliberals for what they refer to as "minimal" states, meaning states that play no (pro)active role in the economy. Such a minimal state, the argument goes, will be less likely to "crowd out" private investment and interfere with the actions of free market players. Hence, in terms of societal duties and rights, a state's primary obligation to its population is of a negative quality, in particular the protection of (rich) individuals and their property from aggression (by the poor). However, research has indicated that the more a neoliberal state succeeds in reducing itself (or, phrased differently, in becoming a "minimal state", or a "night watchman state"), the less able (or even: less willing) such a state will be to protect positive rights, such as workers' rights. More specifically, the protection of workers' rights is believed to be a costly endeavour, as it requires the provision of state resources to monitor compliance with these rights and prosecute violators, which could impede free trade. Similarly, a "small state" will be less able, and willing, to prevent employers from violating the core labour standards under which people of the working classes are employed. This implies that, the more a state starts corresponding to the ideal of a neoliberal, minimal state, the more likely it is to allow employers to resort to exploitative practices.¹⁴

Overall, research points to a both strong and consistent negative relationship between neo-liberal policies and a willingness to respect fundamental workers' rights. The more "market-friendly" public policies become, the more damaging they are towards labour and social rights.¹⁵

Fifthly and finally, as more and more countries all over the world have begun to follow neoliberal ideology by implementing "free market reforms" the more these effects started to resonate on a global scale. As a result, neoliberal reforms swept the world economy in the 1980s and 1990s, widely seen as the culmination in the so-called "Washington Consensus" model (cf. Sect. 3.4.1.). After the fall of the Soviet regime in Russia, even central and Eastern European countries made their own transition to free market structures, while many other states radically reformed their socioeconomic order in accordance with explicit dictates of the IMF and World Bank austerity programmes. These transitions have been detrimental to workers' rights.¹⁶

¹⁴Blanton and Peksen (2016).

¹⁵Blanton and Peksen (2016).

¹⁶Blanton and Peksen (2016).

7.1.2 Some Further Insights in the Theoretical Background Regarding the Hierarchy Scale Between Capital and Labour Within (Neo)Liberal Societies

When considering the matter from a longer, historical perspective, one can but observe how the success of capitalism has largely been based on how enterprises—in the broadest sense of the world—employ people (other than the shareholders of companies).¹⁷ This goes back to the hierarchy between the stakeholders of capitalistic companies, as worked out under the classical economic theories developed in the course of the eighteenth century.

Already from the very start, capitalist ideologies—such as (economic) liberalism, and later (economic) neoliberalism—stipulated a very clear hierarchy between these several categories of stakeholders. In this hierarchy set out by the ideologies in favour of capitalism, the interests of capital come first (hence the denomination "capitalism"), followed by the interests of the managers and directors leading companies, while the interests of the employees are often entirely neglected, or at least only cared for to the least possible extent.¹⁸

¹⁸Byttebier (2019), p. 38.

¹⁷Byttebier (2019), p. 37.

To even go further back in history, in the period of history preceding capitalist times, i.e., during the second half of the Middle Ages, the providing of work was mainly done by either feudal slaves, or by independent craftsmen who themselves could also employ co-workers, often people getting a training in order to, at a certain moment in life, be able to start working as independent labourers themselves. As there were no(t yet) private legal persons with limited liability, (free) people mainly conducted their affairs, be it work or trade, on their own accord, being personally responsible for its (legal) consequences. With the breakthrough of the company with limited liability, also the way other man's "work" could be deployed underwent drastic changes. During the eighteenth and nineteenth centuries, the aforementioned types of companies that gave form to capitalist enterprises, started to become big employers of sometimes tens, hundreds or even thousands of employees who got hired on a contractual basis to make the business aspirations of the few individuals "behind the companies" come true. As a result, especially in the course of the eighteenth and nineteenth century, people all over the world found themselves, to a growing extent, getting employed by legal fictitious personalities, namely said companies often under the most appalling working conditions. (Cf., furthermore, Byttebier (2019), pp. 37–38.)

In order to be able to grasp this hierarchy of interests characterizing the working methods of capitalist enterprises, it is necessary to, at least, have some basic insight into the main ideology that (initially) shaped capitalism, namely (economic) liberalism that itself has to a large extent been based upon Adam Smith's notorious work "An Inquiry into the Nature and Causes of the Wealth of Nations", often abbreviated as "The Wealth of Nations". In "The Wealth of Nations", Smith more precisely developed a theory that, later in history, would become known as the "trickle-down-economics"-theory. Phrased in a very brief manner, this theory holds that all societal prosperity, especially within the socio-economic field, is accomplished thanks to the endeavors of the class of (rich) entrepreneurs. It is through their (exceptional) efforts that the economy, and hence society in general, advances, making it normal that the proceeds of such advances should mainly flow back to the class of entrepreneurs itself, while at the same time, other societal classes, such as especially the working classes, will also benefit from this, as they will be employed by the class of (rich) entrepreneurs, and in return will receive wages, be it for way lesser amounts than the profits

7.1 Introduction

When we transpose this approach to real life by making abstraction from legal fictions and only referring to human beings (to the extent that legal persons, such as companies, are mere fictions of the law that do not really exist), capitalism basically boils down to an economic system that favours the interests of the rich (esp. people belonging to the entrepreneurial class)¹⁹ to the detriment of the working class. It is, in this manner, by definition, of an elitist and anti-egalitarian nature.

In Western "liberal"²⁰ societies that mirror capitalist economies, this hierarchy is enabled by the legal principle of contractual freedom, also referred to as the "voluntary association"-mechanism. In accordance with this voluntary associationtheory, all legal entities, be they human beings or fictitious legal entities, are allowed, and even supposed, to enter into agreements in order to conduct their private affairs, amongst which entering into employment agreements: e.g., a person looking to get employed is supposed to enter into negotiations with a person (in many cases: a legal person) who is looking to hire work forces, the ultimate idea being that they would reach an employment agreement that serves both their interests in the most effective manner. In accordance with the theories of (economic) liberalism (as these, in most Western jurisdictions, lie at the basis of contract law), such negotiations between a future employer and employee are, moreover, deemed to take place on a purportedly equal footing.²¹

Under the dictates of capitalism, enterprises are, furthermore, above all supposed to make as much as profits possible, these profits, moreover, being supposed to flow mainly to the shareholders. This helps to explain why capitalistic enterprises are—and even should be—extremely cost aware. This principle can be referred to as the "maximalization of profits and minimalization of costs"-principle. This principle was first developed as a measure of conduct for enterprises, and later, under the dictates of economic neoliberalism, for all possible layers of society. In (classical) economic literature, this approach, as applied to the employment of—real—people, translates into "the Iron Law of the Wages". This (classical) Iron Law of the Wages basically holds that, to be sufficiently profitable, employers should aim at keeping the cost of hiring and employing employees –the cost of wages—as low as possible.

generated by enterprises that are flowing back to the class of rich entrepreneurs themselves. This theory, which lies at the basis of liberal (and later on in history: neoliberal) thinking, has in its turn provided one of the main building stones for the way companies—these themselves but being the legal forms for organizing enterprises that, in the end, are run by real people–, got organized until this very day, especially providing the theoretical justification for putting the interests of "labour", hence of working people, behind those of "capital", hence the people who are (ultimately) the shareholders (or beneficiaries) to whom as much of the profits the enterprises generate, are supposed to flow. (Cf., furthermore, Byttebier (2019), p. 39, with further references.)

¹⁹The term refers to leading stakeholders in enterprises and firms in the broadest sense of the world, including financial enterprises and firms, amongst which banks.

²⁰The term "liberal" is here used in its original meaning and not in the meaning that is given to the term in the present-day American political debate, where the term "liberal" is, surprisingly, used in a distorted way to indicate progressive political thinking.

²¹For a critical analysis of this assumption, cf. Byttebier (2018), p. 56.

The application of the voluntary association-theory often leads to situations in which employees find themselves imprisoned in a merciless socio-economic-system, where it becomes almost impossible to still enjoy one's job. The relationship between employers and employees has, in many cases, become completely dehumanized. (Cf., furthermore, Sect. 7.12, where the insights of Erich Fromm in this regard will be briefly readdressed.)

Another consequence of these (neo)liberal principles has been that in capitalist societies, basically two main interest groups of people (sometimes referred to as "classes"²²) have emerged, namely, on the one side, the small class of (rich) entrepreneurs (in the broad sense of the word) and, on the other side, the large class of—(much) poor(er)—working people. As a result, under the rule of capitalism, a manifest conflict of interests determines the relationship between said two classes: While it is in the interests of the class of rich entrepreneurs to employ workers at the lowest possible (or acceptable) cost, it is in the interest of the class of workers to be employed under the most favourable working conditions possible.²³

The answers provided by economic neoliberalism for the societal problems caused by capitalist labour policies, so far, have been that the relationships between labourers and the enterprises employing them, should be even more left to the domain of the free market itself. Within such a way of reasoning, there can, e.g., be no place for labour or social protective legal measures that had been installed in the past to protect employees against capitalistic exploitation. As a result, during the past decades, neoliberal governments all over the world started deploying state authority in order to get rid of labour and social protective legal measures that had been installed in the period after World War II, in order to liberate the markets from anything hindering entrepreneurs in purportedly enhancing general welfare through employing the rest of mankind at the lowest possible cost (otherwise put: for the lowest possible wages). In this manner, neoliberal ideology has during the past decades initiated an ongoing race to the bottom regarding labour standards and social protection.

Finally, while the pursuit of profit determines the behaviour of corporations and, therefore, also of the rich in society-, members of the working classes are largely dependent on the income generated from their labour efforts for their daily

²²As Chomsky said in an interview: "Well, there's always a class war going on. The United States, to an unusual extent, is a business-run society, more so than others. The business classes are very class-conscious—they're constantly fighting a bitter class war to improve their power and diminish opposition. Occasionally this is recognized. We don't use the term "working class" here because it's a taboo term. You're supposed to say "middle class," because it helps diminish the understanding that there's a class war going on." (Cf. Chomsky (2013).)

²³This conflict of interests helps explaining the emergence, in the course of the twentieth century of a variety of mutually opposite representative institutions, ranging from trade unions and organizations of employers, to political parties, whose basic reason for existing is providing an answer to the question how society should best deal with this conflict of interests.

Obviously, the adherents of (neo)liberal doctrine prefer to argue that this conflict of interests is inexistent and that the lower classes should be happy with the breadcrumbs capitalism generates for them (an attitude that translates into the earlier referred to "trickle-down economics"-doctrine).

livelihoods. This explains why, at least in the more prosperous capitalist countries, neoliberal policy—e.g., minimum wages policy, taxation policy...—is designed to ensure that wages enable members of the working classes to make a decent living, besides being able to consume basic products and services—produced by the big enterprises—but not much more. On the contrary, wealth accumulation and saving by the low and middle classes is, increasingly, discouraged under a wide range of neoliberal policies, as this could allow members of the working class to become less dependent on labour, which would destabilize the construct of neoliberal societies.

Among countries, a certain degree of nuance may still apply. It is, e.g., in certain western countries still possible for members of the working class to purchase a house, provided they are prepared to take on a long-term mortgage loan, which in turn perpetuates the prison for working people even more, since a mortgage borrower will have to work a large part of his life to be able to repay such a mortgage loan.²⁴ In more extreme cases, even that possibility has not been granted to the members of the working classes. We refer here to e.g., the (German) meat processing industry—which we shall readdress at the end of this chapter. Here, (imported) workers are expected to return part of their meagre wages to their employers as rent for a rental apartment made available by the latter. (Cf. Sect. 7.11.1.)

For those who belong to the enterprise class in such capitalist countries, wealth accumulation is, obviously, much more tolerated (and enabled, e.g., via all kinds of favourable tax regimes), under pretext of the eternal "trickle-down"-economics argument: the enterprising class must be pampered as much as possible, because they are the (only) ones providing general prosperity, which then also trickles down to the working classes. In this manner, capitalism has set up a (so far) perpetual motion machine that continues to be cranked up with every further neoliberal measure, by which the sharp division within society between a small class of wealthy entrepreneurs and a large class of poor to very poor workers is continuously kept in place.

Even worse, capitalist models of organizing the economy have, time and again, shown themselves to be incapable of dealing with crises. This explains why, in times when things are going (more or less) well, the free markets allow the profits from the functioning of the economy to flow into the pockets of the rich (via the numerous corporate profits distribution mechanisms), only to turn to the government when things get bad by making claims for state aid. (Cf. Chap. 4) It is then up to states to burden themselves even more heavily with debts—to be passed on to future tax-payers—in order to bail out said ailing enterprises and firms. This phenomenon has also been referred to as "privatization of profits and socialization of losses". As a result, the problems of capitalist economies worsen after each crisis. Reference can in this regard be made to the figures concerning the growth of the public debt due to Covid-19 (cf. Sect. 3.5), in the knowledge that such public debt weighs most heavily on the working classes who are (1) the most affected by the effects of taxation in neoliberal countries, (2) the most affected by austerity policies, when the powers that

²⁴Cf. Byttebier (2018), pp. 88–89, and Byttebier (2019), pp. 219–221.

be undertake such a policy, and (3) the most affected by an economy that goes haywire due to excessive private and public debt (e.g., leading to longer working hours, an even greater need for flexible work systems, later retirement ages, less social security benefits (such as furlough and sick leave), more stress at work because of ever-higher production quotas ...).

7.1.3 The Role of the State in Regulating Labour Markets

Although capitalism has gradually evolved into the dominant socio-economic system on Earth, this does not imply that it has a completely unilateral character. On the contrary, there may be very strong differences between capitalist countries, be it that the basic premises of capitalism—especially the notion that labour must serve capital, or, in other words, that people are subordinate to the interests of the economic system—are in most countries the same.

E.g., in the opinion of Aghion, Maghin and Sapir, the differences between the German and the American capitalist system form a striking example of how there are still significant differences between capitalist countries, particularly with regard to labour protection issues. E.g., in "normal years", the unemployment rate of both countries is believed to be similar, but in "crisis years" (e.g., in recent history, in the aftermath of the financial crisis of 2008, i.e. in the years 2009–2010, as well as in the Covid-19 year 2020), the unemployment rate rose sharply in the United States, while it remained quite stable in Germany, a fact that has been attributed to the "Kurzarbeit" system, amongst other factors. The difference between the two countries is even more striking with regard to health coverage. Already in normal times, there is a fundamental difference between Germany, where a system of universal health coverage prevails, and the United States, where even after the enactment of the ACA in 2014 (cf. Sect. 5.2.3.4), the part of the population without any health coverage at all was believed to still amount to around 9% in 2018 (with predictions being made that this rate would amount to almost 12% in 2020, to fall to 11% by 2021).²⁵

Compared to Germany, health coverage in the United States is therefore both structurally weaker and particularly deficient in times of recession, as it is often linked to employers. It has been shown, for example, that a one percentage point increase in the unemployment rate after the great recession of 2007–2009 led to a substantial reduction—of 1.67 percentage points (2.12%)—in the probability of retaining health coverage.²⁶

²⁵Aghion et al. (2020).

²⁶Aghion et al. (2020).

As explained by Aghion, Maghin and Sapir, the risk of losing social benefits in the United States in 2020 depended, in part, on the ability of government agencies to cope with the massive influx of new insurance requests. The Kaiser Foundation in this regard estimated that of the 31 million people who had applied for unemployment benefits between March and May 2020, 27 million had been at

Similar differences exist between the United States and several other Western European countries with regard to systems of unemployment and health coverage. E. g., in countries such as France, Italy, Spain, the Benelux countries and the United Kingdom, besides numerous other countries, people enjoy universal health coverage. Thus, although some of these countries may be dealing with high structural unemployment and, moreover, had to endure a sharp increase in unemployment rates throughout 2020, their citizens were able to retain their health coverage in spite of the Covid-19 crisis.²⁷

Obviously, this classic capitalist hierarchy scale between labour and capital, besides the interconnectedness between the rich classes of society and ruling politicians and the fact that the members of the working class are completely dependent on their income from labour, created a perfect storm for Covid-19 to play out throughout the Western world in all its disastrous effects.

7.2 The Impact of Covid-19 on Labour

7.2.1 General

In the Western world, particularly in Europe and the United States, the outbreak of the Covid-19 health crisis has been accompanied by an economic crisis that, as pointed out by Aghion, Maghin and Sapir, threatened the health, jobs and incomes of millions of people.²⁸

The strict containment measures resorted to by many of these Western countries during the first wave of the Covid-19 pandemic—i.e., more or less from March to April/May 2020, with huge differences between countries—in order to mitigate the increase in Covid-19 contamination cases (cf. Sects. 2.3, 2.4 and 2.5) has, obviously, put a major brake on a wide variety of socioeconomic activities. According to the International Labour Organisation (ILO), the collapse in hours worked and the decline in socio-economic activities had not been seen in peacetime since the Great Depression of the 1930s.²⁹

Envisioning a rapid and sustainable recovery of the economy and the rebuilding of a more resilient and inclusive labour market, G20 Leaders at their Summit that took place on 6 March 2020 committed to do whatever is necessary to overcome the Covid-19 pandemic and its impact and, in particular, to make every effort possible to

risk of losing their employment-related insurance coverage. Of these people, up to 48% should have been eligible for Medicaid, and 31% should have been eligible for premium subsidies, leaving the rest ineligible for either. However, eligibility did not guarantee full coverage, even in states that had expanded Obamacare. (Cf. Aghion et al. (2020).)

²⁷Aghion et al. (2020).

 $^{^{28}}$ Cf. Aghion et al. (2020). Cf., furthermore, International Labour Organisation (2020), p. 3 and p. 6.

²⁹International Labour Organisation (2020), p. 6.

preserve people's jobs and incomes. As part of this commitment, G20 Leaders requested the ILO and the OECD to closely monitor the impact of the Covid-19 pandemic on a variety of labour market related matters, including (un)employment.³⁰

The result of this effort has been a comprehensive and insightful report in which the social aspects of Covid-19 were treated in detail. The findings of this report will be discussed in the following subsections.

7.2.2 The Unequal Impact of the Crisis

Probably one of the key findings of the joint ILO-OECD report has been that the socio-economic consequences of the Covid-19 pandemic have not been equally severe for all members of global societies. Basically, the vulnerabilities that had already been characterising neoliberal societies throughout the world were clearly exacerbated by the Covid-19 crisis itself. This implies that Covid-19 has resulted in even greater socioeconomic inequalities. As a result, across the Western world, many of those already most deprived, have also been the least able to shield themselves against the socio-economic consequences of Covid-19.³¹

During the first wave of the Covid-19 pandemic, it have mostly been low-paid, often low-skilled workers that were particularly affected by the crisis Covid-19 caused.³²

First, a lot of the so-called "frontline" workers who had put their health and safety most at risk and had continued to expose themselves to the Covid-19 virus in order to ensure the continuity of essential services during the lockdown periods, were at the same time the ones employed in sectors characterised by relatively low wages.³³ These included health and care workers (excluding physicians), but, e.g., also cashiers in supermarkets or convenience stores (that had remained open during the first wave of the pandemic), people employed in food production, industry workers, caretakers and domestic workers, agricultural workers, and delivery and transport personnel (including truck drivers).³⁴

Data from a number of countries have indicated that in April 2020, the top 25% of earners were, on average, at the same time 50% more likely to be allowed to work at home during the lockdown periods than the bottom 25%. At the same time, low-paid employees and independent workers were twice as likely to stop working altogether during the effective lockdown periods.³⁵ Thus, these low-wage jobs were either

³⁰International Labour Organisation (2020), p. 6.

³¹International Labour Organisation (2020), p. 14.

³²International Labour Organisation (2020), p. 14.

³³International Labour Organisation (2020), p. 14.

³⁴International Labour Organisation (2020), pp. 14–15.

³⁵International Labour Organisation (2020), pp. 14–15.

affected by the fact that people could no longer work at all (to the extent that the nature of their jobs did not allow for working from home), or by the fact that they had to keep showing up in their physical workplace (and were thus more exposed to the threat of the Covid-19 virus than those who were allowed to work from home). We shall illustrate the situation for people stuck on the physical work floor at the end of this chapter by describing the impact of Covid-19 on the meat processing sector throughout 2020 (cf. Sect. 7.11.1.).

Second, labourers in various forms of employment that differ from full-time salaried work under a permanent contract—such as (1) the self-employed, (2) those on temporary, on-call and/or part-time contracts, and (3) labourers in the informal economy—have been most exposed to job and income losses caused by the Covid-19 pandemic. This exposure stemmed partly from the sectoral concentration of workers in various work arrangements, such as accommodation and food services, arts, entertainment and recreation, and a wide variety of other personal services, and partly from their low participation in social protection schemes. In addition, workers on fixed-term contracts were among the people who first lost their jobs during the first wave of the Covid-19 crisis, as expiring contracts were in most cases not renewed.³⁶

Third, the impact of the Covid-19 crisis was particularly severe for labourers in the informal economy, for whom being forced to stay at home simply meant losing their jobs and livelihoods. According to estimates made by the ILO, in 2020, 1.2 billion labourers in the G20 economies performed labour under such an informal employment system. This extreme high figure represented 55% of total employment (i.e., 20% in the developed G20 economies, and 67% in the emerging G20 economies). Of these informal economy labourers, an estimated 850 million (i.e., 70%) was most likely to be severely affected by the Covid-19 crisis, resulting in an estimated decline in their earnings of 61% (i.e., 34% in developed G20 economies, and 76% in emerging G20 economies). In addition, relative poverty (defined as the part of labourers earning less than 50% of the median wages of the overall population on a monthly basis) rose sharply as regards informal workers and their families, by almost 36 percentage points in the G20 economies, and by 29 percentage points in the emerging G20 economies).³⁷

There are purportedly two main reasons why such a high proportion of workers in the informal economy was so severely affected by the containment measures. The first reason is said to be "sectoral": the sectors in which informal economy labourers

³⁶In France, e.g., the increase in new unemployment claims in March and April 2020 was almost entirely due to temporary workers and workers in temporary jobs whose contracts had not been renewed. Similarly, in Italy, the decrease in the number of jobs between the end of February 2020 and the end of April 2020, compared to the same period in 2019, was largely driven by a reduction in hiring on fixed-term contracts, despite efforts to temporarily ease existing regulations on the use of these types of contracts. The same pattern was also observed with regard to Spain (Cf. International Labour Organisation (2020), p. 15.)

³⁷International Labour Organisation (2020), p. 15.

mostly work, were at the same time the sectors hardest hit by the Covid-19 pandemic.³⁸ Among these sectors most affected by the Covid-19 pandemic were retail and manufacturing, which at the time accounted for 22% and 21% respectively of informal non-farm labour in the G20 countries.³⁹ A second reason for the high impact of Covid-19 on informal economy labourers was related to the size of the economic business units in which they were performing their labour. The vast majority of labourers at risk in the informal economy were the self-employed or the ones working in small enterprises with fewer than 10 workers, both categories being generally more vulnerable to economic shocks. These categories of informal workers, including the owners of micro-enterprises employing fewer than 10 workers themselves, accounted for almost 70% of total informal employment in G20 countries.⁴⁰ In most G20 countries, the vulnerability of informal economy labourers was. furthermore, compounded by their limited access to social protection systems, such as unemployment or sickness benefits. In the absence of a unified social protection system and even of ad hoc support measures for supporting these categories of informal economy labourers, means-conditional minimum income guarantee schemes or conditional cash support forms were often the only form of support available. However, unless extended, these measures did not provide immediate support to moderate-income workers who had lost their jobs and livelihoods as a result of the Covid-19 crisis. As a means of responding to the Covid-19 outbreak, many G20 countries therefore simply resorted to temporary emergency support measures to fill the gaps in income support that had been revealed during the early days of the Covid-19 crisis.41

Fourth, young people were among those most likely to face lasting effects of the Covid-19 crisis. Indeed, as had already been the case during the 2008 financial crisis, young people were again likely to be among the biggest losers of the Covid-19 crisis. E.g., the graduates of 2020—sometimes referred to as the "Corona class"— were leaving schools and universities with little chance of finding a job or work experience in the immediate future. Meanwhile, many of their peers a decade older, were experiencing a second severe economic crisis in their short careers and lifetimes. According to the ILO, initial labour market experience has a profound influence on later working life, and a crisis such as the 2008 financial crisis, or the Covid-19 crisis of 2020-2021, can have lasting and marked effects in terms of future employment opportunities and earnings.⁴² For the current generation of young people, not only has the Covid-19 crisis disrupted their skill-development, but there are fears that they will also have to bear the direct burden of financing the high levels of debt incurred by neoliberal governments for measures taken to

³⁸International Labour Organisation (2020), p. 15.

³⁹International Labour Organisation (2020), p. 15.

⁴⁰International Labour Organisation (2020), p. 16.

⁴¹International Labour Organisation (2020), p. 16.

⁴²International Labour Organisation (2020), p. 16.

mitigate the immediate negative economic consequences of the Covid-19 crisis.⁴³ (Cf. Sect. 3.5, on the huge increase in global debt as a result of the Covid-19 crisis. Cf., furthermore, Sect. 4.2.3, where it has already been mentioned that some of the EU's interventions were to be financed either by new taxes or new debts, thus creating an intergenerational effect that will—again—put the burden of the economic crisis largely on the shoulders of the "next generation".)

Fifth, women have been disproportionately affected by Covid-19 in various ways.⁴⁴

According to the ILO, women bore a disproportionate share of the socioeconomic costs of the Covid-19 crisis. The ILO has mentioned the following factors:

- (1) Women were, relatively speaking, more heavily involved in front-line occupations in the healthcare and related sectors.
- (2) Women suffered disproportionately from job loss and reduced working hours, and
- (3) Women often had to face an increased workload at home, during the lockdowns and beyond.

Basically, the Covid-19 crisis strengthened some of the gender inequalities that had been marking G20 (and other) labour markets for decades already.⁴⁵

Women were of vital importance in the healthcare response to the Covid-19 pandemic. This is mainly due to the fact that women make up the majority of healthcare workers in almost all G20 economies, ranging from a mere 35% in Saudi Arabia to more than 80% in countries such as Russia, Canada and Korea. Along with their male counterparts employed in the same sector, women in healthcare had to face exceptional demands and were subjected to increased risks regarding their own health and safety throughout the Covid-19 crisis. This was especially bad during the first wave of the Covid-19 pandemic, when most (Western) countries were still groping for the best way to respond to the Covid-19 crisis and to protect their frontline health workers from contamination. Moreover, as explained

⁴³Early evidence has already confirmed that young people were indeed disproportionately affected by the Covid-19 crisis. For example, they tended to take on more precarious jobs and were also over-represented among workers in the most affected sectors, such as accommodation and catering. For those G20 countries for which monthly data were made available, job losses between December 2019 and April 2020 were found to be much greater for young people than for adults aged 25 and over. In the majority of countries, the declines were also much larger than those recorded during the 2008 financial crisis. Despite some rebound since April 2020, youth employment in July 2020 in most countries remained well below its pre-Covid-19 crisis level. Young people were also more likely to be working in the informal economy than adults. For this reason, they were also particularly vulnerable to job and income losses as a result of the Covid-19 pandemic. In the G20 economies, it was estimated that almost 67% (or 149 million) of young workers were in informal employment, compared to about 54% of adult workers (aged 25 and over). Nearly half of them, or 72 million, were working in the sectors that were hardest hit at the start of the Covid-19 crisis. (Cf. International Labour Organisation (2020), p. 17.)

⁴⁴International Labour Organisation (2020), p. 18.

⁴⁵International Labour Organisation (2020), p. 18.

before, in many cases healthcare workers lacked adequate PPE for protecting their own health when dealing with Covid-19 patients and hospitals or nursing homes. In many of these cases, the pressure brought forward by the Covid-19 crisis was particularly strong on mothers who, because of what has been referred to as "entrenched cultural and gender norms", had to face additional childcare demands as a result of closures of schools and day-care during the lockdowns of the Covid-19 crisis. By contrast, women remained largely under-represented in leadership roles in the health care and long-term nursing sectors (cf. Chaps. 5 and 6), as well as in advisory positions shaping the government response to deal with the Covid-19 pandemic.⁴⁶

Women were, furthermore, more concentrated in "hazardous occupations"⁴⁷ than men, a fact that has been mainly attributed to gender differences with regard to employment by profession and by sector.⁴⁸

As already mentioned before, the consequences of job loss were particularly severe for labourers in the informal economy. Employment in this sector tends to favour women, who are thus more likely to be confronted with job loss. More precisely, 42% of the women were said to perform labour in these informal economy sectors at the start of the Covid-19 crisis, compared with only 32% of the men. This was even worse in emerging countries where women were, e.g., significantly overrepresented in the manufacturing and wholesale/retail sectors. Women were more confronted with a sharper decline in labour force participation, employment and working hours, as well as a decline in social security coverage. They were, therefore, also more subjected to large income losses than men. Covid-19 exacerbated an already precarious situation, as women were, on average, since decades already

⁴⁶It is remarkable that some of the countries led by a woman were among those that have handled the Covid-19 crisis best. Examples of these countries include Finland, New Zealand and, to some extent, Germany.

As Bear and Agner have argued: "(...) women are also the shining examples of vital and effective leadership in the pandemic response. Countries with women who are head of state such as Denmark, Finland, Iceland, New Zealand, Germany and Slovakia have been internationally recognized for the effectiveness of their response to the pandemic. These women leaders were proactive in responding to the threat of the virus, implementing social distancing restrictions early, seeking expert advice to inform health strategies and unifying the country around a comprehensive response with transparent and compassionate communication. The example of pandemic response adds to a body of knowledge that supports having women at the top, leading the leaders, is good for everyone." (Cf. Bear and Agner (2021).)

⁴⁷ In the context of the Covid-19 pandemic, hazardous jobs are those that cannot be performed from home and that involve direct physical contact with other people. Not only were women more exposed to such hazardous jobs than men, but they were also more vulnerable to job loss, as they were over-represented in sectors where the decline in employment was greatest, such as retail trade, hotels and restaurants, arts and entertainment, besides comparable personal services. (Cf. International Labour Organisation (2020), p. 18.)

⁴⁸In 2019, these sectors accounted for a higher proportion of total female employment than male employment in all G20 economies, except India and Turkey. The risk of job loss was particularly high in Argentina, Brazil and Mexico, where these sectors accounted for 45%, or more, of total female employment (cf. International Labour Organisation (2020), p. 19.)

facing lower incomes, higher poverty rates and greater difficulties in accessing income support than men. The Covid-19 crisis also increased the burden of unpaid care and domestic work, much of which has traditionally fallen on the shoulders of women.⁴⁹ As schools and day-care centres started closing due to containment measures (especially during the first wave of the Covid-19 pandemic), parents' time spent on childcare, supervision and schooling increased, as did the care for disabled or elderly family members. The largest part of this additional workload again fell on the shoulders of women. Single parents, most of whom are women, were found to be extremely vulnerable. They were, e.g., found to be hit much harder than two-parent families by the closure of childcare facilities and schools during lock-out periods. Dependence on a single income also implied that the loss of a job could be severely affecting single-parent families, particularly in countries where public family support was weak or slow to respond. More generally, the greater burden on women with regard to household tasks may also have affected their career prospects in a negative manner. Together, all these additional burdens women had to face, may also have caused an impact on the mental health of many of them.⁵⁰

According to an article that appeared in The Guardian on 4 May 2021, which was based mainly on information provided by the "Trades Union Congress" (abbreviated as "TUC"), the uneven impact of Covid-19 on women has been confirmed by research into the situation in the United Kingdom. According to this newspaper article, working women in the United Kingdom even faced a greater risk on the labour market than during the financial crisis of 2008, in particular because many women had become (temporarily) redundant as a result of the Covid-19 pandemic. According to the analysis undertaken by The Guardian, female redundancies in the United Kingdom amounted to 178,000 between September and November 2020, a number that was said to be 76% higher than the peak at the height of the financial crisis of 2008, when female redundancies had only reached 100,000. During the same period of time, "only" 217,000 men had become redundant—which was 3% more than the peak in male redundancies that had occurred during the financial crisis of 2008. Still according to the TUC, as quoted by The Guardian, during the Covid-19 pandemic, women in the United Kingdom had been more likely to be off work than men, as well as to be employed in the sectors hardest hit by Covid-19, such as retail and healthcare. The Guardian-article also confirmed that in the United Kingdom, women had to bear the brunt of childcare when schools and childcare centres had to be closed as part of the containment measures. According to the TUC's Job Monitor,⁵¹ during the 12 months counting back to December 2019, women accounted for six out of 10 job losses in hotels, six out of 10 job losses in wholesale and retail trade, and almost six out of 10 job losses in other services, such as hairdressers, beauty and care services. While the number of female redundancies

⁴⁹Ranging from about 60% in Canada to 90% in India (cf. International Labour Organisation (2020), p. 19).

⁵⁰International Labour Organisation (2020), pp. 19–20.

⁵¹Topping (2021).

slowed down as of November 2020, by 4 May 2021, the figures still remained at "crisis levels". According to the latest official figures available on 4 May 2021, almost 94,000 additional women had been turned redundant between December 2020 and February 2021, close to the level seen at the height of the financial crisis of 2008. By the end of February 2021, 2,337,900 women were reported to be on furlough, compared to 2,144,700 men.⁵²

There is also a growing amount of evidence originating from some of the advanced G20 economies that the Covid-19 crisis has had a more negative impact on the mental health of women than on that of men. The combination of deteriorating mental health and an increasing degree of physical and psychological abuse some women were exposed to, was, moreover, expected to have a long-term negative impact on women's likelihood of returning to work when the economy would finally recover.⁵³

According to research undertaken by Reinhart, Dawes and Maybank, published in "The Lancet" on 20 April 2021, it appears that the Covid-19 pandemic has benefited from a long-standing synergy—produced by public policy (or, put another way, by policy largely based on the dictates of economic neo-liberalism)—between "structural misogyny, racism, inadequate welfare and labour protections, and epidemiology".⁵⁴ E.g., in the United States, millions of labourers got infected and there have been thousands of deaths from Covid-19. A disproportionate number of people put at risk had been women and people of colour, particularly among caregivers, such as health care aides and auxiliary healthcare labourers without high occupational status. Approximately 80% of healthcare labourers who contracted Covid-19 in the United States were women, with healthcare workers of colour significantly over-represented among those contaminated. At the same time, this mirrors the fact that a female workforce, mostly from minority groups and/or from immigrant populations, has formed the basis of health care delivery in the United States, as in the United Kingdom and many other countries.⁵⁵

Sixth and final, as more and more people work from home based upon modern information and communication technologies, labourers were also more exposed to labour-related cyberbullying.⁵⁶

Some of these issues will be discussed again in Chap. 10.

⁵²Topping (2021).

⁵³International Labour Organisation (2020), pp. 19–20.

⁵⁴Reinhart et al. (2021).

⁵⁵Reinhart et al. (2021).

⁵⁶International Labour Organisation (2020), p. 20.

7.2.3 Collapse in Employment and Hours Worked

The lockdown and containment measures that were massively resorted to in the Western world, particularly during the first wave of the Covid-19 pandemic (cf. Sects. 2.3, 2.4 and 2.5), led to a sharp and unprecedented fall in employment in the G20 economies. E.g., monthly labour force data from G20 countries (for which such data were available) painted a common picture. There was a sharp drop in the number of still employed persons, as upon the outbreak of Covid-19, labourers were laid off, made redundant or did not have their (temporary) labour agreements renewed. Between December 2019 (when there still had been a pre-Covid-19 peak in activity) and April 2020 (when the trough of the Covid-19 crisis was reached in most Western countries), these declines amounted to almost 40% in Mexico, to around 8-9% in Japan and Korea. On average, the sharp decline of the number of people still at work that occurred as countries resorted to containment measures, has been 14 times greater than the total peak-to-trough decline—measured over a much longer period—that had occurred during the 2008 financial crisis.⁵⁷

In all countries for which data were available, the amount of people still at work increased again from April 2020, but remained well below its pre-Covid-19 crisis level throughout the months of June and July 2020. In most countries, the fall in total hours worked was larger than the fall in the number of people still employed, ranging from a dramatic fall of hours worked of 46% in Mexico, to a still significant fall of hours worked of around 10% in Australia. The decline was, moreover, considerably larger on average (by more than 6 times) than the fall that had occurred during the 2008 financial crisis.⁵⁸

Projections by the ILO have even suggested that, on a global scale, the number of working hours may have dropped by 14% between Q4 2019 and Q2 2020. This projection came down to an equivalent of approximately 400 million full-time jobs (under the assumption of a 48-hour working week). With regard to G20 economies in particular, the ILO projection of the decline of total hours worked came down to an equivalent of 265 million full-time jobs. In addition, for many people, especially for women, this decline of paid working hours went hand-in-hand with an increasing number of hours spent in unpaid care work due to closures of school and child care centres, the reduction of public service available to people with disabilities and/or to the elderly, the non-availability of domestic workers, and the need to look after one's family members who contracted Covid-19.⁵⁹

⁵⁷International Labour Organisation (2020), p. 10.

⁵⁸International Labour Organisation (2020), pp. 10–11.

⁵⁹International Labour Organisation (2020), p. 11.

7.2.4 Unemployment

According to the ILO, in many countries, the decline in effective employment and the number of hours worked did not entirely translate into higher official unemployment numbers.⁶⁰

According to the same source, the unemployment rate in Canada and the United States rose significantly upon the outbreak of Covid-19-much higher than during the 2008 financial crisis. However, it remained lower than could be expected, given the decline in effective employment and total hours worked. E.g., in the United States, employment declined by 22.4 million (adjusted seasonally) between March 2020 and April 2020, while unemployment only rose by a smaller 15.9 million. By contrast, in several other countries, the rise in unemployment has been much more moderate. These differences between countries partly reflected differences in the treatment of temporarily unemployed labourers. These were considered "unemployed" in Canadian and US statistics, while most other jurisdictions still considered this "employed". These differences in numbers also reflect the policy approach resorted to in each country for cushioning the socioeconomic impact of the Covid-19 crisis. Many countries, particularly in the EU, started to make extensive use of re-employment programmes in order to prevent people from becoming unemployed.⁶¹ (On these socioeconomic and cultural differences, cf., furthermore, Sect. 7.12.)

According to Krugman, the situation was most severe for those workers who were hardest hit. E.g., the collapse of the Covid-19 pandemic disproportionately affected workers in the leisure and hospitality sector—e.g., restaurants—while the unemployment rate for workers in industry was much lower.⁶²

The rise in unemployment was, furthermore, mitigated by those unemployed who waited to actively search for a new job or who were unavailable for work when national and local lockdowns had been put in place. In accordance with standard criteria defining the notion of "labour force", these persons were classified as "inactive", and therefore not part of the official labour force numbers. Consequently, in all G20 countries for which monthly data were available, barring the United Kingdom, labour force participation rates fell substantially upon the outbreak of Covid-19. In the opinion of the ILO, for many of these people, there was also little incentive to actively seek work during a period of confinement, while others were not available for paid employment because of the additional household duties associated with confinement, such as childcare and home teaching activities. Although some decline in labour-participation rates had already been a feature of previous recessions, the magnitude of the decline during the Covid-19 crisis has been of an exceptional nature in most countries, as many people were discouraged from actively seeking work. In cases where people were unable to return to work

⁶⁰International Labour Organisation (2020), p. 12.

⁶¹International Labour Organisation (2020), p. 12.

⁶²Krugman (2020).

quickly, this may even have resulted in permanent discouragement for some workers. 63

With the recovery of economic activity as of May 2020, many people belonging to this group of potential job seekers returned to the labour market. This inflow of people who were officially not categorised as potential labour market participants implied that the reduction in unemployment would take time, despite the recovery in effective employment itself. Indeed, in both Canada and the United States, the unemployment rate in July 2020 remained well above its pre-Covid-19 crisis level. According to the OECD's June 2020 projections, unemployment rates in most of the G20 countries where these data were available, would still remain much higher at the end of 2021, than they had been at the end of 2019.⁶⁴

Partly because of where the slump was concentrated, at least in the United States, those who remained unemployed tended to be Americans who had earned low wages even before the slump, implying that the recovery of the economy after the first wave of the Covid-19 pandemic left out those who needed the recovery most.⁶⁵

7.2.5 Changes in Wages and Incomes

As the Covid-19 virus started to spread around the world, (physical) workplaces began to close as of March 2020. Millions of labourers lost some or all of their income. Even people who still remained working in many cases had to accept shorter working hours and/or wage cuts. This phenomenon occurred in various economic sectors, such as airlines, retail and accommodation, food services and the textile and clothing sectors, all sectors which, at the time, were moreover heavily feminised sectors. In some cases, such wage reductions were negotiated in formal, collective agreements between employees and employers.⁶⁶

In some countries, labour statistics pointed to a general decline in wages. E.g., in Australia, average nominal wages for employees aged between 50 and 59 fell by 3.2% between 14 March 2020 and 13 June 2020. In the United Kingdom, the real average wages fell by 1.2% in April 2020, after also having fallen in March 2020. In the United States, by contrast, real wages experienced an unprecedented jump of 5.8% in April 2020, followed by a weaker real growth of 0.5% in May 2020.

⁶³International Labour Organisation (2020), p. 13.

⁶⁴International Labour Organisation (2020), p. 13.

⁶⁵Krugman (2020).

⁶⁶International Labour Organisation (2020), p. 14.

E.g., in Argentina, a collective agreement provided for a 25% reduction in wages for workers in closed sectors, for a period of 60 days as of 1 April 2020. This measure was resorted to in order to save jobs. Among employees who could remain in paid employment at the beginning of April 2020, 35% in the United States, 30% in the United Kingdom and 20% in Germany reported lower earnings in March 2020, compared to previous months. Several countries also cut public sector wages. (Cf. International Labour Organisation (2020), p. 14.)

However, this is thought to have reflected a so-called "compositional effect", namely a larger job loss among low-paid workers than among high-paid workers, which has as effect that the average wages of those still employed, increased. Restricting the analysis to workers employed in consecutive periods, one study, cited by the ILO, found that in March, April and May 2020, wage freezes and cuts were much more frequent than in the same months of 2019. In Canada, there was also an exceptional acceleration in real wage growth, which probably—and similarly to the United States—reflected greater job losses for low-paid workers, rising by 6.8% in April 2020, after a substantial rise in unemployment numbers from 8% in March 2020, to 13.4% in April 2020.⁶⁷

7.3 (Re-)Organizing the Working Floor

7.3.1 Introduction

One of the basic assumptions of capitalist economies is that the economy must keep running and essentially cannot afford any (long) breaks. All economic tools and legal mechanisms that shape the capitalist economy, e.g., the methods of employment based on labour contracts, the repayment of all forms of credit (ranging from financing loans for companies to mortgage loans for individuals), the design of production lines, the content of purchase and supply contracts, leases-the list is obviously too long to sum up in detail—are based on this premise. The more a country's economy is aligned with these capitalist working methods, the more important it is for its economy to be able to keep going. Thus, when at the end of March-early April 2020, most Western countries had no choice but to move to lockdown measures (cf. Sects. 2.4 and 2.5), methods were anxiously sought to keep the capitalist machinery running as much as possible. For almost all white-collar work (e.g., administration, management, dealing with files, etc.), the solution could be found in "teleworking", made possible primarily by software packages that enabled online meetings, in addition to a multitude of other applications, such as lectures and teaching (particularly relevant for schools and universities).

These tools even proved to be so effective that soon after they got widely and globally used, there were calls to continue using them in the post-Covid-19 era.

However, no such high-performance substitutes were available for physical labour, which implied that people providing such physical labour would soon be called back to the work floor, with all the negative effects that this would entail.

In the following Sect. 7.3.2, we shall first take a closer look at the design of telework. In a subsequent Sect. 7.3.3 we shall discuss some of the implications of the recall of workers to the physical working floors.

⁶⁷International Labour Organisation (2020), p. 14.

7.3.2 Telework

For many G20-countries, one of the key measures resorted to for containing the spread of Covid-19, was the encouragement of telework from home.⁶⁸

As of March 2020, in order to promote a rapid transition to telework in all professions for which this was considered feasible, countries all over the world started taking legal and practical measures to simplify the use of telework, including even financial and non-financial support to enterprises in order to enable their transmission to a telework environment. By way of an example, the ILO report has pointed to the example of Italy that largely simplified the procedure for working from home by allowing enterprises and their employees to set up telework without the need for a prior agreement from the trade unions or for a written agreement between employer and employee. Similarly, Russia made alterations to its labour code concerning telework rules. Spain expedited already existing public programs in support of the digitalisation of the working environment of small and medium-sized enterprises. Other countries, such as Japan and Korea, offered financial support for subsidising the cost of introducing remote working arrangements.⁶⁹

Some large technology enterprises themselves also stepped in by providing enterprises and employees with specific assistance and temporary free access for using some of their communication and data exchange software.⁷⁰

Data based on surveys conducted in mid-April 2020 point to a massive increase in the share of employees working from home by comparison to pre-Covid-19 crisis figures. This increase amounted from around 30% in Canada, to almost 70% in South Africa.⁷¹

According to the ILO, the result of all this has been a global experiment in mass telework that, at the same time, generated a number of specific organisational problems. On the one hand, telework has been instrumental for helping to contain the Covid-19 virus itself, especially by granting a greater degree of flexibility to individuals for managing their work and family lives, particularly in the context of the closures of school and child day-care facilities which—in rich countries—also resorted to functioning in a virtual environment and which mandated parents to stay at home in order to take care of their (small) children. On the other hand, the mandatory and full-time nature of telework during the Covid-19 pandemic has

⁶⁸International Labour Organisation (2020), p. 21.

According to Montoriol-Garriga, even before the Covid-19 pandemic, a growing number of enterprises around the world had started encouraging their employees to work from home by creating the necessary infrastructure for remote connections, by providing employees with mobile devices, as well as by offering the necessary training for using digital tools. A recent study by "CaixaBank Research", as referred to by said authors, estimated that by July 2020, 32.6% of all employees in Spain could potentially work remotely, a percentage similar to most advanced economies. (Cf. Montoriol-Garriga (2020).)

⁶⁹International Labour Organisation (2020), p. 21.

⁷⁰International Labour Organisation (2020), p. 21.

⁷¹International Labour Organisation (2020), p. 21.

been unusual, to the extent that telework had in the past mostly been of a voluntary nature and only been used for limited periods of time (e.g., one or two days per week). Purported risks of telework were that it could exacerbate the risk of social isolation and detachment from colleagues and employer, as well as raising ergonomic problems and creating difficulties in detaching from work.⁷² Nevertheless, some have argued that working from home and/or telework, already underway in times preceding Covid-19, are likely to accelerate further in the wake of the crisis.⁷³

What the Covid-19 crisis also seems to have demonstrated is that the most digitalised enterprises are the ones most likely to emerge stronger. E.g., enterprises that had already invested the most in adopting new digital technologies in times pre-Covid-19, were simply able to continue offering their services remotely, which in many cases implied a competitive advantage by comparison to enterprises that had not yet adapted to said technological changes. Once the Covid-19 pandemic will be over, this is, moreover, expected to lead to new customer demands for greater flexibility and more personalised online services.⁷⁴

7.3.3 Adopting Strict Health and Safety Standards in the Workplace

In order to protect labourers for whom working from home was impossible because of the nature of the labour concerned, i.e., in most cases, physical labour and/or labour implying the transfer of physical goods, countries in many cases resorted to limiting business activities to "essential" activities and/or services, or introduced very strict so-called "occupational safety and health" (OSH) standards.⁷⁵

E.g., many countries issued stricter health and sanitary guidelines, ranging from the requirement to use room dividers and personal protective equipment (PPE) such as face masks, gloves and other protective clothing—to restrictions on the maximum number of workers allowed to be physically present on enterprise premises (or certain parts of these premises). Such measures, again, proved more difficult to implement in the informal economy, where labour activities are in many cases carried out in crowded places, such as public areas, often with limited access to hand-washing stations and/or PPE. In addition, labourers and enterprises active in the informal economy are, by definition, not registered, which made it difficult to properly identify them and to disseminate information on OSH measures in an official and effective manner.⁷⁶ Because of this, it became essential to adapt existing policy interventions by taking into account the specific constraints faced by

⁷²International Labour Organisation (2020), pp. 21–22.

⁷³Montoriol-Garriga (2020).

⁷⁴Montoriol-Garriga (2020).

⁷⁵International Labour Organisation (2020), p. 22.

⁷⁶International Labour Organisation (2020), p. 22.

most enterprises and labourers in the informal economy, such as decreased or simplified levels of information and granting exceptional, limited access to formal healthcare services. Solutions were thought of by using communication channels adapted to the needs of the informal economy, such as radio, in order to disseminate information of general interest, by cooperating with entrepreneurial and middle class organisations, and by adopting innovative communication mechanisms and techniques for better reach.⁷⁷

According to research referred to by the ILO in its here quoted study, 32 specific national OSH policy measures in 16 EU countries had been implemented for dealing with the Covid-19 pandemic at the time of the study. Of these, 13 policies had focused on general principles for occupational safety and health, 12 on telework arrangements, 5 on alterations to working arrangements, and 2 specifically on employee welfare.⁷⁸

For example:⁷⁹

- (1) In Italy, the government, associations of employers and trade unions jointly signed a protocol on occupational safety and health measures during the early stages of the Covid-19 crisis, and subsequently, as the Covid-19 crisis persisted, renewed and updated this protocol.
- (2) Germany introduced strict rules for its meat processing industry, after a series of outbreaks of Covid-19 in slaughterhouses and/or meat processing factories had occurred (cf. Sect. 7.11.1.).
- (3) In France, the Ministry of Labour and the employers' organisations in the construction sector negotiated a guide that defined protocols on health and safety in the construction sector, while at the same time aimed at supporting business continuity.
- (4) In Spain, the national OSH institute published updated guidelines for the sectors that were still in operation, including advice on the use of PPE.
- (5) In countries such as the United States, South Africa and South Korea, national OSH authorities made recommendations on the use of engineering and administrative controls, safe work practices and PPE.

Employers have in many countries also been advised to continuously evaluate and manage alternating occupational risks. In Russia, in order to prevent violations of employees' labour rights, an interactive, public control mechanism was launched on the website-portal "Online Inspection of the Russian Federation". Through this portal, employees obtained the possibility to request for advice on compliance with labour legislation, as well as to make an appeal in case of a labour rights violations and/or for complaining about poor labour conditions.⁸⁰

⁷⁷International Labour Organisation (2020), p. 22.

⁷⁸International Labour Organisation (2020), p. 22.

⁷⁹International Labour Organisation (2020), p. 22.

⁸⁰International Labour Organisation (2020), p. 22.

It also became essential to distribute accessible information on occupational safety and health measures targeted at vulnerable groups of the population, such as migrant workers and refugees, e.g., by making such information available in a language they could understand. Special consideration was hereby given to labourers active in informal economic units. In some countries, the ILO itself started to support "Migrant Worker Resource Centres", as well as social partners, in providing understandable and relevant information to migrant workers and the communities to which these belonged on a broad range of topics, such as assistance on Covid-19 related issues, legal assistance for migrant workers who had become the victims of labour rights violations, and the provision of both health and safety training and materials, such as face masks and hand sanitizers. One of the fore-runners in this regard has undoubtedly been the Danish Refugee Council that, in partnership with the Danish Ministry of Health, started to provide information on Covid-19 in 25 languages.⁸¹

7.3.4 Unaddressed Mental Health Issues

In the United Kingdom, the NAO report of 13 May 2021 already cited above, explicitly mentions that the Covid-19 pandemic put a strain on some health and care workers, a sector that was already under high pressure before the Covid-19 outbreak.⁸²

For example:⁸³

- (1) In May 2020, some 45% of UK physicians (3,936 out of 8,685) who responded to a British Medical Association survey said that they suffered from mental illnesses ranging from depression, anxiety, stress, burnout, emotional distress, to other mental health problems related to and/or aggravated by their work. Some registered social care managers added to this that medical workers' mental health was under great pressure, with people being particularly worried about becoming ill themselves, and/or unknowingly passing on the Covid-19 virus to others.
- (2) At the height of the first wave of the Covid-19 pandemic, some care labourers, physicians and nurses felt that they were not sufficiently protected. Many social service providers, similarly, pointed out that they were running out of PPE. This was said to create uncertainty, anxiety and stress.

Given, on one side, the stress that medical staff members were already under prior to the Covid-19 pandemic and, on the other side, the additional pressures brought along by the Covid-19 pandemic itself, the NAO report found that the after-effects of

⁸¹International Labour Organisation (2020), p. 22.

⁸²National Audit Office (NAO) (2021), p. 29.

⁸³National Audit Office (NAO) (2021), p. 29.

the Covid-19 pandemic response were likely to be significant and, for some people, even lasting.⁸⁴

7.4 Providing Sickness Benefits and Paid Leave to All Workers

Again according to the ILO-report referred to before, the widespread use of sick pay and paid sick leave played an important role in enabling workers who got contaminated by the Covid-19 virus to self-isolate, and thus in helping to contain the spread of Covid-19 as much as possible. Said support systems, more precisely, were crucial to workers on several levels, namely by protecting their income, their jobs and their health. However, in the opinion of the ILO, such paid sick leave could only be an effective policy tool during containment, mitigation and post-containment periods, provided it is widely available to a sufficiently large proportion of the workforce.⁸⁵

Regretfully, these premises were far from being met anywhere before the outbreak of the Covid-19 crisis. As a result, at the onset of the Covid-19 epidemic, many labourers, particularly those employed in low-wage forms of employment, such as informal workers and the self-employed, were by and large left unprotected, or inadequately protected, under collectively funded sickness benefits. In addition to posing significant poverty risks, these gaps in protection of the official sick leave programs, also posed a serious threat to public health, as labourers without income replacement during illness may be inclined or even forced to remain working, which, in case of the Covid-19 disease, might result in the contamination of (numerous) others.⁸⁶

As a result, many G20 countries decided to significantly expand their existing sick leave programs, or even to initiate such programs for the very first time in response to the Covid-19 pandemic. E.g., in Korea, where there had been no prior compulsory sick-leave scheme, the "epidemic law" extended paid sick leave to labourers hospitalised or quarantined because of Covid-19. In the United States, it was decided to introduce two weeks of mandatory sick leave for labourers suffering from Covid-19-related symptoms in enterprises with fewer than 500 employees—with such sick leave initially paid by employers but afterwards fully reimbursed by the federal government. Several other countries, including France, Australia and Spain, increased the amount of paid sick leave for people with Covid-19, often through the introduction of new pandemic-related payments or supplements. Some countries (e.g., France and the United Kingdom) temporarily removed existing waiting periods. A group of other countries (e.g., Russia) relaxed on reporting requirements, e.g., by delaying or waiving the need for a medical certificate, or by

⁸⁴National Audit Office (NAO) (2021), p. 29.

⁸⁵International Labour Organisation (2020), pp. 22–23.

⁸⁶International Labour Organisation (2020), p. 23.

allowing online claims. In Russia, it was, furthermore, enacted upon by the legislator that the amount of temporary disability benefits for periods of disability falling within the time period starting 1 April 2020 until 31 December 2020 (the latter date included) could not be less than the minimum wage. Other G20 countries introduced what has been referred to as "stopgap" measures to extend coverage to categories of labourers not covered before. E.g., in the United Kingdom, sickness benefit schemes were extended to all labourers, including those employed in the gig economy and those who were self-insured. Japan decided to provide cash sickness benefits to people who took time off work because of "subjective" Covid-19 symptoms but could not consult a physician. In such a case, a certificate stating the labourer's incapacity to work and provided by the employer was allowed to replace a medical certificate.⁸⁷

During the Covid-19 pandemic, several countries also temporarily extended access to sickness benefits for self-employed workers suffering from Covid-19 and/or in quarantine. This was, e.g., the case for France, Australia, Canada, Korea, Singapore, Spain, the United Kingdom and the United States. Some countries also resorted to measures for ensuring that national social protection schemes were temporarily expanded for the benefit of migrant workers. E.g., in order to ensure migrants' access to public healthcare services, Portugal adopted provisions in accordance with which they were considered permanent residents for the duration of the Covid-19 pandemic.⁸⁸

Some governments issued various other measures to provide income security for those affected by Covid-19, such as the payment of crisis allowances or partial unemployment benefits for employees who were ill and/or in quarantine. This has been the case for, e.g., Australia, Canada, France and the United States. In Argentina, a generalized one-time cash benefit was accorded through existing support channels of the government agency responsible for providing family benefits. The beneficiaries of this one-time support included domestic workers in formal and informal employment. In addition, various countries installed relief funds or other financial support schemes to the benefit of self-employed labourers. In almost all these cases, however, said measures were time-limited and applied to Covid-19 cases only.⁸⁹

Despite the benevolent intentions, said Covid-19 specific sickness benefits in many countries only covered a small fraction of wages, or were only granted for periods even shorter than the recommended self-isolation periods for people suffering from Covid-19 symptoms.⁹⁰

⁸⁷International Labour Organisation (2020), p. 23.

⁸⁸International Labour Organisation (2020), p. 23.

⁸⁹International Labour Organisation (2020), p. 23.

⁹⁰International Labour Organisation (2020), p. 23.

7.5 Addressing Unforeseen Care Needs

For many labourers, the Covid-19 crisis created or increased the needs for family care. We have already explained how, especially during the first wave of the Covid-19 pandemic, many people, especially women, had to devote more time than usual to care for their family, notably children, but also other family members with special care needs, such as elderly parents or family members with disabilities. These increased care needs had many causes, such as school and child day-care closures (cf., furthermore, Chap. 8), reductions in public services for people with disabilities and the elderly (cf. Chap. 6), as well as a decreased availability of domestic workers. The ILO in this regard pointed to the fact that working a full-time job is already difficult under normal circumstances, but that combining a full-time employment with Covid-19 enhanced care needs from children, elderly family members and/or family members with disabilities, was in many cases impossible. This appeared to be especially difficult for single parents and for (young) couples whereby only one partner could telework from home, or whereby both partners were not able to perform telework from home. It needs, hence, not be surprising that especially parents with young children who require closer attention, especially during times of school closures where they were at home all the time and, moreover, were supposed to commit to online schooling, reported particular difficulties balancing work and family life.⁹¹

In order to try and diminish the strain put on working parents, many G20 countries resorted to specific measures for supporting families. Obvious such measures were extending the duration of special paid leave (including parental leave), or providing special financial means so that families could hire paid care services. Examples of countries that resorted to such measures were Australia, Canada, France, Germany, Italy, Japan and the United States. However, in most of these countries, the special paid leave and/or income support measures only applied for limited, fixed periods of times, ranging from 10 days (per parent) in Korea, to up to 12 weeks in the United States, and to four months in Canada. Still, in other countries (e.g., France), the special family support measures were extended a couple of times, for the duration of the closures of the schools and child care facilities concerned. In still other countries, labourers were allowed to take special leave at a flat-rate payment (e.g., in Canada, Korea) or at a fixed part of their usual salary (e.g., in France, Germany, Italy, the United Kingdom and the United States). To the extent that in some countries authorities suspected that continued payment of wages without people working (or without people working full-time) would be difficult to bear for many employers, these countries resorted to measures aimed at supporting employers, such as reductions in employer social security contributions or even direct funding of the special family leave systems through general taxation or social security. Some countries decided to extend these special family care leave systems (or the income support for hiring external care) to self-employed labourers

⁹¹International Labour Organisation (2020), p. 24.

(e.g., in Canada, France, Italy, Japan, and the United Kingdom). However, the ILO pointed to the fact that the financial compensation the self-employed were entitled to, was in many cases lower than the compensation granted to employees. Some countries granted subsidies to compensate enterprises that granted family leave (e.g., Japan), or made loans available to the self-employed who needed to stay home due to school or childcare facility closures.⁹²

In some countries, specific measures were resorted to in order to address special care needs of essential service workers, many of whom (as explained before; cf. Sect. 7.2.2) being women. E.g., in France, Germany and Russia, authorities allowed childcare facilities to remain open, albeit with reduced staff, in order to ensure that the children of essential service workers, e.g., healthcare staff members, could still be looked after. Similar measures were resorted to by Korea, Switzerland and the United Kingdom. Also in Australia, childcare services were allowed to remain open to care for the children of essential workers, while vulnerable children were entitled to enhanced government financial support.⁹³

7.6 Addressing Discrimination, Stigma, and Exclusion

The quoted ILO-report also explains that, from the early start, the Covid-19 pandemic particularly created severe problems for groups of people who already in normal times face discrimination, stigma and exclusion. This may have been due to the fact that many people belonging to such stigmatized or discriminated groups, are over-represented in the informal economy. Varying from country to country, examples of such groups included people with disabilities, indigenous and tribal peoples, lgbtq+ people, people suffering from HIV, forcibly displaced populations and labourers with a migrant background. The ILO report reminded that, regretfully, in many countries these groups of people are far from small or rare categories, but often intersect with each other, as well as with a wide variety of other concerns which may be related to gender (e.g., discrimination against women), socio-economic status (e.g., class-related issues), age (e.g., discrimination on the labour market against people from a certain age on), besides numerous other factors. These factors, either on their own or combined, all may result in multiple layers of discrimination, stigma and exclusion regarding access to employment, social protection, family rights and healthcare services. Covid-19 raised special problems with regard to both protecting labourers belonging to such categories and ensuring that they would be protected and that they would not be discriminated against. This appeared to be especially problematic for labourers belonging to such groups who were employed in the informal economy and who in many cases already were discriminated against on matters of social and labour protection before the outbreak of the Covid-19 crisis.

⁹²International Labour Organisation (2020), p. 24.

⁹³ International Labour Organisation (2020), p. 24.

Furthermore, the ILO expressed its concern about increasing levels of discrimination, xenophobia, and homophobic attacks during the Covid-19 pandemic, besides dramatic spikes in both domestic and societal violence and harassment.⁹⁴

In order to deal with these specific societal problems, some G20 countries resorted to either inclusive policies, targeted measures, or to a combination of both. Such targeted measures could, e.g., be aimed at addressing the impact of the health crisis and the economic consequences for such specific groups. This "twintrack approach" involved, phrased differently, targeted measures to the exclusive benefit of minority groups of special vulnerability, as well as resorting to actions for ensuring that these minority groups would be included in the more mainstream responses and support measures for dealing with the Covid-19 crisis, such as access to financial support, benefits and/or special care services. Such integration policies could also include measures such as, e.g., relaxation of eligibility requirements for benefits. An obvious example of the latter category have been the measures aimed at allowing migrant workers and/or informal economy labourers in general to benefit from income support schemes that, in "normal times", are only open for regularly employed workers. Such inclusion measures, in most cases, only applied for the duration of the Covid-19 crisis, or for a more limited duration.⁹⁵

The category of "targeted measures" included measures for ensuring that public healthcare, public education and matters such as workplace communication regarding Covid-19, were easily accessible to persons with disabilities or to people who speak another language. This could, e.g., involve the use of sign language, as well as ensuring that communications were made available in languages accessible to migrant workers and indigenous and/or displaced people. There were also measures resorted to for ensuring that communications would happen in a culturally appropriate manner, e.g., by taking into account cultural practices of minority groups, indigenous peoples, etc. Such targeted measures could also deal with special healthcare needs, such as social security coverage for dealing with specific, additional healthcare expenses to the benefit of people with disabilities or people living with pre-existing medical conditions, such as HIV, for whom the Covid-19 pandemic generated specific concerns and problems. Some countries were reported to have facilitated the access to benefits for people with disabilities, e.g., through a relaxation on administrative requirements, or to have established systems of ongoing care and support (e.g., in Argentina, France, Turkey and Saudi Arabia). Some countries were reported to have advanced the payment of retirement pensions or disability benefits. Another support measure consisted of increasing the level of financial support under such schemes in order to reduce the risk of poverty (e.g., in Argentina and Turkey). Spain even introduced a minimum-income scheme in the form of a permanent structural instrument designed to protect the most disadvantaged.⁹⁶

⁹⁴International Labour Organisation (2020), pp. 24–25.

⁹⁵International Labour Organisation (2020), p. 25.

⁹⁶International Labour Organisation (2020), p. 25.

7.7 Securing Jobs, Supporting Companies, and Maintaining Essential Service Provision

7.7.1 Introduction

The quoted ILO-report pointed to the (obvious) fact that imposed business closures or other restrictions, quarantines of people, and limitations on mobility, all measures that have been resorted to for containing Covid-19 (cf., in more detail, in Chap. 2), had as side-effect that they put enterprises under severe strain. As economic activity plummeted because of a combination of Covid-19 contamination cases and Covid-19 related deaths on one hand, and of the public measures for dealing with the Covid-10 pandemic on the other hand, even productive, well-managed enterprises started facing major liquidity shortages. Financial commitments to a wide variety of creditors, such as suppliers, employees, lenders, investors and even the state could no longer be met (cf. Chaps. 3 and 4). As for many enterprises demand collapsed and supply chains broke, some enterprises also found themselves with excess capacity. Besides the problems this caused for the enterprises themselves (the solutions that states resorted to have been dealt with in the previous Chaps. 3 and 4), such situations obviously also put jobs at risk on a large scale.⁹⁷

Appropriate solutions had to be found for this, such as:

- (1) Job-retention schemes.
- (2) Limiting dismissals for economic reasons.
- (3) Schemes of protecting workers against unfair dismissals and/or from becoming irregular workers.
- (4) Liquidity support to enterprises (cf. already in Chaps. 3 and 4).

7.7.2 Job-Retention Schemes: Short-Time Work and Wage-Subsidies

According to the ILO-report, one of the main policy tools used by many advanced countries for dealing with the labour related consequences of the Covid-19 pandemic have been "job retention schemes" (abbreviated as "JRS"). Such JRS are designed for protecting labourers against mass layoffs, as well as for protecting incomes. Such JRS, e.g., may aim at preserving jobs at enterprises by temporarily reducing the labour costs of such enterprises, which often account for a substantial share of enterprises" operating costs. Labour costs are especially considerable in the service sector, to the extent that this sector mainly relies on vast numbers of personnel. The service sector, however, was also one of the sectors that were particularly badly affected by the Covid-19 crisis. Other parts of JRS aimed at providing (complements

⁹⁷International Labour Organisation (2020), p. 25.

to already existing) liquidity support measures to the benefit of enterprises who faced temporary credit payment constraints.⁹⁸

Such JRS may take a wide variety of forms:

- (1) JRS can directly subsidise hours not worked, e.g., under the form of short-time work (STW), or temporary layoff schemes.⁹⁹
- (2) JRS can subsidise hours worked.
- (3) JRS can top-up overall earnings of labourers on reduced hours (e.g., the "Job Keeper Payment" in Australia).¹⁰⁰
- (4) Etc.

JRS in practice could differ widely in the level of support they provided to enterprises and labourers and in the eligibility conditions they imposed for participation (e.g., economic necessity, "force majeure", social partner agreement, restrictions on redundancies...).¹⁰¹

According to the ILO-report, several G20 economies, moreover, already had pre-existing "short-time working schemes" in place, which they could quickly adapt to deal with the Covid-19 crisis. Among the G20 countries, those with existing job retention programmes in place were, e.g., Brazil, France, Germany, Italy, Spain and Turkey. The measures resorted to by these countries for expanding their existing STW schemes fell into three main categories: (1) simplifying access and extending coverage in order to stimulate take-up by the enterprises concerned; (2) extending coverage to non-permanent labourers, which often included temporary labourers, (interim) agency labourers, and even some categories of self-employed labourers, and (3) increasing the levels of financial support, e.g., by raising income replacement rates for workers and/or reducing costs for enterprises.¹⁰²

In addition, a number of countries were reported to have introduced new job retention schemes, based on a combination of elements of STW schemes and elements of standard wage subsidies. Australia and Canada, e.g., were among the G20 countries that resorted to temporary wage subsidy schemes. In the opinion of the ILO, while wage subsidy schemes may be easier to execute and, moreover, provide more flexibility to enterprises than traditional STW schemes, they also tend to be less well targeted at enterprises facing financial problems. By contrast, in countries where the costs of lay-offs are relatively low, a STW scheme was in most cases not very appealing for enterprises.¹⁰³

⁹⁸International Labour Organisation (2020), p. 25.

⁹⁹The ILO in this regard makes reference to the German "Kurzarbeit", the French "Activité partielle", the Italian "Cassa Integrazione" and the Spanish "ERTEs"). (Cf. International Labour Organisation (2020), p. 25.)

¹⁰⁰International Labour Organisation (2020), p. 25.

¹⁰¹International Labour Organisation (2020), p. 25.

¹⁰²International Labour Organisation (2020), pp. 25–26.

¹⁰³International Labour Organisation (2020), pp. 25–26.

According to the ILO-report, in several of the G20 countries, both the requests and the actual uptake under new or extended JRS have been massive. By May 2020, enterprises' requests for support under JRS covered 55% of employee costs in France, over 40% in Italy, and around 30% in the United Kingdom, Germany and Australia. In some countries, however, the actual take-up of JRS has been significantly lower than originally intended. In Germany, e.g., the actual take-up only amounted to 19% in May 2020, and to 33% in France.¹⁰⁴

In the opinion of the ILO, the substantial adoption of such JRS instruments in both Australia and many of the European countries, in part, explains why these countries did not experience the massive increase in unemployment that occurred in countries such as Canada and the United States.¹⁰⁵

7.7.3 Limiting Economic Dismissals and Protecting Workers Against Unfair Dismissals, or From Becoming Irregular Workers

According to the ILO-report, to keep the immediate increase in layoffs within reasonable boundaries and to propagate a high take-up rate of JRS, some G20 countries resorted to restrictions on collective and individual dismissals.¹⁰⁶

Such restrictions included: (1) imposing an explicit ban on layoffs for economic reasons, as did Argentina, Italy and Turkey; and (2) resorting to increased control and costs for layoffs, as did Spain and France.¹⁰⁷

Such policies of limiting layoffs can serve several further goals, such as:¹⁰⁸

(1) help maintain incomes of labourers,

(2) during a period of already high anxiety, limit the possibility of employers to use a new crisis, notably the Covid-19 crisis, as an excuse to dismiss labourers they had already planned before to lay off for non-economic reasons.

On the downside, a strict ban on dismissal of personnel may also result in enterprise failures, especially in cases that the access to JRS is incomplete, impractical, delayed or simply too costly. Forbidding dismissals may also further lead to adjustment towards fixed-term contracts, which are terminated in case of simple non-renewal. Finally, limitations on economic layoffs, especially in combination with too generous JRS may prevent necessary structural changes in the labour market and even slow down general economic recovery.¹⁰⁹

¹⁰⁴International Labour Organisation (2020), p. 26.

¹⁰⁵International Labour Organisation (2020), p. 26.

¹⁰⁶International Labour Organisation (2020), p. 27.

¹⁰⁷International Labour Organisation (2020), p. 27.

¹⁰⁸International Labour Organisation (2020), p. 27.

¹⁰⁹International Labour Organisation (2020), p. 27.

During the Covid-19 pandemic, it also became of significant importance to ensure that migrant workers and refugees obtained regular status or did not fall into a situation of irregularity. E.g., measures for facilitating the extension of visas and amnesties, as well as permits for renewal of work or residence, can help to ensure both access to essential services, and continuity of regular employment, in this manner avoiding a rise of irregularity. During the Covid-19 crisis, some countries (such as South Africa), therefore, decided to extend migrant work visas and/or amnesties, besides resorting to other measures for alleviating the obstacles that migrant workers and their families living in destination countries were facing. During the peak months of the Covid-19 crisis, a number of EU countries resorted to steps to extend the validity or automatically renewable residence or asylum status documents. This was, e.g., done by Portugal, Italy, Spain, Ireland and Portugal. Other EU countries introduced measures to enhance transition from the informal to the formal economy, in sectors characterized by a high proportion of informal migrant workers. This was, e.g., done by Italy. Spain also made the treatment of residence permits more flexible in order to avoid their withdrawal or non-renewal if a migrant loses his or her job, or is temporarily laid off due to the Covid-19 crisis.¹¹⁰

7.7.4 Liquidity Support for Enterprises

According to the ILO-report, many G20 countries—but also supranational policy levels, such as the E(M)U—adopted a wide range of emergency measures to support the liquidity of the entrepreneurial sector in the broad sense of the word. In addition to monetary measures resorted to by central banks (cf. already Chap. 3), governments themselves intervened by means of fiscal policy measures for helping enterprises in smoothing their financial obligations over time (cf. already Chap. 4). Such fiscal policy measures included subsidies, loan guarantees and other fiscal measures aimed at supporting the overall financial liquidity position of enterprises. Some countries even delivered direct financial support by injecting liquidity or by pooling losses. Other measures included grants based on past sales, job retention grants, donations and profit sharing agreements. There were even countries (e.g., Russia) that took more direct support measures, such as allowing enterprises a deferral of paying their taxes and/or social security contributions, extending loan maturities and/or temporarily suspending loan re-payments. Finally, some countries supplemented these measures with further "soft" policy tools aimed at securing repayments and payments of interests, as well as preserving operating cash flow.¹¹¹

Still according to the ILO, many countries issued specific measures for supporting small and medium-sized enterprises (SMEs) in particular, to the extent that such

¹¹⁰International Labour Organisation (2020), p. 27.

¹¹¹International Labour Organisation (2020), p. 27.

small and medium-sized enterprises were generally facing greater liquidity constraints.¹¹²

It has been estimated that without these public support measures, 20% of the enterprises operational in the EU, would have faced a liquidity crisis after the first month of Covid-19 containment. If the containment measures would have lasted seven months, more than 50% of the entrepreneurial world would have started to face a liquidity shortage. In case these liquidity constraints would not have been addressed immediately through monetary and/or fiscal policy measures, this could have resulted into a severe solvency crisis, with long-term negative effects on employment, productivity, economic growth and overall welfare.¹¹³

However, certainly in the EU and in the EU Member States, the majority of the Covid-19 financial support measures, both in the field of monetary policy, as in the field of fiscal policy, were made to the benefit of the banking and business world with the "trickle-down economics doctrine" in mind. This aid to the entrepreneurial class would then "drip" to the rest of the population, e.g., via wages. However, it is suspected that the costs of this aid, in particular the repayment costs of the loans that European governments had to incur to finance it, will in the post-Covid-19 era have to be recovered from the general EU population. As has also been the case after the 2008 financial crisis, this will probably happen through a mix of (1) higher and/or new taxes, (2) the resumption of neoliberal austerity policies and, perhaps even (3) a renewed debate on even further raising the retirement age for the working class.

As was already explained above in Sect. 7.1.2, with each crisis, these effects of the capitalist monetary and financing model get even worse, which is why already in the aftermath of the previous capitalist crisis of 2008, we ourselves called for a fundamental rethinking of the systems for ordering the economy.¹¹⁴ The current Covid-19 crisis has only magnified this need, which is why we continue to emphatically reiterate our call to start thinking about alternative systems. We shall return to this important issue in the final conclusions of this book (cf. Chap. 11).

7.8 Income Support for Those Losing Their Job or Self-Employment Income

According to the ILO-report, during the Covid-19 crisis, extended income support programmes have been of vital importance for alleviating economic hardship. Such programmes were especially aimed at stabilising the economy by supporting aggregate demand.¹¹⁵ Even before the Covid-19 crisis, such social protection schemes varied considerably between advanced and emerging/developing economies.

¹¹²International Labour Organisation (2020), pp. 27–28.

¹¹³International Labour Organisation (2020), p. 28.

¹¹⁴Cf. Byttebier (2015a, b, 2017, 2018, 2019, 2021).

¹¹⁵International Labour Organisation (2020), p. 29.

Variations occurred, e.g., in terms of design, coverage, level of support and delivery mechanisms of these protection schemes. In light of these already existing differences, a variety of strategies were adopted to strengthen these schemes in the face of the brutal and deep recession that was caused by the Covid-19 pandemic.¹¹⁶

In the ILO-report, it is explained how in many advanced G20 economies, but also increasingly in some emerging economies such as China, social insurance schemes are of vital importance for delivering proximity support in the event of job loss. However, the Covid-19 crisis highlighted a number of shortcomings in these existing schemes, both with regard to labourers to the self-employed, who were not always fully covered by these schemes, if at all. For this reason, already in the early weeks of the Covid-19 crisis, many G20 countries sought to improve both access and the levels of support under the unemployment insurance or assistance systems.¹¹⁷

According to the ILO-report, measures taken by countries to extend said benefits, at a federal/national or local policy level, fell into four main categories:¹¹⁸

- (1) Ameliorating access to and increasing coverage under said unemployment benefits—either by decreasing or completely eliminating minimum contribution demands, or waiting periods (e.g., in Spain and the United States), or by extending the qualifying period with regard to employment conditions (e.g., in France and the United States), or by including groups that had before not been eligible, such as the self-employed (e.g., in China, France, Spain and the United States) or domestic labourers (e.g., in Spain).
- (2) Extending the duration of unemployment benefits—either by prolonging the maximum time duration (e.g., in Argentina, Germany, Switzerland and the United States), or by extending all expiring claims until the end of the Covid-19 crisis (e.g., in Italy, Luxembourg, Portugal and Spain).
- (3) Increasing the level of unemployment benefits (e.g., in Australia, Russia, and the United States), or by increasing the level of benefits under second tier programmes (e.g., in Austria, the United Kingdom and the United States).
- (4) Granting income aid to the most disadvantaged—e.g., by introducing minimum income schemes for aiding those suffering from societal exclusion, or those exposed to a risk of becoming excluded, because of a shortage of financial resources (e.g., in Spain), besides measures of a temporary nature to support informal and self-employed workers (e.g., in Argentina and Italy).

¹¹⁶International Labour Organisation (2020), p. 29.

¹¹⁷International Labour Organisation (2020), p. 29.

¹¹⁸International Labour Organisation (2020), pp. 29–30.

7.9 Employment Services and Training for Jobseekers and Workers

During the Covid-19 pandemic, countries also had to undertake measures to help public employment services cope with the surge in claims for benefits and adapt to the demands raised by physical distancing measures.¹¹⁹

Measures resorted to included:

- simplifying and streamlining application procedures (e.g., in Russia, Spain, and the United Kingdom).
- moving quickly to online platforms (e.g., in Spain and the United Kingdom).
- changing the procedures for making claims during periods of confinement.
- allowing automatic renewal of benefits, without having to follow the usual renewal procedures (e.g., in Spain).
- relaxing job search and reclassification requirements for existing beneficiaries during the Covid-19 crisis (e.g., in France and Germany).
- resorting to a moratorium on existing sanctions for jobseekers who did not comply with the regulations (e.g., in Australia and Italy).
- the reallocation of staff from non-core services to claims processing as a priority (e.g., in Germany).¹²⁰
- ...

Countries also soon started to prepare their employment services for the time when physical and social distancing measures, besides other containment measures, would be abandoned. Well-functioning private and public employment services were hereby deemed of vital importance for facilitating the relocation of job seekers, as it was expected that the labour market would shift drastically across sectors and regions once the Covid-19 crisis would reach its conclusion. Some countries, e.g., started to increase funding for retraining and upgrading programmes for labourers who lost their jobs because of the Covid-19 crisis (e.g., Korea, India).¹²¹

¹¹⁹International Labour Organisation (2020), p. 32.

¹²⁰International Labour Organisation (2020), p. 32.

¹²¹International Labour Organisation (2020), p. 33.

7.10 Plans for Reopening the Economy

7.10.1 Neoliberal Strategies of Reopening the Economy (and Why These Can Be Lethal)

7.10.1.1 Underlying Neoliberal Ideas

To the extent that the entire organization of neoliberal economies is geared towards keeping every worker employed for (1) as long (in life), and (2) as much as possible, it should come as no surprise that, already very early in the course of the Covid-19 pandemic, and much earlier than would have been appropriate for combatting it, calls for the "reopening of the economy" started resonating throughout the Western world.

Western countries could instead have followed the lead of the examples of a wide variety of Asian countries. These had much more experience in combating these kinds of health crises, and contrary to many Western countries, had in most cases, based upon an elimination strategy rather than a mitigation strategy, kept strictly observed NPIs (short for "Non-pharmaceutical interventions"), such as testing and tracking, besides social distance and hygiene measures, in place until the Covid-19 spread had as good as entirely disappeared from their territory (cf. Sect. 2.4.2.4.1). Another example that could have inspired the governments of the Western world was, e.g., New Zealand (cf. Sect. 2.4.2.4.2).

Notwithstanding the success rates of said countries, the Western world was not particularly inspired by these examples. On the contrary, especially during the first wave of the Covid-19 pandemic (albeit not limited to this first wave), most Western countries found situations of lockdown and/or, by extension, all types of measures that limited the freedom of individuals and enterprises too much, more than enough after a few weeks only. As a result, neoliberal governments of many Western countries, urged upon by all kinds of business interest groups, started much sooner than would have been wise with the so-called "reopening of their economies". Working people were quickly ordered back to their physical workplaces, in many cases without much consideration for their health or safety. (Cf. Sect. 2.2.6.)

So, especially during the first wave of the Covid-19 pandemic, already after a few weeks of restrictive measures, neoliberal governments all over the Western world initiated plans for reopening their economies, with one of the most prominent advocates of this policy being (once again) US President Donald Trump (next to a wide variety of lesser gods of neoliberal thinking).

An early example of how neoliberal ideology thus became dangerous for the working class, could already be seen from the pressure put on the American federal government by a variety of corporate lobbyists, not to activate the "Defense Production Act". Under this Act, the US executive branch could have decided to order enterprises to manufacture medical supplies for both testing and treating the Covid-19 virus. Instead of making use of this possibility, Trump insisted that hospitals would simply take care of their own. (Cf. Sect. 2.5.4.1.) Worse, a wide variety of

politicians and lobbyist soon started aching to get the economy back to normal, with the stock markets and the popularity ratings of politicians themselves further driving these demands. The lieutenant-governor of Texas even went as far to suggest that older Texan citizens—the group most prone to dying from the Covid-19 virus—would be glad to "sacrifice" their lives in the interest of getting the economy moving again.¹²²

The underlying policy of dealing with the Covid-19 crisis thus became not so much about (entirely) eliminating the disease, but rather one of keeping statistics in check (i.e., a mitigation strategy), namely by on the one hand accepting that new Covid-19 infections and deaths would continue to occur, while on the other hand ensuring that the contamination and death cases would not become so high that (1) the hospitals (especially regarding the availability of ICU beds) would no longer be able to cope with new cases (as had happened in Italy in early-March 2020) and (2) economic production would suffer too much.

Indeed, under neoliberal doctrine, the importance of the economy (more specifically of the profits of the class of wealthy entrepreneurs) always takes precedence over any other concern,¹²³ in the case of the Covid-19 crisis, including public health, which itself, in accordance with economic neoliberalism, only needs to be protected to the extent that it could negatively affect economic production. Under such a public policy approach, the life of an individual (unless it concerns a wealthy entrepreneur, or a major shareholder of an important company) is of no value; what counts are the profit margins.

Incidentally, we have already seen this neoliberal subordination of all other values to economic interests several times before in our search for the causes and consequences of the Covid-19 pandemic,¹²⁴ e.g., also:

(1) With the privatization and the marketization of the hospital sector since the 1990s, whereby EU austerity policy had led to a reduction in health and medical care, including a substantial decrease in both the number of hospitals and

¹²²Assa (2021).

On 24 March 2020, Dan Patrick, at the time the lieutenant governor of Texas, argued in an interview on Fox News' "Tucker Carlson Tonight" night that the United States should simply go back to work, saying grandparents like him, did not want to sacrifice the country's economy during the Covid-19 crisis. Patrick, was quoted saying that he wanted to reopen the country for business in weeks, not months. Patrick was also quoted saying that the elderly population could take care of themselves and suggested that grandparents would not want to sacrifice their grandchildren's economic future. Patrick even claimed that, after having spoken to over a hundred people over the phone, there was a general consensus under the elderly population of the United States that they did not want to "lose our whole country" over the current public health crisis and face an economic collapse. (Cf. Rodriguez (2020).)

¹²³Cf. Byttebier (2017), p. 184.

¹²⁴In some of our other work, we have explained the origin and the motivation for this "subordination of values" in more detail. (Cf., e.g. Byttebier (2017), pp. 184–219; Byttebier (2018), pp. 144–146.)

hospital beds (both ICU and other), next to a decrease in nursing staff—especially in the aftermath of the financial crisis of 2008 (cf. Chap. 5).

- (2) With the privatization and the marketization of the long-term nursing home sector, whereby, under the dictates of economic neoliberalism, the quality of care for the elderly had been sacrificed to the profit margins of the private companies that own and run such long-term nursing homes to an ever-increasing extent (cf. Chap. 6), and,
- (3) As we shall see below, regarding the EU's vaccination policy, whereby (infuriatingly well-paid) EU officials in charge of the Covid-19 vaccine procurement conducted lengthy negotiations in order to obtain the lowest possible prices for the Covid-19 vaccines. As result that the EU placed most of it procurement orders very late in the bidding game, ultimately resulting in extreme vaccination delays all over the Union; cf. Sect. 9.4.3.).

But for the moment, we are dealing with the fact that, just a few weeks after the initial lockdowns and similar containment measures during the first wave of the ovid-19 pandemic, Western countries were itching to reopen their economies, and, in order to do so, were looking for measures not so much aimed at preventing the further spread of Covid-19, but to keep this spread as manageable as possible in the light of economic interests.

We shall address these measures under the Sect. 7.10.2, but not before having a closer look at one of these "reopening" plans, more precisely the mid-April 2020 plan of the Trump administration in the United States.

7.10.1.2 Trump's Plan for "Opening Up America Again"

On April 16, 2020, President Trump introduced his "Opening Up America Again"-plan,¹²⁵ aggressively touting his desire to get back to normal and emphasizing the importance of reopening the economy as soon as possible.¹²⁶

Ironically, Trump's reopening plan was announced on the day of the at the time highest US-death toll, with a total of more than 680,000 confirmed Covid-19 contamination cases and 34,000 Covid-19 related deaths.¹²⁷

Figure 7.1 gives an overview of the new daily Covid-19 cases the United States was reporting at the time.

The Trump administration's 18-page guidance document, titled "Guidelines— Opening up America again", detailed three phases to reopen state economies, with each of these phases lasting, at minimum, 14 days.¹²⁸

¹²⁵Trump administration (2020).

¹²⁶PYMNTS (2020a).

¹²⁷Pilkington and Rushe (2020).

¹²⁸BBC News (2020a); Pilkington and Rushe (2020).

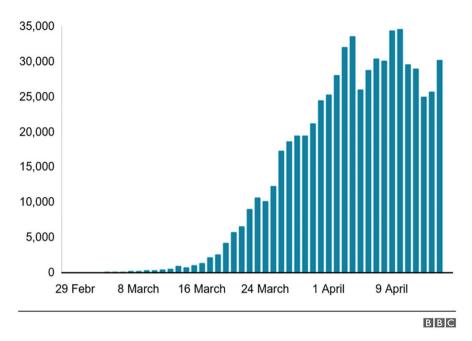


Fig. 7.1 New daily cases of the Covid-19 virus in the USA (as of 15 April 2020) [Source: BBC News (2020a)] (Source: Covid Tracking Project, 15 April)

These three phases were as follows:¹²⁹

- (1) Phase one was to include much of the at the time already existing lockdown measures, such as the avoidance of all non-essential travel and a ban of gathering in large groups. But Trump's document also said that large venues, such as restaurants, places of worship and sports venues could again start operating under strict physical distancing protocols.
- (2) If there was no evidence of a reoccurrence of Covid-19, phase two was to allow non-essential travel. The Trump administration-guidance, moreover, said that schools could then also reopen and bars could start operating "with diminished standing-room occupancy".
- (3) Under phase three, states still facing a downward trend of Covid-19 contaminations would be allowed to start "public interactions" and to allow unrestricted staffing of worksites. Visits to long-term nursing homes and hospitals would also be allowed to resume, and bars would be allowed to increase their standing room capacity.

¹²⁹BBC News (2020a).

Under this policy, counties could start to return to normalcy after a month-long evaluation period. In places with remaining Covid-19 infections, or with rising rates, this evaluation period could take longer.¹³⁰

However, academics and public health experts soon started scrutinising the president's plan and guidelines, doubting both their safety and necessity.¹³¹

E.g., in an opinion piece which appeared in 'The Guardian' on 3 May 2020, entitled "Donald Trump's four-step plan to reopen the US economy—and why it will be lethal", Robert Reich commented on the underlying neoliberal agenda of this reopening strategy, as well as on the dangers it inherently posed.¹³² In addition, upon the announcement of Trump's reopening plan, a chorus of expert voices warned that three essential pillars for such a plan to have the slightest chance of being successful, were still missing in the United States. According to these scientists and public health officials, these three pillars were: (1) mass testing to identify those who were contaminated, (2) contact tracing to isolate other people who might have caught Covid-19 from them, and (3) an ample supply of personal protective equipment (PPE) to shield frontline healthcare workers from any flare-up of the number of contamination cases.¹³³

According to Reich, the implementation of the plan of the Trump administration to reopen the economy by early-May 2020, in practice, started with an announcement made by Trump's labour department. Furloughed labourers that did not accept an employer's offer to return to work, would lose their unemployment benefits, regardless of Covid-19. Around the same moment, Trump's ally, Iowa's Republican governor, Kim Reynolds, similarly explained that labourers could not refuse to return to work for fear of contracting Covid-19, arguing that this would imply a voluntary dismissal which would make someone ineligible for benefits. In all these statements, no consideration for the health of the employee was considered relevant.¹³⁴

For Reich, it was clear:¹³⁵

Forcing people to choose between getting Covid-19 or losing their livelihood is inhumane. It is also nonsensical.

The neoliberal scheme to reopen the economy as quickly as possible and send the working classes of the American population back to the physical working floors as soon as possible, was not just based on the aforementioned threat of withdrawing social benefits (obfuscated with the classic austerity argument that these burden public finances too much).

More importantly, a twofold persuasion strategy was used.

¹³⁰BBC News (2020a).

¹³¹Pilkington and Rushe (2020).

¹³²Reich (2020).

¹³³Pilkington and Rushe (2020).

¹³⁴Reich (2020).

¹³⁵Reich (2020).

The first part of this persuasion strategy concerned a deliberate concealment of the actual Covid-19 contamination figures, in order to convince workers of a false sense of security. According to Robert Reich, at the beginning of May 2020, no one had any clue how many Americans were infected, because the Trump administration deliberately continued "to drag its heels" on testing. E.g., Florida, one of the first states to reopen its economy, had simply stopped releasing medical examiners' statistics on the number of Covid-19 victims because the figures were higher than the state's official count. Not surprisingly, the White House at the time also blocked Dr Fauci from testifying before the US House of Representatives, apparently in order to stop him from presenting the members of the House (and, by extension, the American public) with accurate figures on the crisis.¹³⁶

Still according to Reich, the second step of this persuasion strategy was to convince the general public that lockdown and social distance measures affected their individual freedom too much and, therefore, clashed with the basic values of Western society. As much as this line of argument, going back to the writings of Ayn Rand (cf. Sect. 2.5.2), is, obviously, complete nonsense, it is nonetheless astonishing to witness to what extent this kind of propaganda has been successful (and even resonated far beyond the borders of the United States itself).¹³⁷

According to Reich, the Trump administration went incredibly far in deploying this persuasion strategy. Weeks before, Trump had already called on the general public to "LIBERATE" states such as Michigan, whose Democratic governor, Gretchen Whitmer, had mandated strict "stay-at-home rules". At the time, Michigan purportedly had the third-highest number of Covid-19 related deaths in the United States, although it was only the 10th biggest states in terms of population. The Covid-19 virus had, more precisely, infected more than 41,000 Michigan residents and had led to the deaths of 3789, many of them in the Detroit area. When Whitmer had made the decision to extend Michigan's lockdown measures until 28 May 2020, gun-toting protesters were reported to have rushed to the state house, while chanting: "Lock her up!" Rather than condemn the behaviour of these protesters, president Trump had responded by suggesting that Whitmer should "make a deal" with the group of protesters. "The Governor of Michigan should give a little, and put out the fire," President Trump was reported of having tweeted, while continuing; "These are very good people, but they are angry. They want their lives back again, safely!" In another tweet, almost foreshadowing the events that preceded the attack on the US Capitol on 6 January 2021, President Trump had appealed to supporters of gun rights when he wrote: "LIBERATE VIRGINIA, and save your great 2nd Amendment. It is under siege!" Meanwhile, the US attorney general, William Barr, had directed the

¹³⁶Reich (2020).

¹³⁷Reich (2020). We would later meet a similar emotional argument in the debate about reopening schools (as much as possible): there it was argued that the feelings of the poor children and teenagers were so hurt by not being allowed to go to school (enough), and that the same poor children and teenagers were deprived of social contacts, in order to make the case of keeping schools open (as much as possible), without any consideration whatsoever for the health and safety of the teachers—the working people on the floor that never matter to neoliberals at all.

justice department to take legal action against any state or local authorities imposing lockdown measures that "could be violating the constitutional rights and civil liberties of individual citizens".¹³⁸

Making lockdown, containment and other health and safety measures about "freedom" is in the opinion of Reich, obviously, absurd. Together with Reich, we can only argue that "freedom" is meaningless for people who have no choice but to accept (or return to) a job that will put both their health and life at risk.¹³⁹

As a final component of his "reopen the economy"-strategy, Trump even announced that he would seek to give reopening businesses a "liability shield" against legal action by workers or customers who would get infected by the Covid-19 virus. At the end of April 2020, Trump also announced that he would use the "Defense Production Act" in order to sign an executive order, forcing meat-processing plants to remain open despite extremely high rates of Covid-19 infections and deaths among meatpackers.¹⁴⁰ Such an executive order was ultimately signed on 28 April 2020. (Cf. Sect. 7.11.1.2.2.1.)

In a similar manner, the (at the time) US Senate majority leader, Mitch McConnell, insisted that the proposed legislation giving state and local governments the funding they desperately needed, had to include legal immunity for corporations that would cause workers or consumers to become infected. In the further opinion of Reich, such legal initiatives were not only immoral, but also completely absurd, raising the question how the economy could safely reopen if enterprises did not have any incentive to keep people safe, taken into further consideration that vague promises to provide protective gear and other safeguards are worthless absent the threat of damages if workers or customers would indeed get infected.¹⁴¹

It was, moreover, not only politicians who wanted the economy to reopen as soon as possible, and regardless of the cost for human lives among the working classes. Also, captains of industry joined in. E.g., during the spring of 2020, after having

¹³⁸Reich (2020); Greve (2020).

During a radio interview with conservative host Hugh Hewitt of April 21, 2020, US attorney William Barr declared that governors with mandates that are too strict, could inadvertently be violating citizens' fundamental and constitutional rights. "When a governor acts, especially when a governor does something that intrudes upon or infringes on a fundamental right or a Constitutional right, they're bounded by that," Barr had said. "And those situations are emerging around the country, to some extent." Barr had, more specifically, pointed to some stay-home rules as "burdens on civil liberties" and had indicated that if lawsuits would surface, the DOJ would not side with the states. "The idea that you have to stay in your house is disturbingly close to house arrest. I'm not saying it wasn't justified. I'm not saying in some places it might still be justified. But it's very onerous, as is shutting down your livelihood," Barr had, furthermore, said. "I think the president's guidance has been, as I say, superb and very common sensical, and I think a lot of the governors are following that," Barr said. "And you know, to the extent that governors don't and impinge on either civil rights or on the national commerce, our common market that we have here, then we'll have to address that." (Cf. PYMNTS (2020a).)

¹³⁹Reich (2020).

¹⁴⁰Crampton and Orr (2020).

¹⁴¹Reich (2020). Cf., furthermore, Evelyn (2020).

called government stay-at-home orders "fascist" and tweeting "FREE AMERICA NOW", Elon Musk was reported to have reopened his Tesla factory in Fremont, California, even before health officials had declared that it was safe to do so. Almost immediately, 10 labourers of Tesla contracted the Covid-19 virus. As contamination cases mounted further, Musk simply fired labourers who had taken unpaid leave in order to protect themselves from being contaminated. Seven months later, at least 450 Tesla labourers had been infected with Covid-19.¹⁴²

Be this as it may, President Trump's idea of reopening the economy had by the end of April 2020 obtained a huge resonance. One of the states that, at the time, announced its own reopening plan even ahead of the three-phase "Opening Up" Trump himself had in mind, was the state of Georgia, where the reopening was officially slated to start on Friday, 24 April 2020. Georgia announced it was about to allow hair salons, nail salons, massage therapists, bowling alleys and gyms—all, obviously, of the highest importance for the economy to function—to open again, with restrictions on the in-store density of consumers. In addition, movie theatres and restaurants were scheduled to reopen by Monday, April 27, 2020. Unfortunately, Georgia was not alone in its efforts to restart its economy. South Carolina, in a similar manner, albeit at a slower pace, began its own, limited store reopenings on Monday 20 April 2020, while Florida had already lifted a state order that had before closed public beaches. Texas was likewise allowing for some limited business reopenings as of Friday 24 April 2020, while Tennessee announced plans to reopen the majority of its businesses as of 1 May 2020.¹⁴³

By 20 May 2020, each state that had imposed a stay-at-home order earlier in the Covid-19 pandemic, had begun lifting the restrictions on enterprises and public areas. People were, in some cases, allowed to go back to restaurants, offices and places of worship. In response, some people effectively ventured out; however, other people would still continue to stay at home as much as possible. Health experts at the time declared that they wanted to see expanded testing and contact tracing of people who were suspected of having caught the Covid-19 virus, before they could validate such reopenings. Health experts similarly called for improved medical treatment options and vaccine development before even considering further step(s) of these reopening processes.¹⁴⁴

Nevertheless, in the period between 20 April 2020 until mid-May 2020, most of the states of the United States started their reopening process. Table 7.1 gives an indication of the first date, per state, on which such reopening started.

¹⁴²Reich (2021b).

¹⁴³PYMNTS (2020a, b).

¹⁴⁴Elassar (2020).

State	Starting date of reopening	State	Starting date of reopening
Alabama	April 28	Montana	April 24
Alaska	April 22	Nebraska	April 24
Arizona	May 1	Nevada	May 7
Arkansas	May 1	New Hampshire	May 1
California	May 7	New Jersey	May 13
Colorado	April 26	New Mexico	April 30
Connecticut	May 9	New York	May 11
Delaware	May 5	North Carolina	May 5
Florida	April 29	North Dakota	April 29
Georgia	April 20	Ohio	May 7
Hawaii	May 5	Oklahoma	April 24
Idaho	April 30	Oregon	May 7
Illinois	April 24	Pennsylvania	May 4
Indiana	May 1	Rhode Island	May 5
Iowa	April 27	South Carolina	April 20
Kansas	April 30	South Dakota	April 28
Kentucky	May 4	Tennessee	April 20
Louisiana	April 30	Texas	April 27
Maine	April 29	Utah	April 29
Maryland	May 13	Vermont	April 24
Massachusetts	May 18	Virginia	May 8
Michigan	April 24	Washington	May 4
Minnesota	April 23	West Virginia	April 30
Mississippi	April 24	Wisconsin	April 27
Missouri	April 27	Wyoming	April 28

Table 7.1 Starting dates of reopening of US states^a

^aSmith et al. (2020)

7.10.1.3 In-Between Evaluation

Throughout the further Covid-19 pandemic, the approach of easing restrictions as soon as Covid-19 contamination and Covid-19 related death numbers were some-what under control again, would characterize the public policy of neoliberal governments all over the Western world, with the underlaying aim not so much the elimination, or mere containment of the Covid-19 pandemic, but rather to keep it within purportedly "reasonable" boundaries. As explained before, this policy approach resulted in a series of guided "accordion movements", whereby the numbers of Covid-19 cases (both contamination cases and deaths) would go up (during reopening) or down (when reopened economies had to lock down again), as indicated above (cf. Sect. 2.2.6 and Table 2.1.).

7.10.2 Ensuring the Safety of Re-Opened Workplaces (Enough)

By the time the first calls to "reopen the economy" started resonating throughout the Western world, around the beginning of May 2020, the development of Covid-19 vaccines was still in an early stage (cf., furthermore, Chap. 9). If Western economies were to reopen, a comprehensive set of NPIs would be needed to avoid a second wave of the Covid-19 pandemic. These would range from large-scale testing, monitoring and contact tracing, to enhanced personal hygiene recommendations and continued physical and social distance policies. In the meantime, working from home could remain a viable means of ensuring that some work could continue, without the risk of spreading the Covid-19 virus during commuting and working hours. This would however, remain a privilege for those few labourers who did not need to be physically present at their place of employment.¹⁴⁵

Incidentally, this connected back to a discriminatory policy within capitalist societies from a more distant past, in which a distinction was made between, on the one hand, so-called "(physical) blue-collar" workers who, in times of Covid-19, could not be sent back to the working floors quickly enough and, on the other hand, so-called "(intellectual) white-collar" workers for whom teleworking was deemed possible.¹⁴⁶

According to the already quoted ILO-report, in their search for methods to reopen the economy, most G20 countries resorted to specific policies for a supposedly safe return to work, often recommending a gradual return to the workplace based on several criteria. These included: (1) limiting the frequency and proximity of contacts between labourers and between labourers and customers, and (2) increasing the awareness and preparedness on how to deal with new outbreaks of the Covid-19 virus that were bound to occur.¹⁴⁷

¹⁴⁵International Labour Organisation (2020), p. 36.

¹⁴⁶International Labour Organisation (2020), pp. 36–37.

In addition to the call that the economy should reopen, there was also the parallel call that the schools should open again, with the suspicion that this was more likely to ensure that childcare was assured for the benefit of the parents who went to work, then because of a concern for the education of the young ones themselves, a presumption that is not implausible in the light of the scale of values that characterizes neoliberalism. Teachers were thus placed on an equal footing with physical labourers: Their health and lives were in a similar manner considered of less value than the economic interests themselves.

¹⁴⁷International Labour Organisation (2020), p. 36.

E.g., in India, guidelines with regard to a multi-phase re-opening plan identified "red", "green" and "orange" zones according to risk profiles and, moreover, defined the protocols applying to each colour, as well as the activities that would be allowed in each zone. Employers were thereby advised to still promote remote working, ensure physical protection and carry out thermal scans on the physical working floors. In Australia, state and federal governments agreed on ten guidelines to help enterprises and labourers maintain safe working environments throughout the Covid-19 pandemic. In Turkey, the DG OSH of the Ministry of Family, Labour and Social Services, prepared guidelines, posters, videos and sectoral checklists (indicating areas of high risk for the spread of Covid-19, such

Many return-to-work public policies required employers to carry out risk assessments and to provide safe labour conditions in accordance with a hierarchy of controls, as suggested by ILO guidelines on occupational safety and health management systems and on return-to-work policies.¹⁴⁸ In addition to government rules that described best practices, some enterprises were in need of more practical and/or financial support in order to implement these kinds of occupational health and safety practices (e.g., through tax credits). According to the ILO, in many countries, collective bargaining and social dialogue proved to be further key instruments in guaranteeing safer working environments. Guidelines and codes of best practice drawn up by the social partners, as well as agreements signed between employers and trade unions, as resorted to in e.g., France, Italy and Spain, have demonstrated how social dialogue and collective bargaining could complement public policy measures.¹⁴⁹

Without wishing to downplay the importance of such measures, one cannot escape the impression that in many cases they were simply "too little, too late", as e.g. the events in the German meat processing industry (to which we shall return in more detail in Sect. 7.11.1) have shown.

Alongside these back-to-work rules, the effective isolation of infected labourers remained a central measure for curbing the spread of the Covid-19 disease. In order to ensure that such a policy could be implemented, isolated or quarantined labourers had to obtain a replacement income for the duration of their leave. A rule that proved highly effective concerned the automatic extension of sickness benefit rights, particularly for workers put in isolation or quarantine. This helped to prevent that people who contracted Covid-19, still kept working (either out of their own free will in cases where no replacement benefits were in force, or under pressure from their employer). More generally, it was considered important to maintain and apply extraordinary entitlement to sickness benefits and paid sick leave, and to extend these rights to groups of labourers who were not sufficiently covered under normal rules. The Covid-19 crisis in this regard accentuated long-standing deficiencies in the regulation of sickness benefits in a wide variety of countries. The ILO, therefore, advised these countries, some of which had introduced mandatory sick leave and benefits regulations for the first time in their history, to consider closing these gaps between categories of labourers permanently.¹⁵⁰

At the same time, in line with general neo-liberal policy, as soon as labourers who benefited from paid sick leave could safely put back to work, it was expected that they would be allowed to do so. In particular, it was considered important to avoid that paid sick leave schemes would become a route to disability benefits for the

as markets, goods transport and pharmacies). Other G20 countries, with similar gradual re-opening agreements were Indonesia, China and Mexico. (Cf. International Labour Organisation (2020), pp. 36–37.)

¹⁴⁸International Labour Organisation (2020), p. 37.

¹⁴⁹International Labour Organisation (2020), p. 37.

¹⁵⁰International Labour Organisation (2020), p. 37.

long-term unemployed, as had in the past occurred in some advanced G20 economies after a period of recession. For neoliberal policymakers, this general guideline was seen as even more crucial in the context of Covid-19, to the extent that some labourers on sick leave or under quarantine might not have been able to return to work or that their employers simply would not want them back. Linking workers that had been put on sick leave to vocational rehabilitation and employment services was, therefore, seen as essential to prevent a long-term exit from the labour market (which can, obviously, never be tolerated according to neoliberal principles).¹⁵¹

7.10.3 Adapting Job Retention Programmes

Still according to the ILO-report quoted before, job retention programmes, statefunded STW systems, and wage subsidy programmes, all helped to prevent an initial rise in unemployment during the early period of the Covid-19 crisis in many countries. However, such programmes are primarily developed to provide shortterm critical aid in times of crisis, and cannot be used for a prolonged period of time. This is why, in the opinion of the ILO, these programmes had to be modified as the crisis persisted, in order to provide sufficient incentives for enterprises to keep running, and for employees to be sufficiently willing to return to viable employment. The ultimate goal of such modifications was, obviously, to reduce pressure on public budgets (in light of the prevailing fiscal austerity), as well as to avoid the risk that prolonged reemployment programmes would become an obstacle for recovery by slowing down the reallocation of jobs to more viable and productive enterprises. Concerns about potential abuses (by neoliberals, usually referred to as "profiteering") had already been raised at the start of the Covid-19 crisis. These concerns, moreover, grew as some enterprises continued to claim subsidies for reduced working hours, even after labourers had returned to work.¹⁵²

In re-opening the economy, policymakers sought to focus job retention programmes on jobs that, despite a short-term risk of redundancy, were most likely to remain sufficiently viable in the longer term. In order to avoid a sudden wave of job redundancies, it was considered essential for job retention programmes to be carefully tailored to respond to evolving economic and health conditions, and account for sector-specific conditions.¹⁵³

To achieve this, governments could resort to a number of policy levers, such as: 154

¹⁵¹International Labour Organisation (2020), p. 37.

¹⁵²International Labour Organisation (2020), p. 37.

¹⁵³International Labour Organisation (2020), p. 37.

¹⁵⁴International Labour Organisation (2020), p. 38.

- (1) Asking enterprises to bear part of the costs of short time working schemes themselves. This was believed to be a delicate exercise. Requiring enterprises to contribute to the costs of hours not worked, increased the incentive for them to limit the reallocation of jobs after the crisis (and, hence, to end certain jobs altogether). In order to avoid that sharing the financial burden of STW schemes would cause financial difficulties for the employers concerned, such employer participation could take the form of deferred payment or be vested on interestfree loans.
- (2) Resorting to time limits for the programmes in question—but with limits adapted to changing circumstances.

E.g., limits on the maximum duration of job retention programmes were aimed to reduce the risk of supporting jobs that were no longer viable, even in the long term. However, the ultimate duration of job retention schemes had to be adjusted in line with the changing health and economic situation, which was not always easy to estimate.

- (3) Promoting worker mobility between subsidised and non-subsidised jobs: This could be accomplished by requiring, or allowing, workers on short-time working schedules to register with and receive government support for finding a new job (e.g., job search assistance, career guidance and training).
- (4) Promoting participation in training during reduced working hours.

Using reduced working hours for training could help labourers to improve their productivity in their current job, or to improve their chances of finding another job. Several countries, therefore, encouraged training during short-time working by offering financial incentives to enterprises and/or labourers themselves. In other countries, participation in training programmes even was a condition for receiving subsidies for short-time work.

7.10.4 Ensuring Adequate Income Protection

As the Covid-19 crisis progressed, it was soon deemed unlikely that employment levels would return quickly to former trend levels in most G20 countries. Because of this, social protection systems were likely to come under pressure. The ILO, therefore, stressed the need to strike a balance between ensuring adequate income to the members of the working classes, including through job retention programmes, and encouraging active job search when employment growth would start to pick up.¹⁵⁵

¹⁵⁵International Labour Organisation (2020), p. 38.

In the case of unemployment benefits, the experience of the 2008 global financial crisis had pointed out that prolonged benefit schemes were less likely to harm employment in a severe recession. In case benefit durations are short and many unemployed people exhaust their benefits without finding work, countries were therefore recommended to review benefit provisions and consider temporary extensions. Linking the maximum duration of benefits to the unemployment

Governments were advised to reassess the temporary schemes put in place in order to support the self-employed and small enterprises at the start of the Covid-19 crisis. These schemes had been designed to provide quick, preliminary assistance, often with limited attention to targeting. These schemes were usually not linked to previous earnings, which was to be introduced when the economy were to reopen again. More generally, there was the need to expand entitlements to out-of-work income support measures to the self-employed, as well as to labourers employed in other—more informal—forms of employment, to the same extent as those enjoyed by regular employees. Although the inclusion of the self-employed and the informal economy workers in social protection schemes faced various difficulties, especially on identifying their contributory income, several countries, nevertheless, succeeded in developing well-designed policies tailored to these kinds of labourers, including finding a right balance between non-contributory and contributory schemes.¹⁵⁶

As the Covid-19 crisis persisted, many jobseekers exhausted their entitlement to unemployment benefits. Labourers in non-standard jobs and informal workers without a replacement income were forced to exhaust their savings. It was feared that the number of claims for more "last resort" minimum income benefits, such as general social assistance and conditional and unconditional cash transfer programmes, would skyrocket. Effective targeting of these minimum income programmes was therefore considered vital, especially as budgetary pressures continued to increase. Nevertheless, governments were still recommended to ensure adequate financial support for those in need.¹⁵⁷

rate in the economy as a whole, could be a way of balancing support with the need to encourage continued job search. It was thereby recommended that "mutual obligation" requirements, which commit unemployed benefit recipients to actively seek work, would be progressively reinstated where they had been relaxed or suspended during lockdown periods. In addition, accompanying any extension of benefits with enhanced incentives to quit, such as requiring long-term claimants to reapply, introducing waiting periods between claim periods and/or reducing benefits over time, was expected to help to encourage job search without compromising the right of workers to freely choose a job. However, it was at the same time recommended that all such measures should be accompanied by enhanced support to help jobseekers find work in terms of training and job preparation programmes, as well as job search assistance more generally. (Cf. International Labour Organisation (2020), p. 38.)

¹⁵⁶International Labour Organisation (2020), p. 38.

¹⁵⁷International Labour Organisation (2020), pp. 38–39.

7.11 Some Case Studies

7.11.1 Meat Processing Factories

7.11.1.1 Introduction

7.11.1.1.1 Economic Background: The Iron Law of the Wages Having More Lives Than the Proverbial Cat

In our earlier work, a multitude of considerations have already been devoted to the contemporary scope of an ancient capitalist, economic principle known as the "Iron law of the wages", the idea that any enterprise operating in accordance with capitalist principles, has to keep its wages—and similar employee related costs—as low as possible in order to achieve the highest possible profitability, so e.g., in our book "The unfree market and the law – On the immorality of making capitalism unbridled again", where we wrote: ¹⁵⁸

An equally alarming example of the capitalist principle that labour should be exploited as cheaply as is possible is obviously the migrant issue. In that sense, populist (political) opinion arguing that the failure to integrate migrants in many western countries has been caused by left-wing thinking (which has, above all, attempted to propagate that migrants should be given a worthy place within the Western societies), whereas in reality the migrant issue directly stems from the capitalist principle that labour should be exploited as cheaply as possible, even if this implies importing cheap labour forces from other countries, is both factually and morally completely wrong.

This method of importing cheap labour forces from other territories, especially to perform hard and hazardous labour, has indeed been used on a massive scale by many capitalist companies in the period after WOII, often even with explicit governmental approval.

However, this mass import of cheap labour, mainly to carry out the less pleasant jobs, has in most cases not been accompanied sufficiently by appropriate measures to effectively integrate the people providing the labour into the societies to which they were artificially drawn, resulting in the known migrant issues which many Western countries are facing today.

Obviously, many other harrowing examples can be given of the inhumane degradation caused by reducing the human being to a mere work force to be used in the capitalist production process at the cheapest price possible.

At the time of writing, we could not have predicted how true those words would ring only two years later. As the Covid-19 pandemic revealed its most glaring malpractices, in various Western countries on both sides of the Atlantic Ocean, the slaughter- and meat processing industry turned out to mirror perfectly what we had written in 2018.

Indeed, Covid-19 brought to light that said industry applied the working methods of capitalism at its crudest, with as main characteristics: (1) A massive employment of cheap immigrants imported from foreign countries to be employed in dire

¹⁵⁸Byttebier (2018), p. 30.

conditions in highly profitable enterprises; (2) An extremely low wage policy; (3) Factory and working conditions that, for cost reasons, lacked even the most elementary safety and hygiene measures; (4) Housing of migrant workers in cheap accommodations that left much to be desired, even the most basic comfort, and (5) In short, living and working conditions that, bearing in mind the principle of the Iron law of the wages, were deliberately kept as rudimentary as possible, fully neglecting the safety and health risks concerned, even after the outbreak of the Covid-19 pandemic itself.

After having already exposed similar malpractices in the liberalized sectors of hospitals and long-term nursing homes (Cf. Chaps. 5 and 6), in 2020, Covid-19 thus also exposed extreme malpractices from the slaughterhouse and meat processing industry in an equally poignant way.

A further study of this latest travesty will hopefully give neoliberal adherents of trickle-down economics some pause before they further dismiss critiques of their theories and schemes as nonsense.

7.11.1.1.2 The Meat Processing Industry as One of the Spreading Industries of Covid-19

7.11.1.1.2.1 Working Floor Conditions

Throughout the Covid-19 pandemic, slaughterhouses and meat processing factories have proven to be a major vectors for Covid-19 infection. By the middle of 2020, outbreaks in this type of facilities were centre stage throughout the Western world, affecting entire communities and regions and necessitating intensive public health interventions.¹⁵⁹

Using county-level data from the United States, Taylor, Boulos and Almond found a strong correlation between livestock meat processing factories and Covid-19 transmission in the local communities located around them. These findings suggested that meat processing factories act(ed) as transmission vectors for surrounding communities and that they enhance(d) the spread of the Covid-19 virus beyond what would have been probable based on population risk characteristics alone. Taylor, Boulos and Almond made a further estimation that, by 21 July 2020, the total excess Covid-19 contamination cases related to proximity around meat processing factories in the United States amounted to between 236,000 and 310,000 (equalling 6–8% of all American contamination cases), and deaths between 4300 and 5200 (equalling 3–4% of all American Covid-19 related deaths), with the vast majority of these contamination cases and deaths likely to be associated with community spread outside of these facilities. The association suggested by these authors primarily concerned large meat processing factories and/or large meat packing plants. Moreover, Taylor, Boulos and Almond found evidence that meat

¹⁵⁹Middleton (2020).

processing factory closures mitigated county-wide cases and that such factories that had obtained permission from the USDA (the Department of Agriculture) for enhancing the speed of their production lines had experienced more Covid-19 cases at a county-wide level.¹⁶⁰ Taylor, Boulos and Almond also indicated that the presence of a slaughtering factory in a US county was related to four to six more cases of Covid-19 per thousand population, an increase of between 51 and 75% over the baseline rate. The authors also pointed to a rise in mortality from 0.07 to 0.1 Covid-19 related deaths per thousand population, an increase which amounted to between 37 and 50% over the baseline rate.¹⁶¹

Taylor, Boulos and Almond, furthermore, indicated that a temporary closure of a high-risk meat processing (or similar) factory was followed by a decrease in the growth rate of Covid-19 contamination cases. The authors also found that smaller, decentralised meat processing factories did not seem to add to Covid-19 transmission.¹⁶²

Slaughterhouses and meat processing factories were thus quickly upon the outbreak of Covid-19 identified as environments conducive to the transmission of SARS-CoV-2, due to several reasons: (1) The Covid-19 virus appeared to thrive in both low temperatures and very high, or very low relative humidity; (2) Metal surfaces were believed to retain live Covid-19 viruses longer than other surfaces or materials; (3) Dense aerosol production, combining elements such as dust, feathers and excrement, occurred in these meat processing factories, while the continued and intense use of water carries these materials onto all possible surfaces, creating a further ideal environment for the spread of the Covid-19 virus; (4) Due to loud noise, labourers have to talk loudly, or even shout, in order to be understood over the noise of machines and animals, which releases more droplets and spreads them further; (5) Working floors are crowded, with people having to walk around a lot, which makes physical and social distancing extremely difficult.¹⁶³ Other environmental issues that already were believed to contribute to the spread of the Covid-19 virus, that at the time still needed further investigation, but that since then have been clarified, included (6) the likelihood of airborne spread of the Covid-19 virus, and the role of air cooling or heating and filtration systems.¹⁶⁴

Research into the circumstances surrounding a huge Covid-19 outbreak that occurred from May to July 2020 in the German meat processing plant "Tönnies" (cf., furthermore, Sect. 7.11.1.2.3.3), in addition, suggested that circumstances in the cutting room of a meat processing plant could favour the spread of the Covid-19

¹⁶⁰Taylor et al. (2020), p. 31706.

¹⁶¹Taylor et al. (2020), p. 31706.

¹⁶²Taylor et al. (2020), p. 31706.

¹⁶³Middleton (2020).

¹⁶⁴Middleton (2020). According to this author, these additional factors were first pointed out with regard to meat processing factories in Germany, more particularly in the Gütersloh epidemic. (Cf. Middleton (2020).)

virus over distances of more than 8 m.¹⁶⁵ This same research also pointed to the fact that all infections during "a first wave" of the huge Covid-19 outbreak that had occurred within the Tönnis factories (namely in May 2020) had originated from a single employee.¹⁶⁶ Specifically, this first Covid-19 outbreak in the Tönnies factories had occurred because an employee of the slaughterhouse had come into contact with employees of an infected factory of a different slaughterhouse, "WestCrown", located in Dissen. The housing of the labourers had not yet played a major role in this first outbreak in the Tönnies plant that occurred at the end of May 2020. However, the latter factor became all the more important when, in mid-June 2020, a more severe, condensing outbreak of the Covid-19 virus hit Tönnies again, eventually forcing the meatpacking enterprise to shut down for up to a month.¹⁶⁷

The quoted researchers had also taken a closer look at the routes that had most likely been taken by the Covid-19 virus between the first contaminated employee and the other Tönnies workers.¹⁶⁸ The researchers found that most of the employee's colleagues who had been working within an 8-metre radius around him, had also tested positive for Covid-19. In the quoted study, it was therefore assumed that Covid-19 virus particles could be transmitted over longer distances under the conditions of a meat processing plant.¹⁶⁹ According to the researchers, the

¹⁶⁵Kloosterman (2020).

¹⁶⁶According to Kloosterman, further investigation with regard to the precise circumstances surrounding the Covid-19 outbreak in the Tönnies factories indicated that the Covid-19 virus had most likely spread from a single employee who worked in the beef cutting plant. This employee had declared that he (together with another colleague) had been in contact with labourers at the Westcrown sow cutting plant in Dissen, Lower Saxony. This contact had taken place after the detection of Covid-19 in this other factory. The Tönnies labourer himself did not show clinical signs of the Covid-19 virus and the contact with the Westcrown colleagues was not considered a high-risk contact at the time, so the Tönnies labourer continued to report to work. Three days after the meeting, the Tönnies labourer was tested and, a day later, a positive result followed for both this labourer and said colleague. Both had to be quarantined. In total 8 days after the meeting, the direct colleagues of both employees' teams were tested, which indicated that already 18 other Tönnies employees tested positive for Covid-19. All employees in the team of the originally contaminated Tönnies labourer had to be quarantined. Afterwards, 11 more positive Covid-19 contamination cases were found among the quarantined employees, and this number increased en more over the following weeks. The quoted research, furthermore, indicated that one of the two colleagues who had been in contact with the Westcrown team was carrying exactly the same type of virus (with the same virus sequence) as the Westcrown team. This proved to be true for a large proportion of the other Tönnies' cases as well. (Cf. Kloosterman (2020).)

¹⁶⁷Kloosterman (2020).

¹⁶⁸Kloosterman (2020).

¹⁶⁹Kloosterman (2020).

Professor Adam Grundhoff, co-author of the research quoted by Kloosterman, later explained the following: "Our results indicate that the conditions during cutting enhance the aerosol transfer of SARS-CoV-2 particles over longer distances, think of the lower temperature, a limited input of fresh air and a constant air circulation because of the room's air-conditioning, in combination with heavy manual labour. It is very likely that these factors in general play a crucial role in outbreaks all over the world in meat or fish processing companies. Obviously, under those conditions, a distance of 1.5 to 3 meters are insufficient to prevent transmission." (Cf. Kloosterman (2020).)

Covid-19 virus had, moreover, already spread in May 2020: The virus had transmitted in rooms of the factory where the air was circulated and cooled to 10 degrees Celsius. In addition, the supply of fresh air in these rooms had been low, while heavy physical work had been carried out. Under these conditions, a distance of 1.5 to 3 m was no longer considered sufficient to prevent Covid-19 transmission.¹⁷⁰

Although sharing flats, bedrooms or carpooling did not play a role in the first outbreak of Covid-19 in Tönnies factories in May 2020, the researchers pointed to the fact that these factors were likely to have played a major role in the second, larger outbreak around the Tönnies meat processing factories that occurred in mid-June 2020.¹⁷¹ The researchers, in addition, concluded that this second outbreak was caused by Covid-19 cases linked to the first outbreak.¹⁷² (Cf., furthermore, Sect. 7.11.1.2.3.3).

As a result of (this and previous similar) outbreaks of Covid-19 in livestock slaughterhouses and meat processing factories, meat processing enterprises around the world were urged to resort to risk assessments and to implement a sequence of protocols aimed at preventing further Covid-19 contamination outbreaks. These measures included: (1) Staggering start, finish and break times for different groups of labourers; (2) Reducing crowd assemblies through creating outdoor break areas; and (3) Installing barriers between labourers, especially those working on meat production lines.¹⁷³ Soon after the first Covid-19 contamination cases were detected in this type of factories, it was also advised that labourers would be screened regularly for Covid-19 related symptoms, including fever, e.g., upon arrival at work, which would allow for quick isolation when necessary.¹⁷⁴ Other recommendations related to operational procedures, such as decreasing the rate of animal and carcass processing, requiring face covering, incorporating good practice in the safe fitting and removal of PPE, installing non-contact time clocks and resorting to improved cleaning and disinfection protocols. It was also recommended that health education materials for staff would be culturally appropriate and would be made available in all relevant languages in light of the workforce present. Other early recommendations implied that face masks were to be mandatory on board of all means of mass transport, and that employers should begin to motivate their labourers

In the quoted study, the researchers recommended that additional measures were mandatory for reducing the Covid-19 contamination risk in those circumstances. By way of example, the authors pointed to improving ventilation and air flow, installing air filtration devices and the use of higher quality protective mouth pieces. The researchers recommended that immediate action was mandated to quarantine all labourers in a radius (around a contaminated person). Although the researchers noticed transmission in an area of roughly 8 m, they stressed that exact transmission distances could vary substantially, depending on set up and factory circumstances. (Cf. Kloosterman (2020).)

¹⁷⁰NOS (2020).

¹⁷¹Kloosterman (2020).

¹⁷²Kloosterman (2020).

¹⁷³Middleton (2020).

¹⁷⁴Middleton (2020).

(1) not to report to work if they were ill, or showing Covid-19 related symptoms, (2) to immediately report all possible symptoms, and (3) to self-isolate when necessary. Adequate sick pay was also considered of vital importance during any absence from work.¹⁷⁵

7.11.1.1.2.2 Socio-Demographic Factors and Working Conditions

At the beginning of 2020, the European meat industry employed nearly one million workers and contained more than 32,000 enterprises, with meat production accounting for 1.53% of EU GDP. As a result of neo-liberal public policies, the European meat processing sector was characterised for decades already, by social dumping practices and aggressive competition between enterprises, both nationally and across borders, which had led to a real "race to the bottom" with regard to wages and general labour conditions.¹⁷⁶ In addition, pressure from retailers had led to a policy of price cutting for years. Competition from outside the EU was also indicated as an important factor for explaining the working conditions prevailing in the sector.¹⁷⁷

The meat processing sector in general is considered to be a "fragmented industry", based on excess capacity and, therefore, subjected to cost pressure originating from the more powerful customers (such as supermarkets) who have access to imported products as well, and can easily exert pressure on prices. As a result, margins within the industry are low and volatile. In most countries, large meat processing factories have, furthermore, obtained the largest share of the market, or are in the process of expanding rapidly.¹⁷⁸

In this context, employers saw themselves forced to adopt aggressive labourrelated strategies that have affected employees in various ways, such as: (1) acceleration of line processing, with important consequences on both health and safety; (2) pressure for flexible working conditions; (3) lowering wages and working standards; and (4) increased reliance on precarious labourers.¹⁷⁹

Meat processing factories are by definition of a labour-intensive nature. Although modern processing factories have been reported to have made ergonomic improvements in the course of the last years, repetitive strain injuries still commonly occur, and such do incidents such as cuts, slips and falls. The general labour conditions are considered to be rather harsh: they are e.g., cold, of a boring and repetitive nature, and requiring physical strength and fitness. It is, hence, not surprising that employee turnover rates in the meat processing sector are high in most European countries. As the result of a combination of these factors, an increasing number of labourers within the industry are suffering from a variety of occupational diseases, such as

¹⁷⁵Middleton (2020).

¹⁷⁶On the theme of how neoliberal public policies have initiated this race to the bottom in employment and social rights in general, cf. Byttebier (2017), p. 74 and p. 175.

¹⁷⁷EFFAT (2020), p. 5.

¹⁷⁸EFFAT (2020), p. 5.

¹⁷⁹EFFAT (2020), p. 5.

musculoskeletal disorders (MSDs), as well as from psychosocial problems at work (such as work-related stress).¹⁸⁰

The socio-demographic factors and working conditions of the sector implicated in the Covid-19 epidemics that occurred in slaughterhouses and meat processing factories on a global scale are all characteristic of exploitative capitalism at its worst. The sector has: (1) a young workforce, more likely to suffer from asymptomatic Covid-19 contamination; (2) precarious and poorly paid jobs that discourage workers from disclosing their symptoms for fear of punishment; (3) long working hours and coercive labour agreements and conditions; (4) heavy reliance on migrant labourers, (5) housing in inadequate and overcrowded accommodations, (6) transport from and to work taking place in overcrowded buses, and (7) limited or no hygiene and safety measures.¹⁸¹

According to a detailed report from the EFFAT, trade unions have in the recent past identified the following specific concerns:¹⁸²

- (1) Job insecurity: Low wages and long working hours are the norm in meat processing factories.
- (2) A large proportion of the personnel employed in the European meat processing sector are cross-border or migrant labourers originating from both the EU and third countries. Many of the people employed in meat processing factories in Western European countries originate from Central and Eastern European countries (CEECs), under the EU's free movement of labour-principle.¹⁸³
- (3) Wage disparities with regard to labourers directly employed by the meat processing enterprises are generally relevant.
- (4) Wage deductions for housing, transport and even working tools are often directly imposed on migrant and cross-border workers.
- (5) Due to low wages, labourers often must share overcrowded accommodation, which is sometimes even directly linked to their employment contract or owned by the employer, whether it is a subcontractor or a temporary work agency.

In view of the many outbreaks in the meat processing industry during the first half of 2020, the IUF, in collaboration with Dr Nabarro—Professor of Public Health at Imperial College London and WHO Special Envoy for Covid-19—started a more in-depth investigation into the problems that the European meat processing industry

¹⁸⁰EFFAT (2020), p. 5.

¹⁸¹Middleton (2020).

¹⁸²EFFAT (2020), pp. 5-6.

¹⁸³CEE labourers are usually recruited through intermediary agencies that charge them a recruitment fee as well as the travel costs to reach the destination country. Many of these labourers are then employed by temporary employment agencies, or through abusive subcontracting practices that allow employers to escape the law. In some countries, subcontractors operate as false employers, with labourers sometimes being also self-employed. The posting of labourers for the provision of services is said to be a recurrent practice, although more limited by law than in previous years. The use of letter-box companies to evade or circumvent remuneration rules, social security contributions and applicable taxes also happens frequent. (Cf. EFFAT (2020), p. 6.)

at the time was facing and that made it especially vulnerable to outbreaks of Covid-19 (and similar viruses). According to the results of their preliminary research, published in a report of 25 June 2020 (entitled "Covid-19 outbreaks in slaughter-houses and meat processing plants") by the European Federation of Food, Agriculture and Tourism Trade Unions (EFFAT), the following factors have been identified as contributing to the enormous spread of the Covid-19 virus in meat processing factories:¹⁸⁴

- (1) Lack of social distancing: Labourers of meat processing factories often work shoulder-to-shoulder, in close proximity to one another, on processing lines. Although staggered shifts and breaks may be used to promote physical distancing, not all meat processing enterprises showed a sufficient willingness to resort to such practices during the first period of the Covid-19 pandemic, as this was said to slow down production. It is believed that this lack of social and even physical distancing policies has contributed to the spread of the Covid-19 virus.
- (2) Poor housing conditions: In almost all EU countries (but also in the United States), the meat processing sector is heavily dependent on migrant and cross-border labourers. Labourers often live in overcrowded flats, in many cases provided by their employers, with sometimes several people living in one room. Said labourers, moreover, continue to live in such unacceptable accommodations for two main reasons: (1) Because housing is often part of their employment agreement, or (2) Because their wages are too low to provide for better living accommodations, and because they may try and save money to get better housing. Obviously, respecting social and even physical distancing in these arrangements is usually impossible.
- (3) Lack of inspections: In many countries, the frequency of health or labour inspections decreased significantly during the Covid-19 pandemic. This is believed to have attributed to more breaches of the law and violations of health and safety precautions issued to protect labourers during the Covid-19 pandemic.
- (4) Joint transport: Many labourers in the meat industry travel to their working place by public transport or carpooling, often even provided directly by employers. In many cases, measures to ensure social or physical distancing during transport could not be respected.
- (5) Ventilation: In many meat processing factories, especially older ones, there was no or poor ventilation, which provided for a further breathing ground for the spread of the Covid-19 virus.
- (6) PPE: Personal protective equipment, especially face mask wearing, was already considered essential at early stages of the Covid-19 pandemic, with recommendations that such proper PPE had to be provided and used in the working place in a systemic manner. This did not always happen in meat processing plants.

¹⁸⁴EFFAT (2020), p. 6.

- (7) Cold: Some parts of meat processing plants are inevitably very cold. The Covid-19 virus is more easily transmitted in colder temperatures. This aspect has often not been sufficiently considered.
- (8) Job insecurity and lack of social protection: The employment conditions of many meat processing labourers at the time were extremely precarious. In addition, the level of sickness benefits could be very low or inexistent. This led to the fact that, in the event of the onset of Covid-19 symptoms, some labourers were not inclined to report their condition for fear of losing their job, or not being able to afford to live decently on sick pay alone.

The cited 2020 EFFAT report mentions that, after some bad experiences with Covid-19 outbreaks in meat processing factories, many European countries adopted precautionary measures for safeguarding the health and safety of labourers for the duration of the Covid-19 pandemic. These measures were, in some cases, adopted at government level, while in other cases, they were enacted through collective labour agreements at cross-industry or sectoral level. These measures included, amongst others, a duty to provide information on the risks of the Covid-19 virus, temperature control at the entrance of the meat processing facilities, filling in forms containing questions on the labourers' health status, hygiene measures, staggered work shifts to ensure physical and social distancing, the use of PPE, modifications of workstation design with, e.g., the installation of plexiglass, modifications of the design of communal areas (such as canteens, changing rooms ...) in order to ensure physical and social distancing, clear processes for dealing with labourer illness, etc. The earlier referred to preliminary research by the IUF in collaboration with Dr Nabarro, further indicated that after these measures had been adopted and adhered to, the level of Covid-19 contamination afterwards became fairly limited, although it was also pointed out that these measures proved insufficient in cases where labourers lived together in overcrowded accommodations.¹⁸⁵

In a report dated from 1 until 8 May 2020,¹⁸⁶ the US CDC reached similar conclusions. This report indicated that, in investigating early outbreaks of

¹⁸⁵EFFAT (2020), p. 6.

¹⁸⁶Dyal et al. (2020) gave the following assessment on this: "Qualitative data from the facility risk assessments identified common characteristics among processing facilities and their workers that might increase risk for transmitting or acquiring SARS-CoV-2 (...). Facility challenges included structural and operational practices that made it difficult to maintain a 6-foot (2-meter) distance while working, especially on production lines, and in nonproduction settings during breaks and while entering and exiting facilities. The pace and physical demands of processing work made adherence to face covering recommendations difficult, with some workers observed covering only their mouths and frequently readjusting their face coverings while working. Some sites were also observed to have difficulty adhering to the heightened cleaning and disinfection guidance recommended for all worksites to reduce SARS-CoV-2 transmission. Solutions to structural and operational challenges that some facilities adopted included adjusting start and stop times of shifts and breaks to increase physical distance between workers. Outdoor break areas were added at some facilities to decrease contact between workers. Some facilities installed physical (e.g., plexiglass) barriers between workers; however, this was not practical for all worker functions. Symptom and temperature screening of workers was newly instituted in some facilities and improved in others.

Covid-19 in meat processing factories, the CDC had identified several common characteristics regarding both meat processing facilities and their labourers that were likely to increase the risk of transmission of Covid-19. Challenges identified by the CDC for such meat processing facilities included structural and operational practices that made it difficult to maintain a 6-foot (2-meter) distance while working, particularly on production lines, as well as in non-production areas during breaks and upon entrance and exit of the facility. The CDC report also indicated that the pace and the severe physical demands of meat processing often made it difficult to fully comply with face mask recommendations, with some labourers even mentioning that they only covered their mouths and frequently replayed their face masks while performing labour. It was also indicated that some meat processing factories had difficulty meeting the enhanced cleaning and disinfection guidelines recommended for all working places for reducing the transmission of the Covid-19 virus.¹⁸⁷

The socio-cultural and socio-economic challenges of Covid-19 prevention in American meat and poultry processing plants, moreover, included addressing the needs of labourers originating from varied backgrounds and speaking a variety of primary languages (with one factory reporting that its workforce spoke 40 primary languages). This required original approaches to educating and training labourers and supervisors on safety and health information. Specific problems were about reports of labourers being encouraged, or forced, to continue to work while ill or when showing Covid-19 related symptoms. This was often due to medical and disability leave conditions (or the absence thereof) and attendance rewards that encouraged to continue to work during sickness or when showing symptoms. Finally, as in Europe, labourers were reported to often live in shared and crowded accommodations, often of a multi-generational nature. Labourers also often shared the same means of transport to and from work. Allowing labourers to keep a physical distance outside the premises of the factories themselves could easily be achieved by measures like increasing the number of vehicles used and by reducing the number of

Sociocultural and economic challenges to COVID-19 prevention in meat and poultry processing facilities (...) include accommodating the needs of workers from diverse backgrounds who speak different primary languages; one facility reported a workforce with 40 primary languages. This necessitates innovative approaches to educating and training employees and supervisors on safety and health information. In addition, some employees were incentivized to work while ill as a result of medical leave and disability policies and attendance bonuses that could encourage working while experiencing symptoms. Finally, many workers live in crowded, multigenerational settings and sometimes share transportation to and from work, contributing to increased risk for transmission of COVID-19 outside the facility itself. Changing transportation to and from the facilities to increase the number of vehicles and reduce the number of passengers per vehicle helped maintain physical distancing in some facilities." (Dyal et al. (2020).)

¹⁸⁷Solutions adopted by some workplaces to address structural and operational challenges include adjusting shift start and end times and breaks to increase the physical distance between workers. Outdoor break areas have been added in some workplaces to reduce contact between workers. Some facilities installed physical barriers (e.g., plexiglass) between workers; however, this was not practical for all worker functions. Worker screening for symptoms and temperature was newly instituted in some facilities and improved in others.

passengers per vehicle. This would already have already reduced the risk of transmission outside the meat processing facilities themselves.¹⁸⁸

7.11.1.2 Outbreaks in Specific Regions/Countries

7.11.1.2.1 General

According to the previously cited study undertaken by Taylor, Boulos and Almond, the livestock and poultry processing industry forms an essential component of the global food supply chain. Especially in the United States, the meat processing industry forms a large industry, employing around 500,000 people. The meat processing industry is also a highly concentrated one: It is estimated that the four biggest American, pork and poultry processing enterprises serve up to 55 and 85% of their respective markets. The degree of concentration in the American meat processing sector is, moreover, much larger than in the EU, where the 15 largest meat processing meat factories are said to account for about 28% of EU meat production only.¹⁸⁹

The first big outbreaks of Covid-19 in slaughterhouses and meat processing plants in Germany occurred as early as May-June 2020, when public health authorities were first confronted with a huge outbreak of Covid-19 in Gütersloh, North Rhine-Westphalia. More than 1500 of the 7000 meat processing labourers had tested positive for Covid-19, and 640,000 inhabitants of two affected counties were sent back to confinement.¹⁹⁰ Similarly, at one of Portugal's largest poultry slaughterhouses, at least 129 of 300 meat processing labourers had contracted Covid-19. The enterprise concerned was subsequently closed for a week, with additional measures including screening and testing of all labourers, besides setting up new cleaning areas and enhancing disinfection protocols.¹⁹¹ The first outbreaks of Covid-19 in England and Wales were also said to have been at and around meat processing factories located in Anglesey, Merthyr Tydfil, Wrexham and Kirklees.¹⁹²

All of these outbreaks were part of larger flare-ups of the Covid-19 pandemic that occurred in the United States and Europe—an illustrative sample of which will be discussed in some more detail in the following subsections.

¹⁸⁸CDC (2020), p. 558.

¹⁸⁹Taylor et al. (2020), p. 31706.

¹⁹⁰Middleton (2020).

¹⁹¹Middleton (2020).

¹⁹²Middleton (2020).

7.11.1.2.2 The United States

7.11.1.2.2.1 The US Livestock- and Poultry-Processing Industry and Its Inherent Vulnerability for Covid-19

Again according to Taylor, Boulos and Almond, on the eve of the Covid-19 outbreak, the livestock and poultry processing industry in the United States was characterized by a process of consolidation into fewer and larger factories that had already been going on for decades. By 2020, meat production per individual factory had tripled since 1976. By the end of November 2020, 12 American meat processing enterprises were reported to produce more than 50% of the American beef, with 12 further enterprises producing more than 50% of the American pork.¹⁹³

Already shortly after the Covid-19 outbreak, early spreads of the Covid-19 virus were reported in the American livestock processing industry. This resulted in greater attention and updated safety advice from the part of the USCDC. As a result, several meat processing factories had already been forced to close.¹⁹⁴

In late April 2020, US President Donald Trump announced that he would use the "Defense Production Act" in order to sign an executive order that would force meat processing plants to remain open, despite knowing the extremely high rates of Covid-19 contamination cases and related deaths among labourers in the industry.¹⁹⁵ This executive order was ultimately signed on 28 April 2020.¹⁹⁶ The federal executive order qualified the status of livestock slaughtering and processing factories

Section 1 of this 'Executive Order' reads as follows:

"Section 1. Policy. The 2019 novel (new) coronavirus known as SARS-CoV-2, the virus causing outbreaks of the disease COVID-19, has significantly disrupted the lives of Americans. In Proclamation 9994 of March 13, 2020 (Declaring a National Emergency Concerning the Novel Coronavirus Disease (COVID-19) Outbreak), I declared that the COVID-19 outbreak in the United States constituted a national emergency, beginning March 1, 2020. Since then, the American people have united behind a policy of mitigation strategies, including social distancing, to flatten the curve of infections and reduce the spread of COVID-19. The COVID-19 outbreak and these necessary mitigation measures have taken a dramatic toll on the United States economy and critical infrastructure.

It is important that processors of beef, pork, and poultry ("meat and poultry") in the food supply chain continue operating and fulfilling orders to ensure a continued supply of protein for Americans. However, outbreaks of COVID-19 among workers at some processing facilities have led to the reduction in some of those facilities' production capacity. In addition, recent actions in some States have led to the complete closure of some large processing facilities. Such actions may differ from or be inconsistent with interim guidance recently issued by the Centers for Disease Control and Prevention (CDC) of the Department of Health and Human Services and the Occupational Safety and Health Administration (OSHA) of the Department of labour entitled "Meat and Poultry Processing Workers and Employers" providing for the safe operation of such facilities.

¹⁹³Taylor et al. (2020), p. 31707.

¹⁹⁴Taylor et al. (2020), p. 31707.

¹⁹⁵Crampton and Orr (2020).

 $^{^{196}}$ Executive Order of April 28, 2020, delegating authority under the defense production act with respect to food supply resources during the national emergency caused by the outbreak of Covid-19 (cf. for the text https://www.politico.com/f/?id=00000171-c35b-d9e7-a3f1-cb5f1d750003).

as "critical infrastructure" for national security reasons and required them to remain open.¹⁹⁷

At the time, work patterns in the US livestock processing industry showed several characteristics that made their factories especially susceptible to local respiratory virus outbreaks. In a similar manner as the already above quoted EFFAT-report (cf. Sect. 7.11.1.1.2.2), the CDC mentioned the following characteristics of the meat processing industry as potential risk factors adding to the spread of Covid-19: long working days in continuous close proximity to co-workers, difficulties to properly cover the face due to physical work-related demands, besides joint transportation among labourers. The CDC-report also hypothesised that an increased speed of production lines because of technological improvements, as well as changes in corporate policies, could have enhanced the transmission of the Covid-19 virus. In addition, in order to preserve meat after slaughter, meat processing areas had to be kept between 0 and 12 °C, with such low temperatures having been associated with an increased risk of Covid-19 contamination. Moreover, studies had suggested that industrial climate control systems applied for cooling and ventilating meat processing facilities may have promoted the spread of pathogenic bioaerosols, one of the suspected transmission routes for the Covid-19 virus.¹⁹⁸

Still according to Taylor, Boulos and Almond, meat processing labourers' socioeconomic status and work practices may have added to the huge degree of infection and transmission. Among so-called frontline meat processing labourers in the United States, 45% were at the time classified as "low-income", 80% as people of colour, and 52% as immigrants, many of whom were "undocumented" and did not have ready access to health care and other social and labour protections that could have facilitated prevention and treatment. In addition, labourers at meat processing facilities were believed to have been incentivised to continue working even if they were ill or showing Covid-19 related symptoms. This has to a large extent been attributed to corporate policies on sick leave and attendance bonuses. Furthermore, as the meatpacking industry had consolidated over the decades, it had potentially

Such closures threaten the continued functioning of the national meat and poultry supply chain, undermining critical infrastructure during the national emergency. Given the high volume of meat and poultry processed by many facilities, any unnecessary closures can quickly have a large effect on the food supply chain. For example, closure of a single large beef processing facility can result in the loss of over 10 million individual servings of beef in a single day. Similarly, under established supply chains, closure of a single meat or poultry processing facility can severely disrupt the supply of protein to an entire grocery store chain.

Accordingly, I find that meat and poultry in the food supply chain meet the criteria specified in section 101(b) of the Act (50 U.S.C. 4511(b)). Under the delegation of authority provided in this order, the Secretary of Agriculture shall take all appropriate action under that section to ensure that meat and poultry processors continue operations consistent with the guidance for their operations jointly issued by the CDC and OSHA. Under the delegation of authority provided in this order, the Secretary of Agriculture may identify additional specific food supply chain resources that meet the criteria of section 101(b)".

¹⁹⁷Taylor et al. (2020), p. 31707.

¹⁹⁸Taylor et al. (2020), p. 31707.

increased its monopsonist power in labour markets, which was increasingly linked to greater occupational risks.¹⁹⁹

Other research has shown that by mid-May 2020, nearly half of the Covid-19 outbreaks-12 out of 25-in the United States had been linked to meat processing factories where poultry, pigs and cattle are slaughtered and packaged. This had in its own turns led to a resurgence of the Covid-19 virus in many small American towns and had prompted calls for urgent reforms in the meat processing industry that was considered being plagued by health and safety issues. E.g., in Nebraska, by mid-May 2020, five counties had experienced Covid-19 outbreaks that could be traced back to meat processing factories. One of these counties was Dakota County, where at the time, about one in 14 residents tested positive for Covid-19, which at the time was the second highest per capita infection rate in the United States. As of 14 May 2020, the Nebraska counties of Dakota, Hall, Dawson, Saline and Colfax, furthermore, accounted for nearly half of the 9075 Covid-19 contamination cases in the state. According to further figures provided by the International Union of Food and Commercial Workers, as referred to by Lakhani, by then, at least 30 meat processing factory labourers had died due to Covid-19-related complications, while more than 10,000 meat processing labourers had been infected by or exposed to the Covid-19 virus.²⁰⁰ Still according to Lakhani, in Nobles County, Minnesota, nearly 500 meat processing workers at a large Brazilian-owned JBS pork processing factory had tested positive for Covid-19. Because of the activities of these meat processing factories, the Covid-19 outbreak spread much more rapidly throughout the county, with 1291 confirmed Covid-19 contamination cases as of 13 May 2020, up from only a handful by mid-April 2020. At that time, about one in seventeen people in the county were reported to test positive for Covid-19.201

¹⁹⁹Taylor et al. (2020), p. 31707.

Taylor, Boulos and Almond, in addition, found a strong relationship between proximity to livestock processing factories and Covid-19 incidence over time. The researchers found that livestock processing factories were associated with an increase in Covid-19 contamination cases of approximately four per thousand people, which implied a 51% increase from the 21 July 2020 baseline rate of eight per thousand. Similarly, mortality rates increased by 0.07 per thousand, or 37%, compared to the county baseline rate of 0.2 deaths per thousand. The researchers considered these results to be robust both at a national level, as well as when only considering variation within states and after including state fixed effects. Similarly, Taylor, Boulos and Almond found that the relationship between livestock processing factories and Covid-19 transmission was most pronounced among the largest factories, whose presence in a county was associated with a 35% higher rate of Covid-19 contamination cases than the average coefficient. Small and medium-sized plants, generally, did not show such significant relationships with local Covid-19 transmission, suggesting that scale of production was an important variable for industry managers and policy makers to take into further consideration. (Cf. Taylor et al. (2020), pp. 31,707–31,708.)

²⁰⁰Lakhani (2020).

²⁰¹Lakhani (2020).

7.11.1.2.2.2 The Case of Smithfield Foods Pork-Processing

One of the first cases of a (huge) Covid-19 outbreak in a meat processing plant in the United States was at the Smithfield Foods pork processing factory in Sioux Falls, South Dakota. The plant—referred to as "a massive eight-storey white box perched on the banks of the Big Sioux River"—ranked in March 2020 as the ninth largest pork processing factory in the United States. When operating at full potential, the factory could process 19,500 freshly slaughtered pigs per day, purportedly "slicing, grinding and smoking" the freshly slaughtered meat into millions of pounds of meat end-products, such as sliced bacon, hot dogs and hams. Counting over 3700 labourers, the enterprise was at the same time the fourth largest employer of the city.²⁰²

According to Mitchell, on 26 March 2020, the local newspaper "Argus Leader" posted an article on its website that a labourer employed by Smithfield Foods had tested positive for Covid-19.²⁰³ A spokeswoman of the enterprise explained that the worker had been put under quarantine for 14 days and that his workplace and other common areas that he frequented had been "thoroughly disinfected". The local paper also quoted the USCDC as having declared that there was no evidence that Covid-19 was to be associated with food, and that "there is likely very low risk of spread from food products or packaging that are kept over a period of days or weeks at ambient, refrigerated, or frozen temperatures."²⁰⁴

However, the factory—which was later qualified as part of so-called "critical infrastructure industry" for national security reasons by the Trump administration (c. Sect. 7.11.1.2.2.1)—would remain fully operational. In a video statement that was released and put online on 19 March 2020, Smithfield CEO Kenneth Sullivan declared similarly that food was an essential part of the American people's lives and that the enterprise's more than 40,000 US team members, next to thousands of American family farms and a wide variety of other supply chain partners formed a vital part of the country's response to the Covid-19 virus, in this manner attempting to justify the decision to keep Smithfield's factories open. The company's CEO added that Smithfield was taking the utmost precautions for ensuring the health and well-being of its labourers and of the consumers of its products.²⁰⁵

At the time, Smithfield's labour force consisted largely of immigrants and refugees from countries such as Myanmar, Ethiopia, Nepal, Congo and El Salvador. Eighty different languages were reported of being spoken in the factory. Estimates about the average hourly wages ranged from USD 14 to USD 16 per hour. Working hours were said to be long, the labour was considered to be back-breaking, and being

²⁰²Lussenhop (2020).

²⁰³Mitchell (2020).

²⁰⁴Mitchell (2020).

²⁰⁵Lussenhop (2020).

positioned along a production line often simply implied being less than one foot away from one's colleagues on either side of the line.²⁰⁶

On 9 April 2020, with 80 confirmed contamination cases of Covid-19, Smithfield issued a statement in which it was formally indicated that the factory would close for three subsequent days over the Easter weekend to come for a thorough clean-up, and that it would only return to full capacity on the following Tuesday. The announcement explained in more detail that the factory would suspend meat processing operations at large parts of the plant on 11 April 2020, and that it would subsequently close completely on 12 April 2020 and 13 April 2020. However, it later emerged that Smithfield labourers were still called in to work during all these three days. Video footage was taken of the company's car park full of cars and of large groups of labourers entering the factory buildings. The plant had reportedly continued to operate at around 60–65% capacity, implying that hundreds of labourers had continued to perform their labour.²⁰⁷

By 15 April 2020, when the Smithfield factory ultimately did close under pressure of the South Dakota governor's office, the factory had become the number one source of new contamination cases in the United States, with a cluster as huge as 644 confirmed Covid-19 contamination cases among Smithfield labourers and people who had contracted the Covid-19 virus from them. In total, Smithfield-related contamination cases accounted for 55% of all the state's cases, which at the time far outnumbered neighbouring and much more populous Midwestern states in terms of Covid-19 contamination cases per capita. These official figures were released one day after the first Smithfield labourer had died in hospital.²⁰⁸

7.11.1.2.3 Germany

7.11.1.2.3.1 Introduction

In Germany, outbreaks in several meat processing factories during the first wave of the Covid-19 pandemic affected entire regions and even initiated local lockdowns (after the national lockdown had come to an end already).²⁰⁹

According to the already referred to EFFAT-report, it has especially been the difficult employment and housing conditions that many meat processing labourers had to undergo, that contributed the most to the spread of the Covid-19 virus in Germany's meat processing factories. One of the central causes why labouring conditions in German meat processing factories were so bad was the sector's subcontracting system. This subcontracting system had for almost two decades been a major cause of social dumping in the meat processing and slaughterhouse

²⁰⁶Lussenhop (2020).

²⁰⁷Lussenhop (2020).

²⁰⁸Lussenhop (2020).

²⁰⁹Middleton (2020).

sector in Germany, and—following in Germany's footsteps—gradually also in the rest of Europe. This system is a textbook example of capitalistic malpractices, and had already, before the outbreak of the pandemic, resulted in thousands of job losses in other EU countries, especially in neighbouring countries such as Denmark, France, the Netherlands and Belgium.²¹⁰

At the beginning of 2020, around 110,000 labourers were reportedly employed by Germany's meat processing sector. Around 30,000 of these were believed to be employed by subcontractors. The employees of these subcontracting firms were mostly migrant and cross-border labourers originating from Central and Eastern European countries (abbreviated as "CEEC"). In Germany's large meat processing enterprises (such as, e.g., "Danish Crown", "Tönnies", "Westfleisch", "Vion"), the number of labourers employed by means of this business practice were said to represent about 80–90% of the total labour force. All the core activities of Germany's meat processing factories (ranging from receiving, unloading, slaughtering, cold storage, pre-cutting, fine cutting, packaging to distribution of the livestock or poultry) were generally performed by these subcontractors. This allowed meat processing enterprises to substantially reduce labour costs (e.g., wages and compulsory social benefits) and to avoid liability for labour rights violations. The practice had also allowed the big meat processing enterprises to evade and circumvent social mandatory requirements, such as wage levels and social security contributions, and even corporate taxes. Labourers who were officially employed by subcontractors, in practice operated on the meat processing enterprise's premises and, although the meat processing enterprises claimed to bear no legal responsibility for these labourers, they clearly had a decisive influence on the working and employment conditions. In practice, the foremen of the meat processing enterprise were the ones who gave direct orders to the labourers employed by the subcontracting firm(s). This generally applied system of avoiding mandatory legal rules was believed to be one of the main drivers for a continuous "race to the bottom" in terms of wages and labour conditions throughout the German meat processing industry, which had even led to neighbouring countries following the (bad) German example.²¹¹

At the beginning of the Covid-19 pandemic, a vast majority of these "subcontracted labourers" were bound by a German employment contract and officially employed by a German subcontractor. This implied that their employment relationships were governed by German law (e.g., on matters such as working time, health and safety provisions, remuneration ...). Important alterations to the applicable German legislation had occurred in 2015 when, in response to pressure from trade unions, a statutory minimum wage had been introduced (at 9.35 euros per hour). Also in 2015 and because of the same reasons, several of Germany's big meat processing enterprises, including "Danish Crown", "Tönnies", "Vion" and "Westfleisch", had joined a "voluntary declaration" (in German: "Freiwillige Selbstverpflichtung") in accordance with which they committed to no longer

²¹⁰EFFAT (2020), p. 7.

²¹¹EFFAT (2020), p. 7.

resorting to legal persons established under the law of other countries for posting labourers to Germany. Another important alteration of the legislative framework had occurred in 2017, through the so-called "GSA Fleisch" (or, in full, the "Gesetz zum Schutz der Arbeitnehmerrechte in der Fleischwirtschaft"). This law brought along some new restrictions on the practice of social dumping through subcontracting, such as a prohibition on wage deductions for financing work tools used by the labourers. Despite these changes to the legislative framework, the labour conditions of labourers employed in the German meat processing sector remained poor. At the beginning of 2020, when the Covid-19 crisis broke loose, the subcontracting system, which until then had been one the main causes of labour rights violations and social dumping practices in Germany, also became one of the main causes for the spread of Covid-19.²¹²

Labourers employed by the subcontractors of meat processing enterprises generally performed between 48 and 65 working hours per week, while their colleagues directly employed by the meat processing enterprises themselves normally performed "only" around 40 working hours per week (up to 48 working hours per week). This implied that for labourers under contract with a subcontractor, the working day could amount to up to 16 h, and this six days a week. Wage disparities between labourers employed by subcontractors and labourers employed by the meat processing enterprises themselves, could be similarly significant. Labourers under contract with subcontractors were reported to earn on average around 40-50% less than labourers directly employed by the meat processing enterprises themselves. This far lower pay was mostly the result of unpaid overtime, as the working hours performed by labourers employed by subcontractors were often not properly recorded. E.g., It was still a common practice to record worked hours by handwritten note, obviously leading to many accidental and deliberate mistakes. A further common, albeit illegal practice that still characterized the employment trough subcontractors, were deductions from the labourers' take-home pay for work materials (ranging from knives, to aprons, gloves ...). As these illegal deductions were often applied to wages already at a minimum level, the practice pushed labourers employed by subcontractors into poverty. Housing accommodations were in most cases also extremely poor. Labourers employed by subcontractors often had no other choice than to agree to live in overcrowded flats, with joint bathrooms and with even reported cases of five or six people having to share a single dormitory. These forms of accommodation were, moreover, usually provided directly or indirectly by the subcontractor himself. In other words, the legal employer, i.e., the subcontractor, was in many cases also the landlord. This per definition made the labourers doubly dependent on their legal employer, who in many cases, also deducted the rent due by a labourer (often amounting to between 200 and 350 euros per month for a single room) directly from the labourer's salary. Most employment contracts between a subcontractor and a labourer were temporary. This implied that job insecurity was extremely high. This is especially relevant, as many labourers hired by a

²¹²EFFAT (2020), p. 7-8

subcontractor, when they experienced symptoms of the Covid-19 virus, did not want to report their illness out of fear of losing their employment. The role played by labour intermediaries operating in the country of origin of the labourers hired by the subcontractors, formed a similar matter of concern. The vast majority of labourers employed by (usually German) subcontractors, usually arrived in Germany under the "free movement of workers" that applies in the EU. A recruitment agency, or other type of labour intermediary, located in the (CEE) country of origin, was usually the one who recruited the candidates. This intermediary would also charge candidates various fees and costs related to recruitment and travel to the destination country. Once these candidates arrived in Germany, they got legally employed by a German subcontractor. The latter was in many cases but a mailbox company with only an elementary office in Germany and with a limited number of German employees. There were, moreover, in most cases close links between the intermediary from the country of departure and the subcontractor established under German law.²¹³

As already mentioned before, a clear lack of proper inspections during the Covid-19 crisis has formed another factor in the huge spread of the Covid-19 virus in Germany's meat processing enterprises. However, inspections in the German meat processing sector did not function properly under normal circumstances either. To put it simply: the meat processing factories were not inspected enough by both federal and local authorities.²¹⁴

7.11.1.2.3.2 Several Early Outbreaks in Meat Processing Factories

Already in May 2020, after an outbreak in a meat processing factory located in the town of Coesfeld, near the city of Münster, the state of North Rhine-Westphalia was the first to resort to an "emergency mechanism" for postponing the lifting of the federal containment restrictions in the administrative district of Coesfeld. The localised spike in Covid-19 cases occurred in Coesfeld after a test of 200 labourers of the Westfleisch meat processing factory had indicated that 151 of them had tested positive for Covid-19. The factory was subsequently closed. Elsewhere, 109 meat processing labourers had tested positive for Covid-19 at a factory in Bad Bramstedt, in the Segeberg district. In addition, more than 200 labourers of Romanian origin had tested positive for Covid-19 at a slaughterhouse located in Birkenfeld, Baden-Wurttemberg. And a meat processing factory located in Schleswig-Holstein had to be shut down after 128 of its labourers had tested positive for Covid-19.²¹⁵

²¹³EFFAT (2020), p. 8.

²¹⁴EFFAT (2020), p. 9.

There was also a complete lack of coordination between the federal labour inspectors and the different local and control agencies. E.g., minimum wage enforcement was monitored by one agency, health and safety standards by local authorities, and accreditation standards by another government agency. Another problem has been that sanctions were not effective and did not provide a sufficient deterrent against breaches of the relevant legislation. (Cf. EFFAT (2020), p. 9.) ²¹⁵EFFAT (2020), p. 7.

These were just some of the most relevant early cases of Covid-19 outbreaks throughout German meat processing factories. Further outbreaks would soon afterwards be reported in many other facilities all over the country.²¹⁶

But the biggest outbreak of Covid-19 in a German meat processing plant during the first half of 2020 was reported in a Tönnies plant in Rheda-Wiedenbrueck (North Rhine-Westphalia). The Tönnies slaughterhouse and meat processing facility, considered to be the largest in Europe, at the time employed 7000 labourers, of whom, in June 2020, over 1550 tested positive for Covid-19. The factory was closed down on 18 June 2020. All labourers who had tested positive for Covid-19, as well as their relatives, had to be quarantined. Various police units (and even the army) had to be deployed in order to ensure compliance with preventive measures.²¹⁷

Given the scale and importance of this Covid-19 outbreak in the Tönnies plant, it will be discussed in more detail in the next subsection.

7.11.1.2.3.3 Tönnies

After there had already been many cases of slaughterhouses/meat processing factories with Covid-19 outbreaks, on June 10, 2020, it was reported that there had been 29 new Covid-19 contamination cases in the Gütersloh district, 27 of which were at a slaughterhouse belonging to Germany's largest meat processing company "Tönnies", located in Rheda-Wiedenbrück.

Because of a previous Covid-19 outbreak at "Westfleisch", in the Coesfeld district, the Ministry in North Rhine-Westphalia had issued mandatory tests at slaughterhouses and/or meat processing factories. However, by the time these tests were to be conducted, the Tönnies enterprise had already started to carry out its own screenings. Tönnies had declared that the infection-risk in its factories had motivated them to start performing their own tests. The enterprise, which had already faced an outbreak of Covid-19 in May 2020 (cf. Sect. 7.11.1.1.2.1), declared that it would do everything possible to reduce the risk of new infections to a minimum within the framework of occupational health and safety rules incumbent on it.²¹⁸

By 15 June 2020, another 46 people tested positive for the Covid-19 virus at the Tönnies slaughterhouses. According to a local crisis team, the enterprise was by then already experiencing a "second wave" with more Covid-19 illnesses: Already around 100 employees had been quarantined before and a total of 13,000 Covid-19 tests had been carried out in Tönnies. In total, 130 infections had been detected. In the Gütersloh district, the seven-day incidence had risen to 25.3, implying that there were 25.3 new Covid-19 contamination cases per 100,000 inhabitants on a seven-day basis.²¹⁹

²¹⁶EFFAT (2020), p. 7.

²¹⁷EFFAT (2020), p. 7.

²¹⁸Bastert et al. (2020).

²¹⁹Bastert et al. (2020).

By 17 June 2020, it was reported that around 730 people had tested positive for the Covid-19 virus at 'Tönnies', while 6400 employees were said to be quarantined.²²⁰ In order to contain the further spread of the Covid-19 virus, the city of Verl had commissioned an external security service to keep an eye on the accommodation where many of the workers of the factory were residing. The external security was to survey the accommodation around the clock for a period of two weeks. In addition, public authorities were setting up a mobile information office. Problematic was that not only Tönnies employees were living in the accommodations, but also many employees from other companies, making it difficult to separate the ones from the other.²²¹

According to virologist Eckerle, it was clear that the working conditions in the slaughterhouses were not compatible with the prescribed hygiene measures.²²²

The district of Gütersloh ordered the closure of the company on Wednesday afternoon, 17 June 2020. Pigs for slaughter were no longer accepted and the cutting department was closed. Nevertheless, production continued, with several hundred of employees still remaining at work on Thursday, 18 June 2020. This was decided after consultation with the health department, in order to allow the factory to process the meat stored in cold stores. This was supposed to take 2 days, after which the Tönnies plant would be completely closed for a period of 7 to 14 days.²²³

A further consequence of the rising Covid-19 contamination cases was that more than 5000 workers had to be tested. The employees of the Gütersloh district performing these tests had so far been supported by volunteers from the Malteser Aid Service and the German Red Cross. But this aid was no longer deemed enough. Administrator Sven-Georg Adenauer, therefore, applied for administrative assistance from the Bundeswehr. In response, 13 soldiers with previous medical knowledge were announced to arrive on Friday, 19 June 2020, next to an additional 12 in order to assist with the administration of the whole process.²²⁴

Isabella Eckerle, head of the Emerging Viruses research group for Infectious Diseases Department at the University of Geneva, assumed that the enterprise had remained infected since the previous outbreak in May 2020. However, a Tönnies spokesman emphasized that the enterprise had done all it could to keep the Covid-19 virus out of its premises, suggesting that the infections had been the result of weekend visits by workers to their home countries.²²⁵

District Administrator Adenauer ordered that all schools and child care centres in the Gütersloh district were to be closed from Thursday, 18 June 2020 on. Adenauer stressed that this was a far better measure than a full lockdown of the entire Gütersloh district. Bundestag member Britta Haßelmann declared to be appalled

- ²²²WDR (2020).
- ²²³WDR (2020).
- ²²⁴WDR (2020).

²²⁰WDR (2020).

²²¹WDR (2020).

²²⁵WDR (2020).

by the situation in the slaughterhouses in Rheda-Wiedenbrück and even filed a criminal complaint against Tönnies. According to Mrs Haßelmann, the outbreak of infections could only be explained by a massive non-compliance with occupational safety standards, besides irresponsible housing accommodation and transport conditions. The Bielefeld Clinic was the first hospital in the region to respond to the Covid-19 cases.²²⁶

The whole matter soon brought a renewed focus on the poor working conditions in the meat processing sector, with workers in previous, outbreaks elsewhere reporting they also had to live in shared accommodations.²²⁷

Later on that same day, NRW Health Minister Karl-Josef Laumann told the "Kölner Stadt-Anzeiger" which specific deficiencies had been found in the housing accommodations for the slaughterhouse workers. It concerned (1) Overcrowding; (2) Mold infestation; (3) Danger of collapse of parts of the buildings; (4) Leaky roofs; (5) Disastrous sanitary facilities; (6) Rat infestation; and (7) Fire protection deficiencies. Four apartments had to be evacuated due to significant construction defects. According to the Minister the health of the employees had been seriously neglected, apparently for reasons of profit maximization. The Minister said that he would no longer accept the situation and that he would take action to remedy it.²²⁸ By 7 PM of the same day, the results of 983 tests were made available. Of these, 657 slaughterhouse employees had tested positive for Covid-19.²²⁹

By 19 October 2020, the meat processing plant's board announced that it had taken firm measures to limit the risk of further spread of the Covid-19 virus. All infected employees working at the plant, as well as those with whom they were in contact, were to be quarantined. That quarantine applied to anybody who had been working on the slaughterhouse's premises and who had not yet been tested.²³⁰

On 19 June 2020, after the Covid-19 outbreak in the Tönnies meat processing factory was announced to have caused 730 registered infections, NRW Health Minister Karl-Josef Laumann declared that he wanted the meat processing industry to be scientifically researched. The Minister announced that he would launch a scientific committee that would investigate the causes of the Covid-19 outbreak in Gütersloh epidemiologically.²³¹

Shortly after, a video from the canteen of the Tönnies slaughterhouse that already had been made public on 17 June 2020, started to cause further outrage. On the video recording, it was shown how employees sat close together to eat—obviously while disregarding Covid-19 distance rules. On 19 June 2020, it became clear that press spokesman for Tönnies, André Vielstädt, had been caught lying about the video. The Tönnies spokesman had told the Bild editorial team before that the video had already

²²⁶WDR (2020).

²²⁷BBC News (2020b).

²²⁸Bastert et al. (2020).

²²⁹Bastert et al. (2020).

²³⁰van Dooren (2020).

²³¹Bastert et al. (2020).

been recorded in March 2020. But this information appeared to be false—the video was recorded later, at a time when the hygiene ordinance issued by the state of North Rhine-Westphalia was already in force. Apparently, the SWR had discovered the false claim when it examined the metadata of the video clip, mentioning as recording date 8 April 2020, at 8.39 a.m.²³²

Also on 19 June 2020, new test results concerning Tönnies labourers were made public, bringing the total of Covid-19 infections at 803. By then, it had also become clear that the outbreak at Tönnies harboured an enormous spreading risk. All forces were to be mobilized to contain what was happening. A further problem discovered after the mass flare-up at Tönnies, was the wide distribution of the worker's residences: most of the labourers working at Tönnies were spread over the districts of Gütersloh, Warendorf and Soest and the cities of Hamm and Bielefeld.²³³

On 20 June 2020, at 2:45 p.m., it was reported that 1,029 Tönnies employees had been tested positive for the Covid-19 virus. This was announced by the district administrator of the Gütersloh district, Sven-Georg Adenauer, who also emphasized that there had not occurred any significant entry of Covid-19 cases into the general population. On the same date, the NRW police prepared for a large-scale operation in order to investigate the Covid-19 mass outbreak at Tönnies. A so-called "BAO"-or "Besondere Aufbauorganisation", literally translated as a "special organizational structure"-, was set up at the Bielefeld police force to coordinate possible operations across the country. Also on 20 June 2020, the city of Verl set up a quarantine zone in the Sürenheide district. Several apartment buildings in which Tönnies labourers were housed, got quarantined. In the afternoon, the entire area was cordoned off, with a hundred police officers on duty. Mayor Michael Esken emphasized that strict compliance with the quarantine was essential. At the same time, city workers started putting up construction fences. According to the city, 78 residents had tested positive for the Covid-19 virus on Zollhausweg alone, one of the three streets secluded. The district health office announced that it would take a throat swab from all residents of the zone who had not yet been tested. The German Red Cross started providing packed lunches and drinks for the first two days of the quarantine. For the remaining days, a supply centre with food and hygiene items for daily needs was to be set up within the quarantine area. Meals were also kept ready for the Tönnies employees. The Zollhausweg was completely cordoned off. According to the city, 60 children and young people lived in the houses in question, 20 of them are younger than three years.²³⁴

By 21 June 2020, shortly after midday, the number of Tönnies employees who tested positive amounted to 1,029. The authorities had already quarantined around 6500 employees of the enterprise. By 3:22 PM, there were a total of 1331 confirmed Covid-19 contamination cases. By then, almost 7000 tests had been carried out on the Tönnies employees with the help of the Bundeswehr and the DRK. The by then

²³²Bastert et al. (2020).

²³³Bastert et al. (2020).

²³⁴Bastert et al. (2020).

7000 people who were quarantined, were reported to live in 1300 apartments. The authorities announced that it could not be ruled out that sick people had left the Gütersloh district and gone home.²³⁵

According to another source, approximately 1400 employees at Tönnies, ultimately, tested positive.²³⁶

On 28 June 2020, it was announced that the indicator of new infections per 100,000 inhabitants for the Gütersloh district within the preceding seven days was still well above the decisive mark of 50. According to RKI figures, the Gütersloh district was then the only district in Germany above the important mark of 50 new infections per 100,000 inhabitants within the preceding seven days. The NRW districts of Gütersloh and Warendorf had been in regional lockdown—the first in Germany—as of 24 June 2020. The lockdown was limited to 30 June 2020.²³⁷

As of 8 July 2020, three weeks after the Covid-19-indicated closure of the Tönnies meat processing factory, a first section outside of production could be reopened. An exemption granted by the mayor enabled the administration sub-area at the main Tönnies location to be gradually brought back into operation.²³⁸

A week later, on 15 July 2020, around four weeks after the Covid-19 outbreak at Tönnies, the city administration lifted the ordered production stop for slaughter with immediate effect. This meant that the company in Rheda-Wiedenbrück could, once again, accept animals from farmers and gradually ramp up production.²³⁹

All in all, the Tönnies-facility in Rheda-Wiedenbrück was closed for almost a month. Ever since, Tönnies has installed a new hygiene protocol, which included adjusted ventilation. This was because, at an earlier stage, it had already been concluded that (bad) ventilation had played a major role in the spread of the Covid-19 virus.²⁴⁰ In addition, all employees were in the period afterwards being tested twice per week. By the end of July 2020, 7300 additional tests had been carried out, of which 30 were positive. According to Tönnies itself, in total 22 of these concerned older positive cases.²⁴¹

On 20 July 2020, Tönnies released on its website an "Immediate Action Plan for extended pandemic prevention and for modification of the work, living, and animal husbandry arrangements".²⁴²

On 28 July 2020, the enterprise announced that it wanted to build new apartments for its labourers. 70 houses with 1500 apartments were planned. The aim was to provide cheap and well-equipped apartments according to a fixed standard (e.g., fully furnished single apartments of 16 m^2 for 300 euros rent/month including

²³⁵Bastert et al. (2020).

²³⁶Santens (2020).

²³⁷Bastert et al. (2020).

²³⁸Bastert et al. (2020).

²³⁹Bastert et al. (2020).

²⁴⁰Kloosterman (2020).

²⁴¹ Kloosterman (2020); NOS (2020).

²⁴²Tönnies (2020).

heating, or apartments for couples of 27 m² for 400 to 450 euros rent/month including heating, the price depending on the locations).²⁴³

Although this may have been well-intentioned in the minds of Tönnies' leading stakeholders, their approach mainly demonstrates the extent to which capitalist rulers, in their continued pursuit of ever more profit (and even after having had several deaths on their consciences shortly before), always keep sticking to their classic methods of exploitation.

Notwithstanding these announced measures, already as early as October 2020, a new Covid-19 outbreak would occur in one of Tönnies's (other) meat processing plants. On 8 October 2020, it was announced that the meat group Tönnies was again hit by Covid-19 and that it was again struggling with high infection rates among employees. The Emsland district immediately responded by closing the doors of the infected site which was located in Sögel. In total, 112 of the approximately 1100 employees had tested positive for Covid-19, notwithstanding the fact that the Sögel slaughterhouse site was at the moment no longer operating at full capacity. Under normal circumstances, 12,000 pigs per day could be slaughtered; in the days preceding the October 2020-outbreak, there had only been 7000 pigs per day slaughtered. The Tönnies slaughter site in Sögel was not the only slaughterhouse where new infections occurred. Several employees had also been tested positive at the slaughter site of "Vion" in Emstek, where in total, 63 employees had contracted Covid-19. All labourers infected were reportedly employed in the cutting department. Landkreis Emsland decided to close the site for a period of 22 days, starting on 11 October 2020 and running until 3 November 2020.²⁴⁴

7.11.1.2.3.4 Change of the Law

Already by 29 July 2020, the Federal "Bundeskabinett" had worked out a proposal for stricter rules for the meat industry. A draft law presented by Federal labour Minister Hubertus Heil (SPD) provided for a ban on temporary labour contracts and subcontracting in large slaughterhouses and/or meat processing factories. In addition, more controls were planned. Stricter regulations were, furthermore, to ensure better accommodation. With these new regulations on occupational safety, the federal government was explicitly responding to the massive Covid-19 outbreaks in the Tönnies slaughterhouse in North Rhine-Westphalia and other meat plants in Lower Saxony. Minister Heil aimed for the new regulations to be implemented as quickly as possible.²⁴⁵

²⁴³Bastert et al. (2020).

²⁴⁴Oussoren (2020); Lageschaar (2020a).

The enterprise announced that it would challenge the measures legally. According to the slaughterhouse, the closure was disproportionate in light of the measures already taken by the enterprise itself. (Cf. Lageschaar (2020a).)

²⁴⁵Bastert et al. (2020).

On 22 December 1920, the Bundestag adopted the "Occupational Safety and Health Control Act" ("Gesetz zur Verbesserung des Vollzugs im Arbeitsschutz', or in short 'Arbeitsschutzkontrollgesetz").

The new law, which entered into force on 1 January 2021, introduced orderly and safe working conditions for the meat processing industry and strengthened the efficiency of state supervision. However, the "Occupational Safety and Health Control Act" also provided various other branches nationwide with uniform rules.

The law included the following regulations:²⁴⁶

(1) A prohibition of external personnel: In the meat industry, subcontracting arrangements were to be prohibited as of 1 January 2021, and temporary work as of 1 April 2021.

The new rule implies that slaughtering and cutting may, by said dates, only be carried out by a factory's own permanent staff. The butcher's trade (= outsourcing to small enterprises with fewer than 50 employees) is excluded from this. In the case of order peaks in meat processing, exceptions to the rule are possible, but only on the basis of a collective agreement limited to three years and subject to strict conditions and controls.

- (2) Standards for employee accommodation: The Workplace Ordinance will determine how the communal accommodation to accommodate employees must be equipped, even away from the company premises.
- (3) Increase in the density of controls: The labour protection authorities of the federal states should monitor companies more frequently, in order to safeguard workers' rights in occupational health and safety.
- (4) Electronic time recording: With the exception of the butcher's trade, employers in the meat industry are required to electronically record the start and end of the daily working hours of their employees.
- (5) Increase in fines: Fines for violations were to be increased to 30,000 euros.

7.11.1.2.4 The Netherlands

At the beginning of the Covid-19 epidemic, the Dutch meat processing industry showed similar characteristics to that of Germany, especially regarding employment systems. About 80% of the labourers in the Dutch meat processing industry were from Central and Eastern Europe (CEE) and were hired through temporary employment agencies. They were paid the minimum wage, with many completely dependent on their employer—often a temporary employment agency—not only for work, but also for housing accommodation and transport. The accommodation in which said labourers were located was in most cases overcrowded, which made physical and social distancing impossible. Many migrant and cross-border workers simply lived together in large groups, sometimes in apartments, but often in bungalows or in

²⁴⁶Bastert et al. (2020).

caravans. All of these were conditions that in 2020 would contribute to the spread of the Covid-19 virus.²⁴⁷

The temporary employment agencies that hired the workers and made them available to the meat processing plants were in most cases based in the Netherlands. This meant that the labourers had to have an employment agreement with a Dutch temporary employment agency and that the labour relationship was subject to Dutch law. As a result, most of the labourers got subjected to the Dutch collective agreements applying to the temporary work sector as well. The labourers in most cases did not speak or understand the Dutch language. The posting of (temporary) labourers through temporary employment agencies which were based in another EU Member State (especially the home country of the thus recruited labourers) was a less common practice in the Netherlands than the recruitment of foreign workers with the help of a foreign recruitment agency, and then hiring them through a local Dutch temporary employment agency.²⁴⁸

Demands for more decent housing for migrant and cross-border labourers had already been made in times pre-Covid-19. Another demand that had been formulated in the past was that meat processing enterprises would employ their labour force directly and not abuse the legal method of hiring their services through temporary work agencies that employ labourers on flexible agreements which are in most cases disadvantageous to the labourers themselves.²⁴⁹

Under pressure from Germany, systematic testing for Covid-19 began to be undertaken at a Vion meat processing factory that was located in the Dutch town of Groenlo, in close proximity to the border between The Netherlands and Germany. The reason for the demands made by Germany was that the majority of the labourers employed at the Groenlo factory were at the time living in Germany. When 45 people effectively tested positive for Covid-19, the slaughterhouse was shut down on 20 May 2020. Another round of additional testing for Covid-19 was then carried oud, which resulted in more than 20% of the labourers testing positive for Covid-19, amounting to 147 labourers out of a total 657. After these positive tests, the factory was temporarily closed, and all labourers were quarantined at home. In addition, in the same week, another Vion pig meat processing factory, this time located in Apeldoorn, also had to be shut down for a day after it was found out that social distance rules were not respected in 17 vans used for the transport of the (mainly foreign) labourers from and to the factory premises. It appeared, moreover, that a few weeks earlier, at another Vion poultry processing factory located in Scherpenzeel, 28 labourers had also contracted the Covid-19 virus.²⁵⁰

In May 2020, the Dutch slaughterhouse "Van Rooi Meat" was similarly forced to close after many of its employees had tested positive for Covid-19.²⁵¹ At the time,

²⁴⁷EFFAT (2020), p. 11.

²⁴⁸EFFAT (2020), p. 11.

²⁴⁹EFFAT (2020), p. 11.

²⁵⁰EFFAT (2020), p. 11.

²⁵¹Lageschaar (2020b).

"Van Rooi Meat" housed the entire processing of pigs, from farm to fork, on $62,000 \text{ m}^2$ (+/- nine football fields) located at Helmond. The supply of the livestock, the slaughtering process, the first cut and the boning all took place in one continuous flow. This implied that at the factory, the meat was immediately processed into end products. especially into bacon. During 18-hour working days, Van Rooi Meat managed to process one million kilos of meat per day.²⁵² Van Rooi Meat was at the time the second largest meat processing enterprise in The Netherlands. It purportedly employed 1700 people, although few on the basis of a permanent employment agreement. In 2019, the enterprises enjoyed a turnover of 650 million euros and made a profit of 35 million euros.²⁵³ On 22 May 2020, it was announced that, as of 23 May 2020, all labourers of Van Rooi Meat had to be tested for Covid-19. The reason for this was that two inspectors from the "Animal Sector Quality Inspection Service" (KDS) and a veterinarian from the food authority "NVWA", who had worked in Helmond, had been tested positive for Covid-19. Vets and inspectors who worked at another slaughterhouse of "Vion" in Boxtel had also tested positive for Covid-19. One of the infected inspectors had worked at both the slaughterhouses in Boxtel and Helmond.²⁵⁴

At the time, almost exclusively labour migrants worked in the mega pig slaughterhouse in Helmond. It concerned mostly Poles and Romanians who, in many cases, also lived together in group accommodations on a camping site in Bakel, amongst other places.²⁵⁵ A large number of these workers were, moreover, employed through an employment agency. The temporary employment agency "Horizon Groep" from Velp was one the major players at Van Rooi Meat, delivering approximately 600 temporary labourers. Of the 21 people who had tested positive, 4 were employed through Horizon Group.²⁵⁶ Similar to the methods resorted to in other meat factories all over Europe, Van Rooi Meat hardly employed permanent labourers, so labourers usually did not dare to come forward when there were complaints. At the time of the Covid-19 outbreak, several people within the factory were ill and some even had severe symptoms, such as fever. In most cases, under the enterprise's governance policy, people were not tested for Covid-19, as a result of which nobody had any real clue about the number of people who were infected.²⁵⁷

The slaughterhouse had to temporarily close its doors on 28 May 2020, when some of its labourers indeed appeared to test positive for Covid-19.²⁵⁸ On the next day, 29 May 2020, it even appeared that out of a sample of 130 labourers, 21 people were infected with Covid-19 (= an infection rate of 17%), implying that there was a

²⁵²Lageschaar (2020b).

²⁵³ van de Klundert and Start (2020)

²⁵⁴de Bruyn (2020).

²⁵⁵Verrijt (2020).

²⁵⁶de Bruyn (2020).

²⁵⁷Verrijt (2020).

²⁵⁸Van Dooren (2020).

risk that the enterprise is, or could become, a spreading cause for the virus.²⁵⁹ The enterprise was ultimately allowed to reopen its door by the beginning of June 2020. Van Rooi Meat got the green light to go back into production, bit by bit, as of 13 June 2020, after all labourers had again been tested negatively for Covid-19.²⁶⁰ The enterprise was first given permission to start up with a maximum of 300 labourers who all had tested negative.²⁶¹ The reopening of the enterprise was not only to happen in phases but was moreover made conditional. One of the measures to which the enterprise was subjected, was that all labourers had to fill out a health statement at the gate every morning. Anyone who declared that they had complaints which could be related to the Covid-19 virus was then to be sent home immediately. However, many labourers did not comply to these rules out of fear for losing their job, knowing that if they were sick and told the truth, they would not be allowed to return to work anymore. A number of labourers later declared in an interview with the Dutch news service "NOS" that they had even been told to lie by the management of the enterprise. When being asked if they were ill, some labourers had, more precisely, been instructed to respond negatively on the health statements to be completed on a daily basis. Other labourers filled in the health declaration incorrectly of their own accord, fearing that they would never be allowed to return in the event they made mention of Covid-19 related health complaints. According to some of the labourers, compliance with other measures within the slaughterhouse, such as keeping a distance of 1.5 m and an obligation to wear face masks, only took place just before and during an inspection, as the health inspection services announced these checks in advance.²⁶²

On one such inspection by the "GGD" and the "Safety Region (council)" ("Veiligheidsregio") that took place on 11 June 2020, "Van Rooi Meat" had indicated that 500 labourers were present at the premises, all having tested negatively. This number was, however, more than allowed under the reopening permit. Still, the Safety Region at the time told the TV news network "Omroep Brabant" that it did not consider the violation serious enough in relation to the results already achieved and that it had found the number of people present in the factory acceptable. Van Rooi Meat itself indicated that, although the number was higher than previously allowed, it was considered acceptable. According to the enterprise, there had been a "misunderstanding" on the side of the Security Region, causing the higher number. Later that year, by mid-September 2020, members of parliament asked for clarification from Minister Schouten about the situation, in particular why the Safety Region had not intervened at the time.²⁶³

²⁵⁹de Bruyn (2020).

²⁶⁰Van Dooren (2020).

²⁶¹Lageschaar (2020b).

²⁶² van de Klundert and Start (2020)

²⁶³Lageschaar (2020b).

7.11.1.2.5 Belgium

Even the meat processing industry of small and over-regulated Belgium could not escape Covid-19, exposing similar malpractices in its meat processing industry as in some of its neighbouring countries, be it to a lesser extent than in, e.g., Germany.

At the beginning of 2020, one of the main problems for labourers employed in the Belgian meat processing industry concerned the poor housing accommodation of "posted" and subcontracted labourers. In addition, transport to and from the factory premises was organised by the employer. Belgian affiliates of EFFAT had already in the past made complaints to the Belgian authorities to deal with these problems and had, in addition, called for more and more frequent inspections. The "posting" of labourers at the time concerned a widespread practice throughout the Belgian meat processing sector. This posting of labourers had become attractive for Belgian meat processing enterprises as a method of avoiding Belgium's expensive mandated insurance contribution scheme. Another widespread practice for reducing costs, especially social security related costs, characterizing the Belgian meat processing industry consisted of subcontracting tasks to registered enterprises operating in the logistics or food trade sectors. This practice allowed meat processors to take advantage of the lower wages provided under collective agreements applicable in these other sectors.²⁶⁴

Already in 2012, Belgian meat processing enterprises had agreed upon a protocol with the Belgian federal government to combat such social dumping and other abuses characterising the sector. As a result, a system of joint liability along the entire meat industry subcontracting chain had been introduced which implied that labour conditions in the Belgian meat processing sector had become much better than in Belgium's neighbouring countries.²⁶⁵ In addition, in 2013, the Belgian authorities, stimulated by the trade unions, had made an attempt to put international pressure on the German government to get them to better regulate their country's meat processing industry. There had even been made a formal complaint with the European Commission by the then Minister of Economic Affairs, Johan Vande Lanotte, and the then Minister of Labour, Monica De Connick.²⁶⁶

²⁶⁴EFFAT (2020), p. 15.

²⁶⁵EFFAT (2020), p. 16.

²⁶⁶In June 2020, the German television station ARD broadcasted a news report which stated that many labourers employed by the German meat processing industry were easily working 60 h a week, for as little as 3 euros an hour. These were often Eastern Europeans who had been recruited under false pretenses by obscure subcontractors. The Belgian meat processing sector was particularly affected by this malpractice. Economy Minister Vande Lanotte reacted to the complaints of the Belgian meat processing sector and addressed the European Commission. But he was told that Europe could not force EU member states to introduce a minimum wage. In the end, the complaint was successful because, in response, the four largest German meat processing companies agreed with the unions to introduce a minimum hourly wage of 8.5 euros. The sector wanted to put an end to the social abuses to which Belgium, among others, had reacted strongly. (Cf. BVB (2013).)

During the Covid-19 pandemic, the Belgian social partners quickly reached an agreement on clear measures to be implemented at all meat processing enterprises. The sectoral guidelines paid particular regard to labourers employed by subcontractors and to posted labourers. It became mandated to make information posters about the risk of the Covid-19 virus and the safety and health measures to be observed available in several languages (e.g., Arabic, Romanian, Bulgarian, Polish. . .). Furthermore, in Belgium, Covid-19 was also quickly recognised as an "occupational disease" in certain key sectors (including the food industry). However, this recognition was made conditional to various factors. It applied, moreover, only during the period between 13 March 2020 and 17 May 2020 and only when it had been impossible to maintain a physical distance of minimum 1.5 m.²⁶⁷

Despite these precautions, a serious epidemic, with +/- 90 contaminated persons out of 330 labourers, was reported to have broken out in (at least) one Belgian meat processing factory, namely "Westvlees" of the Lovenfosse group, in early August 2020.²⁶⁸

The meat processing enterprise "Westvlees" in Westrozebeke was at the time one of the most important European producers of fresh and prepared pork. It processed 1.4 million pigs per year into more than 140,000 tons of pork and served customers in 50 countries. A total of 850 labourers were employed at the factory site in Westrozebeke, of which 225 people in the meat cutting department.²⁶⁹

The alarm bells at "Westvlees" had gone off on 4 August 4 2020, after six labourers of Westvlees had been found to be contaminated with Covid-19. Four of them had been of French nationality. Subsequently, 150 to 200 Covid-19 tests were immediately carried out on the labourers of Westvlees' cutting department. On the next day, there were at least 16 positive cases, but it was said that the numbers were likely to increase. As a precaution, the cutting department of the enterprise was closed,²⁷⁰ with the rest of the factory remaining open. 225 further labourers got tested and quarantined in their homes for at least a week. The food safety agency FAVV emphasized that there was no risk of consuming the enterprise's products.²⁷¹ By 7 August 2020, when more test results became available, there were 67 confirmed Covid-19 contamination cases.²⁷² By 10 August 2020, 60 additional tests were conducted, of which 7 appeared to be positive, bringing the total of Covid-19

²⁶⁷EFFAT (2020), p. 16.

Trade unions wanted the recognition of Covid-19 as an occupational disease to be extended and, moreover, strongly opposed the requirement to demonstrate the impossibility of a social distance of 1.5 meters. They argued that physical and social distancing should always be maintained, as it concerned the most effective way to be protected from the risk of Covid-19 contagion. (Cf. EFFAT (2020), p. 16.)

²⁶⁸EFFAT (2020), p. 16.

²⁶⁹Santens (2020).

²⁷⁰Santens (2020).

²⁷¹Santens (2020).

²⁷²Baert (2020).

contamination cases to $74.^{273}$ By 14 August 2020, after some more testing, that number had risen to $94.^{274}$ None of the contaminated labourers had to be hospitalized.²⁷⁵

According to the major of Westrozebeke, Francesco Vanderjeugd, it had not been considered advisory to close the entire enterprise, as the affected department was deemed to have functioned sufficiently separately from the rest of the enterprise.²⁷⁶ There were, moreover, not yet known cases at the other departments and no infections had been found at the enterprise before. The activities of the cutting department were, in addition, immediately taken over by another Belgian site of the enterprise, located in Aubel, Liège. Major Vanderjeugd pointed out that, although there were certain similarities to the situation in Germany's meat factory 'Tönnies'', there were also clear differences, such as much better living conditions of the labourers of the Belgian meat processing company.²⁷⁷

7.11.1.2.6 The United Kingdom

In the English regions, the need to consider local lockdowns first became apparent after an outbreak of Covid-19 in meat processing plants in Leicester. The Leicester outbreak revealed what has been referred to as the "open secret" of overcrowded labour conditions and extremely low wages endured by racial minority groups employed in the meat processing sector.²⁷⁸ During the first half of 2020, there were several confirmed Covid-19 contamination cases of people employed in in the meat processing sector throughout the United Kingdom, in some cases resulting in site closures.

As in most other countries, meat processing factories in the United Kingdom mostly employed migrant labourers who lived in poor and cramped accommodation, where several occupants worked and lived together. As most of these labourers only received low wages, it was for most impossible to own their own car as a result of which most relied on carpooling or on public transport, which was usually overcrowded. In addition, most of the migrant and cross-border labourers did not speak or understand English, while in the United Kingdom, the information about the risks posed by the Covid-19 virus was only provided in English.²⁷⁹

On 18 June 2020, the "2 Sisters" poultry processing factory located in Anglesey announced that it would close for a fortnight, after local health authorities had announced that there had been 58 Covid-19 contamination cases among the site's

²⁷³Focus/WTV (2020).

²⁷⁴Feys (2020).

²⁷⁵De Letter (2020).

²⁷⁶Santens (2020).

²⁷⁷ Santens (2020).

²⁷⁸Middleton (2020); Lageschaar (2020a).

²⁷⁹EFFAT (2020), p. 12.

560 staff members. Two other food processing factories—more precisely the Kober meat factory in Yorkshire, which supplied bacon to Asda, and Rowan Foods in Wrexham, which manufactured food for UK supermarkets—also had to close due to outbreaks of the Covid-19 virus. Tests undertaken at the Kober-plant indicated that there were 165 positive Covid-19 contamination cases; all labourers testing positive were placed in quarantine for 14 days with health authorities resorting to contact tracing as well. According to Kober's management, the factory was allowed to partially reopen in the week of 22 June 2020, however only with staff members that had tested negative and found fit to return to work.²⁸⁰

Employers in the UK meat processing industry have been criticised for a slow response to the emerging Covid-19 crisis and for having been too reluctant to resort to social and physical distancing measures. E.g., "Unite the Union" had strongly called upon the meat processing enterprises to adopt strict health and safety measures after 1000 labourers had walked out of a Moy Park factory located in Northern Ireland on 25 March 2020 only to resume work after having been formally assured that stricter health and safety guidelines were underway. The social unrest had occurred after four food industry labourers had died of Covid-19 in May 2020, one labourer at Moy Park located in Northern Ireland and three at a meat processing factory located in Barnsley.²⁸¹

At the time, union representatives operating in meat processing factories throughout the United Kingdom had raised concerns over meat production lines not being subjected to physical and social distancing guidelines. In addition, risk assessments, if carried out at all, had little or no input from the unions. Under pressure from the unions, some factories decided to change labour hours and made alterations to the layout of common areas (e.g., changing rooms and canteens). As of June 2020, the 2-meter physical distance guideline was still not respected in the meat processing areas of most factories because the UK government had only issued "guidelines", which were not legally binding.²⁸²

Surprisingly, production levels increased dramatically (by over 40%), purportedly in order to meet the increased demand resulting from a public procurement panic. As a result, meat processing enterprises demonstrated little willingness to slow down production lines in order to allow physical or social distancing between labourers.²⁸³

As in the case of the meat processing industry in other countries, the same systematic risks in UK food production were reported, such as the fact that the workforce, already exposed to a wide variety of vulnerabilities and malpractices, such as low wages, lack of rights and limited access to union representation, became

²⁸⁰EFFAT (2020), p. 12.

²⁸¹EFFAT (2020), p. 12.

²⁸²EFFAT (2020), p. 12.

²⁸³EFFAT (2020), p. 12.

exposed to additional health and safety risks and difficulties because of Covid-19. Recurring problems included²⁸⁴

- A reluctance to call in sick for fear of loss of income.
- Threat of loss of hours and jobs, both implicit and explicit.
- Need to work in large numbers, where physical and social distancing was impossible.
- A lack of adequate PPE for essential and non-essential work.
- Expectations on labourers to integrate the new responsibilities into their work.
- Poor labour union consultation, with little or no union involvement.
- A lack of transparency by enterprises on the number of Covid-19 cases and deaths.

After the Covid-19 pandemic had started, meat processing industry labourers were often scared to go to work, but simply could not afford to stay at home and be without an income for a prolonged duration. In addition, sick pay was extremely low, amounting to only £95 per week, which did not suffice to live on and pay for utilities such as rent and electricity. A survey among GMB members at the time revealed that over 65% of meat processing labourers could simply not afford to not show up at work.²⁸⁵

By the end of September 2020, it was feared that the actual number of Covid-19 contamination cases in food processing factories supplying UK supermarkets and restaurants was more than 30 times higher than had previously been reported. This concern was raised in a study by "Pirc"—in full: "Pensions & Investment Research Consultants Ltd." (an enterprise advising shareholders on ethical investments)²⁸⁶—in which it was, further explained that employers had too much impact on the official data. Already before, it had become clear that food manufacturing in general—and meat processing in particular—had been at the centre of several major local spreading events of the Covid-19 virus in the United Kingdom, with labourers all over the country making complaints about cramped labour conditions and being put under pressure not to take days off even when they showing Covid-19 symptoms. Nevertheless, as of 27 September 2020, only 47 official reports of occupational Covid-19 outbreaks—and no Covid-19 related deaths whatsoever—had been reported to the Health and Safety Executive (HSE) by food processors, which together employed 430,000 people throughout the United Kingdom.²⁸⁷

²⁸⁴Pirc (2020), p. 5.

²⁸⁵EFFAT (2020), pp. 12–13.

In light of this, the GMB had even written to the Secretary of State for Food and Drink, calling for an industry summit with supermarket retailers for establishing minimum industry standards, such as full payment for Covid-19 related absences. (Cf. EFFAT (2020), pp. 13.) ²⁸⁶Cf. https://www.pirc.co.uk.

²⁸⁷Pirc (2020), p. 4. Cf., furthermore, Davies (2020).

The investigation by Pirc had, more in particular, indicated that there had been at least 1,461 Covid-19 contamination cases and six Covid-19 related deaths, while it was, moreover, presumed that the actual figures were likely to be even higher. Pirc said the discrepancy between the reported

7.11.1.3 Long-Term Policy Considerations

From the moment a large number of employees of the German meat producer Tönnies had become infected with Covid-19 (cf. before, Sect. 7.11.1.2.3.3), Germany's largest meat processing factory has come under heavy criticism. Not only the disregard for physical and social distance rules, but also the precarious living accommodations of many immigrant labourers who had come to Germany as guest labourers were said to have ensured the rapid spread of the Covid-19 virus. However, this certainly was not a purely German problem.²⁸⁸

In a recent report of June 25, 2020 (entitled "Covid-19 outbreaks in slaughterhouses and meat processing plants"), the "European Federation of Food Agriculture and Tourism Trade Unions" (EFFAT) indicated that the reasons for the disastrous

Testimonials mentioned in the Pirc-report were as follows (cf. Pirc (2020), p. 5):

- They've already made redundancies in one factory, then they used agency workers to top up which isn't allowed. They've been using 100 agency workers a day during the pandemic.
- We weren't separated initially; people were actually touching each other. The night shift walked out over it.
- There are only 4 or 5 sanitizer pumps around site for around 300 staff... I been told by my HR manager if we don't feel safe, we can take 3 months off with no pay.
- No chance of social distancing, corridors are too small and work areas are not designed for this sort of thing.
- Audits are a sham. Auditors sit in an office for an hour when they arrive to do paperwork, and everyone cleans up the plant.
- Colleagues with COPD were asked to come back into work. When they were shielding, they were earning less than half of what they'd have earned on furlough.
- Most of the workforce in the London factories are from black and ethnic minority backgrounds. And we know that this group is most susceptible to become really ill from the virus.
- Immigrants, women and people of color are assuming great risks to their safety and the safety of
 their families at home because they don't have paid sick leave and are afraid of wage loss, or
 because they fear reprisals from managers should they speak out about workplace health and
 safety lapses.

(Pirc (2020), p. 5.)

According to Pirc labour specialist Alice Martin, the findings pointed to the fact that the figures submitted to the HSE by meat processing enterprises, which could be fined for unsafe working places, lacked credibility. Both labourers and unions have criticised employers and the government for the fact that labourers and the public have been put at risk by a flawed reporting system. Labour MP Luke Pollard declared that the government had turned a blind eye to outbreaks of the Covid-19 virus in food factories. Bev Clarkson, Unite's national officer, similarly declared that the official figures were "radically at odds" with the reality facing food labourers, particularly in the meat processing industry. (Cf. Davies (2020).)

²⁸⁸Nack (2020).

and actual figures was partly due to a loophole that allows companies to determine whether employees were infected with Covid-10 at work or elsewhere when submitting reports via the HSE's Riddor reporting system. Pirc based its findings on individual interviews with workers, union surveys and media reports on food processing companies. One interviewee for the Pirc report even spoke of "fake safety audits" at a large factory in Lincolnshire, adding that staff had been asked to wear cake boxes as makeshift masks. (Cf. Pirc (2020), p. 5.)

Covid-19 outbreaks in the meat processing industry, on a global scale, are to be found in the poor working and living conditions which affected thousands of meat labourers in many European countries, but also elsewhere.²⁸⁹

Numerous meat producers in EU countries such as Belgium, France, Ireland, Spain, Poland and the Netherlands saw waves of Covid-19 infections among their employees since the beginning of April 2020. Within the EU, after Germany, one of the countries whose meat processing industry was hit hardest by contaminations at slaughterhouses and meat processing factories was Ireland: Already by the end of June 2020, it was reported that a total of 950 workers in 19 Irish meat processing enterprises had been infected with the Covid-19 virus, and in some cases a quarter of the workers had become ill. Even so, none of the factories in Ireland had been closed by June 26, 2020. When more than 20% of the labourers at a Dutch slaughterhouse in Groenlo, located near the German border, became infected, the plant of the food producer "Vion" was closed at the end of May 2020. Nevertheless, tests were only carried out under pressure from the German authorities, as the majority of the labourers of the Dutch company lived in Germany and commuted across the border.²⁹⁰ In France, two slaughterhouses in the West of the country had been affected with Covid-19 in mid-May 2020. 180 employees had at the time tested positive for the Covid-19 virus. Only one of the plants in Val de Loire, where around ten percent of labourers had fallen ill, was closed by local authorities. Similarly, around 200 Covid-19 cases occurred at the manufacturer "Litera Meat", in the Spanish municipality of Binéfar.²⁹¹

However, as has already been explained before, by far the largest Covid-19 outbreaks occurred in Germany. According to the EFFAT trade union confederation, the problems in Germany reached such an extreme proportion because of practices of social dumping resorted to in the preceding years. While Germany is the largest meat producer in Europe, many of the labourers employed in the meat processing industry come, through subcontractors, from Eastern Europe, Africa and South America in order to work for German and other European meat producers. The EFFAT union estimated that around 80% of meat production in Germany was accomplished through mainly Eastern European migrant labourers.²⁹² As explained before, the main reason for the use of subcontractors was avoiding regulation. This typically went as follows: A slaughterhouse or meat processing factory concludes a so-called "work contract" with a subcontractor for the slaughter and cutting of a certain number of animals. The subcontractor would then decide how to organize the actual, physical work. How many labourers to employ for the job what to pay them, etc., is no longer officially the responsibility of the slaughterhouse or meat processing operator. Since the guest labourers are not directly employed by the enterprises that own the slaughterhouses, said labourers have little or no

²⁸⁹Nack (2020).

²⁹⁰Nack (2020).

²⁹¹Nack (2020).

²⁹²Nack (2020).

socio-economic security in the EU and accept labour agreements involving long working hours, without adequate breaks. They get housed in cramped collective accommodations that do not meet basic hygiene standards. Any precaution in the actual workplaces becomes useless if the workers get infected in their shared accommodation.²⁹³

Another problem with this precarious employment method has been that, if a labourer became sick, he still went to work for fear of being fired. This has been indicated as a further reason why working with subcontractors made the meat industry all over Europe a centre for the spread of the Covid-19 virus.²⁹⁴

According to the EFFAT union, the only way of dealing with this situation is to gain control over the unreasonable working and living conditions of the immigrant labourers (ab)used by the meat processing industry.²⁹⁵

In Germany, in the aftermath of the Covid-19 outbreaks of May-June 2020 in the meat processing factories of Tönnies, Germany's Federal labour Minister Hubertus Heil (SPD) announced that he wanted to ban work contracts with subcontractors and temporary labourers for the entire German meat industry. EU trade unionist Bragaso, moreover, pointed to the similarities with the situation in the United States. There, the number of infections in meat operation factories had risen to similar numbers as those in Germany. Several enterprises in the United States had in a similar manner been forced to temporarily stop production, after a total of at least 5000 labourers in the sector had tested positive. However, in the United States, many plants simply opened again in May 2020, when US President Donald Trump declared the meat industry to be a "critical sector" for reasons of national security, by presidential executive order (cf. Sect. 7.11.1.2.2.1). Trump's main policy concern had been to do something against the displeasure about meat shortages in the supermarkets, which had started to affect "the American way of life" too much. From his side, the at the time democratic presidential candidate Joe Biden compared conditions in American meat processing factories to "war zones". Also in the United States, it had often been immigrants, especially originating from Latin America, who were employed in the large American meat producing corporations, under extremely poor conditions.²⁹⁶

The methods used by meat producers to set the lowest possible wages and let their labourers work and live in precarious, poor conditions in order to keep production costs and prices down, were, furthermore, similar all around the world. Media reports from Great Britain, Canada, Brazil and Australia all pointed to similar problems concerning the meat processing industry.²⁹⁷

Moreover, it has been known for years already that the meat industry is both highly profitable on a global scale, as well as being a major driver of both

²⁹³Nack (2020).

²⁹⁴Nack (2020).

²⁹⁵Nack (2020).

²⁹⁶Nack (2020).

²⁹⁷Nack (2020).

antimicrobial resistance and climate change.²⁹⁸ (Cf. Sect. 2.2.2) A wide range of scientific research has shown that the continuation of the current meat industry is problematic for a number of reasons, which go far beyond the occurrence of waves of virus-based contamination in slaughterhouses and meat processing plants. Here we need only refer, for example, to a study by Allen and Hof (in which reference is made to a wealth of other scientific research), from which it clearly appears that the livestock slaughter and processing industry, amongst others, is a major contributor to climate change, with estimates of global greenhouse gas emissions from the livestock industry ranging from 12 to 18%.²⁹⁹

It is, therefore, not surprising that, given the consequences of meat consumption, several scientific studies have also urged for a change in food consumption practices. In developed countries in particular, meat consumption rates are very high and for some people account for up to 40% of diets, while alternative plant-based diets are still to be considered as "niche markets". According to Allen and Hof, it is not clear how much longer our planet can support these lifestyle choices. According to these authors, radical lifestyle changes are drastically needed if we are to avoid what they refer to as an "ecological Armageddon".³⁰⁰

Another problem caused by meat consumption is that many ecosystems created by traditional agricultural practices have virtually disappeared due to the increasing intensification of agriculture, especially in developed countries, although greater biodiversity in commercial grasslands could lead to greater economic value. (Cf. Sect. 2.2.2) E.g., the high demand for livestock food products has in the past continuously led to attempts to increase the level of meat production, where the tendency has been to intensify agricultural practices, e.g., by moving livestock "from pastures to barns", so that agricultural areas can be exploited more intensively. This "intensification of agriculture" has been yet another driver of loss of biodiversity and, while traditional farms provided important habitats for biodiversity, under the industrialization of agriculture, many of these important biodiverse habitats are in decline or have already been lost.³⁰¹ In Chaps. 1 and 2 of this book, this last point has already been mentioned as one of the reasons for the interspecies viral transmission of viruses such as Covid-19. (Cf. especially Sect. 2.2.2)

The challenge, therefore, remains to change both the relationship between man and nature, as well as the preferences and behaviour of consumers.³⁰² In the further opinion of Middleton, we can only hope that a sufficient number of people will soon

²⁹⁸Middleton (2020).

²⁹⁹Cf., furthermore, Allen and Hof (2019).

This same research indicated that replacing meat with plant-based diet alternatives could substantially reduce carbon-dioxide emissions within an average "Dutch diet", ranging from 28% to 46%. At the same time, a full life cycle analysis of ruminant meat products revealed that the greenhouse gas footprint of meat products was 19 to 48 times higher than that of high protein plant-based products. (Cf. Allen and Hof (2019).)

³⁰⁰Allen and Hof (2019).

³⁰¹ Allen and Hof (2019).

³⁰²Allen and Hof (2019).

think about how they get their meat, what they are prepared to pay for it and what conditions they expect from animals and workers in order to be able to eat it,³⁰³ provided that they still want to.

³⁰³Middleton (2020).

Perhaps, the Western world could even start to draw lessons from the Eastern spiritual leader Prahbupadha, whose insightful vision on meat eating and slaughterhouse practices goes as follows (as quoted on https://prabhupadabooks.com/d.php?qg=295/): "When demoniac persons engage in animal-killing, the demigods, or devotees of the Lord, are very much afflicted by this killing. Demoniac civilizations in this modern age maintain various types of slaughterhouses all over the world. (...) The hunting process is also carried on in a different way, as we have already explained. Hunting women, drinking different types of liquor, becoming intoxicated, killing animals and enjoying sex all serve as the basis of modern civilization. (...) The devotees are pained to cf. the hunting and killing of animals in the forest, the wholesale slaughter of animals in the slaughterhouses, and the exploitation of young girls in brothels that function under different names as clubs and societies. Being very much compassionate upon the killing of animals in sacrifice, the great sage Nārada began his instructions to King Prācīnabarhişat. In these instructions, Nārada Muni explained that devotees like him are very much afflicted by all the killing that goes on in human society. Not only are saintly persons afflicted by this killing, but even God Himself is afflicted and therefore comes down in the incarnation of Lord Buddha. Jayadeva Gosvāmī therefore sings: sadaya-hrdaya-darśita-paśu-ghātam. Simply to stop the killing of animals, Lord Buddha compassionately appeared. Some rascals put forward the theory that an animal has no soul or is something like dead stone. In this way they rationalize that there is no sin in animal-killing. Actually animals are not dead stone, but the killers of animals are stonehearted. Consequently no reason or philosophy appeals to them. They continue keeping slaughterhouses and killing animals in the forest. The conclusion is that one who does not care for the instructions of saintly persons like Nārada and his disciplic succession surely falls into the category of *nasta-prajña* and thus goes to hell. (...) Actually, those who are in knowledge of everything are determined to execute Kṛṣṇaconsciousness, but those who are rascals $(m\bar{u}dh\bar{a}h)$, sinners (duskrtinah) and the lowest of mankind (*narādhamāh*), who are bereft of all intelligence (*māyayāpahrta jñānāh*) and who take shelter of the demoniac way of life (āsuram bhāvam āśritāh), are disinterested in Krsnaconsciousness. As such they become implicated and take on so many activities. Most of these activities center around the killing of animals. Modern civilization is centered around animalkilling. Karmīs are advertising that without eating meat, their vitamin value or vitality will be reduced; so to keep oneself fit to work hard, one must eat meat, and to digest meat, one must drink liquor, and to keep the balance of drinking wine and eating meat, one must have sufficient sexual intercourse to keep fit to work very hard like an ass. (...) One may kill an animal to enjoy eating it, but he will be bound by such an action. Thus in one's next life he will become a cow or a goat, and the cow or goat will become a man and eat him. This is the Vedic statement, and as with all Vedic statements, one may believe it or not. Unfortunately, at present people are educated in such a way that they do not believe in the next life. Indeed, it seems that the more "educated" one becomes, the less he believes in God, in God's law, in the next life and in sinful and pious activities. Thus modern education is simply preparing men to become animals. If there is no education to teach a human being what he is and whether or not he is this body, he remains no better than an ass. An ass also thinks, "I am this body," as do other animals. Thus if a man thinks in the same way, how is he different from any other animal?"

7.11.2 Revisiting the Case of Amazon

7.11.2.1 The Issue of Labour Conditions in the Amazon-Empire Before the Covid-19 Pandemic

Already in the pre-Covid-19 era, many press articles pointed to the problematic nature of the way the Amazon empire treats its labour force (although very rarely making the connection to the underlying economic doctrines, especially those of economic neoliberalism, that have caused this situation).³⁰⁴

According to the press coverage in 2018, the many problems faced by Amazon labourers went far beyond the issue of (too low) wages, but also involved labourers facing many other difficulties and dangers in the workplace on a day-ily basis.³⁰⁵ In general, labourers in Amazon warehouses were reportedly faced with outrageous work quotas and cruel labour conditions that left many people sick and injured.³⁰⁶ These problems have, moreover, not only occurred in the United States, but also in many other countries, such as the United Kingdom, Spain, Italy, Poland and Germany.³⁰⁷

More generally, it was reported that in 2018, none of Amazon's approximately 600,000 employees worldwide were bound by a comprehensive labour agreement.³⁰⁸

The Amazon empire's extreme enforcement of the Iron Law of Wages, alongside the appalling general working conditions, even prompted US Senator Bernie Sanders in September 2018 to introduce a bill in the Senate—the "Stop Bezos Act"—that would force large employers like "Amazon.com" and "Walmart" to pay the government back for support that the government provides to the labour force of such large employers under the form of food stamps, public housing, Medicaid and other federal assistance received by their labourers. The name of the bill was reported to be an allusion to Amazon CEO Jeffrey P. Bezos and stands for "Stop Bad Employers by Zeroing Out Subsidies Act". Senator Sanders' legislative initiative sought to establish a 100% tax on government benefits granted to labourers at enterprises with 500 or more employees.³⁰⁹

³⁰⁴Cf., e.g., Appelbaum (2018); Bhattarai (2018a, b).

³⁰⁵Cf. Appelbaum (2018).

³⁰⁶Cf. Appelbaum (2018).

³⁰⁷Cf. Appelbaum (2018).

Specifically, Amazon couriers described inhumane working conditions and demands, such as not being allowed to take bathroom breaks and often feeling forced to drive dangerously to meet Amazon's strict requirements.

³⁰⁸Cf. Appelbaum (2018).

³⁰⁹Cf. Bhattarai (2018a).

As (at the time) Senator Sanders argued at a news conference announcing the bill (cf. Bhattarai (2018a)): "In other words, the taxpayers of this country would no longer be subsidizing the wealthiest people in this country who are paying their workers inadequate wages. Despite low

The 2018 bill came just one day after Amazon had reached USD 1 trillion in market capitalization, a milestone that had solidified its position as one of the world's richest and largest enterprises.³¹⁰

As Senator Sanders noted at the time on Twitter:³¹¹

Amazon is worth \$1 trillion. Thousands of Amazon workers have to rely on food stamps, Medicaid and public housing to survive. That is what a rigged economy looks like.

If Sander's initiative had become law, it would have created an additional tax on enterprises whose labourers were paid so little in formal wages that they had to receive additional government assistance through the abovementioned methods (e.g., food stamps). Obviously, Sander's bill was unlikely to become law. Sanders has (and still is) been referred to as "an independent socialist" who often sides with the Democrats. At the time Sanders had submitted his aforementioned proposal, the US Senate was controlled by Republicans. It was even unlikely that many Democrats would have supported the proposal, given how "radical" its content was perceived. But none of this mattered much. After a combination of legislative threats and public pressure, Amazon decided to make a big change of its own: Amazon voluntarily raised its minimum wage for all of the US personnel to USD 15 an hour, achieving in this manner much the same results as the Sanders Act would have. This was no small feat for Amazon either—moving to USD 15 an hour was likely to cost the enterprise at least an additional USD 1.75 billion a year in wages. This voluntary adaptation by Amazon was, hence, a total victory for Sanders. And with this victory

From this, it appeared that a right balance between "private time" and "(a little bit of) time for work" was during the past years high on Bezos' agenda, at least for himself, but much less for the people employed by the Amazon-empire who, in full accordance with the capitalist principles that those who perform labour should work as much as possible at the lowest cost (= wages) conceivable, have been reported to be subject to the most appalling working conditions. (Cf., next to many similar reports on the problem of the harsh working conditions in the Amazon-empire: Jaeger (2018).)

As Jaeger reported: "Employees say they are subject to 12-hour workdays five to six days a week, and claim Amazon never made good on promises to provide buses to and from its \$100 million Bloomfield warehouse, which opened earlier this year. "It takes me four hours every day to get to and from work. Between my work schedule and my commute, I haven't seen my daughter in weeks," worker Rashad Long said in a statement... "We have asked the company to provide air conditioning, but the company told us that the robots inside cannot work in the cold weather," ..." (Jaeger (2018).)

unemployment, we end up having tens of millions of Americans working at wages that are just so low that they can't adequately take care of their families." (Cf. Bhattarai (2018a).)

³¹⁰Cf. Bhattarai (2018a).

³¹¹Cf. Bhattarai (2018a).

The extent to which the rich class of entrepreneurs behave as true elitists can, furthermore, be illustrated by the way Bezos already in the past has been reported to plan his own average working day. In an interview of September 3, 2018, held at the Economic Club of Washington, Bezos described his average working day as follows (cf. Bhattarai (2018a)): "He gets eight hours of sleep every night, exercises regularly, and has his first meetings everyday with staff at 10:00 a.m. He is too tired at 5:00 p.m. to make major decisions. He "putters around" in the morning by reading newspapers and has breakfast with his children before they go to school." (Bhattarai (2018a).)

in hand, Sanders (and Ro Khanna) then turned his attention to Walmart, introducing a new bill, the "Stop WALMART Act", which stands for "Stop Welfare for Any Large Monopoly Amassing Revenue from Taxpayers Act".³¹²

According to Robert Reich,³¹³ the emergence of entrepreneurial behemoths such as Amazon and the retreat of the trade unions that made this possible has been one of the most dramatic changes in American capitalism in the last fifty years. In the opinion, of Reich, the resulting imbalance has led to: (1) almost unprecedented income and wealth inequality (referred to by many authors and investigation centres), (2) the complete corruption of American democracy by big money and (3) the abandonment of the American working class. As Reich, in addition, pointed out, the appalling conditions in Amazon's warehouses include issues such as strict and high production quotas, 10-hour labour days with only two half-hour breaks, dangerous protocols and procedures, arbitrary dismissals and the monitoring of every labourer movement. To thwart the union campaign, Amazon has even forced its labourers to attend anti-union meetings while simultaneously intimidating and harassing the union organisers. As to the question of why Amazon abuses its labourers to such an extent, the simple answer, in the opinion of Reich, is that it can. Reich in this regard recalled to the fact that 50 years ago, General Motors, had still been the largest employer in America. The typical GM labourer, thereby, earned USD 35 an hour in today's dollars and was, moreover, granted a significant say in labour conditions. In the course of 2020, the largest American employers were Amazon and Walmart, each paying about USD 15 an hour and both treating their labourers like cattle. Still according to Reich, the typical GM worker was not intrinsically "worth" more than twice as much as today's Amazon or Walmart labourer, and had certainly no more valuable knowledge about how work had to be organized in an optimal manner. The difference between today's Amazon labourers and vesterday's General Motor's labourer, is that half a century ago, GM workers had a powerful union, which assembled the collective bargaining power of more than a third of the entire US labour force. By contrast, today's Amazon and Walmart labourers are basically on their own. And with only 6.4% of American private sector labourers still unionized in 2020, there is little to no collective pressure on enterprises the likes of Amazon or Walmart to treat their employees better. In the days before Ronald Reagan's presidency, "big labour" still had enough political impact for ensuring that labour laws were effectively enforced, and that the government made sure that giant

³¹²Murphy (2018).

For the text of "The Stop WALMART Act"-bill, cf. https://www.sanders.senate.gov/wp-content/uploads/Stop-walmart-act-full-text.pdf.

This "The Stop WALMART Act"-bill would prohibit large employers from buying back stock unless they (cf. Sanders (2018)): "(1) Pay all employees at least USD 15 an hour, including parttime employees, independent contractors, and franchicf. employees; (2) Allow employees to earn up to 7 days of paid sick leave to be used to care for themselves or a family member; and (3) Ensure that CEO compensation (or the highest paid employee) is not more than 150 times the median pay of all employees." (Sanders (2018).)

³¹³Reich (2021a).

enterprises like GM to helped supporting the middle class. By 2020, after decades of neo-liberal public policy, the political clout of unions had become minuscule by comparison.³¹⁴

This also explains why business empires such as Amazon (of Jeff Bezos) and Tesla/SpaceX (of Elon Musk) are so anti-union and will do everything in their power to prevent the formation of a union in their midst, as we shall explain in more detail in Sect. 7.11.2.2.3.

7.11.2.2 Amazon in Times of Covid-19

7.11.2.2.1 Rising Market Shares

According to Palmer, by the end of July 2020, the Covid-19 pandemic had claimed more than a million people casualties on a global scale, besides having devastated the global economy, crippled industries, caused massive layoffs and, in the case of the retail sector, had led to the slow demise of already struggling department stores' chains around the globe, with Amazon being one of the few exceptions worldwide. Upon the outbreak of the Covid-19 pandemic, Amazon had virtually become what Palmer refers to as "the default retailer" of the planet and an essential service provider for many consumers all over the world. This was because, faced with shop closures and empty shelves in almost every Western country, consumers had first been massively turning to Amazon for products needed for protection against the Covid-19 virus, ranging from hand sanitisers, face masks and disinfectants. Consumers subsequently began ordering from Amazon to stock up on everyday household products and groceries. As the Covid-19 crisis persisted, consumers also started ordering office supplies and fitness equipment in large quantities in order to accommodate being locked in their houses. E.g., between February and March 2020, sales of toilet paper were said to have jumped 186% on Amazon, compared to a year earlier, while sales of cough and cold medicines were even said to have jumped 862% year-over-year.³¹⁵ An ever increasing flood of online purchases soon brought Amazon to record sales during Q1 2020. Amazon itself also reported spending billions on Covid-19-related investments itself, such as safety equipment for labourers and the development of its own internal testing initiative, which was given the name "Project Ultraviolet". While the rest of the United States faced widespread unemployment and economic problems, Amazon managed to continue

³¹⁴Reich (2021a).

In the opinion of Reich, this decades-long shift in power—the emergence of corporate Leviathan and the disappearance of unions—has also led to a massive upward redistribution of income and wealth. The richest 0.1% of Americans by 2020 owned almost as much wealth as the poorest 90% combined. Corporate profits accounted for a growing share of the total economy and wages a shrinking share, with multi-billionaire executives and investors like Bezos taking the lion's share. (Cf. Reich (2021a).)

³¹⁵Palmer (2020a).

hiring new labour forces: Between March and mid-April 2020, Amazon was said to have hired more than 175,000 new warehouse and delivery labourers needed for meeting its customers' growing online purchases. Amazon, moreover, added another 36,400 personnel members over the next three months (through 30 June 2020), bringing its labour force to 876,800 by that date, a 34% increase in comparison to the previous year. By the end of July 2020, Amazon announced that it expected to exceed a milestone USD 100 billion in quarterly revenue in Q4 2020.³¹⁶

Despite the above, it was not a given that Amazon would prosper to such an extent while so many other enterprises were facing extreme hardship due to the Covid-19 pandemic. Indeed, the unexpected influx of online purchases had initially caught Amazon completely off guard. As a result, during the early days of the Covid-19 crisis, Amazon first struggled to meet its famous "two-day delivery time" to which it was committed towards its Prime members as part of their annual membership fee of USD 119. Amazon was also quickly itself facing shortages of highdemand products, such as hand sanitiser and paper disinfectant towels. In addition, Amazon had to confront widespread price gouging, besides having to scramble to adapt its own logistic warehouse operations in order to ensure the safety of its personnel without slowing the pace of work all too much. While, according to Palmer, global enterprises the likes of Amazon are, in general, well equipped for handling "normal" supply chain disruptions, even Amazon was not prepared for what happened as a result of the Covid-19 outbreak. Notwithstanding Amazon's sprawling end-to-end logistics network of warehouses, airplanes, trucks and vans, it was unable at the onset of the Covid-19 outbreak to maintain stable operations. The Covid-19 pandemic demonstrated that Amazon's policy to bring most of its fulfilment operations³¹⁷ in-house "could be both a blessing and a curse".³¹⁸

Nevertheless, thanks to this unprecedented consumer demand, Amazon shares began to peak as of April 2020, with Amazon stock continuing to rise thereafter as well, which purportedly added hundreds of billions to Amazon's market value. As a result, by mid-August 2020, the investors' gains on Amazon's shares amounted to more than 86% compared to the beginning of 2020.³¹⁹

Already by the end of July 2020, Amazon was said to have doubled its quarterly profits to an amount of USD 5.2 billion, up from "only" USD 2.6 billion in the same period in 2019. Amazon's net sales had risen by 40%.³²⁰ By mid-August 2020, the enterprise was worth more than USD 1.7 trillion. This implied that Amazon had become the second most valuable enterprise in the United States, preceded only by

³¹⁶Palmer (2020a).

³¹⁷The fulfilment by Amazon programme allows individual sellers to ship their products to an Amazon warehouse, and then Amazon ships the product to customers in exchange for a commission on each sale. This program allows Amazon to provide a consistent experience for Prime members. (Cf. Palmer (2020a).)

³¹⁸Palmer (2020a).

³¹⁹Palmer (2020b).

³²⁰Harris (2021).

Apple.³²¹ The surge in demand was also behind Amazon's spectacular results of Q2 2020, when Amazon's revenue exceeded USD 88.9 billion and when Amazon reported even higher profits than had been expected, despite the fact that Amazon had had to spend billions of dollars on Covid-19 related expenditure.³²² By 26 August 2020, Jeff Bezos, CEO of Amazon, saw his own personal wealth surpass USD 202 billion, purportedly becoming the first man to cross the USD 200 billion threshold. At the time, Bezos was already USD 78 billion richer than Microsoft co-founder Bill Gates, who then ranked second on the Bloomberg Billionaires Index.³²³

Between January and October 2020, Amazon was reported to have added 427,300 labourers to its staff on a global scale. There were, moreover, rumours that Amazon would add more than 1000 new small facilities in US suburbs to its empire in order to meet same-day deliverance demands. It was similarly reported that Amazon would hire thousands of additional grocery labourers for Amazon Fresh. No other enterprise in history—not even Walmart, at the time the largest private employer in the United States—had ever added so many labourers in a single year. As of December 2020, Amazon was said to employ 1.3 million people worldwide. In Q4 2020, Amazon generated USD 125.6 billion in net sales, which amounted to its largest quarterly revenue ever.³²⁴

7.11.2.2.2 Impact on Amazon's Labourers of Covid-19

Given Amazon's history (cf. Sect. 7.11.2.1), it is hardly surprising that Amazon faced intense public scrutiny related to its treatment of warehouse labourers throughout the Covid-19 pandemic.³²⁵

By the end of March 2020, Amazon was considered to be at the forefront of dealing with the Covid-19 outbreak in the United States, especially through delivering vital goods at times when more than half the American population faced government orders to stay home. However, reports that a handful of Amazon's hundreds of thousands of American warehouse labourers had themselves been contaminated with Covid-19, raised fears of future site closures and operational disruptions.³²⁶

At the time, these Covid-19 cases within Amazon resulted into huge unrest among some of Amazon's personnel. In late March 2020, at an Amazon warehouse that employed more than 5000 people in Staten Island, New York, fifteen workers had simply left the enterprise's premises, which made Amazon fire one of these

³²¹Palmer (2020b).

³²²Palmer (2020b).

³²³Palmer (2020b).

³²⁴Hayasaki (2021).

³²⁵Palmer (2020a).

³²⁶Reuters staff (2020).

workers for having violated a paid quarantine. Around the same time, employees in other countries, including dozens employed at a facility of Amazon near Florence, Italy, began to raise their voices as well.³²⁷

Warehouse labourers complained that Amazon had not gone through enough trouble to protect them from the Covid-19 virus as they themselves had continued to pick, pack and ship Amazon orders at a frenetic pace. Policy makers, regulators, labour rights movements and some Amazon employees themselves all joined the call for urgent action. The enterprise defended itself from these criticisms by arguing that it had implemented more than 150 process updates across its warehouses to stem the transmission of the Covid-19 virus, ranging from improved cleaning, enhanced physical and social distancing measures, to stricter face mask requirements. Amazon also stepped up Covid-19 testing of its labourers.³²⁸

Notwithstanding these measures, Amazon's warehouses across the United States continued to report new contamination cases of Covid-19. By July 2020, at least eight Amazon labourers were said to have died from Covid-19.³²⁹

By April 2020, several French trade unions made the move to take Amazon to court, claiming that the enterprise's working places were not safe after the Covid-19 virus had appeared in some of them. This resulted in a court order from the "Tribunal Judiciaire de Nanterre" on 14 April 2020³³⁰ which mandated Amazon to stop selling anything that was not "essential". This court order, in practice, resulted into the temporary closure of Amazon's six fulfilment centres located in France. Amazon would later be allowed to reopen in May 2020, but security-conscious campaigners qualified the events as proof that even a giant enterprise of the size of Amazon can sometimes be brought to its knees.³³¹

³³¹BBC News (2021).

³²⁷Reuters staff (2020).

³²⁸Palmer (2020a).

³²⁹Palmer (2020a).

³³⁰Order of the Nanterre Court of First Instance of 14 April 2020 (R.G. N°: 20/00503) (available on https://www.leclubdesjuristes.com/wp-content/uploads/2020/04/TJ-Nanterre_Ordonnance-de-référ é-du-14-avril-2020.pdf).

Amazon appealed this decision, which was subsequently, on 24 April 2020, largely upheld by the Court of Appeal ("Cour d'Appel") in Versailles. In reaching its decision, the Court of Appeal took into consideration the following: "The Amazon company has not taken sufficient measures to protect the health of employees at the entrance to sites (revolving gantry), in the changing rooms, during interventions by external companies, when handling parcels and with regard to the necessary social distancing. Although alerted by the representative unions and labour inspectors, the management of the company took day-to-day measures, without a mastered overall plan as required by the very large volume of staff present on each site, mass movements on the occasion of staff rotations at the start of each department (...). and the intervention of external companies, in particular road carriers."

For the text of the decision of the Court of Appeals de Versailles, cf. https://www.leclubdesjuristes.com/wp-content/uploads/2020/04/Arrêt-de-la-cour-dappel-de-Versailles-du-24-avril-2020.pdf.

According to Robert Reich, Amazon had fired at least two labourers who had publicly complained about the lack of PPE on Amazon's premises during the pandemic.³³²

In the United Kingdom, the main union for Amazon labourers at the time was the GMB, which counted 600,000 members. Although Amazon had been unwilling to formally recognise this union as an entity with which to negotiate, GMB officials had always been given permission to support labourers during internal disciplinary meetings. Hence, GMB also did its best to keep monitoring what was occurring in Amazon's processing facilities. Already prior to the Covid-19 pandemic, GMB had regularly raised questions about labourer safety. Hence, it did not come as a surprise that in the second half of 2020, GMB started to make a lot of noise about health and safety issues in the Coventry fulfilment facilities, where there had been at least 30 Covid-19 containment cases in the course of a Covid-19 outbreak that had occurred in October 2020.³³³ As a result, Amazon had started testing UK frontline labourers on its own accord as of October 2020, then sending the test results to Public Health England, which then handed them to NHS Test and Trace and equivalent government agencies in Scotland, Wales and Northern Ireland.³³⁴

Moreover, on 1 October 2020, Amazon publicly announced that as of that date, 19,816 of its frontline labourers at Amazon and Whole Foods in the United States had tested or pre-screened positive for the Covid-19 virus, shedding a formal light for the first time on the impact of Covid-19 on its labour force.³³⁵ Previously, Amazon had over and again refused to share data about the exact number of confirmed Covid-19 contamination cases on its premises with both the general public and with its own labourers. Despite the rumours about huge numbers of confirmed Covid-19 contamination cases in Amazon's warehouses throughout the United States and around the world, Amazon had always just downplayed the importance of making both site-specific and aggregate numbers available, which made it impossible to get a clear picture of overall contamination cases at Amazon's sites.³³⁶ However, on 1 October 2020, Amazon changed course: in a blog post of said date, Amazon shared with the general public that it had conducted a

thorough analysis of data on all 1,372,000 Amazon and Whole Foods Market front-line employees across the United States employed at any time from March 1, 2020, to September 19, 2020.³³⁷

The aforementioned number of 19,816 Covid-19 contamination cases came down to a positivity rate of about 1.4%, based on the total labour of American frontline labourers—more than 1.37 million—that were employed by the enterprise's

³³⁵O'Brien (2020).

³³²Reich (2021b).

³³³BBC News (2021).

³³⁴BBC News (2021). Private test results shared with NHS Test and Trace led to 3853 notifications being wrongly issued on 13 February 2021, as confirmed by the UK government.

³³⁶O'Brien (2020).

³³⁷O'Brien (2020).

Amazon and Whole Foods businesses between 1 March 2020 and 19 September 2020.³³⁸

Amazon had already a couple of times before been urged by many to formally disclose its official Covid-19 figures, but until 1 October 2020, Amazon had always refused to give in to these demands. The reason why Amazon, ultimately, decided to comply has apparently been that the figures that could be released on 1 October 2020 were, overall, and especially when comparing Amazon's figures with the American national averages, not that bad. Indeed, Amazon's reported positivity rates appeared to be lower than the average rates in 49 of the 50 American states. The only state where Amazon labourers appeared to be more positive than the general population was West Virginia. In releasing its Covid-19 figures, Amazon, furthermore, revealed that it had been expecting to have 33,952 cases on a national basis, provided that its positivity rate would have remained equal to the one of the general American population measured over the same period of time. However, the actual number of positive Covid-19 contamination cases at Amazon appeared 42% lower than this expected rate.³³⁹

This was thought to be great news for Amazon in various ways:

- (1) Amazon could start using this information to assure that the cardboard packaging from its warehouses was safe to handle at home.
- (2) Amazon was at the time trying to resolve labour relations following allegations of unsafe working conditions before and during the Covid-19 pandemic.
- (3) Amazon was preparing to hire an additional 100,000 labourers for handling purchases in the United States and Canada in order to help the enterprise in coping with increased demand.

Observers at the time noted that it was not clear whether the enterprise would also have reported the official case numbers if they had been less favourable to the enterprise. It is also unclear whether the labourers tested also included temporary labourers and contractors, such as "delivery drivers" and "customer representatives".³⁴⁰

Mid-November 2020, it was estimated that sending out the average Amazon package required only one minute of human labour. This implied that, although Covid-19 made people's spending to shift from physical shops to internet shopping, the average amount of work related to shopping, as well as the human contact between people involved with shopping, was continuously decreasing. By mid-November 2020, Amazon again announced its intention to hire an additional 8000 labourers in the United Kingdom alone. Meanwhile, and in contrast, during the first eight months of 2020, 125,000 jobs had been lost in the UK retailing sector.³⁴¹

³³⁸Cheng (2020).

³³⁹Cheng (2020).

³⁴⁰Cheng (2020).

³⁴¹Harris (2021).

By mid-November 2020, more than 19,000 of Amazon's labourers employed in the United States alone had contracted Covid-19 since the start of the pandemic (which was said to be 42% lower than the number of contamination cases in the "general population", according to Amazon itself).³⁴² In mid-February 2021, it was still reported that Amazon labourers kept risking their lives as Covid-19 spread through the enterprise's warehouses.³⁴³

7.11.2.2.3 Failed Attempts to Unionize

With regard to institutionalising labourers' rights, for two decades, as Amazon grew from a virtual bookstore to a USD 1.7 trillion behemoth, it strongly—and successfully—resisted all efforts to unionise labourers, while making it clear that it would continue to do so in the near future as well.³⁴⁴

During the Covid-19 pandemic itself, "Amazon Workers International" was set up as an umbrella group aimed at bringing together labourers from a wide variety of countries such as Germany, Poland, Spain, France, Slovakia and the United States, many of whom had played a core role in work stoppages and protests in Amazon's warehouses. In the United States, there was also much enthusiasm for the so-called "United 4 Respect" initiative, which came down to a pressure group focused on ameliorating the lives of retail labourers. A further coalition of organisations that saw the light of day was called "Athena", which intended to "stop Amazon's growing, powerful grip over our society and economy". All these initiatives coalesced into informal networks of people resorting to social media to vent about (often past) experiences working for Amazon, as well as to highlight problems arising from its Amazon's market dominance.³⁴⁵

While some labourers had effectively acted during recent years to bring about real change, e.g. in states as Staten Island, Chicago, Sacramento and Minnesota, Amazon had always succeeded in keeping their impact negligible.³⁴⁶

However, the arrival of Covid-19 in 2020 brought further turbulence to the Amazon empire. As explained earlier (cf. Sect. 7.11.2.2.2), the Covid-19 pandemic had as effect that it had turned Amazon into a critical source of supply for millions of stranded people and that it had, in addition, redefined the enterprise's already troubled relationship with its warehouse labourers. Like many service sector labourers, Amazon's labour force, more precisely, appeared to be very vulnerable to the Covid-19 virus. As society itself largely locked down, Amazon labourers were also less capable of simply changing job when they experienced problems at work,

³⁴²BBC News (2021).

³⁴³Knoblauch (2021).

³⁴⁴Streifteld (2021).

³⁴⁵BBC News (2021); O'Brien (2021).

³⁴⁶Streifteld (2021).

which implied that they were practically forced to stay at Amazon for the duration of the Covid-19 pandemic.³⁴⁷

All of these factors contributed to a climate conducive to a renewed attempt of establishing a union in order to organize labourers employed in the United States by Amazon.³⁴⁸ As a result, in March-April 2021, Amazon had to undergo a Union vote at one of its warehouses located in Bessemer, Alabama. This unionizing attempt has been indicated as one of the largest and most viable union challenges in the enterprise's history. In accordance with this unionizing attempt, nearly 6,000 labourers had until 29 March 2021 the time to decide whether or not they wanted to join the "Retail, Wholesale and Department Store Union". The stakes for this unionizing attempt were believed to be extremely high, both for Amazon's labourers as for Amazon itself, as a union victory would have likely energised labourers in a variety of other American cities, where Amazon had more than 800 other warehouses, in total employing over 500,000 people.³⁴⁹ On 9 April 2021, it was, however, announced that Amazon's Bessemer labourers had, after all, voted against unionising the enterprise's site's labour force. The "National Labour Relations Board" (abbreviated as "NLRB") on that date made the announcement that out of 3041 potentially valid votes, 1798 labourers employed at the BHM1 fulfilment centre had voted against unionisation, while 738 of the labourers had voted in favour. In addition, while the union had previously claimed to have collected a total of 3215 ballots, the eligibility of 505 ballots had been challenged, especially by Amazon itself; to the extent that more than half of the total votes were against unionisation, it was decided not to open the challenged ballots.³⁵⁰

It was, furthermore, not the first time that a unionization attempt within Amazon had failed. Already in 2014, a previous unionisation attempt had taken place among technicians employed at an Amazon warehouse located in Middletown, Delaware. If this 2014 attempt would have been successful, it would have implied the first Union for Amazon. Union elections at the time were announced to take place in Middletown and to be organised by the National Labour Relations Board. A first step had been to gauge interest, from which it appeared that at least 18 of the 30 technicians employed in Chester had returned cards in which they had indicated their willingness to be represented by the union. In response, Amazon had resorted to spending vast sums of money to intimidate its labourers. The National Labour Relations Board ultimately scheduled the election date on 4 March 2015. A simple majority of all the votes cast would have sufficed for establishing union representation. Amazon itself then brought in a team from the "Employee Resource Centre"-basically its human resources department—with as aim to reverse the momentum. One labourer wishing to remain anonymous for fear of even further retaliation, later said to The New York Times that members of this Employee Resource Centre had been following labourers

³⁴⁷BBC News (2021); O'Brien (2021).

³⁴⁸ Streifteld (2021).

³⁴⁹ Jamieson (2021).

³⁵⁰Robertson and Dzieza (2021).

around and, while pretending to be nice, had but tried to find out the individual labourers' position on the union drive. While job security had been one of the main concerns of the Amazon's technicians who were at the basis of the unionizing initiative, they had also been concerned about pay equity—with machinists making claims that they were paid differently for basically doing the same job-and about their lack of autonomy. Part of the intent for starting a union within Amazon had been to make the enterprise's management less arbitrary. Amazon to an increasing extent fiercely opposed the unionizing attempt. Several of the technicians who had been involved with the attempt later declared that they remembered having been told during a meeting that if they would vote in favour of a union, each of them would be looking for a new job the next day. Others remember that, during another meeting, those most in favour of establishing a union had been described as "a cancer and a disease to Amazon and the facility". As the intimidation of the labourers continued, the machinists' union even resorted to filing a formal complaint with the labour board in July 2015, in which they alleged that Amazon had been guilty of unfair labour practices, amongst which unwarranted surveillance, threats and informing labourers that voting for the union's representation would be futile. In early 2016, Amazon ultimately reached an agreement with the labour board which also put an end to the unionizing attempt. The thrust of the two-page agreement was that Amazon would post a notice to labourers promising good behaviour, while for the rest admitting nothing.³⁵¹

After Amazon had successfully defeated this 2014 unionizing attempt in Delaware, the enterprise declared that his had implied a victory for "open lines of direct communication between managers and associates." The places where Amazon subsequently developed its direct communication lines with the labourers was in its warehouse bathrooms, as part of what got referred to as the "inSTALLments" program. Under the "inSTALLments" program, fact sheets were offered containing, e.g., facts about Jeff Bezos' meeting schedules, besides a variety of random and demeaning messages, such as this one with regard to unpaid leave: "If you go negative, your employment status will be reviewed for termination."³⁵²

The labourers behind failed Bessemer initiative had felt that the automatically enforced productivity metrics, had made work "gruelling, stressful and dehumanizing". At the time, Amazon more precisely tracked two metrics: on one hand, the average speed at which labourers completed an assignment, called "takt time", and, on the other hand, the time labourers spent not scanning merchandise, called "time off task". If labourers failed to maintain a sufficiently fast pace, they were either reprimanded or fired. The situation had even gotten to the point where Amazon management had started to complain that labourers were losing time visiting the bathroom and subsequently coming back, while then being reprimanded for the fact that their off task time had increased too much. This did not concern

³⁵¹Streifteld (2021).

³⁵²Streifteld (2021).

single incidents but was a common complaint among labourers at both BHM1 and other Amazon facilities.³⁵³

The labourers behind the new unionizing attempt had high hopes that a union would allow for the improvement of labour conditions and for the creation of a less arbitrary dismissal process, so that people would generally be treated with more respect.³⁵⁴ The labourers behind the initiative also hoped that a union would manage to negotiate higher wages. In addition, many of Amazon's labourers were at the time acutely aware that both Amazon and Bezos themselves had succeeded in performing staggeringly well during the Covid-19 pandemic, with Amazon's profits purportedly up by 84% in 2020 and with Jeff Bezos' personal fortune having increased by around USD 70 billion. Meanwhile, many BHM1 labourers had, by contrast, seen their salaries fall. This was due to the fact that BHM1 had only opened in March 2020, at a moment in time when Amazon had just been applying an additional USD 2 per hour hazard pay, a programme that the enterprise however ended in June 2020, in this manner reducing labourers' pay to a mere USD 15.30 per hour. A complaint often heard among Amazon labourers was that while Bezos received billions of dollars out of all of his facilities established during the Covid-19 pandemic, nothing of that money trickled down to Amazon's labourers, who felt-literally-like they were slaving in the trenches for making Bezos rich. Moreover, while the Covid-19 pandemic soured labourers' grievances, the "Black Lives Matter" protests that arose during the summer of 2020 in reaction to the murder of George Floyd, helped galvanise many of these labourers into concrete action. The majority of Amazon's BHM1 labourers were, furthermore, black, with many of them having participated in the Black Lives Matter protests around Birmingham.³⁵⁵ Around that time, it had also become very clear that black labourers were all over the United States overrepresented in critical, high-risk jobs (such as jobs in Amazon's warehouses), especially jobs on the Covid-19 front lines and/or jobs of a lower-paying nature. In the case of Amazon itself, black workers made up 27% of Amazon's labour force at the time, compared to making up only 13% of all labourers in the United States. In particular within Amazon's Bessemer warehouse, union activists estimated that 85% of labourers were black.³⁵⁶

It was, hence, believed that Amazon's disproportionately black labour force risked their lives during the Covid-19 pandemic, while Amazon itself had hardly shared any of its astonishing profits with them. More precisely, throughout 2020, Amazon had made an *additional* USD 9.7 billion in profits, a staggering 84% increase over 2019. The enterprise's share price as a result rose 82%, with founder Jeff Bezos adding USD 67.9 billion to his fortune, 38 times the total hazard pay Amazon at the time had paid to its one million labourers considered together as of

³⁵³Dzieza (2021).

³⁵⁴Dzieza (2021).

 $^{^{355}}$ Brandom (2021). The RWDSU had framed the campaign as of a civil rights and racial justice nature. (Cf. Brandom (2021).)

³⁵⁶Perry et al. (2021).

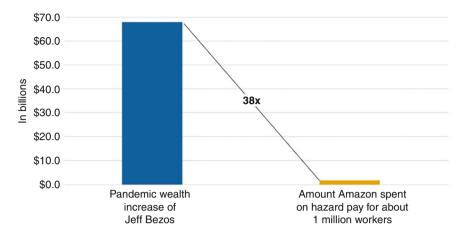


Fig. 7.2 Jeff Bezos's Covid-19 wealth increase versus all hazard pay for all Amazon workers between 18 March 2020 and 15 March 2021 [Source: Perry et al. (2021)]

March 2020.³⁵⁷ The foregoing is further illustrated in Fig. 7.2 which gives an overview of Jeff Bezos's Covid-19 wealth increase versus all hazard pay for all Amazon workers between 18 March 2020 and 15 March 2021.

The NLRB later found that Amazon had both been threatening and dismissing labourers who had protested against the enterprise's way of dealing with the Covid-19 pandemic.³⁵⁸

In the opinion of Day and Soper, when comparing labour conditions at Amazon to similar work environments, they appear to be much worse. In the past, logistics jobs had often been a source of social mobility, and unionised warehouses' wages had typically been double those paid by Amazon. From a Bloomberg analysis referred to by Day and Soper, it even appeared that that when Amazon opens a new facility somewhere, average wages at other warehouses located in the neighbourhood often drop.³⁵⁹ In addition, Amazon's appalling methods of

³⁵⁷Perry et al. (2021).

³⁵⁸Dzieza (2021).

³⁵⁹According to Day and Soper, among the job offers Amazon advertised in late 2020, the enterprise promised a quick start, starting wages of USD 15 per hour and health insurance. In late 2020, Amazon had become the second-largest US employer. As part of its 2020 season holidays recruitment campaign, the enterprise had started releasing videos which showed cheerful warehouse workers wearing face masks, a nod to the Covid-19 pandemic era. Amazon's aim with this campaign was to persuade potential employees that there was no better place to work. In the opinion of said authors, the reality was, however, less rosy. At the time, many Amazon warehouse labourers were struggling to pay their bills, and more than 4000 labourers were said to be on food stamps throughout nine states surveyed by the US Government Accountability Office. Only Walmart, McDonald's and two-dollar shop chains had more labourers in need of these types of assistance. Still according to Day and Soper, through opening new warehouses throughout the United States at a rate of about one a day, Amazon had been transforming labour conditions in the

monitoring workers and enhancing productivity-all characteristics of labour conditions at Amazon that had prompted the BHM1 facility to unionise in the first place—had similarly contaminated the rest of the logistics industry, with other enterprises in the same sector, or even in other sectors, trying to compete with Amazon by copying its labour methods. Dzieza made reference to Benjamin Sachs, a professor of labour and industry law at Harvard Law School and a renowned expert in labour law and industrial relations, who had qualified Amazon as a "bellwether company" due to its leading role in redefining the labour market and in setting out the future of labour, in a likewise manner as the auto industry had once done at the beginning of the twentieth century. According to Sachs, as referred to by Dzieza, the at the time historical unionisation of the car industry, which had been aimed at reforming labour law, had set out labour market trends for decades afterwards. It was hoped that the unionisation attempt at Amazon would cause a similar effect.³⁶⁰ If the Bessemer effort had succeeded, it would have shown that such a unionization of Amazon was feasible after all. And indeed, soon after the initiative at the Bessemer location had been announced, labourers at other Amazon facilities expressed a similar interest in following BHM1's example. According to Dzieza, it was, moreover, expected that such a chain reaction could have implied more than a simple alteration to the labour conditions under which hundreds of thousands of Amazon labourers have to perform their job. Because of Amazon's huge size and because of the increasing geographic reach of its logistics network, the quality and wage level of Amazon's jobs had an important effect on the quality and wage level of jobs elsewhere. Amazon itself was, moreover, fully aware of this and

logistics industry from a career destination promising middle-class wages, to an entry-level job just a notch above that of a hamburger cook or a convenience store cashier. Unionised labourers employed elsewhere who make a comfortable living driving delivery trucks and moving increasingly experienced Amazon as an existential threat. While union tensions because of these concerns had been brewing for years already, the stakes rose sharply because of the Covid-19 pandemic which prompted Amazon to hire more than 250,000 people to meet the growing demand from home internet shoppers. In the meantime, the risk of getting contaminated with the Covid-19 virus in one of the crowded Amazon warehouses for wages of USD 15 an hour left many Amazon labourers wondering if they were being shortchanged. From a further Bloomberg analysis of government labour statistics, it moreover appeared that in communities where Amazon had been setting up shop, warehouse wages tended to fall. More precisely, in 68 counties where Amazon had opened one of its large facilities, average industry wages decreased more than 6 percent during the first two years of Amazon's move, according to Bureau of Labour Statistics data referred to by Day and Soper. In many of these cases, Amazon quickly became the major logistics player in these counties where it had started a new facility, implying that because of its size and declining wages, it in most cases pulled the average wages down. Among economists, there has been a debate about whether Amazon is creating a kind of "monopsony", leaving only one employer for determining market conditions. While in the further opinion of Day and Soper, Amazon's arrival may have coincided with rising wages in some low-wage and southern neighborhoods, the opposite has more often occurred in wealthier parts of the country, including the Northeast and Midwest. E.g., by 2014, before the enterprise had opened a giant fulfillment center in Robbinsville, New Jersey, warehouse labourers earned USD 24 an hour on average, according to BLS data. By 2019, this average hourly wage had already slipped to USD 17.50. (Cf. Day and Soper (2020).)

³⁶⁰Dzieza (2021).

had in, the near past, even touted this effect in its advertisements lobbying for a USD 15 minimum wage. It had thereby appeared that back in 2018 when, Amazon had increased its starting wage to USD 15 per hour (in response to the Bernie Sanders legislative initiative mentioned above; cf. Sect. 7.11.2.1), wages at some nearby employers had also increased.³⁶¹

However, according to Reich, in the case of a full-time labourer, an hourly wage of 15 USD per hour amounts to about USD 31,000 on a yearly basis, which is still considerably less than half the median family income in the United States at the beginning of 2021. Reich also pointed to the fact that labourers at Amazon did not get paid sick leave. And notwithstanding the small effort of increasing hourly wages, Amazon's warehouses still continued to impose severe production quotas and to subject labourers to an arbitrary dismissal policy, total monitoring and working days of 10 hours on average and with only two half-hour breaks—which in many cases leaves not enough time to go to the bathroom and be back at one's job post in time.³⁶²

Amazon itself reacted extremely negatively to Bessemer's unionization attempt. The enterprise started its efforts to thwart the unionisation attempt by resorting to an aggressive social media campaign. Amazon, e.g., sent its labourers several text messages per day in which these were urged to vote against the unionization proposal. Amazon also started running Facebook ads linking to a website that warned labourers that, in case a union would be established, they would have to pay union dues.³⁶³ Amazon's management also began putting banners on walls and signs on toilet doors, containing messages such as "Where will your dues go?" and "Unions can't, we can!"³⁶⁴

Following a standard corporate textbook for dealing with unionization attempts, Amazon, in addition, brought in specialist anti-union consultants in the run-up to the union vote that was due to start in February 2021. Such anti-union consultants specialise in convincing labourers to vote against having a union and in coaching employers in how to stifle union support.³⁶⁵ While under the at the time prevailing law, enterprises could not legally retaliate against a labourer for wanting to establish or join a union, or even question him about his leanings on this matter, penalties for violating this law are believed to be notoriously weak. Often, an offending enterprise is simply instructed to hang a poster in which it acknowledges that it has violated the law. In addition, employers in most cases have a strong incentive to skirt as close to the legal limits as possible if this keeps a union out.³⁶⁶ That is why Amazon used at least two (expensive) consulting firms specialized in advising an employer how to

³⁶¹Dzieza (2021).

³⁶²Reich (2021b).

³⁶³According to Reich, Alabama is a right-to-work state, and a complaint has been filed with the NLRB regarding the website. (Cf. Reich (2021b).)

³⁶⁴Dzieza (2021). Cf., furthermore, Reich (2021b).

³⁶⁵Jamieson (2021). Cf., furthermore, Dzieza (2021).

³⁶⁶ Jamieson (2021).

avoid unionization.³⁶⁷ Amazon, moreover, hired the leading management-support law firm "Morgan Lewis" for handling its labour board disputes. A spokesperson of Amazon later declined to say how much money the enterprise had been spending on such consultancy and how many consultants it had precisely hired, with more information in this regard expected to be provided in future filings. One lawyer was quoted having estimated the total expenses to be in the millions of dollars, if not eight figures.³⁶⁸

Amazon also resorted to mandatory meetings at its warehouses, referring to these as "training sessions", when in fact they were about nothing else than "union bashing".³⁶⁹ Amazon labourers who attended these meetings later referred to them as "very strange". It was reported that sometimes a handful of "bossy-looking" people had been standing aside, leaving in the middle whether they were consultants, managers from other warehouses, security people ... Some of the people posing as labourers were also said to have been asking obsequious-looking questions that raised doubts it they were actual labourers or plants.³⁷⁰ And according to these declarations made by labourers, there had been many such meetings.³⁷¹

From research, it appears that such anti-union campaigns may be very effective and can even swing election results. In a 2009 analysis of union elections, Cornell labour specialist and researcher Kate Bronfenbrenner, found that unionization elections were only won in 47% of the cases when employers organized meetings with captive audiences, compared to 73% of the cases when they did not. From this research, it also appears that other strategies may be effective in thwarting unionization attempts as well, e.g., spreading anti-union literature, videos and emails.³⁷²

³⁶⁷ Jamieson (2021).

Jamieson refers in this regard to information provided to the Ministry of Labour. According to this information, one of these consultants was to be paid USD 3200 per day for organising meetings, with three names of consultants explicitly mentioned. Another consultant's file did not mention a specific rate but simply stated that there was no "maximum amount of billing". (Cf. Jamieson (2021).)

³⁶⁸ Jamieson (2021).

³⁶⁹Dzieza (2021).

³⁷⁰ Jamieson (2021).

³⁷¹ "I want to say they were every week, and one week, they were every day," said one worker. "They were very, very frequent." (Cf. Jamieson (2021)).

³⁷²Jamieson (2021); Bronfenbrenner (2009). Cf., furthermore, Bronfenbrenner and Juravich (1994).

According to Bronfenbrenner: "These findings capture the breadth and extent of employer opposition to organizing while also suggesting how employers continuously capitalize on the changing environment and use it to their advantage. We have grouped these tactics into the following categories: threats, interrogation, and surveillance; fear, coercion, and violence; retaliation and harassment; promises, bribes, and improvements; election interference; and public campaigns. In combination, these numbers reveal a chilling pattern. First, they show that the overwhelming majority of employers — either under the direction of an outside management consultant or their own in-house counsel — are running aggressive campaigns of threats, interrogation, surveillance, harassment, coercion, and retaliation. Second, these tactics, both individually and in tandem, are part of a highly sophisticated, carefully crafted strategy that has withstood the

Jamieson has quoted long-time election organiser Gene Bruskin in saying that the anti-union message ultimately becomes successful because of fear.³⁷³

According to Dzieza, Amazon resorted to even more aggressive and unorthodox measures. After having lost the fight to have the unionization election held in person, Amazon started sending mailers to its labourers with clear instructions on how to fill out their ballots with a "no" vote. The e-mail messages, furthermore, instructed the labourers to drop their ballots in a special mailbox set up at the entrance of the warehouse. Afterwards, in late 2020, Amazon asked the county to change the timing of the traffic lights to make work for Amazon labourers harder.³⁷⁴

The result of all this animosity has been an extremely hard-fought election campaign on both sides. Organisers, hence, expected the vote to be a very close

³⁷³ Jamieson (2021).

According to Jamieson, Bruskin played a crucial role in the United Food and Commercial Workers' efforts to organize the 5000 labourers at the Smithfield pork processing plant in Tar Heel, North Carolina. This had been one of the biggest American union victories of the past quarter century. Amazon's election drew many comparisons to the Smithfield's successful unionization attempt, because of its size, its location in the South and its broader significance for the labour movement. (Cf. Jamieson (2021).)

³⁷⁴Dzieza (2021).

test of time. Under the free speech provisions of the NLRA, employers have control of the communication process, and (...) in today's organizing climate they take full advantage of that opportunity to communicate with their employees through a steady stream of letters, leaflets, emails, digital electronic media, individual one-on-one meetings with supervisors, and mandatory captive-audience meetings with top management during work time. (...) (E)mployers use supervisor one-on-ones to threaten workers for union activity (...). In addition to interrogation, (...) employers use surveillance, primarily electronic and (...) attempt to infiltrate the organizing committee in order to learn more about union supporters and activity. (...) We also confirmed new tactics involving fear, coercion, and violence that organizing directors say are increasingly common. They include such actions as bringing in security guards, putting up fencing, and putting in security cameras (...), bringing in police to walk through the plant (...), or instigating violence and trying to put the blame on the union (...). (...) In combination, these more aggressive coercive actions — threats of plant closure, referrals to ICE, benefit cuts, police walk-throughs, turning the workplace into an armed camp - send a clear message to workers: those who choose to move forward with the union do so at great personal risk. Employers send an even stronger message when they follow through on their threats with direct retaliation and harassment for union activity, such as when they actually refer workers to ICE (...); discharge workers for union activity (...); issue suspensions, written warnings, close supervision, and verbal abuse (...); alter benefits or working conditions (...); order layoffs (...); contract out (...); and transfer workers (...). It is a message heard well beyond the workplaces where the organizing campaigns take place, discouraging not only the voters in that particular campaign, but holding back others from even attempting to get a campaign off the ground. (...) In addition to punitive strategies, employers continue to use softer, less overtly coercive tactics such as promises of improvement (...); bribes and special favors (...); the use of social events (...); or the use of employee involvement programs (...). These tactics have commonly been the reward for supporting or cooperating with the employer campaign, and in the past they have been among the most effective employer strategies. (...) Employers also engage in tactics that directly interfere with the union campaign. The most common of these is assisting the establishment of an anti-union committee (...), illegally issu(ing) rules for union communications and distribution of union materials that are different from rules applied to other organizations and activities (...)." (Cf. Bronfenbrenner (2009), pp. 9–12.)

one. Towards the end of the election campaign, the unionisation attempt even got the support of a wide range of renowned outside supporters, including US President Biden who posted a video message on Twitter in March 2021 in which he made reference to the unionization vote.³⁷⁵ US Senator Bernie Sanders and activist and rapper Killer Mike even paid visits to the warehouse on Friday 9 April 2021, the latest in a series of official and celebrity delegations for supporting the Bessemer unionisation initiative. While this high-profile support is believed to have altered some people's minds, the extremely long voting period meant that some labourers had already handed in their ballots and would have had to request new ones in order to still change their vote.³⁷⁶

The results of the 9 April 2021 vote implied a devastating loss for the RWDSU and for the wider labour union movement. The union itself decided to fight the election results—raising objections under the argument that Amazon's campaign had violated several aspects of labour law—but it was deemed unlikely that these challenges would be able to alter the election outcome. After having put their hopes on a domino effect that was expected to unionise Amazon's warehouses throughout the United States, organisers instead had to start fighting to keep their dream of re-unionising American labourers alive.³⁷⁷

But while what has been referred to as a "lopsided result" may have come as a surprise to some, it is nevertheless but a part of a long and frustrating history, dating back to the days of "Reaganomics" when official neoliberal policy had been about abandoning unions as much as possible. Simply put, since that time, few American labourers had remained unionised.³⁷⁸

³⁷⁵Cadelago and Rainey (2021).

³⁷⁶Dzieza (2021).

³⁷⁷Brandom (2021).

According to Jamieson, the union filed claims that Amazon had broken labour law by having put a mailbox on the warehouse premises at the start of the election in early February 2021. The labour board had shortly before denied Amazon's request to have special purpose ballot boxes on the site, so Amazon had instead asked the US Postal Service to place a mailbox on its campus. This fact had appeared from emails obtained by the union and published by the Washington Post. The union was of the opinion that this had come down to an illegal attempt to exert control over the election, a fact that Amazon itself denied. In theory, the NLRB could have ordered a new election in case it would find that Amazon had violated the law. But a new election would have forced the union to win a new election in a warehouse where it had already suffered heavy losses. (Cf. Jamieson (2021).) ³⁷⁸ Brandom (2021).

By April 2021, outside of public sector jobs, only 6.3% of US labourers was said to be still unionised, a figure that had even fallen slightly over the preceding decade. Industrial labourers in the South had been a particular flashpoint for the labour movement, with similar drives lost at a Volkswagen plant in Chattanooga in 2019, and a Nissan plant in Mississippi in 2017. Seen in this light, the loss of the Bessemer unionisation attempt is less a surprise victory for Amazon, than a depressing return to the norm of cost-what-cost avoiding unionisation in neoliberal America. (Cf. Brandom (2021).)

Amazon's case is, moreover, far from unique. Similar practices of systematically thwarting unions were reported in 2020–2021 about Tesla, the enterprise belonging to another of the world's richest people.³⁷⁹

One important handicap working against union organisers is believed to be US labour law itself, which gives employers ample leeway to promote anti-union policies in the workplace. In the case of the Bessemer campaign, Amazon had been running an aggressive campaign against the union during several months, posting anti-RWDSU leaflets in warehouse bathrooms and bombarding labourers with targeted text messages. But while union organisers may have experienced these tactics as part of an unfair fight, they all fell within the bounds of US labour law.³⁸⁰ There was, however, a particular hope that, under President Joe Biden, the National Labour Relations Board would start to alter the legislation on captive audience meetings and similar anti-union tactics.³⁸¹ There is another factor that helps to explain why the Bessemer's unionisation attempt has ultimately failed, namely the region's economy: as in much of the United States, Alabama's unemployment rate had skyrocketed during the Covid-19 pandemic, rising from 2.6% to 13.6% from March 2020 to April 2020. This implied a huge economic shock to the region, which may have overshadowed the union effort as well.³⁸²

Be this as it may, the failed Bessemer unionisation campaign has drawn attention to the tactics that are used for breaking union drives. As noted, the Democrats responded with a proposal for the most radical reform of labour law in more than half a century, namely the PRO Act. If voted successfully, the bill would, inter alia, prohibit the kind of captive audience meetings that Amazon had organized (with the Bessemer's failed unionisation campaign serving as "Exhibit A" for progressive lawmakers).³⁸³

But overall, there was concern that the Bessemer results would prove to be a major setback for future unionisation attempts both at Amazon and elsewhere. Thanks to the Alabama campaign's publicity, the union had before the result of

³⁷⁹ According to an opinion piece by Robert Reich that appeared in the Journal on 25 April 2021, Elon Musk's "production assistants", as his labourers are referred to, earn on average USD 19 per hour, which is in most cases barely enough to pay rent and other costs of living in Northern California. At the same time, Musk is known to be as virulently anti-union as Bezos. E.g., in April 2021, the National Labour Relations Board found that Tesla had illegally interrogated labourers suspected of wanting to form a union and that the enterprise had fired one of them. It was also found that Tesla had disciplined and threatened labourers for union activity, besides banning some of them from communicating with the media. (Cf. Reich (2021b)) Elon Musk's reputation for fighting unions had, moreover, already been reported in 2018. (Cf. Sainato (2021).)

³⁸⁰Brandom (2021).

³⁸¹Brandom (2021). Cf. H.R.2474—Protecting the Right to Organize Act of 2019, 116th Congress (2019–2020). The Protecting the Right to Organize Act (PRO Act), which passed the House of Representatives on 9 March 2021 but has not yet been approved by the US Senate, would go even further, establishing financial penalties for managers who violate labour laws, amongst other measures.

³⁸²Brandom (2021).

³⁸³ Jamieson (2021).

the Bessemer elections were known, collected more than 1000 signed cards from other Amazon facilities. The Bessemer election results were likely to make a lot of these labourers change their mind. The failed unionisation attempt also sparked further debate about whether it is possible at all to win NLRB-run union elections in Amazon's warehouses, given the labour conditions, the enterprise's deep pockets, its lack of conscience and its deplorable tactics.³⁸⁴

7.12 Conclusions

The problems facing modern, neoliberal societies, especially regarding the consequences of (1) the principle of the primacy of the economic domain and (2) the subordination of all other values to the interests of the economy (read: to the interests of the wealthy entrepreneurs)³⁸⁵ (cf. Sect. 2.2.7) go back to the period when capitalism, which is still the prevailing socio-economic model today—even though the advocates of this model nowadays prefer to call it the "free market model"—took shape, especially the seventeenth–eighteenth century. It is during this turbulent period that the conceptual frameworks which form the building blocks for political-liberal societies and their counterpart in the economic domain, capitalism in particular, have taken shape.³⁸⁶ As Erich Fromm rightly pointed out in his book "The Sane Society" which was first published in 1955:³⁸⁷

In spite of great changes which have occurred within this system [Capitalism], there are certain features which have endured throughout its history and, with reference to these common features, it is legitimate to use the concept of Capitalism for the economic system existing throughout this whole period.

According to Fromm,³⁸⁸ these features that post World war II-societies had in common with early-day capitalism, are, briefly stated: (1) The existence of politically and legally free men (= members of "liberal" societies that started to take form as of the eighteenth century); (2) Probably more important, the fact—or perhaps belief—that free men (i.e., "labourers", "workers" or "employees") may sell their labour to the owner of capital on the labour market, by contract (cf. Sect. 7.1.2, on the voluntary association theory); (3) The existence of the commodity market as a mechanism through which prices are determined and the exchange of the social product is regulated; (4) The principle that each individual acts with the aim of seeking a profit for himself, and yet that, by the competitive action of many, the greatest advantage is supposed to accrue for all.

³⁸⁴ Jamieson (2021).

³⁸⁵Byttebier (2017), pp. 199–219.

³⁸⁶Cf. in general Byttebier (2019).

³⁸⁷Fromm (1991), p. 81.

³⁸⁸Fromm (1991), p. 81.

Not much has changed since then, except that, under neoliberal thinking, the idea that free people, on a contractual basis, make their labour available as a commodity on the free market(s), resonates even more strongly in the socio-economic order. As already explained above, this is because for the adherents of neoliberal thought—and in particular for one of the foremost, self-proclaimed philosophers of this school, Ayn Rand—workers' relations should be fully fleshed out through individual contracting (the so-called "voluntary association"-doctrine), which partly explains the phasing out, from the 1980s onwards, of systems of collectivization of labour relations. As a result, the idea that an employment relationship is established through individual contracts between free people dominates more than ever, having prompted Joseph Stiglitz to write that the fear of job-loss has become one of the greatest motivators of the working person.³⁸⁹

The consequences of this vision on the working man, still a new figure in the seventeenth-eighteenth century, crystallized further in the course of the nineteenth century, according to Fromm, much like capitalism itself: at first slowly and then with increasing acceleration.

Given the crucial nature of his insights, for a proper understanding of the ethical dimension of what happened—and went wrong –, let us again quote the words of Erich Fromm himself:³⁹⁰

The living human being, with his desires and woes, loses more and more his central place in the system, and this place is occupied by business and production. Man ceases to be "the measure of all things" in the economic sphere. The most characteristic element of nineteenthcentury Capitalism was first of all, ruthless exploitation of the worker; it was believed to be a natural or a social law that hundreds of thousands of workers were living at the point of starvation. The owner of capital was supposed to be morally right if, in the pursuit of profit, he exploited to the maximum the labour he hired. There was hardly any sense of human solidarity between the owner of capital and his workers. The law of the economic jungle was supreme. All the restrictive ideas of previous centuries were left behind. One seeks out the customer, tries to undersell one's competitor, and the competitive fight against equals is as ruthless and unrestricted as the exploitation of the worker.

(...)

The capitalistic principle that each one seeks his own profit and thus contributes to the happiness of all becomes the guiding principle of human behaviour.

The market as the prime regulator is freed from all traditional restrictive elements and comes fully into its own in the nineteenth century. While everybody believes himself to act according to his own interest, he is actually determined by the anonymous laws of the market and of the economic machine.

In this approach, which has remained virtually unchanged to this day, an illusion of freedom prevails within the political domain (to be observed, e.g., in systems such as free elections in which everyone can participate, in addition to constitutional freedoms, such as the freedom of association, the freedom of religion, the freedom of

³⁸⁹Cf. Stiglitz (2020); Sanger (1996).

³⁹⁰Fromm (1991), pp. 83–84.

speech, etc.), although their value cannot be properly addressed because the individual has become totally unfree in the socio-economic sphere, a much more important determinant in shaping his daily life.

Erich Fromm has explained this as follows:³⁹¹

The worker who has to accept the wage rate offered him on the labour market is forced to accept the market condition because he could not survive otherwise. Thus the "freedom" of the individual is largely illusory. He is aware of the fact that there is no outer force which compels him to enter into certain contracts; he is less aware of the laws of the market which operate behind his back, as it were; hence he believes that he is free, when he actually is not.

The generalization of this socio-economic model, as of the 1980s, on a global scale, has resulted in a fundamental undervaluation of work, of human effort and skill, amongst others, characterized by extreme discrepancies in compensation.³⁹² As Fromm has phrased this: "The miner earns a fraction of the income of the manager of the mine, though his personal effort is greater if we consider the dangers and discomforts connected with his work."³⁹³ And it is this fundamental imbalance that has continued to characterize industrial relations ever since, only to be further magnified in the current neoliberal era.

Moreover, this evolution was accompanied by an ongoing reversal of the principle of solidarity that had characterized medieval societies, to be displaced by modern capitalist exploitation.³⁹⁴

With the welfare state model (roughly speaking in the period after World War II until the 1970s), an attempt has been made to restore a certain degree of solidarity through systems of workers' protection and social security, although from the 1980s on, again under the impetus of economic neoliberalism, the results of these efforts were largely phased out.

³⁹¹Fromm (1991), pp. 85–86.

³⁹²Fromm (1991), p. 88.

³⁹³Fromm (1991), p. 88.

³⁹⁴Cf. again Fromm (1991), p. 90: "The breakdown of the traditional principle of human solidarity led to new forms of exploitation. In feudal society the lord was supposed to have the divine right to demand services and things from those subject to his domination, but at the same time he was bound by custom and was obligated to be responsible for his subjects, to protect them, and to provide them with at least the minimum-the traditional standard of living. Feudal exploitation took place in a system of mutual human obligations, and thus was governed by certain restrictions. Exploitation as it developed in the nineteenth century was essentially different. The worker, or rather his labour, was a commodity to be bought by the owner of capital, not essentially different from any other commodity on the market, and it was used to its fullest capacity by the buyer. Since it had been bought for its proper price on the labour market, there was no sense of reciprocity, or of any obligation on the part of the owner of capital, beyond that of paying the wages. If hundreds of thousands of workers were without work and on the point of starvation, that was their bad luck, the result of their inferior talents, or simply a social and natural law, which could not be changed. Exploitation was not personal anymore, but it had become anonymous, as it were. It was the law of the market that condemned a man to work for starvation wages, rather than the intention or greed of any one individual. Nobody was responsible or guilty, nobody could change conditions either. One was dealing with the iron laws of society, or so it seemed." (Cf. Fromm (1991), p. 90.)

All this has resulted in a devaluation—or dehumanization—of the human being. In the further opinion of Fromm, it is precisely because of this that man, a living human being, has ceased to be an end in himself, and has become but the means for the economic interests of other men than himself, or of an impersonal giant, the economic machine or, phrased differently, "the economy".³⁹⁵

Again, according to Fromm, this also translates into a clear value scale:³⁹⁶

In the capitalistic hierarchy of values, capital stands higher than labour, amassed things higher than the manifestations of life. Capital employs labour, and not labour capital. The person who owns capital commands the person who "only" owns his life, human skill, vitality and creative productivity. "Things" are higher than man. The conflict between capital and labour is much more than the conflict between two classes, more than their fight for a greater share of the social product. It is the conflict between two principles of value: that between the world of things, and their amassment, and the world of life and its productivity.

The result of this has been that life in a capitalist economy makes everyone concerned about one thing: making enough money. People are forced to make their bare survival the central goal in life. This has transformed interactions with other people. In the struggle to earn enough money, people see colleagues, strangers, and perhaps even friends, merely as elements of this pursuit, rather than as proper human beings on their own accord.³⁹⁷ In such a socioeconomic order, practically everyone is forced to perform what Halliday and Trasher referred to as "alienated labour".³⁹⁸

It is also precisely this dynamic—and the inverse scale of values on which it is based—that has determined how the Western world has dealt with the Covid-19 pandemic, which immediately explains why, instead of waging a "realpolitik", many Western countries have responded to Covid-19 in terms of a mythological world-view—the palace of smoke and mirrors that makes up neoliberal thinking.³⁹⁹

The sensible response when a(n airborne) virus pandemic breaks out, is the elimination strategy as deployed by most Asian countries (drawing on previous, various experiences with infectious virus outbreaks that had been more or less successfully contained in the past, such as "Severe Acute Respiratory Syndrome" (SARS), the "Middle East Respiratory Syndrome coronavirus" (MERS-CoV), the "Ebola virus", the "Swine Flu"...).

The principles for fighting such viruses are not that difficult—and in essence they can even be reduced to but a few basic ideas, namely: "testing", "contact tracing", "isolation"/"quarantine", and "hygiene".⁴⁰⁰

³⁹⁵Fromm (1991), p. 91.

³⁹⁶Fromm (1991), p. 92.

³⁹⁷Halliday and Thrasher (2020), p. 113.

³⁹⁸Halliday and Thrasher (2020), p. 116, given the further example of academics being burdened with a workload of meaningless administration.

³⁹⁹Compare Stiglitz (2006), p. 68.

⁴⁰⁰Testing is the key corner stone for a successful elimination strategy, as one has to know who is contaminated. The principle of contact tracing is based on the idea that, as one is contaminated by such a virus through contact with another human being, as soon as even but one contamination case appears, one has to trace everyone who has been in contact with the contaminated person, and then

It is by acting upon these simple basic insights in a very conscientious manner that the elimination approach to fighting airborne viruses, such as Covid-19, has been very successful. Many Asian countries follow the idea that "there is no other realistic way out other than reducing viral transmission to zero". When an outbreak of a(n airborne) virus is detected in these countries, all guns are brought to bear to achieve the necessary testing, contact tracing, face mask distribution and wearing, and, when needed, isolation, resulting in sustained—and strictly monitored—lock-downs, voluntary and imposed isolation, hard quarantine measures for arriving non-residents, etc. The measures are harsh, but short-term, requiring both a far-reaching solidarity between members of society, and a sufficient degree of discipline from the population. The strategy has, as a general rule, demonstrated high success rates in fighting (airborne) viruses.⁴⁰¹

But the purportedly "free" Western world, and certainly its political leaders, do not like this approach. It even seems that the aversion to such NPI measures increases to the extent that someone adheres to the neoliberal ideology, ranging from the EU's political elite (and the heavy, authoritarian bureaucracy it relies on)

immediately test these persons and, when needed, isolate all persons concerned. The principle of isolation is based on the fact that an airborne virus is spread through social contacts. The answer is, therefore, clear: stay away from infected persons and, since it cannot be read on someone's face that they are infected, stay away from everyone, at least until the contagion is under control. That is why, if other methods fail, the one remaining method of combatting an airborne virus is isolation through various methods: lockdown, quarantine, social distance, etc. These are all but words for indicating that by staying away from each other long enough, the wave of infection will stop.

⁴⁰¹Cf. Nuki et al. (2020); "In addition to the detail, the Asian plans have a sense of urgency and military style of direction throughout, which contrast sharply with the discursive tone and constant mentions of "proportionality" that permeate the British plan. Although most southeast Asian countries anticipated the possibility of a total lockdown in their plans, most have avoided it in the current outbreak because of the way they pre-planned for these and other preventative measures to be put in place. The economies of Taiwan, Singapore, South Korea, Vietnam and Malaysia all maintain a strong pulse as a result. Most experts point to Asia's experience of Sars, Mers and other outbreaks to explain why they were better prepared. Dr John MacArthur, country director of the US CDC in Thailand, said: "The Association of Southeast Asian Nations, or ASEAN, region has a long history of battling emerging infectious diseases going back more than 20 years. "The region has experienced Nipah, SARS, avian influenza or bird flu, pandemic influenza, Zika, and of course now COVID-19. Because of their earlier experiences, ASEAN Member States were quick to agree to the international health regulations and work towards achieving the core capacity requirements under this new framework," he added. Chen Chien-jen, vice president of Taiwan makes a similar point in an exclusive interview with the Telegraph (...). "In 2003 we had a very severe SARS outbreak in Taiwan. We learned a lot about prudent action, rapid response and early deployment... If close contact tracing is done well then disease won't be spread." Professor Daneil Falush, a geneticist at the Institute Pasteur in Shanghai, China, believes UK and much western pandemic planning is characterised by a "fatalism" not evident in Asia. He says East and West "frame" their view of fighting new diseases differently. "There is no other realistic way out of Covid-19 to building up 'herd immunity' through vaccination/infection."" This in my mind is the herd immunity mentality. It's a way of framing the argument. "The alternative framing is: "there is no other realistic way out other than reducing viral transmission to zero'. That's how they cf. it in Asia." China's publicly available pandemic plans are thin but emphasise quarantine and isolation of infected individuals-a tactic it has used to good effect to contain the virus, if it's data can be believed." (Nuki et al. (2020).)

and the leading politicians of many of the EU member states, to the leaders of the Republican party in the United States, and probably the worst of all, President Jair Bolsonaro of Brazil.

One common element is that they all strongly hold on to an illusory idea of political freedom that took shape from the eighteenth century on, which is of no use to the common citizenry. Those who depend on an income from labour to effectively enjoy these nominal political freedoms. This is impossible under languishing socio-economic conditions.⁴⁰²

The political elite of the Western world brings to mind the story—true or not⁴⁰³ of the French queen who, when she learned that the Parisian population was dissatisfied because there was no bread, asked why they simply did not eat cake.

Adhering to this illusory idea of freedom has been decisive for various (usually wrongheaded) responses to the Covid-19 pandemic in the Western world. It, e.g., contributed to the weeks of inactivity of EU leadership. When Covid-19 reached the European continent, their primary concern seemed to maintain the EU treaty-law on "freedom of movement", the EU's insidious rule stipulating that everyone within the boundaries of the EU must be able to circulate freely. But above all, they were deeply concerned about their own freedom to travel, in order to attend their purportedly important meetings and other events. Illusions of freedom also explained "the six missing weeks" in the United States, during which the American President did not do much else other than downplaying the Covid-19 threat to justify inaction. (Cf. Sect 2. 5.4.1.) It also explains why the Covid-19 outbreak has not been quickly responded to with travel restrictions. Within Europe, restrictions on carnival festivities and ski tourism in February 2020 were never considered, allowing for unchecked travel back and forth between clean and contaminated areas, and for everyone to freely throw

⁴⁰²Cf., furthermore, Halliday and Thrasher (2020), p. 126.

⁴⁰³On the origin of this story, cf. History.com Staff (2018): "It's one of the most famous quotes in history. At some point around 1789, when being told that her French subjects had no bread, Marie-Antoinette (bride of France's King Louis XVI) supposedly sniffed, "Qu'ils mangent de la brioche"---"Let them eat cake." With that callous remark, the queen became a hated symbol of the decadent monarchy and fueled the revolution that would cause her to (literally) lose her head several years later. But did Marie-Antoinette really say those infuriating words? Not according to historians. Lady Antonia Fraser, author of a biography of the French queen, believes the quote would have been highly uncharacteristic of Marie-Antoinette, an intelligent woman who donated generously to charitable causes and, despite her own undeniably lavish lifestyle, displayed sensitivity towards the poor population of France. That aside, what's even more convincing is the fact that the "Let them eat cake" story had been floating around for years before 1789. It was first told in a slightly different form about Marie-Thérèse, the Spanish princess who married King Louis XIV in 1660. She allegedly suggested that the French people eat "la croûte de pâté" (or the crust of the pâté). Over the next century, several other eighteenth-century royals were also blamed for the remark, including two aunts of Louis XVI. Most famously, the philosopher Jean-Jacques Rousseau included the pâté story in his "Confessions" in 1766, attributing the words to "a great princess" (probably Marie-Thérèse). Whoever uttered those unforgettable words, it was almost certainly not Marie-Antoinette, who at the time Rousseau was writing was only 10 years old-three years away from marrying the French prince and eight years from becoming queen." (History.com Staff (2018).)

themselves into all kinds of festive debauchery, supercharging the spread of Covid-19. Even though the WHO had already sounded the alarm at the time, quarantine measures simply were not on the table, not even for returning tourists.

It does not even occur to the supporters of such an erroneous view of "freedom", that their freedom restrained by the freedom of others, namely other people's freedom from harm and their right to life.

But in no other domain have the dictates of classical liberal and modern neoliberal thought made themselves felt so harshly than in that of industrial relations. The more sensible (and scientifically more responsible) method of responding to the spread of an airborne virus, is to temporarily restrict economic functioning. Especially in cases, such as the EU and the United States, where one has not successfully resorted to an elimination strategy at the start of an airborne contagion, avoiding a further spread of such a virus may require that mutual contacts between infected and non-infected people are stopped as much as possible. This also concerns all contacts on the working floors, in factories, in shops, etc. Only the most essential services can still be allowed to function, and only under very strict conditions.

But not so in the "free" West, where neoliberal policymakers usually first want to see from which way the wind blows. Hence, at the outbreak of the Covid-19 in January 2020—and even after the WHO had sounded the alarm-, various Western political eminencies still diminished the whole situation, basically demonstrating a classic negationist response—to be traced back to the (neo)liberal "laissez-faire, laissez-passer" idea that teaches that a government should interfere as little as possible with anything that happens, preferably just leaving it all to the functioning of the free market. (Cf. Sect. 2.2.4.)

When, about a month and a half later (by mid-March 2020), the realization had finally set in that Covid-19 was more than a common winter flu, the illusory idea of freedom still stood in the way of an adequate response. Meanwhile, the Covid-19 virus had been allowed to take its course, as a result of which contamination levels began to reach proportions unseen in the past century (perhaps giving Asian leaders and scientists pause as to what they were up to in the so-called "free West").

Only at the point of complete escalation did the Western, neoliberal governments start taking more severe measures, albeit still very reluctantly, and while initially still aiming to affect the supposed freedom of their population as little as possible. As a result, harsh lockdown measures only followed as of the second half of the month of March 2020 and only because there were no other possibilities left. But by then it was already too late: under the free movement of people that the Western world holds so dear, Covid-19 had, in a mere 2 months, been allowed to spread to the farthest corners of the world.

Moreover, as soon as the belated lockdown measures, started to show some good results (as they did in the countries that had resorted to them), neoliberal leadership already started giving in to loud calls to "open up societies and their economies" again. The lack of freedom within the socio-economic sphere of life ironically became in this manner the leading principle of neoliberal, public policy.

Clearly, both the captains of industry and the neoliberal political leadership they have installed throughout the Western world, do not like it when the mob idly sits at

home, even if most of them continued to work via telework. For a good neoliberal, the mere idea of the working classes sitting around doing nothing is a sheer aberration. Circling back to Fromm, we know that in such a (neo-)liberal vision, a fellow human being has no inherent value, except as an economic production factor, which implies that everyone should be at work all the time, regardless of age or risk.

It is, therefore, not surprising that shortly after the Covid-19 lockdown measures had been announced, the business world and neoliberal governments all over the West, started demanding that the working classes be put back to work. Otherwise, the economy (which from a neoliberal point of view is inherently much more important than human lives) would suffer serious further damage, which had to be avoided at all costs.

Since then, the aversion to harsh lockdowns or comparable measures has continued to determine policy in the Western world. The policy of fighting Covid-19 has in fact been turned into a sort of "accordion policy" (cf. Table 2.1), whereby containment measures were relaxed and tightened again in function of statistical data on the pandemic. It was clear that a few deaths as a result of such a policy, did not raise much cause for concern among neoliberal leadership.

In this context, it may even be worth recalling the idea of a universal basic income that could provide working people at least with some resilience against all these capitalist methods of exploitation.⁴⁰⁴ But obviously, such proposals still meet with great resistance from neoliberal policymakers (and neoliberal academia). These same people then turn a blind eye to the trillions in aid that are needed at every crisis to keep banks and other enterprises afloat (cf. Chaps. 3 and 4), under the classic justification—going back to Adam Smith himself—that tiny bits of this aid will "trickle down" to the lower classes, who should be happy with this.

The question remains, if and when the reversal of values on which this (neo)liberal body of thought is based, can be reversed again, once more placing people above the economy (or, put differently: putting "labour" above "capital").⁴⁰⁵ We ourselves, at any rate, continue to devote ourselves to this in our own writings, repeating the models which we have already advocated in the past, and to which we shall return in the final concluding chapter (cf. Chap. 11).

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⁴⁰⁴Cf. e.g., Byttebier (2017), pp. 416–417.

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Chapter 8 Covid-19 and Schools



8.1 Problems with School Closures

8.1.1 General

It has been pointed out in a joint report by UNESCO, UNICEF and The World Bank¹ that, largely as a result of lockdown and similar measures, the Covid-19 pandemic has caused an unprecedented—at least in modern times—disruption of education systems all around the world. This is believed to have affected the lives of more than 1.5 billion students and their families.² In April 2020, UNICEF reported that an estimated 3 billion people were in lockdown or under a similar containment measure worldwide and that nearly 90% of the student population was out of school.³

By 2 February 1921—counting from 11 March 2020—schools were said to have been fully shut down for an average of 95 instructional days worldwide, which amounted to about half of the time that, in normal circumstances, is intended for classroom attendance on a yearly basis. Countries in the Latin America and the Caribbean region were reported to have been the most affected, with an average of 158 days of full school closure, followed by countries in South Asia with 146 days of school closure. Countries in the Eastern and Southern Africa region were said to be the third most affected, with an average of 101 days of school closure. Of the 20 countries with the longest complete school closures during this period, more than half had been located in the Latin America and Caribbean regions. On a global scale, 214 million students following pre-primary to upper secondary education in 23 countries were believed to have missed at least three quarters of classroom time

¹This report was based on a survey among 108 countries for which responses were received from 15 July 2020 until 15 October 2020, with 20 August 2020 being the average date on which countries responded. (Cf. UNESCO, UNICEF and The World Bank (2020), p. 6.)

²UNESCO, UNICEF and The World Bank (2020), p. 12.

³Roe et al. (2021); Marinoni et al. (2020), p. 8.

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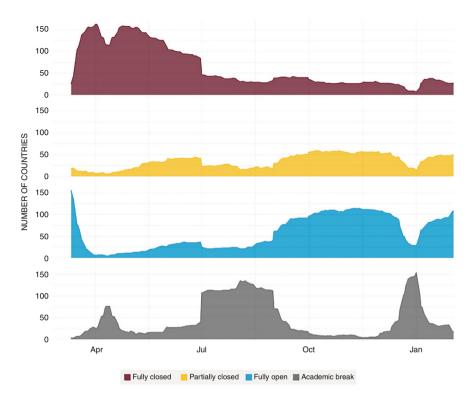


Fig. 8.1 Time-series of school closure status from March 2020 to February 2021 [Source: UNICEF 2021, p. 5]

since March 2020. Of these 214 million students, 168 million spread over 14 countries had not been granted any classroom instruction time because of perpetuated school closures. Countries with the longest school closures, moreover, tended to have a low prevalence of school-age children with access to a fixed internet connection at home, implying that these children not only missed physical classes but also lacked the technology for attending online classes instead.⁴

By 2 February 2021, around 53% of the world's countries had fully (re)opened their schools and almost 25% of the world's countries had partially (re)opened their schools. Still, around 196 million students from 27 countries (accounting for 13% of the school going children on a global scale) were inscribed in schools that remained fully closed. On average, in countries where schools still remained closed on 2 February 2021, almost 80% of classroom instruction was missed during a period of 11 months that had begun in March 2020.⁵

⁴UNICEF (2021), p. 1.

⁵UNICEF (2021), p. 1.

Figure 8.1 shows the evolution of school closures as of March 2020. From this, it appears that, initially, schools had been completely closed in about 150 countries, while about ten countries had only partially closed their schools, and another ten had kept school completely open. According to UNICEF, this situation started to change as of May 2020, due to a gradual decrease in the number of countries with complete school closures, a measure that came with an increase in the number of countries with partially or fully open schools. According to UNESCO, UNICEF and The World Bank, from July until September 2020, a further decrease could be observed in the number of full school closures, mostly because of overlapping school holidays. In addition, in October 2020-i.e., six months after the start of the first school closures and at a time when in many countries, a news school year was about to begin –, a reversal of this trend could be observed, with at the time about 100 countries having fully opened schools, while about 50 countries had partially opened schools, and about 25 countries still had fully closed schools.⁶ This is illustrated by Fig. 8.1, which gives a representation of a time-series of school closure status from March 2020 to February 2021.

Already from March 2020 onwards, there had been several immediate policy responses aimed at ensuring a continuous curriculum-based learning through a range of distance learning modalities, including online, TV/radio, take-home materials, and other approaches. Governments around the world responded to the challenges posed by this hastened transition to distance learning environments by trying to strengthen support for schools and teachers, as well as by adapting their own assessment and examination policies. Specific measures were also resorted to for ensuring the inclusion of children in populations at risk of exclusion from distance learning platforms, as well as to promote overall student welfare. Of particular concern was that in February-March 2020, when the Covid-19 response had first started to affect schools, the expected duration of the school closures was unknown and often depended on unpredictable elements, such as the severity of the Covid-19 pandemic in a specific country and its sub-regions,⁷ which made a planned policy response extremely difficult.

Full closure of schools obviously had a huge impact on education, and soon proved to be a highly controversial measure, that would continue to stir emotions in many countries for the duration of the Covid-19 pandemic.

The closure of schools as such was believed to have a wide range of negative consequences for society as a whole, as well as for children in particular, such as (1) disruption of schooling, (2) food insecurity regarding children (from poor families) who relied on schools or teachers for daily access to healthy food, (3) a variety of social and psychological implications rising from the fact that children were unable to see one another, as well as their teachers, and even (4) an increased exposure to violence and exploitation at home, besides (5) the challenges of

⁶UNICEF (2021), p. 5.

⁷UNESCO, UNICEF and The World Bank (2020), p. 12.

establishing, maintaining and improving alternatives for physical classes, such as distance or remote education. 8

As to the functioning of the labour market (cf. Chap. 7), the closure of schools brought along certain risks of its own, such as permanent school drop-outs from students (including the decreased labour market prospects this brought along), besides the non-renewal of fixed-term contracts of young teachers who had not yet been granted permanent employment in a given school. In addition, many internships and apprenticeships were cancelled upon the outbreak of Covid-19, which added to a disrupted education of children and youngsters for whom such experiences formed a part of their learning curriculum. Moreover, new graduates who ended their education during the Covid-19 pandemic in many cases faced extreme difficulties in getting a foothold in the labour market. In light of similar, past experiences during the financial crisis of 2008–2009, prospects were rather pessimistic, especially to the extent that the persistent high unemployment and underemployment of young people in the aftermath of the 2008 global financial crisis had pointed out that once young people lost touch with the labour market or got marginalised in precarious jobs, it became extremely difficult to reintroduce them in a normal labour circuit.9

As we shall see in this chapter, the debate on school closures and distant or remote learning has often been driven by emotional and economic (side-)arguments, even to the detriment of public health considerations (i.e., the fight against the Covid-19 pandemic itself) in general, or the safety of educational staff in particular.

8.1.2 2020 Joint Report by UNESCO, UNICEF and the World Bank Measuring the Impact of School Closures and Remote Schooling

8.1.2.1 Key-Elements on Assessing the Impact of School Closures

8.1.2.1.1 School Closures in General

According to a joint 2020 report by UNESCO, UNICEF and The World Bank, hereafter referred to as "the Joint Report", the key elements of assessing the impact of school closures due to the Covid-19 pandemic may be divided into three categories, namely:¹⁰

⁸Roe et al. (2021).

⁹International Labour Organisation (2020).

¹⁰UNESCO, UNICEF and The World Bank (2020), pp. 6–7.

For a similar global survey, focusing in particular on higher education, cf. Marinoni et al. (2020). Indeed, in order to better understand the disruption caused by Covid-19 on higher education and to investigate the first steps taken by higher education institutions worldwide for responding to the Covid-19 crisis, already at an early stage of the Covid-19 pandemic, the International Association of

- (1) Lost learning opportunities: Overall, the 108 countries that partook in the Joint Report reported having missed an average of 47 days of "face-to-face" instruction as a consequence of school closures at the time of the survey. This number of missed days of physical presence in schools, on average, amounted to about a quarter of a normal school year. Countries where the academic year 2019–2020 was still running at the time of the survey had, moreover, reported more lost face-to-face teaching days (more precisely, on average, 54 days) than those where, at the time of the survey, the academic year 2019–2020 had already ended (more precisely, on average, 40 days).
- (2) Learning assessments: A large majority of the countries (more precisely, around 86%) that partook in the Joint Survey reported that student learning remained monitored by teachers throughout the days of school closures. However, this did not imply that there were no large differences between countries and country groups. More in particular, only 3% of high-income countries indicated that student learning progress was no longer monitored by teachers during the days of school closures, compared to about 25% of the group of "low- and lower-middle-income countries".

At the end of the so-called "first wave" of the Covid-19 pandemic, in many countries schools began to reopen as well, with most of these countries reporting that they would be assessing, or planning to assess, their students through school-based assessments, even if not in a systematic manner. However, in the period immediately following the reopening of schools, the vast majority of countries did not intend or plan to already conduct a systematic assessment of children at a primary level. This was by some expected to reduce the ability to measure the loss of learning during the days of school closures in a comprehensive manner and in relation to the expected learning trajectory of the students concerned.

(3) Re-opening support to address learning loss: The majority of the countries that partook in the Joint Survey (more precisely, around 84%) pointed out that they had introduced so-called "additional support programmes" in order to address learning loss when schools would reopen. In as good as all income groups of countries, but in particular within low-income countries, this learning loss support most often took the form of remedial programmes aimed at helping at least part of the students to catch up. By contrast, one out of four high-income countries declared that they did not intend to resort to such methods of additional support. High-income countries were on the other hand more likely to consider distance learning as a sufficient substitute for formal school days (as noted in

Universities (IAU), decided to launch the so-called "the IAU Global Survey on the impact of Covid-19 on higher education around the world". This survey was available online and open from 25 March 2020 to 17 April 2020 (cf. Marinoni et al. 2020, p. 8). What made the IAU global survey unique was that it attempted to capture a description of the impact of Covid-19 globally and on higher education in a broad sense, including all areas of teaching and learning, research and community engagement missions of universities and other higher education institutions ("HEIS"). (Cf. Marinoni et al. 2020, p. 9.)

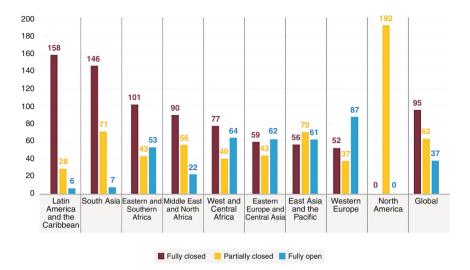


Fig. 8.2 School closure status in number of days and by region, from March 2020 to February 2021 (weighted average) [Source: UNICEF 2021, p. 6]

more detail in the Joint Report itself, to which further reference is made). Among all groups of countries—including the high-income ones—were school closures seen as leading to learning losses and widening the achievement gap.

The duration of "school closures", by definition, indicates the total number of school days on which pupils were not physically present at schools in order to enjoy classroom teaching. From data collected by UNICEF on the academic year 2019–2002, it appears that different regions had been disproportionately affected by the extent of school closures (cf. Fig. 8.2). In the period from 11 March 2020 until 2 February 2021, the average number of days of disruption of classroom teaching had been the highest in the Latin America and Caribbean region, followed by the South Asia and Eastern and Southern Africa regions. By contrast, in the North America region, schools had in many cases only been partially closed. Globally, during the academic year 2019–2020, schools had been closed for an average of 95 days (about half of the academic year), which was believed to account for a large part of scheduled classroom time.¹¹

Still according to UNICEF, after the summer of 2020, the status of school closures, as well as the differences between countries and groups of countries, drastically altered. Some countries after the summer of 2020 initially still kept all schools closed, to reopen them shortly afterwards. Other countries decided to keep relying on total school closures for most of the rest of the calendar year since the start of the Covid-19 pandemic. Data point out that, e.g., as mentioned before, more than half of the top 20 countries with the highest number of ongoing days of full school

¹¹UNICEF (2021), p. 6.

closure were concentrated in the Latin America and Caribbean region, while the number of days of full school closure was also high in Jordan and Panama, ranging from 148 days to 211 days respectively.¹²

As of 2 February 2021, school closures because of the pandemic remained in effect in many countries. In fact, a full year after the spread of the Covid-19 virus had been declared a pandemic, only half of the world's countries had managed to fully reopen their schools. In 37% of the countries, schools were still partially or fully closed.¹³

8.1.2.1.2 Closures of Higher Education Institutions in Particular

For higher education institutions (sometimes abbreviated as "HEIs") in particular, Marinoni, van't Land and Jensen have pointed to the fact that almost all the HEIs that had responded to their own survey—hereafter also referred to as to the "HEI Survey"—had been affected by Covid-19 at the time of the survey (which had taken place in March-April 2020 already). Only one HE institution out of 424 (an HEI located in Burundi) had responded that it had simply remained open as usual, without any special Covid-19 related measures in place. By contrast, 59% of the surveyed HE institutions had responded that all their on-campus activities had ceased and that their institution had been fully closed.¹⁴

From the HEI Survey, it moreover appeared that the region with the highest percentage of full HEI closures due to Covid-19 was the African region (with more than three quarters of HEIs or, to be more precise, 77% of HEIs fully closed).¹⁵ Marinoni, van't Land and Jensen thereby pointed to the fact that this result has been somewhat surprising, as at the time of the HEI Survey, Africa was the region of the world with the lowest number of reported Covid-19 contamination cases, with the most affected regions being Asia, the Pacific and especially Europe where there were less full HEIs closures. In the opinion of said authors, these results may indicate that African HEIs where inclined to resort to a policy (or were forced to do so by their respective governments) of closing their campuses as a precautionary Covid-19 measure much earlier than HEIs located in other regions.¹⁶ By contrast, the percentage of HEIs with fully closed campuses in said three other regions was about the same (notably 55% in Asia-Pacific and Europe, and 54% in the Americas).¹⁷

¹²UNICEF (2021), p. 7.

¹³UNICEF (2021), p. 11.

¹⁴Marinoni et al. (2020), p. 16.

¹⁵Marinoni et al. (2020), p. 16.

¹⁶Marinoni et al. (2020), p. 16.

¹⁷Marinoni et al. (2020), p. 16.

8.1.2.2 Key-Elements on Assessing the Impact of Distant Learning

As schools around the world were forced to close in February-March 2020 in order to contain the spread of the Covid-19 virus, many governments responded quickly to this unprecedented situation by providing learning and teaching alternatives in the form of so-called "distant" or "remote" learning. These included online learning platforms, educational programmes that were broadcasted on television and/or radio, and paper-based home packages. Countries however soon had to recognize that these options were not equally, or similarly, accessible to all. Countries, therefore, went through huge efforts for stimulating equal access to these alternative learning environments, as well as for supporting students, teachers and parents/caregivers to obtain (more) access to them.¹⁸

The Joint Report mentions the following main points on country experiences on how their schools deployed distance education options with or without relying on corresponding support measures, including:¹⁹

- (1) Distant or remote learning systems and their effectiveness: Almost all countries that partook in the Joint Report, indicated that they had included distant learning as part of their educational response to Covid-19. The methods mostly resorted to included using online platforms, TV/radio programmes and/or take-home packages. E-learning was thereby mentioned as a solution—for at least a part of the students of a given country—by all high-income countries. By contrast, systems of e-learning were not as consistently indicated by countries belonging to other income groups. In addition, almost 75% of the countries that partook in the Joint Report, indicated that distant learning days counted as official school days. However, the latter was the case in only one in five of the low-income countries.
- (2) Policies for ensuring (more) access to e-learning: The majority of the countries that partook in the Joint Report (amounting to 89% of all these countries) indicated that they had been introducing at least one measure for improving access to either the services or the hardware connectivity necessary for making e-learning possible. In the majority of the cases, such support measures involved making access to e-learning platforms or other e-learning systems available from mobile devices, and/or offering internet access at a cheaper (governmental-subsidised) price, or even completely free of charge. The majority of countries that partook to the Joint Report (notably 91%) also pointed out that they had taken steps for supporting population groups at risk of exclusion from distant or remote learning systems. However, over 30% of low-income countries indicated that they had not resorted to any special measures for supporting access and/or for dealing with exclusion.

¹⁸UNESCO, UNICEF and The World Bank (2020), pp. 7–8.

¹⁹UNESCO, UNICEF and The World Bank (2020), pp. 7–8.

- (3) Teacher support policies: Three quarters of the countries that partook to the Joint Report indicated that educators had been instructed to continue teaching in times of school closures, however again with significant differences between income groups of countries. The percentages of countries having mandated their teachers to continue all teaching and related activities during days of school closures, more in particular, amounted to over 90% for high and upper-middle income countries, compared to only 60% for lower-middle income countries and a mere 39% with regard low-income countries. Overall, the majority of the countries declared to also having encouraged their teachers to interact with students and their parents by resorting to messaging applications on mobile devices and/or computers. In addition, more than half of the high-income countries partaking in the Joint Report, indicated that they had recruited, or were in the process of recruiting, additional staff members in order to support distant or remote learning, or even for preparing school reopenings. The majority of countries (notably 89%), furthermore, stated that they had taken special measures for supporting teachers, although one in five low-income countries indicated that it had not resorted to such special measures. This support, in most cases, took the form of training sessions on how to deliver distant or remote learning courses.
- (4) Policies to support parents and caregivers: Around three quarters of the countries that partook declared that they had resorted to specific measures for supporting parents and/or caregivers. However, the differences between countries and groups of countries were again considerable. Over a third of low-income countries had more in particular pointed to the fact that it had not introduced any such learning-related measures. The most frequently used measures consisted in the provision of advice or tips and in the handing out of materials for explaining about learning and studying at home. In addition, more than a third of the high-and middle-income countries declared that they had been following-up on parents and caregivers through regular telephone calls. However, the latter practice was only resorted to by a mere 22% of low-income countries.

8.1.2.3 The Debate on the Reopening of Schools

As has been the case with the debate on the reopening of economies (Cf. Chap. 7), one of the most difficult debates in the field of education concerned the reopening of schools, which especially started to resonate at the end of the first wave of the Covid-19 pandemic. As the danger Covid-19 posed had at that time by no means disappeared from the Western world, the question of whether or not schools still had to close during future peaks of the Covid-19 pandemic, deeply moved the minds of policymakers and everyone else involved.

Both the timing and strategies for reopening schools varied from country to country, but they universally suffered from a lack of means. Almost all countries that partook in the Joint Report survey declared that they needed additional funding for adequate safety protocols in the education sector. In addition, countries started to rely on a wide variety of resources to meet these needs, while at the same expecting their future education budgets to remain (heavily) affected.²⁰

We turn again to the survey on which the Joint Report was based. The main highlights of how countries planned to safely reopen schools and to finance the necessary measures for dealing with the impact of Covid-19-related matters were as follows:²¹

- (1) School reopening plans: As of September 2020, the majority of the countries that partook in the survey (i.e., 73%) indicated that they had fully, or partially, reopened schools, with a further 5% of the countries that had partook in said survey indicating a future reopening date. The remainder of said countries had either failed to comply with previously set reopening dates or had not reported any reopening dates whatsoever. From the Joint Report, it moreover appeared that the group of high-income countries had been more likely to reopen schools and also to do so by resorting to a "hybrid approach" in accordance with which a combination was to be made of distant or remote learning and face-to-face learning. By contrast, low-income countries were said to be more likely to delay the dates for the reopening of their schools, while in most cases planning to return to face-to-face teaching and learning only.
- (2) Health protocols during school reopenings: Across all income groups, almost all of the countries declared that they had either produced or approved specific health and hygiene protocols for when their schools would be effectively reopening. The vast majority of these guidelines included measures such as the promotion of physical and social distancing, hand-washing practices and a wide variety of other measures aimed at reducing exposure of contact with the Covid-19 virus. However, at the same time, fewer than one in five countries had declared it had plans for testing children or students and staff members for Covid-19 on school premises. In addition, more than a quarter of the countries that partook in the survey on which the Joint Report was based, indicated that they did not have sufficient resources to ensure the safety of all of their school going children or students and school staff members, with again wide variations among countries by income level.
- (3) Funding: A very large majority of the countries (notably 95%) pointed to the fact that additional financial (re)sources would be needed for ensuring an adequate response to the demand for education, especially in a context of school reopenings whereby Covid-19 measures would still remain in force. For at least 75% of the responding low- and lower-middle-income countries, this support was to be searched among external donors. By contrast, more than 75% of the high-income countries declared having access to additional government funding in support of education.²²

²⁰UNESCO, UNICEF and The World Bank (2020), p. 9.

²¹UNESCO, UNICEF and The World Bank (2020), pp. 9–10.

²²According to the Joint Report, reallocations within the education budget were announced to take place in about two-thirds of middle-income countries, and half of high-income countries. While,

8.1.3 Evaluation of the Effectiveness of School Closures as NPIs

According to the European Centre for Disease Prevention and Control, based on a (fast) screening of 23 official documents on prevention and the management of specific cases in the context of primary and secondary schools throughout the EU, school closures are generally seen as the measure of last resort for dealing with the spread of Covid-19.²³

In the further opinion of the European Centre for Disease Prevention and Control, there was at the time no direct method for evaluating preventive school closure (by which reference is made to closures of schools and child day-care centres that happen at an early stage and in a planned way in order to contain the transmission and the spread of the Covid-19 virus in schools and throughout the community) as a stand-alone so-called "NPI" (or "non-pharmaceutical intervention"). The reason for this is that school closures have often been introduced in conjunction with other containment measures, which made it impossible to point out what effects were related to which measures.²⁴ Notwithstanding these limitations, as well as diverging study results, many of the studies referred by the European Centre for Disease Prevention and Control still came to the conclusion that school closures help reducing the spread of the Covid-19 virus. However, it also appeared from these combined insights that school closures as such did not suffice to contain the Covid-19 pandemic, albeit that they have been found more effective when used as part of a package of a variety of NPIs.²⁵

The reduction in social mix resulting from school closures in particular was inferred by several studies referred to by the European Centre for Disease Prevention and Control. E.g., from an age-structured model with regard to the situation in The Netherlands, it appeared that, presuming unaltered contacts outside the school context, the closure of schools as measured in November 2020 was found to reduce

moreover, only 19% of the responding high- or middle-income countries had already experienced, or anticipated, decreases in the education budget for 2020 and 2021, more than a third of low- and lower-middle-income countries had reported this situation. (Cf. UNESCO, UNICEF and The World Bank (2020), p. 10.)

²³European Centre for Disease Prevention and Control (2020), p. 21; European Centre for Disease Prevention and Control (2021), pp. 13–14.

²⁴According to the European Centre for Disease Prevention and Control, there still were many modelling studies on the impact of school closures on reducing SARS-CoV-2 transmission which share some common limitations, such as: varying assumptions about children's susceptibility and infectiousness; difficulties in distinguishing the impact of school closure from that of other NPIs (including workplace closures and teleworking policies); the scale of analysis tends to be national, whereas transmission and NPI measures may vary at sub-national levels; and difficulties in accounting for (or not accounting for) different mitigation measures at school. Another general limitation was that models did not generally distinguish between the closure of different types of schools, e.g., between primary and secondary schools. (Cf. European Centre for Disease Prevention and Control 2020, p. 21.)

²⁵European Centre for Disease Prevention and Control (2020), p. 21.

the contagion-factor by 8% for pupils from 10 to 20 year old, by 5% for pupils 5–10 year old and in a negligible manner for children 0–5 year old. The study, hence, came to the conclusion that the greatest effect on community transmission of Covid-19 was feasible by decreasing social contacts in secondary schools.²⁶

According to the European Centre for Disease Prevention and Control, the effectiveness of school closures probably arises from two main causes. First, children who remain at home have less social contact than children who go out to school. Secondly, and according to the European Centre for Disease Prevention and Control probably more important, school closures have an indirect effect on parents with smaller children who—or at least one of them—have to remain at home themselves to keep an eye of their children, which reduces their own social contacts and, hence, contamination risk, as well. However, according to the quoted research, it was impossible to decipher between these two elements. A particularly difficult aspect has in this regard been that, within the European context, school closures have often been introduced in parallel with teleworking orders and the closing down of physical working places. In addition, it was pointed out that it was unclear whether older children, especially those between 16 and 18 year old, also decreased their social contacts when schools were closed or when subject to remote learning.²⁷

Another modelling study referred to by the European Centre for Disease Prevention and Control examined the transnational impact of a series of NPIs in the period between 22 January 2020 and 30 May 2020. This study pointed to a positive effect of school and university closures when resorted to jointly. However, this study failed to differentiate between the relative contribution to this positive effect of school and university closures. The study also failed to make a distinction between the direct and indirect consequences of the closures concerned.²⁸

A further Dutch age-structured model, again referred to by the European Centre for Disease Prevention and Control, was based on the at the time predominant circulating strains of the Covid-19 virus. From this study, it appeared that the greatest effect on community transmission was obtained by reducing social contacts among children attending secondary schools.²⁹

²⁶European Centre for Disease Prevention and Control (2020), p. 21.

²⁷European Centre for Disease Prevention and Control (2020), p. 21.

²⁸European Centre for Disease Prevention and Control (2020), p. 21.

²⁹European Centre for Disease Prevention and Control (2021), p. 14.

A Danish study of a much later date was based on the assumption that children under 10 years of age were 50% less susceptible to Covid-19 infection than adults. This modelling study indicated that, under the presumption that all other containment measures were kept constant, the opening of only primary schools (grades 0-4) in February 2021 would not have led to a substantial increase in new Covid-19 contamination cases or hospitalisations, provided that the transmissibility of the B.1.1.7. variant increased by only 40% compared to previously circulating strains of the Covid-19 virus. By contrast, if the relative infection rate was 1.55 or 1.7, there would be a substantial increase in new daily cases and hospitalizations by April 2021. (Cf. European Centre for Disease Prevention and Control 2021, p. 14.)

In the assessment of the European Centre for Disease Prevention and Control, empirical studies on school closure, although relatively limited in number, also pointed to a heterogeneity of results. One American study pointed to a correlation between school closure and reduced numbers of Covid-19 contamination cases and Covid-19 related deaths measured on a weekly basis. Another American study indicated that there was a rise in Covid-19 related mortality risk when school closures got delayed, while a further European study pointed to the fact that school closures were associated with lower Covid-19 incidence rates. However, also with regard to these studies, it was observed that, because the school closures had been introduced in conjunction with other containment measures, it was difficult to assess the effect of each individual NPI. Meanwhile, from another study on the situation in Japan, it appeared that school closures did not have a significant effect on Covid-19 transmission, while research in Finland indicated that child day-care centre closures decreased children's hospital admittance, but that the subsequent reopening of these child day-care centres did not lead to an increase in children's hospital admittance.³⁰

The European Centre for Disease Prevention and Control also pointed to the fact that during the Covid-19 pandemic, a wide range of containment measures were implemented on school premises in order to reduce the potential spread of the Covid-19 virus in school settings. It was, thereby, pointed out that most of the modelling studies with regard to the effect of school closures on Covid-19 transmission, had failed to take these types of measures into sufficient consideration. One exception to this finding concerned a modelling study regarding Shanghai, from which it appeared that schools could indeed be reopened without causing excessive transmission of Covid-19, provided that the daily contacts between children aged between 10 and 19 years could be diminished to 33% of baseline levels.³¹

The European Centre for Disease Prevention and Control also remarked that, while many European countries had decided to close their schools during the first wave of the Covid-19 pandemic, they had in most cases chosen to keep their schools open during the autumn of 2020, a period that for many (European) countries coincided with the second wave of the Covid-19 pandemic. However, it was pointed out that such reopened primary and secondary schools could not be seen as similar to regular school settings from before the Covid-19 pandemic (without any preventive measures yet in place). Although in many EU countries schools remained open in the autumn of 2020, there was generally a wide range of separate IPNs installed that also needed to be taken into account.³²

Finally, it was noted that "reactive" school closures (i.e., school closures in response to increased community transmission of Covid-19, and/or a localised Covid-19 outbreak in a single school, and/or because of increased absenteeism among staff members and/or students making it difficult to maintain education)

³⁰European Centre for Disease Prevention and Control (2020), p. 21.

³¹European Centre for Disease Prevention and Control (2020), p. 21.

³²European Centre for Disease Prevention and Control (2020), p. 21.

could also be seen as a NPI and even as a more useful and targeted measure than closing all schools by means of a preventive (proactive) measure.³³

8.2 Problems Resulting from School Closures

8.2.1 Lost Learning Opportunities

Around the world, school closures due to Covid-19 have been assessed as depriving students of learning opportunities.³⁴

One estimate referred to in the Joint Report even suggested that the global educational losses resulting from four months of school closures may have amounted to USD 10 trillion in lost earnings. Other studies also referred to in the Joint Report indicated that students as well as countries stood to lose significant amounts of money over the lifetime of the students involved.³⁵

In the 2020 survey referred to in the Joint Report, an attempt was made to track the timing and duration of school closures in response to Covid-19, based on countries' self-reported values on the duration of school closures in relation to the precise duration of the school year of each of the countries involved. From these data, it appeared that the severity of the effect of a school closure on students varied depending on when school closures began in terms of the school calendar and in terms of their duration. At the same time, the data also revealed whether the respondents to the survey had deemed distant or remote learning methods to be viable alternatives for in-school teaching and learning methods. It was believed that, considered jointly, these two pieces of information would not only allow to make an estimation of the severity of school closures, but also to explain some of the policy choices governments were facing when developing a menu of policy responses to compensate for lost school days.³⁶

Figure 8.3 shows that school closures had different effects in countries around the world. In some countries, school closures came at the end of the school year, while in

³³European Centre for Disease Prevention and Control (2020), p. 21.

According to the European Centre for Disease Prevention and Control, more powerful empirical and modelling studies comparing the first and second waves of Covid-19 with regard to several countries were expected to provide additional information on the effects of school closures on Covid-19 transmission. E.g., studies that model a range of assumptions about child infectivity, distinguish between primary and secondary school closures, consider school closures in a range of community transmission scenarios, and distinguish between the direct and indirect impact of school closures on Covid-19 transmission if other measures (such as workplace closures and telecommuting) are in place, were thereby to be given priority. (Cf. European Centre for Disease Prevention and Control 2020, p. 21.)

³⁴UNESCO, UNICEF and The World Bank (2020), p. 14.

³⁵UNESCO, UNICEF and The World Bank (2020), p. 14.

³⁶UNESCO, UNICEF and The World Bank (2020), p. 14.

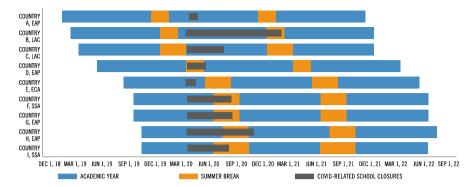


Fig. 8.3 School closures varying by length, starting date and moment in the academic year [Source: UNESCO, UNICEF, The World Bank 2020, p. 14]

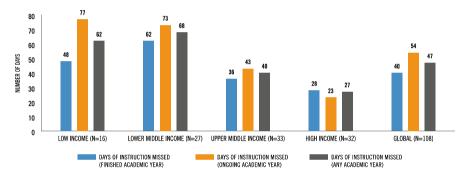


Fig. 8.4 Average days of instruction missed, by income level [Source: UNESCO, UNICEF, The World Bank 2020, p. 15]

other countries they delayed the start of a new school year. In still other countries, school closures largely overlapped with a previously planned vacation period (e.g., the summer holidays). Figure 8.3 shows the timing of school closures for a number of countries which have been selected in order to highlight the variety of these situations. Even neighbouring countries located in a same region were thereby reported to have very different duration and timing of school closures.³⁷

Moreover, the patterns largely varied between countries of the northern and southern hemispheres. Specifically, Fig. 8.4 indicates that, regardless of the income position of the countries concerned, on average, 40 school days were lost in case the academic year was already (as good as) over at the time of the survey, which was often the case for countries located in the northern hemisphere. By contrast, in countries where the academic year was still ongoing at the time of the survey, an average of 55 days were reported as being lost, which was the case for many of the

³⁷UNESCO, UNICEF and The World Bank (2020), p. 14.

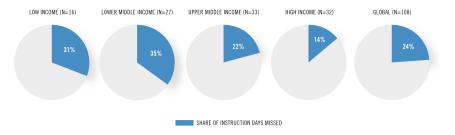


Fig. 8.5 Share of instruction days missed by income level

countries located in the southern hemisphere. On average, for all responding countries, school closures lasted for the duration of one quarter of a normal school year.³⁸ The latter is further illustrated by Fig. 8.5,³⁹ which gives an overview of the share of instruction days missed by income level (Fig. 8.5).

The Joint Report, furthermore, revealed a wide variation of both experiences and responses to the survey referred to in said report at a national level. E.g., the duration of school closures varied from country to country. Some considered school closures to be a problem as they considered that distant learning systems did not provide a viable alternative. The assessment of school closures also varied depending on a variety of factors such as (1) whether the academic year was (almost) over, (2) whether countries considered distant learning methods to be effective, (3) the income group of the country, and (4) the hemisphere in which the country was located.⁴⁰

According to Borkowski et al., the loss of schooling and learning has particularly been problematic for girls who, considered globally, were already under normal circumstances at greater risk of not going to school or of being withdrawn prematurely from school.⁴¹

In the United Kingdom, the category of young people "not in education, employment or training" has already for a long time been referred to as "NEET". It was pointed out that the NEET rate had been relatively stable before the outbreak of Covid-19. However, the NEET rate among young men rose by 1% between February/March 2020 and July/September 2020. It was, furthermore, predicted that this rate was likely to increase further, to the extent that employment and training possibilities shrank further because of Covid-19. Moreover, in the United Kingdom—and most likely also in many other European countries—apprenticeships were of particular importance for the most deprived groups of society, as such

³⁸UNESCO, UNICEF and The World Bank (2020), p. 15.

³⁹"Respondents answered the surveys during the period July–October. While there is a possibility that durations of school closure could be correlated to when the survey was filled out, there is no clear pattern in the data that would indicate a bias in either direction in the numbers reported here. Caution is advised in generalizing the results represented in the figure as the countries that responded to this question cover less than 50% of the total 4–17 year old population" [UNESCO, UNICEF, The World Bank 2020, p. 15]

⁴⁰UNESCO, UNICEF and The World Bank (2020), p. 16.

⁴¹Borkowski et al. (2021), p. 6.

apprenticeships may help to decrease inequities in employment and income. These apprenticeships have been hit hard by the Covid-19 crisis. E.g., the Sutton Trust reported that by May 2020 (1) less than 40% of apprenticeships were proceeding as normal, (2) more than a third of apprentices had been put on furlough, (3) one in 12 had been made completely redundant, and (4) prospects for future apprenticeship recruitment were looking bleak. Meanwhile, youth services, which for reasons of neoliberal austerity had been severely cut in the decade to 2020, faced further difficulties as funding from the part of local governments and charities was drastically diminished. Many of the still remaining youth services, which offer services for supporting young people, improving participation in both school and employment and reducing youth crime, were threatened with closure.⁴²

8.2.2 Learning Assessment and Monitoring

8.2.2.1 Learning Assessment and Monitoring in Primary and Secondary School Settings

According to the Joint Report, learning assessments and monitoring of educational progress are essential tools for measuring what children are effectively learning. When designed properly, such assessment and monitoring tools may moreover help to evaluate the performance of the education system as such, and to inform policy makers and education officials about possible future reforms and pending needs of schools. Learning assessments and monitoring systems may also allow for feedback, enabling all stakeholders in school settings, including teachers and other staff members, to comprehend what is being learned and how teaching and learning in the classroom could be further enhanced.⁴³

According to the Joint Report, there exist different types of learning assessments, each serving different objectives:⁴⁴

- (1) Formative and summative assessments allow teachers and educators to adapt their teaching strategies and/or serve as a means of providing individual assessment to students at the end of a given teaching period.
- (2) Examinations are used to certify or select students belonging to a given grade or age group with regard to further education, training or employment.
- (3) Large-scale system-level assessments help to provide feedback on the general health of the educational system for a given group of students (ranged by age and/or grade), in a given academic year, and in a limited number of areas. This type of assessments has been indicated as the most relevant type of assessment of learning loss due to school closures on a consistent basis.

⁴²Marmot et al. (2020), p. 32.

⁴³UNESCO, UNICEF and The World Bank (2020), p. 16.

⁴⁴UNESCO, UNICEF and The World Bank (2020), p. 16.

It will not come as a surprise that the Covid-19 pandemic and the school closures resorted to for fighting it, have had a huge impact on learning assessments and monitoring systems. According to information provided in the Joint Report, especially during the first wave of the Covid-19 pandemic, more than half of the partaking countries had decided to delay and/or reschedule high-stakes exams, for a duration ranging from four weeks to more than 12 weeks. A few countries even pointed out that they had simply cancelled their exams altogether. By contrast, about a quarter of the countries that partook in the survey, indicated that they would hold high-stakes exams as scheduled (although this number was smaller for primary schools), but half of them announced that they intended to reduce the curriculum content to be examined.⁴⁵

A second set of questions in the joint survey covered the following issues:

- (1) teachers' monitoring of learning outcomes and the corresponding monitoring tool;
- (2) the types of assessment methods that existed before Covid-19, notably formative/summative assessments, examinations, and large-scale system-wide assessments with regard to primary and secondary education; and
- (3) whether students were assessed (or planned to be assessed) after the reopening of schools at school, sub-national, and national levels and by educational level.

Overall, 14% of the countries that partook in the survey indicated that students' learning progress was not monitored by teachers/schools during times of school closures. However, there were large variations in monitoring and assessment practices between income groups of countries. E.g., only 3% of high-income countries indicated that the learning progress of students had not been monitored by teachers. This percentage amounted to 25% with regard to low-income countries and to 27% with regard to lower-middle-income countries.

When schools reopened, most countries partaking to the survey indicated that they were effectively assessing, or planning to assess, students' learning outcomes based upon school-based assessments. Although it was believed that such school-based assessments were less suited for providing a clear and nationwide picture of learning losses arising from school closures in response to Covid-19, they were still considered as being of great value for helping teachers understand where their individual students stood, so that they could start supporting them accordingly. In particular for the primary level, the proportion of countries which had been assessing, or had been making plans to assess, primary school pupils through sub-national or national assessment methods, was considered extremely low, with only 10-30% of the surveyed countries planning to assess primary school pupils in such a manner. According to the Joint Report, this formed an indication that a large majority of the surveyed countries were not preparing to undertake system-wide assessments as schools reopened and may, as a result, not have been able to make

⁴⁵UNESCO, UNICEF and The World Bank (2020), p. 17.

⁴⁶UNESCO, UNICEF and The World Bank (2020), pp. 17–18.

accurate estimations and to compare effective learning losses against the normally expected learning trajectory of students.⁴⁷

According to the Joint Report, when schools began to reopen, assessment and monitoring of learning was to be considered more important than ever. However, the Joint Report found that the large differences that already prevailed for day-to-day learning monitoring and for firm system-wide learning assessment systems between countries in times before Covid-19, had only been further exacerbated by the pandemic and by the school closures this had caused. Furthermore, to the extent that access to distant or remote learning channels varied, so did their adoption and effectiveness once implemented.⁴⁸

8.2.2.2 Learning Assessment and Monitoring in HEIs

Regarding examinations in HEIs, the HEI survey⁴⁹ pointed out that just over half of the HEIs would still go through with examinations as planned for the semester that was going on at the time of the survey. The majority of the surveyed HEIs that were planning to still conduct examinations, indicated that this would happen through new measures or systems, while only 6% of these HEIs said that examinations would go through as usual. 14% of these HEIs planned to conduct only some of the planned examinations, while other examinations would be postponed. In about a quarter of the surveyed HEIs, reviews were to be completely postponed or temporarily put on hold. Europe had the highest numbers of HEIs planning to conduct exams during the at the time of the survey pending semester, with 80% of the surveyed European HEIs planning to act in such a manner. Of these, 56% planned to conduct these examinations by resorting to new measures or systems, 5% by conducting examinations as usual, and 19% only with regard to some examinations. Only 8% of the surveyed European HEIs declared that they would postpone reviews or put them completely on hold. By contrast, the situation was totally different as regards Africa, where 61% of the surveyed HEIs said that they most likely would either postpone (34%) or suspend (27%) examinations, with only 32% of the surveyed HEIs planning to go through with examinations for the semester pending at the time of the survey (18%) by resorting to new measures or systems, 6% by conducting examinations as usual, and 8% by only conduction examinations in part). The situation in the Asia-Pacific region and in the Americas was reported to be falling between these two extremes, albeit showing more similarities to the situation in Europe than the one in Africa. In the Americas, 69% of the surveyed HEIs declared that they would conduct examinations. Of these, 51% announced that they would do so through new measures or systems, 8% by conducting examinations as usual, and 10% by only conduction examinations in part. In Asia and the Pacific, 62% of the surveyed HEIs said that

⁴⁷UNESCO, UNICEF and The World Bank (2020), pp. 17–18.

⁴⁸UNESCO, UNICEF and The World Bank (2020), pp. 17–18.

⁴⁹Cf. Marinoni et al. (2020), p. 30.

they still planned to conduct examinations. Of these, 46% announced that they planned to do so through new measures or systems, 6% through examinations as usual, and 10% only for some examinations. In almost all of the surveyed Asian and Pacific HEIs (notably in 98% of these), it was indicated that strategies were under discussion to deal with problems related to final exams. The percentage of the surveyed HEIs discussing such strategies was also indicated as very high in the Americas (92%) and Europe (94%), albeit somewhat lower in Africa (73%).⁵⁰

8.2.3 Health, Mental and Other Similar Problems

8.2.3.1 A Global Problem

In the assessment of Thorell, Skoglund, de la Peña, et al., under "normal circumstances" (i.e., outside the scope of a pandemic), many schools provide a wide variety of essential services beyond education (e.g., providing nutrition, organizing physical exercise, ensuring social contact between students and between staff members, providing mental health services, organizing extra-curricular activities . . .). It has in this regard been pointed out that, clearly, school closures disrupted the provision of these services, and through this, the daily functioning of children and their parents as well.⁵¹

Further research (referred to by Thorell, Skoglund, de la Peña, et al., as well) has, in addition, pointed to the fact that social isolation may contribute to mental health disturbances, and even to depression, particularly for children. Among the other mental disturbances that may occur because of social isolation are stress, anxiety and family conflict. Moreover, such disturbances may have been initiated during the Covid-19 pandemic school closures, to continue afterwards. According to said authors, there is also growing empirical evidence that during the Covid-19 pandemic, a variety of behavioural problems, ranging from irritability, aggression, inattention and internalization of problems, similarly became common amongst children, with home schooling itself indicated as one of the occurrences associated with the greatest negative effects.⁵² A few smaller surveys referred to by said authors which targeted parents of children with neurodevelopmental disorders, moreover, indicated an increase in life management problems and aggression due to home schooling. It has in this context been further hypothesised that children with pre-existing mental health problems may have been particularly vulnerable to the negative effects of the Covid-19 pandemic. However, it has also been pointed out that children with such existing mental or behavioural disorders may also have

⁵⁰Marinoni et al. (2020), pp. 30-31.

⁵¹Thorell et al. (2021).

⁵²Thorell et al. (2021).

experienced positive aspects of home schooling. According to Thorell, Skoglund, de la Peña, et al., the latter concerned a claim that required further examination.⁵³

Research on the United Kingdom in particular found that deteriorating mental health during lockdown periods has been evident for all age groups, but especially with regard to young people. From this research, it appeared that the following occurrences have been experienced during the Covid-19 pandemic: traumatic experiences (in general), social isolation, loss of education and routine, disruption of formal and informal support, and loss or reduced access to school services and support systems. From this research, it moreover appeared that children and young people who already lived in deprivation, had been more likely to suffer from higher levels of mental distress than their more affluent peers, a fact that was attributed to pre-existing household and socio-economic conditions.⁵⁴

According to the European Centre for Disease Prevention and Control, a number of organisations reported on a variety of negative consequences of school closures on children's general well-being, learning opportunities and safety, even in cases whereby face-to-face classroom teaching and learning was replaced by (in theory) full-time distant or remote learning. These effects ranged from disruption of learning, an exacerbation of disparities and mental health problems, to even an increased risk of domestic violence.⁵⁵ These negative impacts were, moreover, reported to have been disproportionately affecting children originating form vulnerable or marginalised population groups. The European Centre for Disease Prevention and Control Research in this regard especially highlighted the role of school settings in providing an active social life to children aged 2–10. Such social contacts, purportedly, helps such young children to learn from their peers, which is said to have a positive impact on the formation of personality and sense of identity. By contrast, disruptions in such peer relationships have in children been associated with depression, guilt and anger issues. In addition, school settings and related out-of-school extra-curricular activities may help to provide structure, meaning and daily rhythm to both children and young people. For children and young people already suffering from issues such as anxiety and depression, the loss of these activities may have worsened symptoms, as well as enhanced social withdrawal behaviour and feelings of abandonment.⁵⁶

⁵³Thorell et al. (2021).

⁵⁴Marmot et al. (2020), p. 30.

⁵⁵It has indeed been found that children were at increased risk of domestic violence during times of school closures. In these circumstances, children no longer had regular face-to-face interaction with teachers and other school staff members who, in normal circumstances, can be the ones to detect and report such abuse. An important element in this regard is that, outside school settings, children do not have an external social network or other support system for dealing with abuse at home. Beyond the immediate damaging effects, child abuse and neglect can also have long-term effects, including mental health problems, sexually transmitted disease, unwanted pregnancies and substance abuse. (Cf. European Centre for Disease Prevention and Control 2020, p. 18.)

⁵⁶European Centre for Disease Prevention and Control (2020), p. 18.

8.2.3.2 The United Kingdom

According to Marmot, et al., already prior to the first Covid-19 related lockdown periods, the number of UK children exposed to violence was already extremely high. According to some numbers referred to by Marmot, et al., an estimated one in five children were victims of such domestic violence. It was, furthermore, estimated that during the first Covid-19 lockdown period, there had been an increase of domestic violence within the United Kingdom of at least 25%, with some surveys pointing out that increases may in fact have been even higher. From a Women's Aid study on the impact of Covid-19 containment on domestic violence referred to by Marmot, et al., it even appeared that 53% of respondents to this survey had declared that their children witnessed more violence towards them. Also in the United Kingdom, common school settings, as well as a further range of related services, under normal circumstances play a crucial role for identifying and supporting child abuse. These settings and services were under the tough Covid-19 containment measures no longer available.⁵⁷

8.2.3.3 The United States

In order to measure the effect that the year 2020 had on children, by the end of 2020, "NBC News" took the initiative of gathering data on a wide range of child protection metrics, especially aimed at finding out what had changed as of March 2020 when the Covid-19 virus had shut down as good as every school in the United States.⁵⁸

Already earlier, it had appeared from a modelling study of the situation in the United States, that a decision to close primary schools was likely to result in the loss of years of life expectancy, compared to a situation in which primary schools would have been allowed to remain open. This modelling study was based on a model that connected, on one hand, school closures to reduced educational attainment and, on the other hand, such reduced educational attainment to (a decrease in) life expectancy.⁵⁹

While it appeared from the NBC News assessment that not all the numbers were bad—e.g., the NBC News pointed to the fact that the numbers on drug and alcohol abuse among young people were down, as were juvenile arrest and incarceration rates—for several other areas of socioeconomic life, the preliminary data collected by NBC News pointed to alarming signs that US children were in trouble because of Covid-19 and more in particular because of the Covid-19 containment measures:⁶⁰

⁵⁷Marmot et al. (2020), p. 30.

⁵⁸Einhorn (2020).

⁵⁹European Centre for Disease Prevention and Control (2020), p. 18.

⁶⁰Einhorn (2020).

- (1) Compared to the year 2019, emergency hospital rooms experienced a 24% increase of mental health-related visits of children aged 5–11 years. The increase of this same figure among older children was even higher, more precisely at 31%.
- (2) Food banks reported being overwhelmed by hungry families. An estimated 17 million children—many of whom did no longer receive free meals in school settings—were said of being at risk of having not enough to eat. Compared to the situation before the Covid-19 pandemic, this figure represented an increase of more than 6 million children facing hunger.
- (3) Most closed schools initiated distant learning programmes, which implied that children had to follow classes from home. In other schools, classes could still be attended in person, with children having to wear face masks and having to sit behind plastic shields. All of this appeared to have had a negative influence on educational performance. E.g., a national testing organization reported that an average third- through eighth-grader who was to undergo a maths assessment in the autumn of 2020, was likely to score 5 to 10 percentile points lower than students belonging to the same age and grade group who had been taking the same test in 2019. It, moreover, appeared that black, Hispanic and poor students were even falling further behind.
- (4) During times of Covid-19, many school classrooms were unusually empty, with lockdowns, personal quarantines and illness all having affected face-to-face school attendance, and with, moreover, computer and internet problems having disrupted online education. Some US districts even reported that the number of students who missed at least 10% of classes (either in person-classes or classes provided through a system of distant learning) had doubled because of Covid-19.
- (5) In addition, an estimated 3 million vulnerable students—e.g., homeless children, children put in foster care, children having disabilities, children still in the process of learning English ...—have not been attending school at all.

NBC News made further reference to Mrs Barbara Duffield who is (or was at the time) the director of School House Connection.⁶¹ In the opinion of Duffield, the whole situation with regard to Covid-19 resulted in a schooling catastrophe. Duffield in particular shared her fears that with so many schools closed, many families were facing the Covid-19 crisis alone, while struggling with issues that could impact them, as well as their schools and communities, for many years to come.⁶² Among the children most affected by this situation, were those who already had to face a variety of racial, socioeconomic and other inequities that only had gotten enhanced since the start of the Covid-19 pandemic. Besides suffering from these inequities as such, the students concerned were in many cases already running behind their peers with regard to school matters. As a further result of the Covid-19 pandemic and of

⁶¹Cf. https://schoolhouseconnection.org. Accessed on 15 May 2021.

⁶²Einhorn (2020).

the containment measures for fighting in, these students now also had to face inadequate learning, besides a lack of language acquisition in school settings outside of classes (e.g., in contacts with peer pupils) and of teaching materials they needed. There was, moreover, a general gross neglect of students with learning disabilities across the United States that these students had to deal with.⁶³

According to NBC News, there was, furthermore, growing evidence that, during the Covid-19 pandemic, children, as well as their parents, were experiencing a variety of mental health issues, such as increased depression, anxiety and trauma. According to experts referred to by NBC News, children who had no access to school settings because of the Covid-19 pandemic could even be compared to children who had experienced (and survived) a natural disaster.⁶⁴

By the end of 2020, it remained very difficult to measure the real impact of the still ongoing Covid-19 pandemic on the situation of children. This was, to a large extent, due to the fact that most official public health and child welfare metrics monitored by federal agencies did not yet include the data from 2020 in their reports. Data collection was, moreover, expected to be troubled given the large number of children who had not been in any contact with their schools and who had not been seeing doctors (due to the fact that their parents and families had no health insurance or were simply delaying medical treatment out of fear of the Covid-19 virus).⁶⁵

NBC News also made reference to Paul Gionfriddo who is (or at the time was) the President and CEO of Mental Health America, an organisation aimed at supporting people suffering from mental illnesses. In the assessment of Gionfriddo, it was clear that no part of the American population has been more affected by the mental health aspects of the Covid-19 crisis than children. Gionfriddo thereby referred to the Covid-19 pandemic as an "ongoing traumatic event". Contrary to adults, children had to endure this "ongoing event" without the perspective of an older person who already has experienced other types of trauma in his life and who is thus, in normal cases, more able of putting the Covid-19 related events somehow in perspective. Mental Health America, moreover, declared that it witnessed about 10,000 people taking its online depression and anxiety screening every day throughout the year 2020. This number was twice as high as during previous years, with the biggest spike reported regarding children aged between 11 and 17. In the opinion of Gionfriddo, this group of young people was also the one most likely to point to recent and frequent thoughts of suicide or self-harm.⁶⁶

Finally, the negative effects of Covid-19 regarding children were expected to be the worst for "ghost pupils", i.e., children who appeared to have simply disappeared from the schools' radars altogether, and for whom it was, hence, no longer clear what they were doing. When schools throughout the United States closed somewhere in mid-March 2020, that was also the last time when such ghost children had spoken to

⁶³ Einhorn (2020).

⁶⁴Einhorn (2020).

⁶⁵Einhorn (2020).

⁶⁶Einhorn (2020).

a teacher. Since then, they never picked up a laptop, never logged on to distant learning, and have no phone they could answer.⁶⁷

8.2.4 Health and Mental Problems of Teachers

According to the European Centre for Disease Prevention and Control, in many schools throughout the EU, teachers themselves faced significant mental health problems during the Covid-19 pandemic as a result of their work. These problems were caused by, among other things, a fear of being contaminated by the Covid-19 virus themselves, a fear of having colleagues and other school personnel admitted to hospital because of Covid-19, challenging behaviour of their students (such as non-compliance with Covid-19 social distance or other containment measures), being confronted with the fears and frustrations of parents, and an increased workload associated with absences of students (who then were in need of individual guidance afterwards), the adjustment of work routines in school settings and having to be available for students and their parents outside school schedules. Moreover, teachers had in many cases to adjust to distant or remote education themselves in circumstances that were far from ideal. One of the main issues teachers experienced in this regard concerned technical difficulties that were only gradually solved (e.g., not having timely access to the tools needed for distant teaching). Overall, teachers throughout the EU also had to face an increased workload, with ergonomic and other health-related problems to be expected in these circumstances.⁶⁸

In an "American Educational Resources Survey" (abbreviated as "AIRS"), which was conducted in May and June 2020 among a representative sample of teachers and principals associated with the RAND Corporation's American Educator Panels, and with representative samples of educators taken from 12 states, teachers were presented with the opportunity to respond to the open-ended question, "In your opinion, what is the greatest challenge to teaching and learning related to COVID-19?" Teachers' responses often described a combination of such challenges, leading to the suggesting that these challenges were deeply intertwined. The researchers conducting the survey identified the following four main themes in the teachers' responses, with the first theme representing the most frequently reported challenge:⁶⁹

(1) About 43% of the surveyed teachers indicated concerns connected to communication with students and student engagement, such as difficulties of reaching all students, concerns about students completing (or not completing) assignments, and difficulties holding students responsible for their schoolwork.

⁶⁷Einhorn (2020).

⁶⁸European Centre for Disease Prevention and Control (2020), p. 18.

⁶⁹Stelitano et al. (2020), p. 2.

- (2) Some 31% of the surveyed teachers expressed concerns about teaching in the context of distant or remote learning settings, including how to teach new content online, provide feedback to students, engage in asynchronous teaching, monitor students' progress and assess students' understanding.
- (3) About 27% of the surveyed teachers indicated difficulties with regard to their students' families, such as teachers' inability to reach and support their students' families, challenges students were facing in their home and family life situation, concerns about families' ability to support students' distance learning, and concerns about students' families' (in)ability to meet the students' basic needs during the Covid-19 pandemic.
- (4) About 20% of the surveyed teachers reported difficulties with the technology available to their students, including students' lack of access to the Internet, students' lack of access to devices, and students' or families' difficulties using technology.

8.2.5 Problems for Parents

After an intense period of home-schooling because of Covid-19 lockdown and similar containment measures, parents from all over the world began to share their experiences of home-schooling, both with regard to their children as for themselves.

According to the already referred to research conducted by Thorell, Skoglund, de la Peña, et al., in all investigated countries, with the exception of Sweden, parents noted higher levels of positive experiences from the containment measures for themselves, than for their children. Differences between countries were in this context mostly small, except that the proportion of parents reporting negative experiences from home schooling on themselves was, e.g., lower in Sweden than in all other countries, except The Netherlands.⁷⁰

In terms of parental worry and stress, the proportion of parents experiencing these was higher than 40% in many countries.⁷¹ In all countries that were part of the research, about a third of the parents was of the opinion that home schooling demanded too much from their children. Some parents also indicated that their child was not able to participate fully under home-schooling settings.⁷²

⁷⁰Thorell et al. (2021).

According to the study undertaken by these authors, a substantial proportion of parents reported positive experiences of home-schooling for the children and for themselves. E.g., the proportion of parents reporting positive experiences of home-schooling was even higher than that of parents reporting negative experiences in both Sweden and the Netherlands. (Cf. Thorell et al. 2021.)

⁷¹Thorell et al. (2021). ⁷²Thorell et al. (2021).

⁸¹⁴

8.2.6 School Closures and Social Inequalities

In 2020, UN Secretary General António Guterres declared that the Covid-19 pandemic had caused the greatest educational disruption in history, with schools having been closed in more than 160 countries by mid-July 2020, and with over a billion students affected worldwide.⁷³

During the period March-June 2020, some form of school closure-whether in institutions of higher education, secondary schools, primary schools and child day-care centres—had been resorted to in each of the EU/EEA member countries. It has been estimated that around 58 million primary and secondary school pupils throughout the EU had been deprived of their usual face-to-face school learning settings during several weeks in a row in March-April 2020. This was obviously considered detrimental for all children concerned, even in cases where online learning was offered as an alternative for physical school settings. However this situation was believed to be even more disadvantageous for children who had already been marginalised and/or belonging to minority or otherwise vulnerable groups prior to the pandemic. The most obvious example concerned pupils who were living in poverty. For these children, as already explained before, the school setting is not only a place of learning, but also a provider of some additional vital services, not in the least the provision of daily meals. It is no surprise then that research on the impact of Covid-19 has pointed to the fact that school closures due to Covid-19 exacerbated deprived students' food insecurity and decreased their nutrient intake. This, in turn, was deemed likely to further influence said poor children's ability to learn during the school closure periods in a negative manner.⁷⁴

These findings were, to a large extent, confirmed for the specific situation of the United Kingdom. During the first wave of the Covid-19 pandemic, it more precisely appeared that school closures in the United Kingdom resulted into increased pressure on family finances. This was in the first place attributed to the fact that free school meals had been suddenly withdrawn from 1.3 million deprived children. In response, authorities resorted to alternative food voucher systems for alleviating child hunger. However, it appeared that such alternatives did not succeed in successfully eliminating the problem of child hunger, leading to further reports of increased hunger and food deprivation among young people. E.g., the Food Foundation indicated that in households where there were three or more children, food deprivation increased from 12% in times before Covid-19 to 16% in the period between March and August 2020.⁷⁵

According to Borkowski, et al., schools generally fulfil an important role in directly providing health and nutrition services during the first 8000 days of a child's life, which converge with the period in the life of a child that is essential for development. According to these authors, an estimated 1.6 billion school attending

⁷³United Nations (2020).

⁷⁴European Centre for Disease Prevention and Control (2020), pp. 18–19.

⁷⁵Mamot et al. (2021), p. 30.

children in 199 countries around the world have since the start of the Covid-19 pandemic been negatively affected by school closures. For school meals in particular, this implied that nearly 370 million children, in 150 countries, had been deprived of their daily school meals. According to another estimation, all over 2020 and on a global scale, around 39 billion school meals have not been handed out because of school closures. It has, moreover, been estimated that children around the world were deprived of an average of 4 out of every 10 school meals that they would in normal circumstances—i.e., without school closures due to Covid-19—have received. In some countries, it was even estimated that children had missed 9 out of every 10 school meals.⁷⁶

Another problem that arose due to school closures was that pupils who were forced to learn from home during a period when their schools were closed due to Covid-19 containment measures, were in need of infrastructure—both a device suitable for following online classes and internet-connectivity–, as well as a quiet setting to follow online classes and study. This again proved the most problematic for children who were already deprived before Covid-19. E.g., from a study undertaken in several EU countries, it appeared that deprived pupils were more than three times more likely to have no connection from home to the internet than their richer counterparts. Based upon a reading achievement scale for fourth grade students, the study also pointed to a 5% increase in educational disadvantages because of school closures.⁷⁷

Similar trends were moreover identified in several other studies.⁷⁸

E.g., from a joint study undertaken by the United Nations Children's Fund and the International Telecommunication Union, it appeared that in 2020, globally, around two-thirds of children and young people aged 25 and under were deprived of an internet connection in their home environment. However, from this same study, it also appeared that internet access varied greatly according to the relative wealth of the countries concerned: 87% of said children and young people living in high-income countries were said to have an internet connection available at their home setting, while this percentage only amounted to 6% in low-income countries. This pattern, moreover, held true for all relevant age groups that had been the subject of said study (i.e., school-going children aged 3 to 17, and young people aged 15 to 24). In addition, strong inequalities in digital connectivity could be observed in different regions of the world. E.g., in Eastern Europe and Central Asia, about 60% of the children and young people aged 25, or younger, were said to have access to the internet from their home setting. A comparable situation, albeit based on a percentage that was a bit lower, could be observed in the regions of East Asia, the Pacific, Latin America and the Caribbean, where at least 50% of children and young people were reported to have access to an internet connection from their homes. However, in the regions of South Asia and Eastern and Southern Africa, only 13% of the

⁷⁶Borkowski et al. (2021).

⁷⁷European Centre for Disease Prevention and Control (2020), pp. 18–19.

⁷⁸European Centre for Disease Prevention and Control (2020), p. 19.

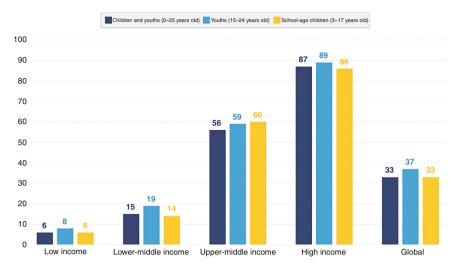


Fig. 8.6 Percentage of children and young people with internet access at home, by country income group [Source: United Nations Children's Fund and International Telecommunication Union 2020, p. 4]

children and young people were reported to have internet available at their home. In the regions of Western and Central Africa, this percentage was even lower and amounted to 5% only. Furthermore, the actual numbers behind these abstract percentages are even more striking: throughout 2020 and on a global scale, an inconceivable 2.2 billion children and young people aged 25 or younger—amongst whom around 1.3 billion school-going girls and boys aged between 3 and 17, and around 760 million other young people aged between 15 and 24—were deprived of an internet connection in their home setting.⁷⁹ Figure 8.6 gives an overview of the percentage of children and young people with internet access at home, by country income group. Figure 8.7 gives a similar indication of the percentage of children and young people with internet access at home, by region.

In 2020, globally, only 25% of people aged 25 and under living in the countryside had internet access at home. This percentage amounted to 41% with their urban counterparts, implying a 16% global difference between rural and urban youngsters. However, some world regions experienced a much larger gap. E.g., in the regions of Latin America and the Caribbean, 27% of rural youngsters were said to have access to the internet available at home, compared to 62% of their urban counterparts, a difference which amounted to 35 percentage points.⁸⁰ The presence of a rural-urban internet access divide was in many ways believed to be a function of a country's income level. Indeed, from data in 2020, it appeared that such a divide was as good

⁷⁹United Nations Children's Fund and International Telecommunication Union (2020), p. 4.

⁸⁰United Nations Children's Fund and International Telecommunication Union (2020), p. 7.

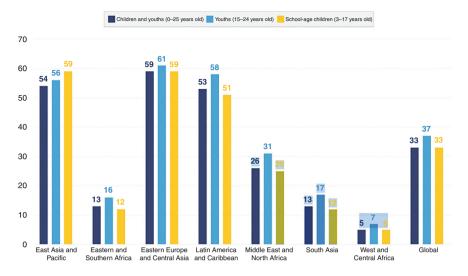


Fig. 8.7 Percentage of children and young people with internet access at home, by region [Source: United Nations Children's Fund and International Telecommunication Union 2020, p. 5]

as non-existent in high-income countries, but was much more significant in low-, low- and upper-middle-income countries.⁸¹

From other research, it appeared that even in the United States, access to the internet in home environments, while widespread, was far from ubiquitous. According to the "American Instructional Resources Survey" (abbreviated as "AIRS") conducted in May and June 2020 among a group of teachers deemed representative for the whole country, it was found that, on a national scale, only half of the surveyed teachers were under the impression that "all or almost all" of their students had access to the internet at home, with, in addition, 29 and 14% of the surveyed teachers pointing out that respectively "about 75 per cent" and "about 50 per cent" of their students had internet available in their home environment. According to the researchers who conducted the survey, these responses indicated that teachers believed that students' home internet access was "widespread", but far from "ubiquitous". However, the surveyed teachers' estimates with regard to their students' home internet access still varied considerably depending on the demographics of the schools in which they worked. Teachers in rural schools, in schools located in small towns, in schools with higher percentages of students of colour, and in high-poverty schools (i.e., schools with higher-than-average percentages of FRPL-eligible students) were significantly less likely to report that "all" or "almost all" of their students had internet access at their home settings. It, moreover, appeared that differences in internet access were most pronounced by school poverty level. More in particular, only 30% of the surveyed teachers employed by schools in

⁸¹United Nations Children's Fund and International Telecommunication Union (2020), p. 7.

the highest school poverty category (with between 76 to 100% of their pupils eligible for FRPL-support) indicated that they believed that all or almost all of their pupils had access to the internet in their home environment. This was 53 percentage points lower than the estimates of teachers employed by schools belonging to the lowest poverty category (with only between 0 and 25% of their pupils eligible for FRPLsupport). Almost all respondents to the survey, moreover, reported that their school provided some form of support to students with accessing technology. Of these, 78% indicated that their school had provided devices suitable for online learning to students. In addition, it was pointed out that 73% of schools had provided information to families on how to obtain internet access, but that only 45% of schools had provided students with internet access hot spots. Given the number of teachers who indicated that their students did not have access to the internet in their home environment, it was however assumed that information alone would most probably not be enough to bridge the internet access gap between students from affluent families and students from deprived families. Teachers' responses to the open-ended survey question, furthermore, suggested that, even with such additional support, household access to the internet and technology may not have been ideal for participating in distant education. E.g., internet connections were said to be too slow or unreliable in some cases, while families with more than one child may have been in need of more than one device.⁸²

Due to a range of reasons, children originating from lower socio-economic backgrounds were also less likely to have access to parental help-or help from other family members—with their homework. This competitive disadvantage is already of huge importance under normal circumstances, but became even more accentuated in a context of distant learning due to Covid-19. In addition, disabled children were facing particular difficulties due to school closures. One such additional problem was that children and young people with disabilities were likely to feel more isolated than other people. Another problem was that, because of lockdowns, the special support services that these children and young people with disabilities needed, were often closed. It was, similarly, pointed out that parents caring for children with chronic illnesses (e.g., asthma, autism, attention deficit hyperactivity disorder, anxiety, diabetes ...) and who had to get involved in home schooling or distant learning, in most cases had to endure higher levels of stress than the parents of children without these conditions. This may in turn have affected parents' own job security and mental health, which could, ultimately, backfire on the safety of their child.⁸³

⁸²Stelitano et al. (2020), p. 3.

⁸³European Centre for Disease Prevention and Control (2020), pp. 18–19.

8.2.7 Costs to Schools and Economic Impact of School Closures

Research on the United Kingdom dating from before the Covid-19 pandemic and referred to by the European Centre for Disease Prevention and Control, already assessed the cost-effectiveness of school closures. From this research, it appeared that the economic costs of school closures in the United Kingdom amounted to between EUR 0.28 billion and EUR 1.68 billion on a weekly basis. From other research dating from before the Covid-19 pandemic, it appeared that when school closures are resorted to as part of a package of containment measures, next to, e.g., antiviral prophylaxis and preventive vaccination, although such school closures added to health improvement, they were at the same time the least cost-effective of the measures evaluated. From a modelling study regarding Canada referred to by the European Centre for Disease Prevention and Control, it had similarly appeared that packages of measures for fighting a disease that included school closures were the least cost-effective. The latter was attributed to the significant costs that arise because of lost working (for staff members) and schooling (for students) days, while said packages resulted into relatively low gains in terms of years of life saved. From two other studies referred to by the European Centre for Disease Prevention and Control, it, furthermore, appeared that school closures of a very limited duration, in combination with certain other measures, such as home-based antiviral prophylaxis, were the most cost-effective.⁸⁴

The OECD attempted to make a cost-estimate of the actual school closures that were resorted to in response to the Covid-19 pandemic. From this, it appeared that the estimated economic cost of these school closures has been enormous. The long-term economic loss was estimated in terms of decreased GDP due to lost learning opportunities in the Covid-19-year 2020 for students belonging to grades 1-12, under a first assumption that lost learning had occurred with regard to one third of an academic year and under a second assumption that these closures had led to a decrease in labour force skills and in economic productivity. The estimated costs under this OECD projection were considerable: over USD 3087 billion (or EUR 2546 billion) as regards Germany, and over USD 2137 billion (or EUR 1762 billion) as regards France.⁸⁵

There are also indirect costs economic resulting from school closures. An estimate of these indirect costs resulting from school closures in response to the Covid-19 pandemic has been made for the UK economy. This was based on a simulation of two scenarios: a "mitigation scenario" for a duration of 12 weeks, and a "suppression scenario" for a duration of seven months, in both cases with as starting date 23 March 2020. The first impact measured was labour lost by labouring parents of school-going children attributable to the Covid-19 school closures. This estimation

⁸⁴European Centre for Disease Prevention and Control (2020), p. 19.

⁸⁵European Centre for Disease Prevention and Control (2020), p. 19. Cf., for the OECD study on which this assessment has been based: Hanushek and Woessmann (2020).

amounted to EUR 74 billion (equalling 2.9% of GDP) in case of a mitigation scenario and to EUR 186 billion (equalling 7.3% of GDP) in case of a suppression scenario.⁸⁶ A second impact that was measured was the health-related burden on the UK economy. This estimation amounted to EUR 45 billion (equalling 1.73% of GDP).⁸⁷

The European Centre for Disease Prevention and Control, furthermore, referred to a Cochrane systematic review of 42 other studies dealing with school closures. From this Cochrane review, it appeared that five of said other studies had assessed the socioeconomic implications of the Covid-19 school closures. In these studies, it was remarked that the loss of parental labouring activity resulting from prolonged school closures and/or from resorting to distant learning, led to an immediate economic harm on two levels. First, to the families in which the parents were no longer able to work (as usual). Second, on the macro-economic level, school closures resulted into reduction in GDP. From this, it was concluded that the economic cost of school closures far exceeded direct health costs for dealing with the Covid-19 disease as such.⁸⁸

When performing such assessments, it had to be taken into account that a successful reopening of schools during the Covid-19 pandemic required sufficient means for implementing and maintaining containment or mitigation strategies, avoiding the further spread of the Covid-19 virus. This has been measured in terms of financial impact regarding the United States. From these measurements, it has appeared that the estimated average cost per "pre-kindergarten to grade 12" student for implementing measures that were recommended by the CDC, on average, amounted to USD 55 per student for materials and consumables. However, this cost increased to an average of maximum USD 442 per student in cases where a school district was either mandated or voluntarily choosing to employ the maximum number of additional custodial staff per school out of safety concerns and to add additional means of transportation in order to optimise physical and social distancing.⁸⁹

⁸⁶European Centre for Disease Prevention and Control (2020), p. 19.

⁸⁷Hanushek and Woessmann (2020). Cf., furthermore, European Centre for Disease Prevention and Control (2020), p. 19.

⁸⁸European Centre for Disease Prevention and Control (2020), p. 19.

⁸⁹European Centre for Disease Prevention and Control (2020), p. 19.

Costs could however also be lower, depending on the evolution of the educational model resorted to, especially when schools moved from "virtual learning" to "blended" or "correspondence" learning. (Cf. European Centre for Disease Prevention and Control 2020, p. 19.)

8.2.8 Specific Problems Related to Higher Education

With regard to HEIs in particular, in their HEI survey (as conducted in March-April 2020) referred to before, Marinoni, van't Land and Jensen came to the following general conclusions (based on their previously cited survey):⁹⁰

- Almost all of the HEIs that partook in the HEI survey said that they had been affected by Covid-19: 59% of said HEIs declared that they had stopped all campus activities and that they had completely closed their institution.
- Almost all of the HEIs that partook in the HEI survey (91%) declared that they had the infrastructure in place needed for effective communication with both their students and staff members about Covid-19. Despite this, HEIs responding to the HEI survey also declared that clear and effective communication with both staff members and students remained challenging.
- Almost 80% of the HEIs that partook in the HEI survey were of the opinion that Covid-19 would have an impact on students' enrolment. Almost half of the HEI survey respondents (46%) was of the opinion that this impact would affect both international and local students. Some of the HEIs that responded to the HEI survey, in particular private HEIs, indicated that this impact was likely to lead to negative financial consequences.
- Two-thirds of the HEIs that partook in the HEI survey mentioned that their managerial and administrative staff and/or members of their faculties had been consulted by government (or other public) officials on public policy matters relating to Covid-19.
- Almost half (48%) of the HEIs that partook in the HEI survey pointed out that their supervisory public authorities (e.g., governor or minister of education) would support their school in mitigating the disruption on academic learning caused by the Covid-19 pandemic. The most common support referred to was assistance for allowing students to complete the running academic year.
- With regard to partnerships, 64% of the HEIs that partook in the HEI survey declared that Covid-19 was expected to have various effects. Half of said HEIs believed that Covid-19 would have a weakening effect on such partnerships, while 18% of the responding HEIs were of the opinion that Covid-19 would have a strengthening effect. However, 31% of the HEIs that partook in the HEI survey,

⁹⁰Marinoni et al. (2020), pp. 10-11.

These results were based on 424 complete responses from single HEIs located in 109 countries and two special administrative regions of China (notably Hong Kong and Macao). The results were analysed both globally and regionally with regard to four world regions (namely Africa, the Americas, Asia & Pacific and Europe). However, the authors of the study pointed out that while Africa and Europe were over-represented in their survey, the Americas and Asia & Pacific were under-represented. The authors of the study also pointed to the fact that the profile of respondents was broad, with faculty members (20%), head teachers (17%) and international office heads (16%) being the most common respondents. (Cf. Marinoni et al. 2020, p. 10.)

indicated that the Covid-19 pandemic could create new opportunities for cooperation with partner institutions.

- By almost all of the HEIs that partook in the HEI survey, Covid-19 was reported to have impacted teaching and learning in a severe manner. The most reported impact, reported by two thirds of the correspondents, concerned the fact that traditional methods of physical teaching and learning had mostly been replaced by distant or remote teaching and learning. In addition, it was indicated that the transition from face-to-face teaching and learning to distant or remote teaching and learning to distant or remote teaching and learning to distant or remote teaching and learning was not without its challenges. The main challenges concerned (insufficient) availability of technical infrastructure, skills and pedagogic qualities needed for implementing distant or remote teaching in general and unaddressed requirements with regard to teaching specific fields of academics in particular.
- It was also indicated that the mandated shift to distant or remote teaching and learning had many advantages as well, such as: vast opportunities to provide more flexible learning opportunities to students, introducing and encouraging blended or hybrid learning models (based on a combination of physical teaching and learning, and distant teaching and learning), and combining synchronous ("life") with asynchronous ("pre-recorded") teaching.
- Covid-19 was reported to have impacted international student mobility in 89% of the HEIs that partook in the HEI survey (cf., furthermore, below). The nature of this impact was diverse and varied from HEI to HEI, although it had been negative everywhere. The majority of the HEIs that partook in the HEI survey, moreover, reported that they had contingency plans in place for mitigating this impact.
- 60% of the HEIs that partook in the HEI survey reported that Covid-19 had led to an increased virtual mobility between institutions and/or to new forms of collaborative online teaching by means of alternatives to student mobility of a physical nature. HEIs indicated that these possibilities may have saved internationalization, although the authors of the survey pointed out that this matter still needed to be analysed in more detail.⁹¹
- Just over half of the HEIs that partook in the HEI survey indicated that they
 intended to go through with semester examinations as planned, albeit in the
 majority of cases based upon new measures. There were, however, substantial
 regional variations on this matter: 80% of the European HEIs that partook in the
 HEI survey indicated that they were planning to effectively organise

⁹¹According to Sahu, the Covid-19 outbreak had, obviously, led to chaos for airlines on a global scale. As countries around the world started closing their international borders in order to mitigate or contain the spread of the Covid-19 virus, HEI administrations started urging their staff members to postpone all participation in any event that would require international travel until normalcy would again be restored. However, many staff members had already made expenses related to such international activities, such as having paid for conference fees, hotel or other living accommodations and airway tickets. There was, obviously, much confusion among staff members how to deal with such situations. (Cf. Sahu 2020.)

examinations, while 61% of the African HEIs that partook in the HEI survey had indicated that they were most likely to postpone or cancel examinations.

- With regard to academic research, 80% of the HEIs that partook in the HEI survey indicated that research activities had been negatively affected by the Covid-19 pandemic at their institutions. Cancellations of international academic exchange visits were reported by 83% of said HEIs, while the cancellation, or postponement, of academic conferences was reported by 81% of said HEIs. In addition, 52% of said HEIs indicated that academic research projects might not be completed.
- 41% of the HEIs that partook in the HEI survey declared that they were involved in Covid-19 related research. By contrast, a large majority of HEIs that partook in the HEI survey indicated that one or more of their staff members were contributing to Covid-19 related public policy. More in particular, about three quarters of the HEIs that partook in the HEI survey declared that they contributed to public policy either through their institutional leadership or through their researchers. A quarter of the HEIs that partook in the HEI survey declared that they were considered important players in the development of public policy in their country, both on an institutional level and at the level of individual experts.
- For the vast majority of the HEIs that partook in the HEI survey, Covid-19 had a
 huge impact on their so-called "community engagement initiatives". In half of the
 cases, this impact was believed to be positive, with, e.g., the Covid-19 crisis
 leading to increased HEIs' community engagement, while in about a third of the
 cases, this impact was believed to be negative to the extent that it had decreased
 HEIs' community engagement activities. Considered regionally, the impact of
 Covid-19 on community engagement was uneven, with Covid-19 mainly having
 increased community engagement in the Americas and mainly having decreased
 it in the Asia-Pacific region.

International students at HEIs faced some further specific problems, including:

- (1) International students being trapped in a host HEI.
- (2) Travel difficulties.

At the beginning of the Covid-19 epidemic, many international students studying in other countries faced problems travelling back to their home countries. Some HEIs even had advised international students not to travel abroad but to continue their studies in, e.g., hostels.⁹² As HEIs closed their campuses, it then appeared that many of these "stranded" foreign students did not have access to alternative facilities for a variety of needs (such as housing, meals, studying . . .) outside the campuses of the HEIs they attended. The main challenges that HEI administrations in this regard were facing, concerned practical matters, such as the provision of housing accommodation and meals, as well as security services. The foreign students stranded at HEIs outside their country were also in need of appropriate advice and support on

⁹²Sahu (2020).

how to protect themselves from contacts with other people and on how to isolate themselves until the public health situation would turn to normal, or sufficiently normal. Another practical problem concerned the financing of extensions for staying in the country where the host HEI was located in case of suspension of curriculum activities and/or postponements of examinations. Foreign students who had managed to return home often feared that their studies would be interrupted. Such students often faced the difficulty that they no longer had sufficient access to adequate equipment (e.g., libraries, books, computers, a broadband internet connection ...) for continuing their studies (e.g., through distant learning). The disruptions caused by Covid-19 also posed specific administrative problems for international students, e.g., in gaining admission for a coming academic session or year.⁹³

Most of these findings have been confirmed by another survey conducted by Marinoni, van't Land and Jensen.⁹⁴ The survey conducted by these researchers has indicated that in Europe, almost all HEIs surveyed (i.e., 95%) had been affected by Covid-19. These percentages were also high in the Americas (namely 91%) and with regard to the Asia-Pacific region (namely 85%), but somewhat lower in the African region (namely 78%).⁹⁵ The type of impact of Covid-19 on international student mobility reported in this survey, appeared to be diverse and varying across the four regions.⁹⁶

8.3 Search for Alternative Solutions

8.3.1 General

In light of the various problems schools faced, both policymakers and schools themselves began to address lost learning opportunities, leading to a diverse range of policy responses. More than a third of the countries that partook in the survey on which the Joint Report was based, thus introduced remediation programmes for helping children in their studies.⁹⁷

⁹³Sahu (2020).

⁹⁴Marinoni et al. (2020), p. 27.

⁹⁵Marinoni et al. (2020), p. 27.

⁹⁶Marinoni et al. (2020), p. 28.

Only with regard to Europe was the survey option "International students are anchored in our own institution" indicated by more than half of the HEIs concerned (53%). This was also a common impact reported by HEIs based in Africa (but with a lower percentage of HEIs, namely 38%), Asia and the Pacific (with 45% of HEIs, where the percentage was the same as for "Student exchanges with certain countries have been cancelled"), while in the Americas it concerned the third most common impact (having occurred in 40% of the surveyed HEIs). The most common impact in the Americas was "Student exchanges with some countries have been cancelled" (namely in 49% of the surveyed HEIs). (Cf. Marinoni et al. 2020, p. 28.)

⁹⁷UNESCO, UNICEF and The World Bank (2020), p. 19.

8.3.2 Distant Learning

8.3.2.1 Distant Learning in General

According to the Joint Report, one of the most widely used measures to address the problems caused by school closures in response to the Covid-19 pandemic, has been distance (or distant) learning. This method of learning allowed children to continue their education through a variety of alternative modalities for physical classes, including online platforms, educational programmes broadcasted on traditional media (namely TV and radio) and take-home paper packages.⁹⁸

According to the Joint Report, it is widely acknowledged that even a brief interruption to children's schooling may have a lasting negative effect on their education. When all around the world schools had to close at the onset of the Covid-19 pandemic, this insight made the deployment of alternatives for physical schooling a matter of primary policy concern. This would soon result in the activation of a variety of learning methods that got referred to as "distant", "distance" or "remote" learning. In addition, some key guiding principles were established on the use of the variety of delivery channels deployed for such distant learning, including (1) the need for dealing with what has been referred to as "the digital divide", (2) the selection of existing (open) accessible content, where available, and (3) the provision of appropriate support to students, teachers, parents and caregivers for delivering and accessing distance learning systems.⁹⁹

Overall, e-learning and television were indicated as the most widely resorted to means for distant learning. These methods were more in particular offered in 90% and 87% of the countries that partook in the survey of the Joint Report respectively. These methods were followed by paper-based take-home materials (resorted to in 85% of the surveyed countries) and radio-based distant learning (resorted to in 61% of the surveyed countries). The Joint Report in this regard mentions that the differences in economic and financial strength between income groups of countries caused wide inequalities for accessing the technologies needed for distant learning. It was also pointed out that, although these differences were already in place in times before Covid-19, the Covid-19 pandemic has further exacerbated these differences, resulting in what has been referred to as a "digital divide" that especially affected the poorest communities within and between countries in a disproportionate manner.¹⁰⁰

These findings of the Joint Report have been largely confirmed by another report from UNICEF that appeared in 2021 under the title "COVID-19 and the School Closures: A Year of Education Disruption" (hereafter referred to as the "UNICEF 2021-report").¹⁰¹ The UNICEF 2021-report more in particular states that in the period from 11 March 2020 until 2 February 1921, more than 90% of the world's

⁹⁸UNESCO, UNICEF and The World Bank (2020), p. 20.

⁹⁹UNESCO, UNICEF and The World Bank (2020), p. 21.

¹⁰⁰UNESCO, UNICEF and The World Bank (2020), p. 21.

¹⁰¹UNICEF (2021), p. 10.

competent authorities (i.e., in most cases, ministries of education) mandated schools to resort to some form of distant learning through radio, television or the internet, as an alternative for physical schooling. According to the UNICEF 2021-report, while no distant learning technology is equivalent to the classroom learning experience itself, some of the technologies have features that make it possible to better mimic the physical classroom experience to the extent that they usually require that programmes are pre-recorded. They, moreover, make live interaction between those who speak and/or give explanations during said TV- or radio programmes and the students following the programmes in their classrooms, difficult. By contrast, modern digital technologies, usually based on accessing the internet through personal computers, tablets and/or mobile phones, do not require that programs are pre-recorded (although they neither exclude this possibility) and, in addition, allow for direct life-interaction between teachers and students. They were, for these reasons, deemed more suitable for emulating the classroom experience.¹⁰²

According to the UNICEF 2021-report, however, it appeared that many (of especially the low-income) countries where schools were closed in response to the Covid-19 pandemic for the longest periods of time, were also the countries having the lowest levels of internet connection in students' home settings. As already indicated before (cf. Sect. 8.2.6), many of the students living in these countries had no at home internet connection at their disposal, which implied that these students were unable to benefit from distant teaching and learning opportunities that were based upon internet technologies. This was believed to put this group of already deprived students even more at risk of falling behind in their education.¹⁰³

UNESCO and the International Telecommunication Union jointly estimated that 40% of students registered in closed schools, did not have access to the internet at home. However, this digital gap was not the only obstacle for assuring equal access to distant learning opportunities. Around the world, access to the more traditional technologies for spreading information, such as television and radio, also significantly varied between and within countries. According to Roe, Blikstad-Balas and Pedersen, in 40 of the 88 countries for which recent survey data were available, it appeared that television ownership in urban households was more than double that of rural households, with the largest disparities occurring in sub-Saharan Africa.¹⁰⁴

In high-income countries, the reported hierarchy among the methods used for delivering distant learning was as follows: (1) use of online platforms (use in 95% of the cases); (2) use of paper-based take-home materials (use in 89% of the cases); (3) use of television programmes (use in 63% of the cases) and (4) use of radio programmes (use in 22% of the cases). By contrast, the reported hierarchy among the methods used for delivering distant learning in low-income countries was as follows: (1) use of radio programmes (use in 93% of the cases); (2) use of television

¹⁰²UNICEF (2021), p. 8.

¹⁰³UNICEF (2021), p. 8.

¹⁰⁴Cf. Roe et al. (2021). Cf., furthermore, UNESCO, UNICEF and The World Bank (2020), p. 21.

programmes (use in 92% of the cases), (3) use of online platforms through the internet (use in 64% of the cases).¹⁰⁵

It was in the quoted research reports assessed that the total impact of school closures and the relative effectiveness of distant learning methods were far from clear already, and that this matter still required further research. Still, the perceived effectiveness of distant learning methods could already be temporarily assessed, from which it, furthermore, appeared that huge variations by modality and origin group occurred. The Joint Report in this regard provided the following insights:¹⁰⁶

- (1) Globally, internet-based e-learning platforms were perceived as "very effective" (36%) or "somewhat effective" (58%), particularly in high-income and uppermiddle-income countries. In addition, no high-income countries, and only 6% of the upper-middle-income countries, had qualified e-learning as an ineffective method for delivering distant learning.
- (2) From the Joint Report, it moreover appeared that television was widely used for delivering distant learning in low- and middle-income countries. These two groups of countries, moreover, reported varying degrees of effectiveness. More in particular, 37% of the upper-middle income countries, compared to 16% of the lower-middle income countries and 27% of the low-income countries, indicated television as a very effective means for delivering distant learning.
- (3) On a global scale, radio was rated as an ineffective means for delivering distant learning by more than one of five countries worldwide, although it was believed that this negative assessment was correlated to the prevalence of its use across income groups. More in particular, high-income countries were the least likely to use radio as a means for delivering distant learning, with a third of those who had used it, considering it an ineffective method. By contrast, among low and lowermiddle income countries, radio was both widely used as a means of delivering distant learning and considered "very effective" by about 16% of these countries and "somewhat effective" by 65%.
- (4) Globally, a majority of high- and middle-income countries resorted to take-home paper-based kits, with most (>70%) of these countries rating them as "fairly effective". By contrast, although such paper-based materials were almost as commonly resorted to as online platforms by low-income countries, the latter group of countries judged them in a far more negative manner, with 43% of low-income countries that had used them, having rated them as ineffective.

According to the Joint Report, low-income countries were generally more inclined than other countries to indicate all distant learning methods and modalities

¹⁰⁶UNESCO, UNICEF and The World Bank (2020), p. 22.

¹⁰⁵Cf. UNESCO, UNICEF and The World Bank (2020), pp. 21–22; Roe et al. (2021).

E.g., while Rwandan children were receiving educational content via radio, several other African countries, including Côte d'Ivoire, implemented televised classrooms, an initiative that was based on recording lessons for broadcast on national television. (Cf. Roe et al. 2021.)

as ineffective, with the exception of radio. This has been attributed to wider issues of availability of prior infrastructure, as well as to a general lack of household access to the technology necessary for using said distant learning methods, as all this technology is generally lacking in low-income countries. Distant learning methods were, in addition, widely accepted as valid methods of delivering education. This explains why, in a variety of countries, days on which these methods had been used even counted as official school days. The latter appeared to have been the case in 73% of the countries that partook in the survey on which the Joint Report was based, all having indicated that distant learning qualified as formal schooling. There were, however, once more considerable differences between income groups. According to the Joint Report, only 20% of the group of low-income countries deemed distant learning days sufficient for replacing formal school days. This percentage amounted to 70% in lower-middle income countries, 82% in upper-middle income countries and 86% in the group of high-income countries. Still, over 90% of all countries in all of the income groups indicated that distant learning (regardless of the methods or modalities, i.e., whether through online platforms, television, radio or take-home packages) was likely to continue once schools would reopen.¹⁰⁷

It was, hence, suspected that distant learning systems would prove resilient and adaptable, so that its use could be expanded beyond being a mere stopgap in case of localised or widespread school closures.¹⁰⁸ Goodman has in this regard argued that Covid-19 was an ideal experiment for delivering distant learning on such a large scale, which will likely have enormous long-term benefits. Goodman refers to the following, possible long-term positive effects: (1) the fast development and implementation of a wide variety of online learning methods and solutions, and (2) a possible expansion of virtual schools and other virtual learning environments. Goodman is of the opinion that this could, in practice, revolutionise traditional education. Without denying that traditional school settings play an important social role for children and young people, and that physical "face-to-face" teaching and listening is still vital for personal development, especially to the extent that teaching and learning are essentially social activities, Goodman at the same time argues that the potential of distant education for future gains is impossible to deny. As distant learning is a very young development, Goodman expects that the increased application of information technologies to everyday learning, such as establishing virtual schools and introducing artificial intelligence technology in educational settings, will further enhance educational possibilities. The technology has great potential to support a more personalized virtual teaching and learning experience. This could even result in the creation of truly individualised virtual educational settings that are perfectly suited to the learning curves of each individual student, which may contribute to a more rapid learning progress. The further adaptation of new technologies could, furthermore, result in the development of age- and ability-based learning models, making it possible to tailor school curricula to the needs of gifted

¹⁰⁷UNESCO, UNICEF and The World Bank (2020), p. 23.

¹⁰⁸UNESCO, UNICEF and The World Bank (2020), p. 23.

students or those with learning difficulties. Further developments may include new ways of personal studying, homework, assessment and monitoring for students, or of communicating and interacting with parents. All of this could contribute to a fast development of the concept of "mastery of learning", based on increased personal motivation, leading to greater independence and better results for students.¹⁰⁹

8.3.2.2 Distant Learning in HEIs in Particular

For most HEIs, online teaching and learning was not an entirely new mode of content delivery as these techniques had already, to various degrees, been resorted to by many HEIs all over the world. Many faculty members of various HEIs had already received training on, and been making effective use of, specialised online learning platforms, either as the sole mode of delivery of a given course, or as a complement to more traditional, face-to-face teaching. However, it was also true that other faculty members, even at HEIs which had played a pioneer role with regard to these evolutions towards distant learning environments, were not particularly in favour of using these teaching methods and would even during Covid-19 related HEI closures themselves, remain resistant to adapt to these teaching modes. The transition to the online teaching and learning environments had, consequently, already in times pre-Covid-19 raised questions for some HEIs about the ability to introduce and enhance the new technological systems for every-day use. In addition, Covid-19 created some new concerns, such as the fact that computers and other hardware devices that are suitable for online learning from home, suddenly became in high demand for all members of a given household, ranging from parents and children to other family members who all had to start either working or following courses from home. This implied that working from home could in some cases become a huge challenge for academics. Moreover, many HEIs, especially those located in low(er)-income countries, did not have all the necessary infrastructure or other resources for enabling online teaching and learning with immediate effect. Consequently, the quality of online teaching became a critical issue for HEIs all over the world. This required appropriate policy attention, in some cases for dealing with problems similar to those encountered in other types of schools (cf. Sect. 8.3.2.1).¹¹⁰

In their March-April 2020 survey, Marinoni, van't Land and Jensen found that in almost all of the surveyed HEIs, Covid-19 had effectively affected teaching and learning, with only 2% of the surveyed HEIs (amounting to a mere 7 HEIs) having indicated that teaching and learning had not been affected.¹¹¹ Two-thirds of the surveyed HEIs, moreover, indicated that face-to-face teaching in a classroom had been effectively replaced by distant teaching and learning methods. A quarter of the surveyed HEIs, by contrast, reported that most teaching and learning activities had

¹⁰⁹Goodman (2021).

¹¹⁰Sahu (2020).

¹¹¹Marinoni et al. (2020), p. 23.

gotten suspended at the time of the survey, but that the HEI was working on solutions to rekindle teaching and learning, either by resorting to digital teaching or learning settings, or through self-study. Only 7% of the surveyed HEIs said that all teaching had been cancelled (until further notice).¹¹² These survey results implied that two thirds of the surveyed HEIs had effectively succeeded in mitigating teaching to an online environment, while one third had not been able to accomplish this. However, the majority of the surveyed HEIs remained concerned about the further development of solutions to continue or support teaching online. According to the authors of the survey, these survey results have been largely confirmed by several other research (articles) on the digitization of higher education in times of crisis.¹¹³ However, the survey conducted by Marinoni, van't Land and Jensen, also found that two-thirds of the African surveyed HEIs were not prepared to move teaching online and that when they had closed their campuses, they also had suspended teaching.¹¹⁴

Still according to the survey conducted by Marinoni, van't Land and Jensen, most HEIs were early 2020 confronted with what has been referred to as "a sudden and unprepared transition to online teaching". This transition was undertaken in order to address the need for continued teaching and learning activities when institutions had to close and to keep engaging and motivating their students during periods of time when physical or social distancing measures were in place. According to said authors, this transition was, moreover, determined by three interconnected dimensions that all impacted both the feasibility and the quality of the distant learning offered, namely:¹¹⁵

- (1) Technical infrastructure and accessibility.
- (2) Skills and pedagogic qualities for giving distant learning lessons.
- (3) The field of study.

Marinoni, van't Land and Jensen, furthermore, identified two different trends in the responses that dealt with issues of infrastructure and online access as preconditions for the transition to a distant teaching and learning environment. The survey identified, on the one hand, a number of HEIs that could not make the transition to online teaching and learning due to the fact that their students lacked access to the internet in their home settings. This matter was of particular concern for African HEI's, but also for HEIs located in other low- and middle-income countries. When in such countries lockdown or containment measures were resorted to, HEIs could simply no longer provide teaching and learning, as a further result of which it became, gradually, unlikely that their students would be able to complete the running academic year. The survey, on the other hand, identified a second group of HEIs that faced problems with mitigating to an online teaching and learning environment, notwithstanding the fact that said HEIs were located in countries characterized by

¹¹²Marinoni et al. (2020), p. 23.

¹¹³Marinoni et al. (2020), p. 23.

¹¹⁴Marinoni et al. (2020), p. 24.

¹¹⁵Marinoni et al. (2020), p. 24.

good internet penetration. With regard to this second group of HEIs, it appeared that these, in many cases, lacked the technical infrastructure and/or the technical tools necessary for mitigating to a (full) distant learning environment. Some HEIs belonging to this category indicated that they were confronted with restrictions of a financial nature for investing in state-of-the-art online tools and software licenses. Finally, there was also a group of HEIs that, within the same institution, had to deal with a gap between groups of students who had access to the internet from home and groups of students who did not. For the HEIs belonging to this category, it was especially challenging to ensure equal access to online teaching services that would allow all students to complete their academic year. Some of these HEIs reached the decision to suspend all teaching activities for the duration of the Covid-19 lockdown measures, under the motivation that they would not succeed in reaching a sufficiently large enough group of their students for being able to resort to distant learning without endangering equal treatment.¹¹⁶

Several of the HEIs surveyed by Marinoni, van't Land and Jensen's pointed to the fact that their staff members had been confronted with different pedagogical needs for ensuring distant teaching and learning, and that it had been a huge challenge for many of their educators to accomplish the urgent and in most cases unprepared transition from a face-to-face physical learning environment to a distant teaching and learning environment. In general, the level of preparation, readiness and/or willingness of educators to make this transition to an online teaching and learning environment, moreover, varied widely. This variation occurred between regions, countries, HEI's of a given country and even within a given HEI itself. Yet, even to the extent that resorting to education in an online environment did not guarantee the same level of quality and continuity as face-to-face physical teaching, most HEIs and policy makers still considered it preferable to no teaching at all.¹¹⁷

Another problem has been that HEIs often lacked the management structure to ensure a smooth transition to an online learning environment. This often required a wide variety of adaptations, such as making sure that the teaching staff acquired the skills for moving into e-learning, and acquiring the necessary equipment and software (cf. above). For many HEIs, instead the transition often came down to a "learning by doing" approach, or simply emulating a face-to-face mode of teaching, in a rudimentary online setting.¹¹⁸

Another challenge was that the required technical equipment could widely differ from one academic field to another within a given HEI. This appeared to be especially challenging for diversified HEIs, who pointed to limitations of distant learning in specific academic domains. A good example is the wide variety of

¹¹⁶Marinoni et al. (2020), pp. 24–25.

An interesting solution for this problem that was pursued by one of the surveyed HEIs consisted of providing and distributing technical equipment (such as tablets or phones) to students in order to minimise disruption and inequal treatment. (Cf. Marinoni et al. 2020, p. 25.)

¹¹⁷Marinoni et al. (2020), p. 25.

¹¹⁸Marinoni et al. (2020), p. 25.

academic disciplines that, both for purposes of teaching and research, are highly depend on the use of laboratories. Fields like clinical medicine and veterinary studies spring to mind. Other academic fields concerned those requiring a lot of (personal) creativity, and specialized materials, such as arts, music and design.¹¹⁹

All of the foregoing implied that even in HEIs where both the technical infrastructure and the pedagogical skills required for the transition to online teaching and learning were available and sufficiently reliable, and even where a given faculty was fully committed to adapt to the required change in delivery mode, ensuring the quality of the distant learning experience often depended to a large extent on the characteristics of one discipline to another. This helps to explain why the reported reliability and quality of distant education varied so greatly. A wide variety of factors was at play here, the most important being (1) the infrastructure in place (both within the HEIs themselves as in the home settings of students and teachers), (2) the ability and willingness of teaching staff members to make the transition to online teaching and (3) the peculiarities of the academic field of study.¹²⁰

Notwithstanding all these difficulties and challenges, many of the HEIs that had partaken to Marinoni, van't Land and Jensen's survey still considered the experience of making the transition to a distant teaching and learning environment as a great opportunity, amongst others, for investing financial resources and people's skills in offering more flexible learning solutions, to explore blended and/or hybrid learning methods and for mixing systems of synchronous and asynchronous learning. The unplanned and unprepared transition to online teaching and learning at a distance has serendipitously led to a fast build-up of capacity. According to Marinoni, van't Land and Jensen, a change of mindset may have set in among HEI's around the world. These experiences opened up a new horizon of possibilities in teaching and learning. Some of the surveyed HEIs have indicated that e-learning methods should, also post-Covid-19, become a more integral part of HEI curriculums. Other surveyed HEIs also expected to see a new approach to teaching pedagogical skills, as well as to teaching and learning modalities. Some of the surveyed HEIs also pointed out that the experience with the Covid-19-imposed transition to online teaching and learning

¹¹⁹E.g., music students can usually not achieve good results when only working at home and when being deprived of the necessary equipment for enhancing their skills. Indeed, practice in and with orchestras, and/or practice in the physical presence of a teacher or of fellow students, could not be replaced at the same level by solely relying on isolated practice. Performing the more practical aspects of such studies was therefore particularly challenging, especially to the extent that the teaching provided during a closed online session was often limited to the theoretical dimension of the study curriculum. (Cf. Marinoni et al. 2020, p. 26.)

¹²⁰Marinoni et al. (2020), pp. 25–26.

Obviously, the minimum-prerequisite concerned the availability of a technical infrastructure. It is, hence, not surprising that HEIs operating within areas with unreliable infrastructure experienced more difficulties during the Covid-19 crisis. Similarly, students who did not have the necessary access to online communication tools (including the internet) were among those hardest hit. This has been indicated as one more reason why the Covid-19 crisis has further exacerbated already existing inequalities. (Cf. Marinoni et al. 2020, p. 26.)

environments, could help in breaking the still strongly present taboo on working at home.¹²¹

According to Marinoni, van't Land and Jensen, HEIs are now faced with the challenge to keep investing more in technical infrastructure in order to enable a permanent shift to even more advanced digital learning environments, e.g., based on cloud-based services, digitization of business processes and universal online access to all documents, resources and libraries. According to said authors, this will ultimately enhance the possibilities for distance working in the field of academics and provide lifelong learning opportunities for all concerned learners and, by extension, for society as a whole.¹²²

8.3.3 Policies to Improve Access to Online Learning

According to the Joint Report, the tools needed to allow everyone to enjoy distant learning are not equally spread. This applies to a wide variety of tools, technologies and infrastructure, even very basic necessities such as internet-access and electricity. It especially appears that children and young people living in conflict zones, and rural areas of low(er)-income countries, as well as those from poor households, are most likely to be disproportionally deprived. While, still according to the Joint Report, 53% of households around the world have access to the internet available in their home setting, the proportion of students deprived of internet access at home ranges from less than 15% in the regions of Western Europe and North America, to 80% in the sub-Saharan Africa region. The latter category of students, most often originating from rural locations and/or from low-income households, were de facto excluded from participating in any online distant learning.¹²³

The matter is even made more complex due to gaps in access to online learning stemming from a variety of socioeconomic determinants. The Joint Report has pointed to the fact that, from analyses about household-level data in eight sub-Saharan countries, it has appeared that, even when both technology and internet connectivity are available, girls are far more disadvantaged in acquiring ICT skills both in school and at home. This makes enhancing equal access to technology all the

¹²¹Marinoni et al. (2020), p. 26.

¹²²Marinoni et al. (2020), p. 26. The authors added: "Time will show to what extent these opportunities will be explored or whether there will be a return to business as usual." (Cf. Marinoni et al. 2020, p. 26.)

To address some of these challenges, the European Commission announced in 2020 a new "Action Plan" setting out a vision for improving digital literacy, skills and competences at all levels of education and training, and for all levels of digital competences (basic to advanced). The Action Plan supports the "Skills Agenda" target of ensuring that 70% of 16–74 year olds have at least basic digital skills by 2025. (Cf. European Commission 2020, p. 4.)

¹²³UNESCO, UNICEF and The World Bank (2020), p. 25.

more important for tackling inequalities and, through this, for reducing loss of learning opportunities.¹²⁴

An important trend in enabling access to online learning has become the provision of internet access at a (governmental) subsidised or zero cost (for the end user). From the Joint Report, it appears that at least two-thirds of the surveyed high-income and upper-middle-income countries have implemented this measure for parts of their population, although the measure appeared to be less common in most low- and lower-middle-income countries (38% and 42% respectively). It was, furthermore, reported that during the Covid-19 pandemic, some countries made access to a variety of national online digital platforms completely free of charge, while other countries resorted to indirect subsidies, e.g., by providing a lump sum of money to students and/or teachers aimed at participating in the financial burden of purchasing an internet subscription.¹²⁵ Another measure that has been applied for enhancing access to online learning consisted of the provision of low-cost devices, such as portable computers, tablets or smartphones, for educational purposes. Once more, the Joint Report pointed to large differences between income groups. It appeared that the measure was resorted to by 72% of the group of high-income countries, 53% of the group of upper-middle-income countries, 21% of the group of lower-middle-income countries and none of the group of low-income countries that responded to the survey mentioned in the Joint Report.¹²⁶

Ensuring easy access to e-learning platforms through mobile phones has been another measure resorted to by the majority of high- and middle-income countries. Although ensuring access to online learning platforms by phone was also the main measure resorted to by low-income countries, it was only used in 44% of these countries that, moreover, in about a third of the cases, did not report having offered any specific support measure for stimulating access to online connectivity at all. This lack of policy measures for ensuring access to online learning settings was in some of these low-income countries somewhat mitigated by the widespread use of television and radio, or the use of paper-based take-home packages. In said low-income countries, the latter measure was moreover indicated as the only short-term alternative for actual face-to-face schooling at locations without electricity, let alone internet connectivity.¹²⁷ A less frequently implemented measure for ensuring general access to online learning consisted of the use of fixed phone lines for providing access to the internet, and hence to distant learning platforms as well. However, the Joint Report indicated that the latter measure was used by only 19% of low-income countries and by about one in four high- and middle-income countries.¹²⁸

¹²⁴UNESCO, UNICEF and The World Bank (2020), p. 25.

¹²⁵UNESCO, UNICEF and The World Bank (2020), p. 25.

¹²⁶UNESCO, UNICEF and The World Bank (2020), p. 25.

¹²⁷UNESCO, UNICEF and The World Bank (2020), p. 25.

¹²⁸UNESCO, UNICEF and The World Bank (2020), p. 26.

8.3.4 Teacher Support Policies

According to the Joint Report, during the first half of the Covid-19 pandemic, an estimated 63 million primary and secondary school teachers were affected in their daily functioning. According to the same report, especially during the initial phase of the Covid-19 pandemic, teachers had been severely challenged to quickly innovate their teaching approach, especially when they had been obligated to make the transition to distant teaching, with or without access to qualitative digital technologies. Teachers similarly had to take up a key functions for communicating measures to prevent the spread of the Covid-19 virus, in this manner helping to ensure that children and young people were kept safe and felt supported.¹²⁹

In at least 75% of surveyed countries for the Joint Report, teachers had been required to continue to teach notwithstanding school closures. For the majority of these teachers, it was reported that there had not been any change in their salaries or other benefits. Still, the proportion of surveyed countries where teachers were mandated to continue to teach, again varied by income group. This was more in particular the case with over 90% of the group of high and upper-middle income countries, 60% of the group of lower-middle income countries, and a mere 39% of the group of low income countries. Moreover, about half of the group of highincome countries had allowed teachers to continue to both teach and work on school premises, compared with 27% of the group of middle-income countries (i.e., the group of upper-middle countries and the group of lower-middle income countries combined). It thereby appeared that teaching from school premises had been most common for upper secondary school teachers, especially teachers who were in the process of preparing their students for national examinations. In some other cases, schools were kept physically open in order to continue face-to-face classes to the benefit of the children of frontline labourers and of certain other priority groups. A special measure for dealing with the challenges posed by the transition to Covid-19 suitable teaching and learning environments consisted of attracting additional staff members. The Joint Report mentions that in one out of three of the surveyed countries, schools could (temporarily) appoint additional teachers and other staff members for supporting the transition to distant education systems, both during periods of school closure and school reopening. However, such measures were only reported on in upper-middle and high-income countries.¹³⁰

Similarly, 77% of the surveyed countries in the Joint Report mentioned that a variety of auxiliary staff members continued to work during times of school closure. These included, first and foremost, computer technicians whose main tasks became ensuring a smooth transition to online distant learning and to assist teachers and students in the acquisition of appropriate devices suitable for online teaching and learning. In some countries, schools were allowed to recruit additional psychologists and educational experts in order to mentally support both teachers and students. A

¹²⁹UNESCO, UNICEF and The World Bank (2020), p. 28.

¹³⁰UNESCO, UNICEF and The World Bank (2020), p. 28.

special task of such psychologists and pedagogical experts consisted of assisting deprived and vulnerable children, such as children whose parents are employed in vital sectors and children living in (known) precarious conditions at home. Moreover, about one in four countries mentioned that their schools were provided with the (financial) means to recruit other additional staff members, such as cleaning and administrative personnel. This was a measure that was especially resorted to when schools reopened.¹³¹

Overall, measures for supporting teachers varied largely across income groups. The majority of the countries that partook in the survey mentioned in the Joint Report (namely 66% of said countries) indicated that the teachers at their schools had been provided with clear instructions on how to organise and deliver courses through systems of distant (online) teaching and learning. In low-income countries in particular, this kind of support was by far the most common support measure that had been provided to teachers.¹³² About two-thirds of the group of high-income countries, almost half of the group of middle-income countries but only about 20% of the group of low-income countries, made mention of the fact that they had provided special training to teachers. Such special training generally involved enhancing teachers' ICT skills and reworking the teachers' pedagogical approaches to ensure that they would be able to deliver learning content in a distant (online) learning environment. In countries where online teaching and learning platforms had already become common practice in times preceding the Covid-19 crisis itself, teachers most commonly received additional training on these platforms themselves.¹³³ In addition, more than 60% of the group of high- and upper-middleincome countries reported that they had provided the teachers at their schools with updated learning content that was more suitable for distant teaching. This form of support occurred by contrast only in 48% of the group of lower-middle-income countries and in a mere 33% of the group of low-income countries. Overall, one in three countries that partook in the survey indicated in the Joint report, declared that it had provided teachers at its schools with both ICT tools and free internet connection aimed at ensuring that teachers could continue to work while schools were (physically) closed.¹³⁴

A final measure resorted to by a variety of surveyed countries, consisted in the provision of psychosocial and emotional support to teachers, which was in many cases aimed at complementing more technical support forms provided to said teachers. The Joint Report indicates that this form of support was provided by more than half of the group of high- and upper-middle-income countries, and by about 26% of the group of lower-middle-income countries. In some countries, social media groups were set up (with or without the support of schools themselves) in

¹³¹UNESCO, UNICEF and The World Bank (2020), p. 29.

¹³²UNESCO, UNICEF and The World Bank (2020), p. 29.

¹³³UNESCO, UNICEF and The World Bank (2020), p. 29.

¹³⁴UNESCO, UNICEF and The World Bank (2020), p. 29.

order to facilitate peer support and the exchange of best practices among teachers.¹³⁵

8.3.5 Further Public and Private Initiatives to Ensure Access to Technologies

According to Roe, Blikstad-Balas and Pedersen, the lack of pre-existing digital infrastructure in both schools and societies as a whole has, notwithstanding all of the foregoing, around the world been indicated as one of the most major obstacles for the transition to online educational strategies.¹³⁶

This explains why, during the Covid-19 pandemic, many international providers of educational materials, both of a public and private nature, made their resources available free of charge. E.g., UNICEF launched the so-called "#LearningAtHome" initiative that provided free daily educational activities that parents could then adapt and share with others. However, one of the main vulnerabilities of this initiative was that accessing it, in a similar manner as accessing online teaching and learning provided by schools themselves, remained dependent on having access to the internet.¹³⁷

8.3.6 Support for Parents

The Joint Report stresses the importance of parental engagement in their children's education. Also regarding this matter, there appeared to be striking and persistent disparities in home settings between the groups of countries that partook in the survey mentioned in the Joint Report. During times of school closures, the

¹³⁵UNESCO, UNICEF and The World Bank (2020), p. 29.

¹³⁶Cf. Roe et al. (2021).

Norway is mentioned as a particularly interesting case in terms of education and Covid-19, due to the vast technological infrastructure available in the country. Home internet access among the Norwegian population has been repeatedly measured at 98%. In addition, overall access to technology for Norwegian students has always been high and well above the European average for the student/laptop ratio. (Cf. Roe et al. 2021.)

¹³⁷Cf. Roe et al. (2021).

According to these authors, ICT infrastructure is an obvious prerequisite for the integration of digital technology in education. Since the 1990s, the issue of access has dominated the ICT discourse in many countries, and many schools have reported pressure to provide individual access (1,1) to all their students, with "1:1" implying that one digital device provided by the school itself, is available per student. However, research has indicated that such access is by itself not a reliable indicator of the actual implementation and adoption of digital technology by teachers. Research in Norway, e.g., has highlighted the critical gap between simply providing access to students and effectively preparing teachers to actually use the technology in their daily teaching. (Cf. Roe et al. 2021.)

importance of parental support while learning at home was even further amplified. This at the same time implied an increased supportive role for parents (and other caregivers). Moreover, in addition to home learning itself, vulnerable and deprived households had to take on additional responsibilities for their children's welfare, such as having to prepare meals that previously had been provided at school.¹³⁸

According to the Joint Report, 62% of the countries that partook in the therein mentioned survey, reported that they had developed and provided informative materials in order to guide parents with regard to home learning. This appeared to be a common form of support across countries from all income levels, with 71% of the group of high-income countries, 66% of the group of upper-middle-income countries, 53% of the group of lower-middle-income countries and 44% of the group of low-income countries having mentioned that they had developed and provided such materials to at least some parents. Several countries, similarly, made mention of the fact that they had set up additional parental guidance to support learning at home, e.g., through regular telephone follow-up aimed at reinforcing parental involvement. Such a practice was resorted to by schools in 45% of the group of high-income countries, 44% of the group of upper-middle-income countries and 41% of the group of lower-middle-income countries, but, by contrast, only in 22% of the group of low-income countries.¹³⁹

The Joint Report also indicates that especially younger children are often in need of additional parental support and guidance while learning at home. This appeared to be a luxury that was not commonly available in low-income households, as well as in home settings where either parents or caregivers had to continue to work outside the home settings (or, phrased differently: had to continue to perform labour on the physical working floor of their employer). The Joint Report, similarly, points to the fact that early learning (at home) and play guidance and assistance may constitute another important support measure for young children. This however happened to be a rarer form of child support, with around 34% of the countries that partook in the survey mentioned in the Joint Report having indicated that this support was commonly provided in home settings, but with only 17% of low-income countries that partook in said survey indicated that no action was taken to promote the home learning environment.¹⁴⁰

As has already been elaborated upon before (cf. Sect. 8.1.1), schools are not only a place for learning. Schools, to an increasing extent, also provide a wide variety of other essential services to children, ranging from childcare to providing nutrition through daily school meals. The sudden disappearance of these services due to Covid-19 imposed school closures was reported to have placed an additional both practical and financial burden on vulnerable and deprived households. According to Joint Report, 27% of the countries that partook in the therein referred to survey,

¹³⁸UNESCO, UNICEF and The World Bank (2020), p. 31.

¹³⁹UNESCO, UNICEF and The World Bank (2020), pp. 31–32.

¹⁴⁰UNESCO, UNICEF and The World Bank (2020), pp. 31–32.

indicated that their schools had kept regularly providing meals and/or food rations to vulnerable families during school closures. 25% of the surveyed countries indicated that they even provided financial support to vulnerable households. According to the Joint Report, such types of support became thus the more essential to the extent that parents and caregivers had to take on additional responsibilities in supporting their children to learn at home and because of the loss of livelihoods because of lockdown measures.¹⁴¹

According to the Joint Report, the provision of psychosocial support and childcare became one of the main domains of child and family support provided by governments during the Covid-19 related lockdowns. However, this type of support, once again, varied by income level. While 61% of the group of high-income countries declared that they provided such psychological support to parents and children (or to some categories of parents and children), only 26% of the group of lower-middle-income countries reported doing the same. Similarly, childcare services were reported to have been offered by 55% of the group of high-income countries, compared to a mere 17% of the group of low-income countries. Between 28% and 38% of the group of middle- and low-income countries indicated that they had not implemented any of these mitigation measures, suggesting that these countries lacked themselves the financial resources needed for providing these essential services to their citizens.¹⁴²

8.3.7 Government Support for HEIs

With regard to HEIs in particular, Marinoni, van't Land and Jensen also examined the issue of government support measures.¹⁴³

Almost half (more precisely 48%) of the HEIs that partook in the survey of Marinoni, van't Land and Jensen indicated that their government (or ministry of education) had declared that it would financially or otherwise support HEIs in facing Covid-19. However, a quarter of the surveyed HEIs by contrast indicated that their government or competent ministry had denied any support, while the remainder lacked all information on the matter.¹⁴⁴

The most common support granted by governments or other public authorities was handed out to HEIs in order to allow them to cope with the end of the academic year. Three quarters of the surveyed HEIs had indicated that they would obtain this kind of support. Only a few of the surveyed HEI's mentioned that they would be granted other forms of support. E.g., government financial support for allowing the HEIs to cope with the expected or unexpected financial income losses due to

¹⁴¹UNESCO, UNICEF and The World Bank (2020), pp. 31–32.

¹⁴²UNESCO, UNICEF and The World Bank (2020), p. 32.

¹⁴³Marinoni et al. (2020), p. 20.

¹⁴⁴Marinoni et al. (2020), p. 20.

Covid-19 (and to the measures for dealing with it), were only mentioned by 13% of the surveyed HEIs. 145

Of the surveyed HEIs, 53% in the European region indicated receiving support from their government, or other competent authority (e.g., the ministry of education). By contrast, the amount of HEIs from the African region indicating that they received such support was much lower, only amounting to 39%. This was, moreover, only slightly higher than the percentage of surveyed African HEIs that had indicated that their government (or ministry of education) would not be handing out support to HEIs, the latter percentage amounting to 31%.¹⁴⁶ For the Asia-Pacific and American regions, these percentages were, generally speaking, more in line with the European ones. However, the percentage of HEIs in the Americas indicating that their government (or ministry of education) would not be handing out support to the HEIs was close to the one of the African region (amounting to 29%).¹⁴⁷

Regarding the types of support, governmental support handed out to allow HEIs to complete the current academic year appeared to be the most common, as indicated by more than 75% of the surveyed HEIs in the African and European regions. This was also the most common support in the Asian and the Pacific regions, granted to 62% of the surveyed HEIs, and in the Americas, although only granted to a mere 41% of the surveyed HEIs in this region.¹⁴⁸

Overall, advice on how to mitigate missing credits for courses or other academic achievements required for admission to the next academic year or for graduation appeared to be the second most common type of assistance that had been granted in the Asian and the Pacific regions, with 41% of the surveyed HEIs in these regions indicating that they were granted this kind of support, as well as in the European region (with 34% of the respondents indicating that they were granted this kind of support) and the Americas (also with 34% indicating this type of support). By contrast, only 11% of the surveyed African HEIs indicated that they were granted this kind of support.¹⁴⁹

8.4 Reopening of Schools

8.4.1 Policy Considerations

According to Lo Moro, et al., as of October 2020, there were more than 34 million Covid-19 contamination cases and more than one million Covid-19 related deaths globally. Around that time period, the majority of the Covid-19 related deaths had

¹⁴⁵Marinoni et al. (2020), p. 20.

¹⁴⁶Marinoni et al. (2020), p. 20.

¹⁴⁷Marinoni et al. (2020), p. 21.

¹⁴⁸Marinoni et al. (2020), p. 21.

¹⁴⁹Marinoni et al. (2020), p. 21.

occurred in the WHO's Region of the Americas (accounting for 55% of the total Covid-19 related deaths) and the European Region (accounting for 23% of the total of Covid-19 related deaths). Moreover, in a large number of countries belonging to these WHO Regions, it appeared that the second wave of the Covid-19 pandemic was even larger than the first wave, which (according to the quoted authors) may in part have been due to improved testing capability in said regions. Nevertheless, in most parts of the European Region, the incidence of new Covid-19 contamination cases and Covid-19 related deaths had been steadily increasing after the summer of 2020. Countries such as France, Russia, the United Kingdom, Spain and Israel were all among the countries that reported their highest numbers of new cases in the first week of October 2020.¹⁵⁰

However, at that time, less than 5% of the Covid-19 contamination cases that had occurred in the combined population of the European Economic Area and United Kingdom, had been diagnosed among people aged 18 years or younger. It further, appeared that even when youngsters and children contracted the Covid-19 virus, they were in most cases asymptomatic. It was unclear at the time whether asymptomatic Covid-19 patients were themselves contagious, i.e., capable of spreading the Covid-19 virus to others.¹⁵¹ Although Covid-19 outbreaks had been reported in schools, their detection remained extremely difficult because most young people and children did not display any symptoms, as a result of which many of them did not even know that they could have contracted the virus, as there was no systematic testing taking place in schools. There were therefore no reliable data available on Covid-19 transmission dynamics in school settings. It was at the time, moreover, assumed that child-to-child Covid-19 transmission in schools was, most likely, uncommon. In light of these insights, it was assumed that it should be feasible to establish effective protocols for school settings to prevent school-based transmission of the Covid-19 virus.¹⁵²

There were, in addition, other insights on the effectiveness of NPIs that entered the equation. More precisely, modelling studies regarding the effectiveness of NPIs had pointed to the fact that stand-alone (i.e., not combined with other NPIs) school closures "only" prevented 2 to 4% of the Covid-19 related deaths. This appeared to be a much lower percentage than other NPIs, such as general social distance measures. It was, hence, assumed that school closures were unlikely to be effective as a single containment measure, but should at best be considered as part of an overall strategy for containing Covid-19. From other data on the reopening of schools in particular, it, furthermore, appeared that, even during periods of low incidence and despite hygiene measures resorted to in schools, school outbreaks still

¹⁵⁰Lo Moro et al. (2020).

¹⁵¹By contrast, there was at the time already consensus among scientists that symptomatic youngsters and children could effectively spread the Covid-19 infection in the manner as contaminated adults. Research data that were at the time available also indicated that there did not appear to exist a correlation between age and viral load, suggesting that children and young people could carry the same (high) levels of virus. (Cf. Lo Moro et al. 2020.)

¹⁵²Lo Moro et al. (2020).

did occur, but that in such cases, the number of Covid-19 contamination cases was lower than before the school closures, indicating that containment measures applied in school settings could be more effective than NPIs applied elsewhere.¹⁵³

According to further findings gathered by the European Centre for Disease Prevention and Control, Covid-19 transmission in school settings was in general a rare phenomenon.¹⁵⁴

¹⁵³Lo Moro et al. (2020). Cf., furthermore, European Centre for Disease Prevention and Control (2020), p. 4.

¹⁵⁴European Centre for Disease Prevention and Control (2020), p. 11.

According to a (very) wide variety of research studies referred to by the European Centre for Disease Prevention and Control (as quoted and summarised hereafter), schools appeared to be but a small minority of the settings leading to Covid-19 transmission in countries that collected data on suspected locations of infection-transmission, while countries with comprehensive data on schoolbased Covid-19 contamination cases had only found a very low prevalence (<1%) of SARS-CoV-2. A case-control study with regard to the United States about 397 children that had been infected with Covid-19 had, moreover, found that attendance at a school or child day-care centre in the 2 weeks prior to testing positive for Covid-19, was not associated with an increased likelihood of Covid-19 infection, while infected children were far more likely to have participated in other social activities and gatherings with people outside their home. Similarly, studies with regard to England and Germany had reached the conclusion that Covid-19 outbreaks in schools only represented a relatively small proportion of all Covid-19 outbreaks during periods when schools were open. From a prospective, cross-sectional analysis on educational institutions in England, it appeared that Covid-19 infections and outbreaks were rare in educational institutions during the summer term, when schools had been open. In addition, a strong association with community transmission was observed: more in particular, the risk of an epidemic in an educational institution increased by 72% (or 95CI: 28-130) for each increase in community incidence of five Covid-19 contamination cases per 100,000. Most of the outbreak cases, moreover, involved staff members rather than (only) children, with the most likely directions of Covid-19 transmission observed having been staff-tostaff (26 of the outbreaks), staff-to-student (eight of the outbreaks), student-to-staff (16 of the outbreaks) and student-to-student (only five of the outbreaks). Surveys with regard to Germany, France, Ireland, Australia, Singapore and the United States had found no or very low secondary Covid-19 outbreak rates in preschools, primary schools and secondary schools. A contact tracing study with regard to Italy had identified a secondary Covid-19 attack rate of 0% in infant and toddler centres, 0.44% in primary schools, but a higher rate of 6.46% in secondary schools. In Norway, a prospective contact tracing study of paediatric Covid-19 cases, which followed 13 index cases and 292 contacts in primary schools, found very low secondary attack rates: less than 1% among child contacts and less than 2% among adult staff contacts. The above-mentioned studies with regard to Australia and the United States also reported outbreaks in preschools. A report on Salt Lake City, USA, had, e.g., identified three childcare facilities where 22 confirmed cases of Covid-19 had been identified among 101 staff members and children. In Poland, a cluster of 29 Covid-19 contamination cases had been indicated as having arisen from a probable index case of an adult working in a day care centre. The authors of said research had from this concluded that the attack rate of Covid-19 infections was high in children, although not providing specific attack rates. With regard to adultto-child transmission in schools, the studies with regard to Poland, Australia and Finland referred to adults as index cases in schools, leading to secondary transmission in children, although in the Finnish study, household or community transmission for some of the child cases was not excluded. Studies with regard to Germany and Italy, on the other hand, suggested that if a child got infected with Covid-19 by an adult, it was more likely to be in the home setting than in a school setting. According to these studies, rates of transmission to adults, whether by children or adults, in school settings, have rarely been reported. A study with regard to educational institutions in Australia noted

In light of these findings, most neoliberal Western countries found it wise to alter their policy approach towards schools (other than HEIs), whereby school closures were no longer considered as a main measure for dealing with the Covid-19 pandemic. Instead, governments began to consider less disruptive strategies than school closures, taking further into account that school closures were likely to result in learning backlog, besides resulting into other high socioeconomic costs as well. Avoiding these side-effects of school closures soon was considered more important than avoiding the small percentage increase of Covid-19 contaminations and deaths prevented by school closures. It was, thereby, in particular taken into account that school closures could also have several negative consequences for children, adolescents and their families, to the extent that—as explained before (cf. Sect. 8.1.1) schools are not only an educational setting, but also a source of (mental) health services, food aid, obesity prevention and support systems in case of all kinds of (family) abuse and homelessness.¹⁵⁵

UNESCO was particularly concerned that the longer deprived or marginalised children were out of school, the less likely they were to return afterwards. UNESCO also pointed to the fact that, considered on a global scale, children stemming from the poorest households were already in times pre-Covid-19 almost five times more likely to fall out of primary school than children from rich households. In addition, marginalised children that stopped attending school were more at risk of teenage pregnancy, sexual exploitation, child marriage, violence and other threats. Moreover, school closures resulted in a prolonged disruption of a wide variety of other essential school services, such as school meals and access to mental health and psychosocial support systems. School closures themselves were also reported to cause stress and anxiety due to, amongst others, loss of peer interaction and disruption of daily routines. These negative impacts of school closures were, moreover, significantly higher for deprived or marginalised children which, on a global scale, included many categories, such as children living in countries affected by conflict or other protracted crises, children with a migrant or refugee background, forcibly displaced children, children belonging to minority groups, children with disabilities, and children placed under youth protection or put in institutions.¹⁵⁶

¹⁵⁶UNESCO (2020).

an overall child-to-adult attack rate of 1.0%. Staff members have been reported to be infected in other school outbreaks, such as those reported in Poland, Israel, Rhode Island (United States) and Salt Lake City (United States), but no specific data on the secondary attack rate were provided (Cf. European Centre for Disease Prevention and Control 2020, p. 11.)

¹⁵⁵Lo Moro et al. (2020).

E.g., school closures were reported to have led to a variety of mental health problems among children and young people, while school closures also implied that children and young people in need did no longer have access to mental health services. Similarly, as schools are one of the most important sources for detecting and/or reporting child abuse, school closures also hampered the reporting of child abuse. (Cf. Lo Moro et al. 2020; cf., furthermore, Sect. 8.2.3. for more details on this matter.)

8.4 Reopening of Schools

Based on all of this at the time emerging evidence regarding the first wave of the Covid-19 pandemic, as well as on experiences with previous (health) crises, it was more and more feared that again resorting to school closures after the summer of 2020, would have a lifelong negative impact on children's learning, as well as on their general socioeconomic well-being. It was hereby, furthermore, taken into consideration that many children could not benefit from the continuity of teaching efforts that schools in richer parts of the world had resorted to (particularly advanced systems of online teaching and learning). In light of all these factors and considerations, a UN Secretary-General's policy note, therefore, urged for a quick reopening of schools in all places where the local Covid-19 crisis was brought under control in a manner deemed sufficient.¹⁵⁷

Given, on one hand, the allegedly limited evidence on the effectiveness of school closures for containing the Covid-19 pandemic, and, on the other hand, the

¹⁵⁷UNESCO, UNICEF and The World Bank (2020), p. 34.

The appeal of António Guterres, the ninth Secretary-General of the United Nations, was as follows (cf. United Nations 2020): "We already faced a learning crisis before the pandemic. More than 250 million school-age children were out of school. And only a quarter of secondary school children in developing countries were leaving school with basic skills. Now we face a generational catastrophe that could waste untold human potential, undermine decades of progress, and exacerbate entrenched inequalities. The knock-on effects on child nutrition, child marriage and gender equality, among others, are deeply concerning. This is the backdrop to the Policy Brief I am launching today, together with a new campaign with education partners and United Nations agencies called 'Save our Future'. We are at a defining moment for the world's children and young people. The decisions that governments and partners take now will have lasting impact on hundreds of millions of young people, and on the development prospects of countries for decades to come. This Policy Brief calls for action in four key areas: First, reopening schools. Once local transmission of COVID-19 is under control, getting students back into schools and learning institutions as safely as possible must be a top priority. We have issued guidance to help governments in this complex endeavor. It will be essential to balance health risks against risks to children's education and protection, and to factor in the impact on women's labour force participation. Consultation with parents, carers, teachers and young people is fundamental. Second, prioritizing education in financing decisions. Before the crisis hit, low and middle-income countries already faced an education funding gap of \$1.5 trillion dollars a year. This gap has now grown. Education budgets need to be protected and increased. And it is critical that education is at the heart of international solidarity efforts, from debt management and stimulus packages to global humanitarian appeals and official development assistance. Third, targeting the hardest to reach. Education initiatives must seek to reach those at greatest risk of being left behind - people in emergencies and crises; minority groups of all kinds; displaced people and those with disabilities. They should be sensitive to the specific challenges faced by girls, boys, women and men, and should urgently seek to bridge the digital divide. Fourth, the future of education is here. We have a generational opportunity to reimagine education. We can take a leap towards forward-looking systems that deliver quality education for all as a springboard for the Sustainable Development Goals. To achieve this, we need investment in digital literacy and infrastructure, an evolution towards learning how to learn, a rejuvenation of life-long learning and strengthened links between formal and non-formal education. And we need to draw on flexible delivery methods, digital technologies and modernized curricula while ensuring sustained support for teachers and communities. As the world faces unsustainable levels of inequality, we need education – the great equalizer – more than ever. We must take bold steps now, to create inclusive, resilient, quality education systems fit for the future." (Cf. United Nations 2020.)

significant negative impact of school closures on the lives of children and young people all around the world, from September 2020 onwards, most neoliberal Western governments opted for the reopening of their schools, notwithstanding the fact that in their countries the so-called "second wave" of the Covid-19 pandemic was starting to emerge (to reach its high point during the months of October and November 2020).

It thereby also became of vital importance to implement preventive measures specifically designed for reopening schools, as well as clear strategies for managing potential cases and outbreaks of Covid-19 in school settings.¹⁵⁸

As a result of all of this, by September 2020, at the start of the 2020/2021 academic year, the vast majority of countries belonging to the WHO European Region fully reopened schools,¹⁵⁹ albeit with plans for such school reopenings varying widely: e.g., high-income countries succeeded better than their lower income counterparts to reopen according to plans designed on beforehand and also succeeded better at prioritising school reopenings at pre-primary levels. The manner of school reopenings also varied widely, with more of the richer countries resorting to systems of "hybrid" or "blended" learning, i.e., based on a combination of distant and face-to-face learning.¹⁶⁰

8.4.2 Re-Opening Plans and Strategies

According to information provided in the Joint Report, by September 2020, most countries in the world had, either in full or in part, reopened their schools.¹⁶¹

The Joint Report, moreover, mentions that there has been considerable variation in reopening methods and strategies across income groups. E.g., high-income countries succeeded far better in reopening their schools according to pre-drafted time schedules, while their counterparts belonging to other income groups had been more likely to fail in complying with pre-set reopening dates.¹⁶² More than half of the countries in the world had, furthermore, based the reopening of their schools on systems of "hybrid" or "blended" learning, which came down to applying a combination of distant teaching and learning and face-to-face teaching and learning. Again, the approach a country chose varied largely by income group: In most schools from low-income countries, reopening was based on face-to-face teaching

¹⁵⁸Lo Moro et al. (2020); UNESCO, UNICEF and The World Bank (2020), p. 34.

¹⁵⁹Lo Moro et al. (2020).

¹⁶⁰UNESCO, UNICEF and The World Bank (2020), p. 33.

¹⁶¹UNESCO, UNICEF and The World Bank (2020), p. 34.

¹⁶²In addition to the increase in Covid-19 contamination cases, the delays that occurred in other than high-income countries have been attributed, at least in part, to the absence of resources for ensuring the safe reopening of schools, as discussed in more detail in the next subsection. (Cf. UNESCO, UNICEF and The World Bank 2020, p. 34.)

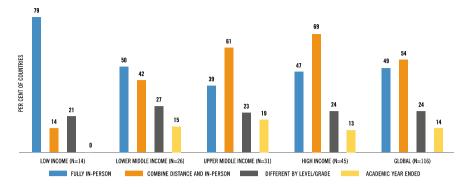


Fig. 8.8 Teaching and learning approaches as schools reopened, by income group [Source: UNESCO, UNICEF, The World Bank 2020, p. 35]

and learning alone. By contrast, schools from high and upper-middle income countries were more likely to resort to a combination of distant and face-to-face teaching and learning.¹⁶³

The countries' re-opening plans in most cases included a widespread use of a variety of hygiene, physical and social distance and other measures for containing the spread of the Covid-19 virus. E.g., most countries resorted to adjusting the physical layout of schools and/or classrooms. Most low-income countries decided to prioritise certain grades, mainly at an upper secondary level. Most middle-income countries were, by contrast, more inclined to prioritise certain geographical areas (mainly based on the geographic spread of the Covid-19 virus). About 4 in 10 countries implemented student rotation aimed at reducing class sizes, albeit this measure was resorted to at slightly higher rates in middle-income countries.¹⁶⁴ The foregoing is further illustrated in Fig. 8.8, which gives a representation of the teaching and learning approaches as schools reopened, by income group.

While most countries started reopening schools or set dates to do so, experiences with school reopening varied across countries: Low- and middle-income countries were more likely to face delays in school reopening. The return to school also looked different for children in different countries: Wealthier countries were more likely to reopen schools with a hybrid approach, and lower income countries were more likely to return to fully in-person teaching and learning.¹⁶⁵

Figure 8.9 gives an overview of the measures that were taken to manage school reopenings, by income group.

¹⁶³UNESCO, UNICEF and The World Bank (2020), pp. 34–35.

¹⁶⁴UNESCO, UNICEF and The World Bank (2020), p. 36.

¹⁶⁵UNESCO, UNICEF and The World Bank (2020), p. 36.

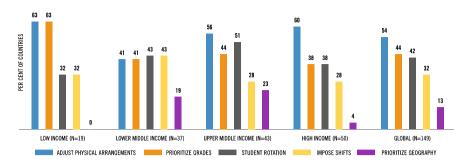


Fig. 8.9 Measures to manage school reopening, by income group [Source: UNESCO, UNICEF, The World Bank 2020, p. 36]

8.4.3 Safeguard Measures and Health Protocols

8.4.3.1 General

The Joint Report mentions that all countries that participated in the survey referred to in this report had developed and approved specific health and hygiene (H&H) guidelines and measures for the reopening of their schools. These were in most cases very detailed and included a wide variety of practical measures such as: physical separation of students (in and outside classrooms), hand washing policy, cleaning and disinfection rules (especially with regard to furniture and other items), policies for the isolation of contaminated staff members or students ... The H&H-guidelines, however, rarely mentioned testing for Covid-19 in school settings.¹⁶⁶

A matter of particular concern regarded the availability of the financial means necessary for financing these H&H-measures. Most of the high-income and uppermiddle-income countries that partook in the survey referred to in the Joint Report, reported that they had sufficient resources to reopen schools safely. By contrast, most of their low-income and lower-middle-income counterparts indicated that this was not the case. Still, the schools of almost all countries were in need of additional financial resources above their usual budgets to ensure a safe return to physical, face-to-face teaching and learning. In countries where these additional financial needs could—at least in part—be met, this usually happened through additional public funding, in combination with support provided by external donors, the latter practice especially having occurred in low- and lower-middle-income countries. More than a third of the countries that partook in the survey mentioned in the Joint Report, moreover, indicated that they expected increases in education budgets, e.g., in the form of support to households for spending on education. By contrast, one out of five of the countries that partook in the survey mentioned in the Joint Report, moreover, indicated that they expected increases in education budgets, e.g., reported

¹⁶⁶UNESCO, UNICEF and The World Bank (2020), p. 33.

reductions in education budgets, a practice that most frequently had occurred in lowand lower-middle-income countries.¹⁶⁷

8.4.3.2 Prevalence and Content of Health and Hygiene Protocols

As good as all of the countries surveyed in the Joint Report had developed and approved health and hygiene guidelines and measures that were specifically designed for school reopenings and that, moreover, showed little variation by origin group.¹⁶⁸ Of the 132 surveyed countries that had such health and hygiene guidelines and measures in place, (1) 98% declared that their guidelines and measures included one or more measures aimed at reducing person-to-person transmission of the Covid-19 virus, (2) 93% indicated that their guidelines and measures included one or more measures aimed at reducing exposure to the Covid-19 virus, and (3) 91% indicated that their guidelines and measures aimed at isolating infected or exposed staff and students (91%).¹⁶⁹

Among the measures most commonly included were the promotion of physical and social distancing, hand washing, and good respiratory hygiene. Measures that were only included in a bit more than half of the cases were general temperature monitoring, self-isolation of staff and students showing Covid-19 related symptoms, and the follow-up on contaminated or exposed staff and students. A mere 19% of the surveyed countries announced plans to start testing for Covid-19 at school level. In addition to these most commonly enforced measures, there was a variety of other measures that got resorted to in many cases and that were designed for protecting students on their way to and from school, such as regulating public transport, staggering student entry and exit times, and providing designated student drop-off areas.¹⁷⁰

Lo Moro, et al., made detailed lists of some of the most commonly resorted to measures in school settings, which have been summarized hereafter:¹⁷¹

(1) Physical distancing measures: Many authorities and/or schools themselves imposed physical distance riles, with distances that had to be kept between people present on school premises ranging from a minimum of 1 metre to a minimum of 2 m. Generally speaking, the distance that one was required to keep was greater between members of staff and students than between students among each other. More detailed and often imposed physical distancing measures

¹⁶⁷UNESCO, UNICEF and The World Bank (2020), p. 33.

¹⁶⁸UNESCO, UNICEF and The World Bank (2020), p. 37.

Only one country responded that no such guidelines had been produced or approved, and sixteen other countries responded that this information was not known. (Cf. UNESCO, UNICEF and The World Bank 2020, p. 37.)

¹⁶⁹UNESCO, UNICEF and The World Bank (2020), p. 37.

¹⁷⁰UNESCO, UNICEF and The World Bank (2020), p. 37.

¹⁷¹Lo Moro et al. (2020).

included (1) guidelines with regard to the best using and/or reconfiguration of all available space in order to maximise physical distance in all circumstances, (2) signposting routes, (3) keeping measured distances, and (4) indicating specified waiting points (e.g., between school activities). The design of classrooms was in many cases re-adapted, e.g., by placing students side by side and facing in one direction, by removing all unnecessary furniture from classrooms in order to make space available for enhanced physical distancing, and by placing as few students as possible in a classroom at the same time.¹⁷²

According to a further ECDC report (based on a survey conducted in EU/EEA countries), other recurring physical distancing measures were about not allowing children re-entry to the school premises after the formal start of the school day, closing communal play areas, and reducing class sizes as much as possible.¹⁷³

- (2) Measures to reduce physical and social interaction: Further measures aimed at reducing physical and social interaction could include reorganising school activities in order to limit social contact and to avoid mixing between pupils and staff members, reviewing timetables (e.g., based on staggered start and finish times for different groups of students), and using all entrances around the school to reduce crowds of students and staff members arriving and leaving at the same place and at the same time. Other measures concerned: regulating access to common areas—e.g., by staggering lunch and break times, by assigning fixed seating, and by the signposting of seats to be occupied. Some schools also had rules that mandated that, as far as possible, pupils and staff members had to remain in the same classroom, or had to be assigned to fixed clusters/groups, whose composition had to remain constant and whose members had to be separated as much as possible from other groups.¹⁷⁴
- (3) Respiratory etiquette and behavioural measures, such as: respiratory etiquette instructions, including with regard to sneezing, coughing and blowing into disposable tissues that had to be disposed of immediately in a closed waste bin; rules mandating that if a tissue was not (immediately) available, one had to sneeze or blow into a bent elbow; rules about avoiding certain forms of direct physical contact (e.g., touching, kissing, hugging or shaking hands); rules about avoiding to touch one's face and/or face mask ... Other measures that were resorted were aimed at avoiding the touching of certain publicly accessible objects (e.g., door handles or lift buttons), encouraging students to avoid behaviours that required hand-to-mouth contact (e.g., putting pens/pencils in the mouth), and discouraging the sharing of personal or educational materials.¹⁷⁵
- (4) Detailed hand hygiene measures: More detailed hang hygiene rules dealt with the promotion and reinforcement of hand hygiene practices, such as

¹⁷²Lo Moro et al. (2020).

¹⁷³European Centre for Disease Prevention and Control (2020), p. 14.

¹⁷⁴Lo Moro et al. (2020).

¹⁷⁵Lo Moro et al. (2020).

recommendations to always use warm water and soap and to always dry one's hands with a disposable paper towel or tissue, or in the open air. Hand hygiene was in many schools carefully monitored and performed at regular intervals, including at arrival at school, before eating or drinking, after using the toilet, after playing outside, when hands were physically dirty, and after coughing or sneezing. In many schools, more hand sanitiser dispensers than before were installed at many locations, such as at school and classroom entry and exit points. Hand hygiene in many schools, moreover, occurred under strict adult supervision, which was especially the case in primary schools or for pupils with special needs.¹⁷⁶

(5) Guidelines on ventilation, cleaning and disinfection: The importance of ensuring adequate ventilation of all areas of the school premises was widely recognized by most schools.

Measures of enhanced ventilation, e.g., concerned ventilation before and after the use of entry and exit points, during break times, at the end of the day, at the beginning and end of all classes, during cleaning operations, and, in general, every so many—e.g., 3—hours. In some schools, it also got mandatory to resort to ventilation for at least 15 min in a row. Some schools also mandated that windows and/or (certain) doors had to be left open at all times.

In a similar manner, cleaning and disinfection were considered essential in all schools. Guidelines were issued that mandated that floors, surfaces and a variety of accessories (used in classes) had to be cleaned at least once a day, with further rules about enhanced or additional cleaning, and/or more frequently cleaning of certain objects, such as often touched surfaces (e.g., door handles, desks . . .). Many schools also resorted to rules on the frequent cleaning of toilets (e.g., at least two or three times a day). There were in many schools also detailed rules on the cleaning of classrooms and tools between usage by different groups/ clusters.¹⁷⁷

(6) Measures concerning physical activity at school: Many schools had rules saying that outdoor activities, when possible, were to be preferred above inside activities. In the latter case, it was ruled that in rooms where physical activities took place, ventilation had to be maximised and that, during such physical activities, a sufficient physical distance between students had to be maintained, e.g., 2 or 3 m. In many schools, it became policy that during physical activities, pupils did not have to wear masks or headgear. There were also rules stipulating that physical activities could only occur between the same groups/clusters of students. Other rules held that individual sports were to be preferred above group sports, and that hand hygiene had to be ensured at all times. There were also

¹⁷⁶Lo Moro et al. (2020). Cf., furthermore, European Centre for Disease Prevention and Control (2020), p. 14.

¹⁷⁷Lo Moro et al. (2020).

rules aimed at minimising the sharing of equipment and about the cleaning of shared equipment.¹⁷⁸

- (7) Measures concerning school transport: With regard to school transport, school rules often made the wearing of face masks compulsory, especially for children above a given age threshold, often 11 years but in some cases even 6 years. A variety of other measures were in many cases resorted to for making school transport safer, such as: the provision of staggered drop-off/pick-up times; imposing discretion during boarding/disembarkation and travel; imposing hand hygiene before boarding and upon disembarkation ... In some countries, there were rules about the maximum occupation of school vehicles, in many cases limiting it to two-thirds of the vehicle's normal capacity. Other rules dealt with the provision of adequate and frequent cleaning and ventilation of transport vehicles, and/or mandated that disinfectants had to be available at all times aboard the vehicles. There were also rules about the use of seat markers and/or the assignment of fixed seats for the duration of the entire academic year. Other measures were aimed at ensuring that the same cohort/group of students was formed for each trip. Finally, many school simply encouraged walking and bicycling to school.¹⁷⁹
- (8) Measures concerning school canteens: Upon school reopenings, school canteens were reopened in most countries as well. The main measures that got issued for canteens included a face mask wearing requirement until sitting down, keeping physical distance, banning buffets, resorting to staggering serving times, offering students the possibility of eating in classrooms, organising separate mealtimes and/or areas for bubbles/clusters of students, and strict policies on cleaning up after each use.¹⁸⁰
- (9) In the above-mentioned ECDC survey, Covid-19 testing and screening has been indicated as one of the measures least frequently resorted to as part of the public policy with regard of the reopening of schools. In the rare cases that such testing was available, this included general temperature screening, besides more targeted screening of pupils (e.g., symptom screening, testing of students showing symptoms, and isolation of students that tested positive).¹⁸¹

8.4.3.3 Resources for Implementing Health and Hygiene Protocols

Overall, 74% of the countries that partook in the survey mentioned in the Joint Report indicated that they had sufficient resources at their disposal for complying with school-specific hygiene and containment measures, ranging from basic items, such as soap, disinfectants and face masks, and basic infrastructure, such as clean

¹⁷⁸Lo Moro et al. (2020).

¹⁷⁹Lo Moro et al. (2020).

¹⁸⁰Lo Moro et al. (2020).

¹⁸¹European Centre for Disease Prevention and Control (2020), p. 14.

water and hand-washing facilities. However, there were again wide variations between countries by income level. More in particular, the percentages of countries having enough resources at their disposal amounted to about 50% for the group of low- and lower-middle-income countries, compared to 80% for the group of upper-middle-income countries and to 95% for the group of high-income countries.¹⁸²

The sources of financial funding that schools had access to for acquiring the resources, commodities and/or infrastructure needed for ensuring a sound health and hygiene policy, mainly came from their own government allocations or from a combination of such allocations and other income sources. E.g., external donors, were reported to contribute to schools' health and hygiene funding in one out of two countries, mainly low-income countries. More in particular, 89% of the group of low-income countries and 80% of the group of lower-middle-income countries declared that they received external funding for implementing their health and hygiene policy, while this percentage only amounted to 50% for the group of upper-middle-income countries and to 21% for the group of high-income countries.

8.4.4 Risks to Staff

In the ECDC-report already referred to before, reference was made to findings by the WHO that in schools (1) staff-to-staff transmission was more common than other forms of transmission and (2) when outbreaks occurred, the Covid-19 virus had been most likely introduced by an adult staff member rather than by a student.¹⁸⁴

Data with regard to the period from 2 September (start of the school year) until 16 October 2020 in the United Kingdom (England) showed no difference in Covid-19 positivity rates between primary and secondary school teachers and other occupations. A similar pattern was observed when including teachers' household members, where no evidence of differences in positivity rates was noted. (Cf. European Centre for Disease Prevention and Control 2020, p. 12.)

Finally, an analysis of national data on occupation and risk of Covid-19 infection and hospitalisation up to 20 October 2020 provided by the Norwegian Institute of Public Health found that, when the data were adjusted for age, sex and country of birth, teachers were not at

¹⁸²UNESCO, UNICEF and The World Bank (2020), p. 38.

¹⁸³UNESCO, UNICEF and The World Bank (2020), p. 38.

¹⁸⁴European Centre for Disease Prevention and Control (2020), p. 12.

The ECDC made reference to several other studies for backing these statements. E.g., data provided by the Swedish Public Health Agency had linked case-based data with regard to the period from 15 March until 19 October 2020 to occupational registers and had come to the conclusion that teachers in kindergarten, primary and secondary schools were not at increased risk of being diagnosed with Covid-19, compared to other occupational groups. However, the researchers did find an increased risk among school headmasters for all grade levels. The study referred to did thereby not differentiate the risk between teachers of children aged 6–12 and teachers of children aged 13–15. In addition, the study mainly covered the first wave of the Covid-19 pandemic, which may not be entirely representative for the second wave where community transmission had been identified in all age groups. (Cf. European Centre for Disease Prevention and Control 2020, p. 12.)

8.4.5 Evaluation of the Impact of the Reopening of Schools

To the extent that schools (other than HEIs) were not the primary site of Covid-19 transmission, an increase in cases was unlikely to occur upon the reopening of schools, at least provided that general community transmission was at sufficiently low levels. However, it was at the same time assumed that an increase in cases was not likely to occur within a time frame of two months after the relaxation of any given NPI measure. In addition, the effect of the reopening of schools was hard to measure due to collateral effects of such a measure, notably the fact that the reopening of schools for physical, face-to-face teaching and learning at the same time allowed more other people—notably the parents of small(ler) children—to return to their physical (on-site) work environments and to have more social contracts within the wider community, especially with colleagues at work.¹⁸⁵

In cases where the school reopenings went hand in hand with the relaxation of other NPIs, modelling studies referred to by the ECDC, have indicated that there has been a subsequent increase in Covid-19 contamination cases. This, e.g., helps explaining the peaks in Covid-19 contamination that occurred in December 2020. However, this finding still does not make it easy, or even possible, to isolate the effect of school reopenings on Covid-19 contamination case rates, particularly to the extent that school reopenings went accompanied by the relaxation of a variety of other NPI measures as well.¹⁸⁶

Still according to the ECDC, the start of the school year in a setting of reopened schools that occurred throughout the countries of the EU/EEA somewhere between mid-August and mid-September 2020, has not been associated with increased Covid-19 contamination cases in children.¹⁸⁷ Similarly, in spring 2020, when on 15 April 2020, after school closures with a duration of a month, Denmark had

significantly higher risk of Covid-19 infection. However, labourers in kindergartens and nurseries had a moderately higher risk of serious illness if infected with Covid-19 than the general Norwegian workforce. National data with regard to Denmark similarly indicated that rates of Covid-19 infection among people working in the education sector did not differ from those of other working adults. Other countries even reported a lower prevalence among teachers than among the average population. E.g., France reported that 0.09% (1020/1,162,850) of teaching staff had tested positive for SARS-CoV-2 on 27 November 2020 and Austria reported that 0.6% of tests had been positive among teachers from a sample of 10,000 gargle tests performed on students and staff in educational institutions between September and October 2020. (Cf. European Centre for Disease Prevention and Control 2020, p. 12.)

¹⁸⁵European Centre for Disease Prevention and Control (2020), p. 21.

¹⁸⁶European Centre for Disease Prevention and Control (2020), p. 21.

With regard to situation that occurred in December 2020, it was observed that the colder weather of the winter season had pushed people indoors which in its own turn also led to an increased mix of children and adults in various settings throughout communities. (Cf. European Centre for Disease Prevention and Control 2020, p. 21.)

¹⁸⁷European Centre for Disease Prevention and Control (2020), p. 21.

allowed children aged 2 to 12 years to physically return to school, there was no increase in contamination cases.¹⁸⁸

8.5 Conclusions

The debate on the closure and reopening of schools is probably one of the most difficult to grasp.

What is abundantly clear is that the international agencies that oversee learning and education (i.e., UNESCO) and children (i.e., UNICEF), supported by The World Bank and the United Nations, were unanimous in their view that school closures were detrimental in many aspects, a view they made known to the world shortly after the first wave of the Covid-19 pandemic.

For these international institutions, the small impact of keeping schools open on Covid-19 contaminations and deaths did not outweigh the many disadvantages of closing schools, even in cases (such as in the Western world) where remote learning systems could be easily deployed.

However, it is less clear whether these views were motivated solely by concern for the welfare of school-age children themselves, or also by other (socio)economic concerns. Be this as it may, research has indicated that school closures, for a variety of reasons, came at an enormous economic cost. In addition, school closures also became a factor of concern in the debate on the reopening of economies (cf., furthermore, in Sect. 7.10) that erupted in many Western countries briefly after the first lockdowns, with on the one hand neoliberal politicians and business leaders calling for such a reopening, and on the other hand many scientists and experts, urging that a sufficient degree of caution be maintained. In this process of reopening economies, it should be noted that for many proponents of reopening the economy, the reopening of schools formed an ideal solution to some perceived problems of

¹⁸⁸European Centre for Disease Prevention and Control (2020), p. 21.

The ECDC, furthermore, referred to various similar research results, some of which with regard to other territories. E.g., it was indicated that South Korea had not experienced a sudden increase in paediatric contamination cases after the gradual reopening of its schools between April and June 2020, while Finland had not reported an increase in paediatric hospitalization cases after the reopening of its childcare centres. A study in England, similarly, found that clusters and outbreaks of Covid-19 had been rare among all educational institutions during the first month after the reopening of schools, when a national lockdown measure had been lifted. Similarly, a German study noted a very low proportion of school disruptions among all Covid-19 outbreaks after reopening in April 2020 and the introduction of mitigation measures in schools, which led to the conclusion that school-based Covid-19 transmission was limited. A modelling study with regard to Shanghai, furthermore, showed that schools could be reopened without causing excessive Covid-19 transmission, provided that daily contact between children aged 10-19 years could be reduced to 33% of baseline levels. Finally, a large outbreak in a high school in Israel was linked to high community transmission and failure to implement in-school mitigation measures, resulting in a reactive closure of the school within 13 days of reopening. (Cf. European Centre for Disease Prevention and Control 2020, p. 21.)

working at home. Having your children home while working was seen as a hinderance to productivity. Insofar as the call to reopen schools came in the wake of the call to reopen economies, this element remains difficult to ignore.

In all of this, the fact that the risk of Covid-19 contamination was low in the context of school settings, has in our view, been treated somewhat lightly. Even if the risk of Covid-19 contamination and transmission was low in the context of school settings, it still remained a risk. This risk also had to be balanced against the reality that the Covid-19 virus follows exponential (and non-linear) contagion and mortality curves, so that any degree of contagion was by definition one too many. These concerns, moreover, applied all the more in the context of the emergence of new variants of the Covid-19 virus - with all their unknown consequences (such as a different degree of contagiousness; a different evolution of the disease, e.g., with regard to young people; resistance of the variants to vaccines ...).¹⁸⁹

The question, therefore, remains, especially for Western countries, whether the possibilities offered by the new technologies have not been dismissed too quickly. It is to be hoped that the various developments in technologically enabled remote learning will be further explored in the post-Covid era. Aside from the pedagogical potential, today's e-learning tools, could contribute to solving a variety of other societal problems. E.g., alleviating traffic jams and the resulting pollution, better planning of lessons and better management of teachers' and students' time, dealing with staff shortages, solving the problem of a lack of space in many schools and HEIs, saving on buildings (a huge cost for many institutions) and all that goes with it (maintenance, heating, etc.).

Without arguing for the disappearance of physical schools altogether, one could at least try to aim at hybrid organizational forms based on a mix between physical and virtual school settings, which could also help with pulling education from the dusty blackboards of the past, into a twenty-first century technological environment.

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¹⁸⁹A personal experience in our extended circle of friends has certainly left its mark: the teenage daughter of one of our friends contracted Covid-19, although it is not clear whether this was at school or outside of school, after which the entire family sharing the same households—parents and grandparents—also got contaminated, which ultimately led to the grandmother's death from Covid-19 shortly afterwards. This is also what experts warned about when HEIs had reopened in September 2020, a factor that contributed to the heavy second wave of the Covid-19 pandemic across Europe. (Cf. Sect. 2.4.)

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Chapter 9 Covid-19 Vaccines and Medicines



9.1 General

Already in 2020, at an early stage of the Covid-19 outbreak, vaccination started to be perceived as the most effective long-term strategy for prevention and control of Covid-19.¹

Because of this, a variety of vaccine platforms against Covid-19 started being developed, including: (1) recombinant vectors; (2) DNA/mRNA in lipid nanoparticles; (3) inactivated viruses; (4) live attenuated viruses, and (5) protein subunits.² According to Hu, Ghuo and Zhou, early October 2020, 174 vaccine candidates for Covid-19 were in the running, and 51 of these were in the phase of human clinical trials. Many of these vaccine in development had reached the phase II testing phase, with some even already advanced to phase III trials. A lot of the Covid-19 vaccines showed a low rate of adverse reactions and effectively caused antibody production neutralizing the Covid-19 virus.³

By 24 March 2021, the number of vaccines was up to 204 in total, of which 122 in preclinical development and 80 in the phase of human trials.⁴

However, throughout the Covid-19 pandemic, science has been persistently looking not only for Covid-19 vaccines, but also for (classic) drugs to treat Covid-19. This research focused both on the potential usefulness of existing drugs (initially developed for other diseases), and on inventing new drugs with a view to the specific treatment of Covid-19. By 24 March 2021, 498 therapeutic drugs for treating Covid-19 were in development, of which 411 were in the phase of human trials and 87 in preclinical development.⁵

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¹Hu et al. (2021).

 $^{^{2}}$ Hu et al. (2021).

 $^{^{3}}$ Hu et al. (2021).

⁴https://biorender.com/covid-vaccine-tracker (as accessed on 24 March 2021).

⁵https://biorender.com/covid-vaccine-tracker (as accessed on 24 March 2021).

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9.2 Free Market Organization

9.2.1 General: Impact of the Pursuit of Profits as Leading Societal Principle

The search for vaccines and medicines, obviously, had to take place in the context of the prevailing, predominant socioeconomic system on earth, namely "capitalism". This has led to serious, ethical questions in relation to medicine development for decades already in the past. Regretfully, the search for vaccines and drugs to combat the Covid-19 pandemic would make these questions more relevant than ever.

Under capitalism, there is but one value that governs economic functioning in general, and that of enterprises more in particular. It is the (unbridled) pursuit of profits-principle (instead of, e.g., the general wellbeing of humanity and the Earth it inhabits). This applies not only to pharmaceutical enterprises which produce vaccines and drugs, but also, as we have discussed in Chaps. 5 and 6, to an ever-growing extent, hospitals and long-term nursing homes.⁶

Under the influence of these philosophical and religious doctrines, at least in the so-called West, the (early) Medieval society, which to a large extent was based on religious rules imposed by the Catholic Church, for a long time (i.e., more or less a millennium) succeeded in both slowing down the breakthrough of the pursuit of profits as a leading societal principle and preventing the class of merchants of becoming the main dominant societal force. However, already in the Middle Ages, the class of merchants, to a growing extent, aimed at escaping this religious scrutiny in practice. During a long period of time, this would be done in clear opposition to the teachings of the Church (as based upon the Words of Jesus Christ Himself). By the end of the Middle Ages, the resulting dualistic attitude towards wealth hoarding behaviour of the class of merchants would become one of the theological discussion points that attributed to the schism of the Protestant churches. Unfortunately, also the leading scholars of Protestantism failed in establishing a clear approach on the subject. As a result, Protestantism even started showing more leniency towards wealth hoarding behaviour than Catholicism had ever been willing to do, which helps explaining that pre-capitalist practices broke first through in the Protestant territories, such as the German territories in the sixteenth Century and Holland and the English territories, next to their respective overseas colonies, as of the seventeenth Century. However, the true turnabout of the societal value scale that would condemn humanity to capitalism, would not be caused by religious doctrine, but rather by (a) laymen's doctrine(s) that later in history would become known as the school of "(economic) liberalism". More precisely, in the approach of Adam Smith, it was held that society's interests are not best served by adhering to an altruistic way of life, but rather by the development of an essentially selfish lifestyle. In this way, Smith was one of the first to proclaim that man should mainly (if not only) pursue his own selfish interest(s), without questioning the impact of such behaviour on others. In the long term, and as if it were guided by an "invisible hand", a society where every individual mainly looks after himself, is

⁶Byttebier (2019), p.33.

Already some of the most ancient philosophers such as Plato and Aristotle had warned that in their times, the "pursuit of profits" was becoming one of the main motives, if not the only one of the (already in their times gradually emerging) class of merchants, and both philosophers had urged that society should best abstain from allowing this pursuit of profits principle becoming too dominant. (For further details, cf. Byttebier (2017), p. 91 a.f.; also Byttebier (2019), p. 33.) Similarly, ancient religious systems, amongst which early Christianity, also came up with severe moral rules against the unbridled pursuit of profits. (For further details, cf. Byttebier (2017), p. 94 a.f.; cf., furthermore, Byttebier (2019), p. 33.)

According to Galbraith, the presentation of self-interest as the most important motivating economic force has been one of the most serviceable means to advocate entrepreneurial power. No other means of justifying capitalist behaviour has served for so long. Thanks to this approach, entrepreneurs do not need to make any effort to explain their selfish motives. On the contrary, virtue is—by definition—given to any of their actions, by an overriding law of economics to which they are wholly subject (just as all other economic agents), however selfish, sordid or inspired by personal greed their motivations and purposes are.⁷

As we shall explore in more detail in this chapter, even the worst health crisis in more than 100 years would fail to put this pursuit of profits on hold, as a result of which scientific efforts to bring the Covid-19 pandemic under control were severely affected by the pharmaceutical companies' own agendas to turn even the most dreadful pandemic, with all pertaining human suffering, in yet another source of ever more profits.

9.2.2 Free Market Organized Research and Innovation

By adherents of capitalism in general, and of neoliberal thinking in particular, it is often—albeit mistakenly—held that all scientific, technological and medical progress in the world happens thanks to capitalism, in the case of medical progress, thanks to the efforts of the private, pharmaceutical sector. However, this proposition can be largely disproved with various arguments, including, in particular, the fact that most scientific progress is primarily due to the efforts of (individual) scientists—as a rule individuals with a passion for their research, for whom the pursuit of profit is by no means a determining factor.⁸ Moreover, on a more institutional level,

believed to evolve into the most prosperous society that will optimally accommodate the interests of all those who are part of it. (Cf., furthermore, Byttebier (2019), p. 34–35.) Through this, Adam Smith's teachings gradually succeeded in identifying the pursuit of economic self-interest of the individual with the public good. Ultimately, the domain of the public good would thus become entirely subordinated to the economic interests of the rich and powerful (cf. Byttebier (2019), p. 36.) ⁷ Galbraith (1983), pp. 112–113.

⁸A perfect illustration in the context of the development of the Covid-19 vaccines, is the life story of Katalin Kariko, as reported about by Kolata in an article that appeared in The New York Times. (Cf. Kolata (2021).)

According to this article, Kariko spent her childhood and youth in Hungary, in the small Hungarian town of Kisujszallas, as the daughter of a local butcher. Already at a very young age, Kariko had decided that she wanted to be a scientist. Kariko obtained her Ph.D. at the University of Szeged and was then employed there as a postdoctoral fellow at the Biological Research Center. In 1985, when the university's research program ran out of money, Kariko, then in her 20s, together with her husband and 2-year-old daughter (Susan), decided to move to Philadelphia, in the United States, where she had managed to obtain a function as a postdoctoral researcher at Temple University. In the decades to follow, Kariko never managed to obtain a permanent academic position in the United States as well, but instead functioned at the fringes of academia. However, by 2021, Kariko had emerged as one of the key researchers of Covid-19 vaccine technology. The

scientific research is, to a very large extent, carried out in non-profit institutions, such as universities (often—in total or in part—financed with public funds), next to a wide variety of other, specialized public institutions, including even institutions such as NASA and sections of armies. In other cases, research taking place in private institutions is still subsidized by governments, while often such private institutions work closely together with their public counterparts, e.g., universities, in which case their combined research activities are still mainly financed by means of public funding. What, by contrast, the private, entrepreneurial sector is good at, is to embrace the fruits of such scientific research, to monopolize them, and to commercialize or convert them into practical applications.

In the Covid-19 vaccine debate, this discussion has become, once again, very acute.

In March 2021, during a private call with Conservative MPs, UK PM Boris Johnson, literally, proclaimed that the UK's at the time successful vaccine campaign was thanks to "greed" and "capitalism". This fact was confirmed to the press by several of those present during an end-of-term Zoom meeting between Johnson and backbenchers of the Tory party, also referred to as the "1922 Committee", which took place on Tuesday evening, March 23, 2021, and during which Johnson proclaimed that more than 28 million people in the United Kingdom had already been given a first jab of a Covid-19 vaccine, in best neoliberal traditions saying:⁹

The reason we have the vaccine success is because of capitalism, because of greed my friends.

According to academic researcher Mariana Mazzucato—author of the book 'The entrepreneurial state—Debunking public vs private sector myths'—if Johnson's

work of Kariko and that of one her former close collaborators, Dr Drew Weissman of the University of Pennsylvania, had more in particular the foundation for the extremely successful mRNA-based vaccines developed by Pfizer-BioNTech and Moderna. (Cf. Kolata (2021).)

Kariko had during her entire career been working on the development of so-called messenger RNA, or abbreviated mRNA—basically a genetic script that carries DNA instructions to cell's protein-making machinery. Kariko was of the opinion mRNA could be used for instructing cells to make their own medicines, including vaccines. Still, for many years, Kariko's career at the University of Pennsylvania was far from successful. She was forced to migrate from lab to lab and made dependent on one senior researcher after another to take her on board and offer her a temporary position. All that time, Kariko never earned more than USD 60,000 a year. According to The New York article quoted above, Kariko's entire career was one huge struggle to stay afloat in the academic world. Kariko was, e.g., repeatedly denied funding as more mainstream and mundane research was always favored by academic authorities. Kariko's own research with regard to mRNA was, by contrast, considered too unorthodox. The university did not expect her to remain on board for so lang. But Kariko persisted. And ultimately, Kariko's efforts resulted in the two most efficient Covid-19 vaccines on the market in December 2020 (and for months afterwards). (Cf. Kolata (2021).)

As appears from Kariko's life story, her ultimate success had little to do with any successful research taking place in the big money-making pharmaceutical enterprises, but all to do with a life of devotion from an undervalued scientific researcher.

⁹Allegretti and Elgot (2021).

words provided any insight in his vision for how the United Kingdom was to find its way out the Covid-19 pandemic, the statement especially posed worrying implications for the United Kingdom's national and foreign policies—and, by extension, for the policies of neoliberal governments all over the planet in general. The reason for this is that PM Boris Johnsons's remark made a direct link to one of the credo's that has been determinant for neoliberal, public policy as of the 1980s,¹⁰ with all of its disastrous effects. According to Mazzucato, this was, moreover, not the first time that Johnson had drawn the wrong conclusions from the Covid-19 crisis. A few months before, Johnson had in a similar sense said that for "those on the left, who think everything can be funded by uncle sugar the taxpayer (...) there comes a moment when the state must stand back and let the private sector get on with it". Nor was Johnson the first neoliberal politician having proclaimed the Covid-19 vaccines as an accomplishment for which the private sector deserved all credit.¹¹

According to Mazzucato, it is, e.g., worth remembering that the "AstraZeneca" vaccine was created by scientists at the University of Oxford, to be later on developed and distributed by the pharmaceutical giant "AstraZeneca" who (as happens often) emerged as one of victors in the public celebration of Covid-19 vaccines.¹² In a similar manner has the development of the mRNA-technology on which the Covid-19 vaccines of Pfizer-BioNTech and of Moderna were based, mainly been the accomplishment of a very few academic researchers, most notably Dr Katalin Kariko.¹³

Moreover, an unprecedented amount of public funding had been poured into the Covid-19 vaccine research, development and manufacturing. In 2020, the leading six vaccine candidates in the field of vaccine development together had received an estimated USD 12 billion (£8.7 billion) of taxpayer and public money for doing their research, including USD 1.7 billion for the Oxford-AstraZeneca jab, and USD 2.5 billion for the Pfizer-BioNTech candidate.¹⁴ Still according to Mazzucato, public funds spent on research and development are, in general, often more important than the research that is financed by the private sector itself—in the sense that governments often invest in the early, both longest and riskiest stages of (health) innovation, before any market is viable. Usually, the private sector is simply not interested in research and development at these early stages, as this costs too much money and does not result in short-time profits, and only jumps aboard when a clear opportunity for profit-making presents itself (i.e., when the medicines or vaccines or as good as ready for commercialization).¹⁵

Obviously, this debate has all to do with the mythological world view that has been propagated by neoliberal doctrine as of the 1970s, esp. the idea that all societal

¹⁰Cf. explicitly Byttebier (2017), p. 4 (with further references).

¹¹Mazzucato (2021).

¹²Mazzucato (2021).

¹³Cf. Kolata (2021).

¹⁴Mazzucato (2021).

¹⁵Mazzucato (2021).

progress happens thanks to the efforts of a few entrepreneurial geniuses to whom the rest of mankind should but be extremely grateful.¹⁶ (Cf. Sect. 2.1) In her book "The Entrepreneurial State," Mazzucato has analysed the impact of this neoliberal mythical world view on the private sector as a (wrongfully) presumed driver of innovation. Mazzucato found out that the purportedly most innovative enterprises are precisely those that have benefited the most from various types of direct public investment. In many cases, so-called venture capitalists even admit that they only went into a business after the state had done the heavy lifting in research and development. From research in the United States, it even appeared that, in the past decades, it has been the US (federal) government that has been taking the lead in innovation in a wide range of industries. Of the 88 most important innovations between 1971 and 2006, 77 had been entirely dependent on US federal support. More specifically, with regard to the private, pharmaceutical sector, the majority (75%) of new drugs came from publicly funded labs (at universities or other). From said research, it also appears that the private pharmaceutical industry itself only invests in research on less risky variations of existing drugs, once the groundwork has been done by the public sector. Yet, in order to justify its patent-based commercialization strategies with regard to these inventions, the sector-and with it numerous neoliberal academics—keeps doing everything in its power for upholding the myth that it is itself extremely innovative, while it is in reality mainly public laboratories that deserve this label.¹⁷

Also in other innovative sectors such as informatics, biotechnology, nanotechnology, etc., states are the ones taking the lead in research with regard to radical (risky) innovation. Industry only starts to invest in developing products that are cost competitive with a time horizon of 3 to 5 years. Focusing on the short term—which is one of the basic dictates of capitalism (cf. Sects. 2.1 and 2.2)—often simply makes it unprofitable for private enterprises to invest in innovation at early development stages. Phrased differently, "patient investment" basically requires public financing and state development financing. As a result, at the foundations of extremely profitable and purportedly innovative private enterprises lie often huge state investments which, however, remain unrewarded once a private enterprise comes in play to commercialize the fruits of the government funded research. In such cases, it is basically citizens who have paid for innovative development through taxes, although

¹⁶Cf. Foulon (2021).

As has already been elaborated upon (cf. Sect. 2.1), since the 1970s, neoliberalism as a politicaleconomic system started to break through in the Western world. First, neoliberalism conquered the academic world, with Nobel Prizes in economics for Friedrich Von Hayek in 1974, and then for Milton Friedman in 1976. Afterwards, as of the 1980s, neoliberalism became the dominant political doctrine, in the United Kingdom under Margaret Thatcher, and in the United States under Ronald Reagan. (Cf., furthermore, Byttebier (2015a, 2018, 2019).) Economic neoliberalism, amongst others, argues that everything goes better if people can free themselves from the suffocating grip of government. The state is portrayed as unwieldy, bureaucratic and incompetent. The private sector, on the other hand, is constantly extolled as dynamic and innovative. (Cf. Foulon (2021).) ¹⁷Foulon (2021).

they do not share in the financial profits derived from this. In the meantime, neoliberal propaganda still makes people believe that all economic growth and progress comes from entrepreneurial geniuses, and that there can only be such progress and growth by leaving everything to the private sector (usually referred to as "leaving everything in the hands of the free market"). By collectively continuing to believe in these myths of neoliberalism—with regard to research and development, but also with regard to numerous other domains of socioeconomic life¹⁸-. we have thus ended up with a system in which the economy "socializes costs" through state investments, hence through tax money paid by ordinary citizens, but "privatizes the rewards" thereof, to the extent that private enterprises-hence, ultimately the shareholders of these—are the only ones profiteering from the fruits of such research. According to Foulon, a consequence of this system has been that entrepreneurial elites continue to enrich themselves at the expense of everyone else. Moreover, the large multinational corporations, which are the ones commercializing the scientific output of such publicly funded research, in most cases, hardly pay any taxes themselves, which would allow the state to, at least in this manner, receive some return on its investment, not only to pay for future innovations, but also to allocate more resources to education, healthcare and other important public services—which are, after all, among the true societal drives of scientific innovation.¹⁹

Also with regard to the development of the Covid-19 vaccines, the pre-existing, government funded vaccination research, has been the main reason why pharmaceutical enterprises have been able to develop a Covid-19 vaccine in record time. (Cf. Sect. 9.3) As, by means of a further illustration, a report from the UK's Industrial Strategy Council of March 2021 made clear, the fast turnaround of Covid-19 vaccines would have been unthinkable without state involvement and funding of vaccination research in at least the preceding decade.²⁰

As said report stated itself:²¹

The Ox/AZ vaccine serves as a useful case study to help surface lessons from the wider programme under the auspices of the Vaccines Taskforce (VTF). Although it was one of many vaccines procured by the Government, development of the Ox/AZ vaccine took place mostly in the UK and so provides a window into how the Government influenced each stage of the process. Consequently, the paper does not provide a definitive account of the vaccine procurement programme. Deployment of Covid-19 vaccines is also out of scope, as it is ongoing at the time of publication.

We find that government played a key role in expediting every stage of the Ox/AZ vaccine development process.

(...)

¹⁸E.g., the same applies with regard to the capitalist money creation systems which are also based on the neoliberal "socialization of losses and privatization of profits"-principle. (See Byttebier (2017), p. 245.)

¹⁹Foulon (2021).

²⁰See Balawejder et al. (2021).

²¹Balawejder et al. (2021), p. 4, resp. p. 6.

The UK Government's Covid-19 vaccine procurement programme is heralded as a flagship success of its response to the pandemic, securing a timely supply of vaccines for the UK population. It is also a natural experiment in the type of 'mission- orientated' industrial policy the Government has trailed in recent years. The public sector had a hand in every aspect of expediting the development of new vaccines, from the pre-pandemic discovery phase and clinical trials to emergency procedures in support of regulatory approval and building capacity for large-scale manufacturing.

By mid-April 2021, it was according to some sources clear that at least 97% of the financing for the development of the Oxford-AstraZeneca Covid-19 vaccine had originated from taxpayers' or charities' money. This had, more precisely, appeared form research referred to by Safi that had been conducted in an attempt to reconstruct where the money had come from for the funding of decades of scientific research that had ultimately resulted in the Oxford-AstraZeneca vaccine. Using a variety of research methods, the researchers were able to identify the source of hundreds of millions of pounds in research grants since 2000. The research had attempted to take all relevant research into consideration, starting with published academic work that lay at the roots of what would ultimately become the new technology behind the Oxford-AstraZeneca vaccine, as well as research with regard to the final stages of the product development itself. Form this research, it appeared that the overwhelming majority of the funding, especially in the early stages of research, had stemmed from UK government departments, UK and US scientific institutes, the European Commission and charities, such as, e.g., the Welcome Trust. Less than 2% of the funds identified by the referred to researchers originated from the private sector. This obviously challenged the views of adherents of economic neoliberalism, such as UK Prime Minister Boris Johnson himself.²²

Phrased differently, and in stark contrast to UK Prime Minister Johnson's earlier statement: In the case of the Covid-19 vaccines, it had mainly been effective and mission-oriented government coordination—from the development of industrial policy, to investment in academic sciences, as well as in strategic long-term public programmes and public-private partnerships—that had been key to the rapid development of the Covid-19 vaccines.²³ After which, as with most inventions that conform to the logic of neoliberal capitalism, the manufacture and distribution of Covid-19 vaccines would be left entirely to the free market, allowing free market players to reap the fruits of decades of public investment.²⁴ This seems to imply that,

²²Safi (2021).

The researchers, hence, urged to stop perpetuating the narrative that the private sector and its search for ever more profits are the sole drivers of innovation and for recognizing that the life-saving "ChAdOx vaccine technology" had been almost completely developed with government and charitable funding. (Cf. Safi (2021).)

²³Mazzucato (2021).

²⁴Cf. Buranyi (2021): "As incredible as it sounds, after all the public money that went into vaccine development, making and distributing them has been left entirely up to the market. Each company has its own – totally secret – recipes and supply chains, and they insist no other approach is possible." (Buranyi (2021).)

Country	Patent applications per million inhabitants	Number of top 5% patents per citation	Percent of top 5% patents per citation
Germany	617.1	170.5	0.4%
Denmark	87.4	0.0	0.0%
Norway	316.4	0.3	0.0%
Sweden	129.8	0.3	0.0%
United States	1186.4	32678.0	71.7%
France	231.1	5.9	0.0%

Table 9.1 Annual average patents 2010–2017^a

^aSource: Aghion et al. (2020)

also with regard to the vaccine market, the neoliberal principle of "socialising costs and privatising profits" fully applies.

Similarly, in the United States, it is mainly federal institutions, such as "BARDA" (short for "Biomedical Advanced Research and Development Authority"), "DARPA" (short for "Defense Advanced Research Projects Agency"), "NIH" (short for "National Institutes of Health") and "NSF" (short for "National Science Foundation"), that are pushing the frontiers of research and innovation and that enable scientific progress in many sectors, of which the private sector ultimately bears the fruits.²⁵ With regard to innovation outputs, over the period 2010–2017, the United States had, e.g., been far ahead of Germany, France, and the Scandinavian countries in terms of the number of patents per million inhabitants. The dominant position of the United States in this regard was even more striking when only taking the top 5% patents into consideration.²⁶ Table 9.1 gives a general overview of the average annual numbers of patents in 2010–2017.

Another method for measuring the innovation output between countries or regions consists of measuring the global value-added output of R&D intensive industries. Over the period 2003-2018, the EU was said to account for about 20–22%, on average, of the global VA in R&D intensive sectors, which was far less than its average share of world GDP (which during said period, on average, accounted to 26%). By contrast, during said time period, the United States

²⁵Aghion et al. (2020).

According to Aghion, Maghin and Sapir, the referred to four institutions had in 2020 a combined budget of USD 55 billion (namely BARDA USD 2 billion, NIH USD 42 billion, NSF USD 8 billion and DARPA USD 3 billion). Said four institutions were said to often work separately, but sometimes together (and with others), as in the "BRAIN" (short for "Brain Research through Advancing Innovative Neurotechnologies) initiative. By way of comparison, the EU budget for funding scientific research, through Horizon 2020, also devotes considerable sums to funding innovative initiatives (around USD 13 billion in 2020), notably through the "European Research Council" (abbreviated as "ERC") and the "European Innovation Council" (abbreviated as "EIC"), but Europe still has a long way to go before it can seriously compete with the innovation potential of the United States. (Cf. Aghion et al. (2020).)

²⁶Aghion et al. (2020).

accounted, on average, for about 30% of the VA of R&D intensive sectors, while its average share in the world GDP only amounted to 24%.²⁷

Pharmaceutical enterprises, supported by neoliberal governments and their legislators all around the world, often insist that there is no alternative to the dominant business model of "socialisation of costs and privatisation of profits". The arguments against opening up the rights to manufacture Covid-19 vaccines have, in this regard, been exactly the same ones that the pharmaceutical industry has always resorted to and that have been taught in introductory courses on intellectual property rights around the world as of the 1980s onwards—namely that it would endanger research and innovation, and that transferring the know-how for actual product development to others would be too complex, or simply not work.²⁸

But, as Buranyi rightly pointed out, the Covid-19 vaccines were developed because of huge amounts of public funding and research. In addition, generic manufacturers of drugs and vaccines operating in developing countries have proven again and again that they are indeed capable of producing large quantities of high quality drugs and vaccines at a fraction of the cost of what is paid for in Western countries. Finally, contrary to what neoliberals make people believe, the patent system allowing private enterprise to monopolise and commercialize drugs and vaccines created by public funding and research, even in the event of a global catastrophe, is but a recent invention that has been deliberately established under neoliberal doctrine itself. By contrast, during World War II, the federal US government had still been capable and willing to force pharmaceutical enterprises to share their antibiotic development methods and recipes. Similarly, during the global campaign against smallpox of a couple of decades ago, the WHO had kept a precise record of all manufacturing methods and recipes. This had allowed the WHO to constantly monitor and evaluate the progress made and to share the technology on a global scale. In the past, it has on numerous cases been recognised, in a collective manner, that there are things, such as international public health, that are more important than the legal protection of private profits. According to Buranyi, before the WTO and what this author refers to as "the proliferation of neo-liberal trade treaties", countries around the world had regularly resorted to subjecting the pharmaceutical industry to "compulsory licensing" (or the at the time equivalent legal method) which allowed third-party, often local manufacturers to produce drugs or vaccines after paying a reasonable licence fee. This practice has in the past been so uncontroversial that Canada has even used it for anti-ulcer drugs. In summary, patents-and hence the legal monopoly of commercializing the proceeds of scientific research-have not always been as sacrosanct as they are in modern-day, neoliberal societies.²⁹ We shall return to these policy issues in the conclusions of this chapter. (Cf. Sect. 9.6.)

²⁷Aghion et al. (2020).

²⁸Buranyi (2021).

²⁹Buranyi (2021).

9.2.3 A First Idea of the Real Benefits

9.2.3.1 Introduction

While the advent of Covid-19 vaccines promised a quick return to a more normal life, it also led to the creation of a global Covid-19 vaccine market worth tens of billions of dollars in annual turnover for a small number of pharmaceutical enterprises that each monopolized its own vaccine.³⁰

At the beginning of 2021, among the biggest winners of the race for making a Covid-19 vaccine ready for use (and, hence, for commercializing it) were "Moderna" and "Pfizer" (the latter working together with "BioNTech")—two very different US pharmaceutical enterprises, both of which started charging more than USD 30 per person for their two-shots vaccines. While Moderna had only been founded in 2010, had never made any profits before the Covid-19 crisis and had only employed a mere 830 people before the outbreak of the Covid-19 pandemic, Pfizer, whose roots go back to 1849, had already been making a net profit of USD 9.6 billion with regard to 2020 and was already employing nearly 80,000 people.³¹ According to Kollowe, other drugmakers, such as the UK's (and Swedish) AstraZeneca and the US's Johnson & Johnson, had purportedly pledged to supply their Covid-19 vaccines on a not-for-profit basis until the Covid-19 pandemic would have ended.³²

Also according to Kollewe, whether the Covid-19 market will continue to remain a source of big money in the future was still unclear in early-2021 but remained dependent on the question whether the Covid-19 vaccines would require only a single injection in a human's life—as, e.g., the vaccine for measles—or whether regularly administered subsequent jabs will be necessary, as, e.g., for influenza (cf. Sect. 9.3.1). But even regardless of the ultimate answer to this question, until every citizen of the world is vaccinated at least once against Covid-19, the financial stakes for monopolising an effective Covid-19 vaccine are extremely high.³³

Kollewe has made a first estimate of the revenues of some of the Covid-19 vaccines for the year 2021, and beyond. Based on the information she provided, hereafter follows an overview of these figures for the four most widely used vaccines in the first months of 2021 during the vaccination campaigns in the United States, the United Kingdom and the EU Member States, namely: (1) the "Comirnaty" vaccine (i.e., the commercial name for the Pfizer-BioNTech vaccine); next to (2) the Moderna vaccine; (3) the Johnson & Johnson vaccine and (4) the Oxford-AstraZeneca vaccine (which, in March 2021, had changed its product name into

³⁰Kollewe (2021).

 $^{^{31}}$ Kollewe (2021).

³²Kollewe (2021).

³³Kollewe (2021).

"Vaxzevria", this name change having been approved by the EMA on 25 March 2021^{34}).

On 22 April 2021, the People's Vaccine Alliance (abbreviated as "PVA"), furthermore, reported that three of the leading Covid-19 vaccine manufacturers— Pfizer-BioNTech, Johnsons & Johnson and AstraZeneca—had in 2020 together paid out USD 26bn in dividends and stock buyouts to shareholders—enough to cover the cost of vaccinating the entire population of Africa.³⁵

9.2.3.2 Pfizer and BioNTech

Pfizer's Comirnaty vaccine that has been developed in cooperation with the German company BioNTech (the latter believed to be the main developer of the vaccine), is based on so-called "redesigned messenger RNA"-RNA being the molecule in cells that transmits the genetic instructions with regard to cell-making from the cell's DNA to the protein-making machinery of a cell. The Pfizer-BioNTEch vaccine was the first Covid-19 vaccine and the first mRNA based vaccine to be approved for use on humans, its main disadvantage being that it had to be stored at ultra-low temperatures (-70 °C) (cf. Sect. 9.3.1.3). As of 6 March 2021, governments around the world had ordered approximately 780 million doses of the vaccine, including the United States (at the time good for 200 million doses, worth USD 3.9 billion) and the European Commission (good for 300 million doses), while a mere 40 million doses had been reserved for low-income nations through the Covax initiative. On 6 March 2021, the cost of the vaccine amounted to USD 39 for two doses in the United States and-due to the way the EU had been conducting the purchase negotiations; cf., furthermore, Sect. 9.4-to about USD 30 in the EU. Projected sales with regard to 2021 amounted to between USD 15 and 30 billion.³⁶

Pfizer, which shares costs and profit margins equally with BioNTech, expected to earn USD 15 billion from sales in 2021, based on contracts signed by early March 2021. However, the final figure for 2021 could be twice as high, as Pfizer had estimated that it could potentially supply 2 billion doses in 2021. At the beginning of March 2021, Barclays forecasted sales of USD 21.5 billion with regard to 2021,

³⁴No official reason was given for the name change, but it may have been related to the pharmaceutical crisis that involved the vaccine with cases of thrombosis, with, at the time, at least a dozen countries in Europe having suspended the use of the vaccine, but then resuming once the EMA affirmed that it was "safe and effective" against Covid-19, although—ultimately—without completely ruling out its relationship with "very rare" cases of coagulation blood associated with thrombosis. AstraZeneca itself was quick to point out that the name change of the product had not been associated with any other change in the drug, while stressing the importance that those responsible for receiving the vaccination had to be aware of the change, since the information on the product labelling and packaging could look different from before. (Cf. King (2021).)

In order to avoid all confusion, we shall elsewhere in this book still refer to the "AstraZeneca-Vaxzevria" vaccine under its initial name "AstraZeneca" or "Oxford-AstraZeneca".

³⁵Boseley (2021).

³⁶Kollewe (2021).

USD 8.6 billion with regard to 2022 and USD 1.95 billion with regard to 2023, assuming the vaccine would be given in a single dose.³⁷

Pfizer's share prices over the period March 2020–March 2021 increased by 1.8%, and those of BioNTech even by 156%.³⁸ BioNTech's two founders, husband and wife team Ugur Sahin and Özlem Türeci³⁹—both doctors—had become multibillionaires overnight in the course of 2020, when the vaccine's potential and the Pfizer deal had sent their company's shares rocketing.⁴⁰ By 22 April 2021, it was estimated that the BioNTech shares of Uğur Şahin and his wife were worth USD 5.9 billion.⁴¹

The People's Alliance for Vaccines estimated on 22 April 2021 that Pfizer had paid USD 8.44 billion in dividends in the previous year.⁴² On 4 May 2021, Pfizer announced more precise figures on the profitability of its Covid-19 vaccine.⁴³ According to this information, the Pfizer-BioNTech vaccine brought USD 3.5 billion in revenue during the first three months of 2021, almost a quarter of its total revenue. The Covid-19 vaccine, by far, appeared to be Pfizer's most important source of revenue.⁴⁴ Although the enterprise did not reveal the exact profits it made from the Covid-19 vaccine, it reiterated a previous prediction that the profit margins on the Covid-19 vaccine would be around 20%. This would translate into about USD 900 million in pre-tax profits on the Covid-19 vaccine with regard to Q1 2021 alone.⁴⁵

To justify its huge profits from sales of its Covid-19 vaccine, Pfizer repeatedly stressed that it had chosen not to take the federal funding offered by the Trump administration under its vaccination purchase programme "Operation Warp Speed".⁴⁶ But BioNTech, that was the actual developer of the Pfizer-BioNTech vaccine, had itself received very substantial financial support from the German government for the development of the joint Pfizer-BioNTech vaccine. And taxpayer-funded research had helped both enterprises: E.g., the National Institutes of Health (abbreviated as NIH) had funded the technology that had made the

³⁷Kollewe (2021).

³⁸Kollewe (2021).

³⁹For further information on the life courses of both scientists, cf. Oltermann (2020).

⁴⁰Kollewe (2021).

⁴¹Boseley (2021).

⁴²Boseley (2021).

⁴³Robbins and Goodman (2021).

⁴⁴Robbins and Goodman (2021).

⁴⁵Robbins and Goodman (2021).

In comparison, Johnson & Johnson and AstraZeneca had, as noted above (cf. Sect. 9.2.3.1), both vowed to sell their vaccines on cost-basis only during the Covid-19 pandemic. Moderna, which had itself in the past never made profits and had even no other products on the market, had also decided to sell its Covid-19 vaccine for profit. This implied that, unlike Moderna's Covid-19 vaccine, Pfizer's sting was not crucial to the enterprise's bottom line. With regard to 2020, Pfizer had already made USD 9.6 billion in profits, before the Covid-19 vaccine started having a noticeable impact on its results. (Cf. Robbins and Goodman (2021).)

⁴⁶Robbins and Goodman (2021).

development of the Pfizer and Moderna's messenger RNA vaccines feasible. BioNTech had more precisely obtained a licensing agreement with the NIH for the development of the vaccine, while the further contribution of Pfizer had mainly consisted in marketing, mass-producing and commercializing the end product.⁴⁷

9.2.3.3 Moderna

The Moderna vaccine is produced by Moderna, a US biotechnology enterprise that is based in Massachusetts, and has to be stored at freezing temperature (-20 °C).⁴⁸ (Cf., furthermore, Sects. 9.3.1.2 and 9.3.1.3.)

The Moderna company was founded in 2010 by a stem cell biologist named Derrick Rossi and two private investors.⁴⁹ The company was later joined by Melissa Moore who became the biotech company's head of mRNA technology. Under the leadership of Moore, Moderna became one of the United States' leading biotech enterprises. By the beginning of March 2021, Moderna had thus become the owner of 23 mRNA drugs and vaccines,⁵⁰ amongst which vaccines against the Zika virus, avian flu and herpes. However, none of Moderna's other drugs and vaccines had already been commercialized, as a result of which the enterprise was still in a loss-making phase.⁵¹ Moderna had, moreover, obtained huge public funding—around USD 2.5 billion—for the rapid development of its Covid-19 vaccine. This helps explaining why Moderna has later on been severely criticised for the pricing of its Covid-19 vaccine, at between USD 32 to USD 37 per vaccination.⁵² According to another source, early 2021, Moderna charged USD 30 for the two doses of the vaccine required in the United States and USD 36 for the two doses required in the EU.⁵³

By 6 March 2021, the United Kingdom had ordered 17 million doses of the Moderna vaccine, the EU 310 million doses, with an option for a further 150 million doses of the vaccine to be purchased throughout 2022, while the US government had ordered 300 million of the vaccine's doses. Japan was said to have ordered 50 million doses of the vaccine.⁵⁴

Sales with regard to the year 2021 were expected to range between USD 18 and 20 billion.⁵⁵ Moderna itself had modestly declared that it expected sales to amount to USD 18.4 billion with regard to 2021. Barclays reached a more optimistic prospect

⁴⁷Robbins and Goodman (2021).

⁴⁸Kollewe (2021).

⁴⁹Kollewe (2020).

⁵⁰For an overview, see https://www.modernatx.com/pipeline.

⁵¹Kollewe (2020).

⁵²Kollewe (2020).

⁵³Kollewe (2021).

⁵⁴Kollewe (2021).

⁵⁵Kollewe (2021).

of sales, amounting to USD 19.6 billion with regard to 2021, USD 12.2 billion in 2022 and USD 11.4 billion in 2023, the same as for recurring vaccines.⁵⁶

Because of these good results and further forecasts, Moderna's share prices substantially increased during the period March 2020–March 2021 by 372%.⁵⁷ The group of investors who had backed the enterprise when it had been founded in 2010, were thus expected to make substantial returns. E.g., Stephane Bancel, a 48-year-old French executive who owned 9% of the company's shares, saw her packet of shares on 6 March 2021 almost worth USD 5 billion.⁵⁸ On 22 April 1921, Stéphane Bancel's shares were estimated to be worth \$5.2 billion.⁵⁹

9.2.3.4 Johnson & Johnson (J&J)

On 6 March 2021, J&J's vaccine was still the world's first and only single-injection Covid-19 vaccine. The single-shot vaccine had been developed by J&J's division located in Belgium. The J&J vaccine, in addition, was based on the so-called "adenovirus-26", a rare variant of the common cold virus. The J&J vaccine had by the end of February 2021 been approved for temporary use in the United States. Besides its characteristic of being a one jab vaccine, the J&J vaccine had as further advantage that it can be stored at normal refrigerator temperatures for a period of at least three months (cf. Sects. 9.3.1.2 and 9.3.1.3). In early March 2021, big purchase orders had been placed in the United States, the United Kingdom (initially for 30 million doses, with a purchase option for an additional 22 million), the EU (good for up to 400 million doses) and the Covax initiative (good for another 500 million doses until 2022).⁶⁰

Sales for 2021 were expected to amount to USD 10 billion.⁶¹

At the beginning of March 2021, the US government placed an order for another 100 million doses of the vaccine, with an option for purchasing an additional 200 million, and was paying USD 10 per dose.⁶²

J&J aimed to deliver at least 1 billion doses of its vaccine throughout 2021, which would together generate USD 10 billion.⁶³

By April 2021²², the People's Vaccine Alliance estimated that Johnson & Johnson had paid USD 10.5 billion in dividends and share buybacks over the preceding year.⁶⁴ J&J's share price during the period March 2020-March 2021 increased by 7.7%.⁶⁵

⁵⁶Kollewe (2021).

⁵⁷Kollewe (2021).

⁵⁸Kollewe (2021).

⁵⁹Boseley (2021).

⁶⁰Kollewe (2021).

⁶¹Kollewe (2021).

⁶²Kollewe (2021).

⁶³Kollewe (2021).

⁶⁴Boseley (2021).

⁶⁵Kollewe (2021).

9.2.3.5 Oxford-AstraZeneca (Ox-AZ)

AstraZeneca developed its Covid-19 vaccine in cooperation with Oxford University, the latter having been considered the main developer of the vaccine. The development of the vaccine was based on a modified chimpanzee cold virus. One of the main advantages of the vaccine that was already observed early upon its completion concerned the fact that the vaccine may be stored at refrigerator temperature,⁶⁶ which makes the vaccine easy to handle, transport and administer. (Cf. Sects. 9.3.1.2 and 9.3.1.3.)

By early March 2021, large orders of the Oxford-AstraZeneca vaccine had been placed by the United Kingdom (100 million doses), the EU (up to 400 million doses), the United States (300 million doses) and Japan (120 million).⁶⁷

Notwithstanding the company's pledge not to strive for profits for the duration of the Covid-19 pandemic, sales with regard to 2021 were expected to amount between USD 2 and 3 billion.⁶⁸ SVB Leerink expected that the company's sales would range between USD 1.9 billion with regard to 2021, and USD 3 billion with regard to 2022. The 2021 figure was expected to be even higher if AstraZeneca would meet its ambitious 3 billion dose target. As the company remained committed to providing its vaccine on a not-for-profit basis for the duration of the Covid-19 pandemic, by 6 March 2021, it was only charging USD 4.30-10 for two of the vaccine doses.⁶⁹

Due to a variety of problems that emerged with the Oxford-AstraZeneca vaccine, AstraZeneca's share price fell by 8.6% between March 2020 and March 2021.⁷⁰ Notwithstanding the pledge not to strive for profits, by 22 April 2021, the People's Vaccine Alliance estimated that AstraZeneca had paid USD 3.6 billion in dividends with regard to the year 2020.⁷¹

9.2.4 Calls for an Alternative Approach

By the spring of 2021, there was a growing opposition to the business model of the pharmaceutical sector of turning Covid-19 vaccines into yet another method of making huge corporate profits to the benefit of their shareholders.

The People's Vaccine Alliance (PVA)⁷² started to argue that the profits the Covid-19 vaccine producing pharmaceutical enterprises made in 2020, were highly

⁶⁶Kollewe (2021).

⁶⁷Kollewe (2021).

⁶⁸Kollewe (2021).

⁶⁹Kollewe (2021).

⁷⁰Kollewe (2021).

⁷¹Boseley (2021).

⁷²The "People's Vaccine Alliance" is a coalition of organizations and activists united by a common aim of campaigning for a "people's vaccine" for Covid-19. This would be based on shared

inappropriate as most of the world could not get access to the vaccines they needed, because they were both too expensive and, due to the monopoly of the producers, each with regard to its own vaccine, too short in supply. PVA campaigners wanted to see the Covid-19 vaccine patents waived. They also wanted the pharmaceutical enterprises, which produced the vaccines, to set up factories for making cheaper versions of the Covid-19 vaccines all around the world. PVA also pointed out that it was unacceptable that the huge need for the Covid-19 vaccines, at a time when the economy of practically all countries in the world had come at a standstill because of the Covid-19 crisis, basically but helped creating a new wave of billionaires.⁷³

Anna Marriott, at the time a health policy adviser at "Oxfam", similarly, pointed out that an international, public health emergency should not have been turned into yet another opportunity for private profit, and that big pharmaceutical enterprises, moreover, should not be the ones deciding who lives and who dies in a global pandemic, all while boosting their own immense profits.⁷⁴

For Heidi Chow of "Global Justice Now",⁷⁵ the Covid-19 vaccines had been publicly funded and had become desperately needed around the world for ending the Covid-19 pandemic. It was, therefore, morally unacceptable that the leadership of the developed world would allow a small group of enterprises to monopolize vaccine technology and keep the know-how for producing the Covid-19 vaccines under lock and key, while selling their limited doses, at huge profits, to the highest bidder.⁷⁶

Finally, in an open letter that was dated on 14 April 2021, a group of renowned people, amongst whom Former Heads of State and Nobel Laureates, jointly called on US President Biden to waive the intellectual property rules for Covid-19 vaccines. The letter was, amongst others, signed by Gordon Brown (UK Prime Minister 2007–2010), Michael Gorbachev (President of the Soviet Union 1985–1991), Eric Maskin (Noble Prize in Economics 2007), Joseph Stiglitz (Nobel Prize in Economics 2001), Archbishop Desmond Tutu (Noble Peace Prize 1984), Lech Walesa (President of Poland 1990–1995), next to numerous others. The letter read as follows⁷⁷:

We the undersigned former Heads of State and Government and Nobel Laureates are gravely concerned by the very slow progress in scaling up global COVID-19 vaccine access and inoculation in low- and middle-income countries.

The world saw unprecedented development of safe and effective vaccines, in major part thanks to U.S. public investment. We all welcome that vaccination rollout in the U.S. and many wealthier countries is bringing hope to their citizens.

knowledge and freely available to everyone everywhere—a "global common good". (Cf. The People's Vaccine (2021). Cf. at https://peoplesvaccine.org. Accessed 15 May 2021).

⁷³Boseley (2021).

⁷⁴Boseley (2021).

⁷⁵Cf. https://www.globaljustice.org.uk. Accessed on 15 May 2021.

⁷⁶Boseley (2021).

⁷⁷Agre et al. (2021).

Yet for the majority of the world that same hope is yet to be seen. New waves of suffering are now rising across the globe. Our global economy cannot rebuild if it remains vulnerable to this virus.

But we are encouraged by news that your Administration is considering a temporary waiver of World Trade Organization (WTO) intellectual property rules during the COVID-19 pandemic, as proposed by South Africa and India, and supported by more than 100 WTO member states and numerous health experts worldwide.

A WTO waiver is a vital and necessary step to bringing an end to this pandemic. It must be combined with ensuring vaccine know-how and technology is shared openly. This can be achieved through the World Health Organization COVID-19 Technology Access Pool, as your Chief Medical Advisor, Dr Anthony Fauci, has called for. This will save lives and advance us towards global herd immunity.

These actions would expand global manufacturing capacity, unhindered by industry monopolies that are driving the dire supply shortages blocking vaccine access. 9 in 10 people in most poor countries may well go without a vaccine this year. At this pace, many nations will be left waiting until at least 2024 to achieve mass COVID-19 immunization, despite what the limited, while welcome, COVAX initiative is able to offer.

These moves should be accompanied by coordinated global investment in research, development, and manufacturing capacity to tackle this pandemic and prepare us for future ones, as part of a more robust international health architecture. If this last year has taught us anything, it is that threats to public health are global, and that strategic government investment, action, global cooperation, and solidarity are vital. The market cannot adequately meet these challenges, and neither can narrow nationalism.

The full protection of intellectual property and monopolies will only negatively impact efforts to vaccinate the world and be self-defeating for the U.S. Given artificial global supply shortages, the U.S. economy already risks losing \$1.3 trillion in GDP this year. Were the virus left to roam the world, and even if vaccinated, people in the U.S. would continue to be exposed to new viral variants.

Mr. President, our world learned painful lessons from unequal access to lifesaving treatments for diseases such as HIV. By supporting a TRIPS waiver, the U.S. will provide an example of responsible leadership at a time when it is needed most on global health — as it has done so before on HIV, saving millions of lives. Your support in rallying allies and all countries to follow your lead will also be essential.

With your leadership, we can ensure COVID-19 vaccine technology is shared with the world. Supporting the emergency waiver of COVID-19 related intellectual property rules will give people around the globe a chance to wake up to a world free from the virus. We need a people's vaccine.

Many of us know, first-hand, the reality of political office and the pressures, challenges and constraints of leadership. However, we believe this would be an unparalleled opportunity for the U.S. to exercise solidarity, cooperation and renewed leadership, one we hope will inspire many more to do the same.

Please take the urgent action that only you can, and let this moment be remembered in history as the time we chose to put the collective right to safety for all ahead of the commercial monopolies of the few.

Let us now ensure an end to this pandemic for us all. As advocates for global and equitable vaccine access, we remain ready to support and add our voices to your efforts on this front.

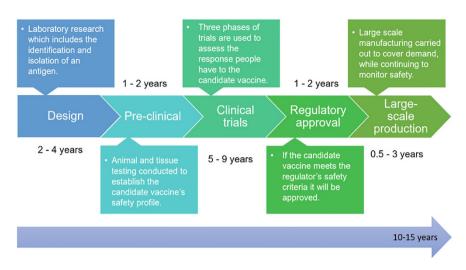


Fig. 9.1 Stylised timeline for typical vaccine development [Source: Balawejder et al. (2021), p. 10]

By the end of April 2021, the message finally started to resonate among political leaders as well. We shall readdress this in the conclusions to this chapter. (Cf. Sect. 9.6.)

9.3 Some Major Milestones in the Race for the Development of Covid-19 Vaccines, -Drugs and -Tests

9.3.1 The Race for the Development of Covid-19 Vaccines

9.3.1.1 Underlying Research

According to Balawejder et al., the development of vaccines in general is a long and complex process, often amounting to 10–15 years and involving a combination of academic, private, and state actors. Before it is ready for use, a vaccine has to go through a series of sequential stages, for developing and testing it, as well as for establishing its quality, safety, and efficacy. Challenges associated with using complex technologies and for managing a variety of risks prolong the process. The standard stages of development and indicative timings for each of these phases are set out in Fig. 9.1.⁷⁸

Still according to Balawejder et al., the length of the vaccine discovery and exploratory stage usually depends directly on the level of scientific difficulty and

⁷⁸Balawejder et al. (2021), p. 9.

uncertainty involved in finding protective antigens of a specific pathogen that may be used in a safe manner for developing the vaccine. This research stage typically lasts anywhere from 2 to 4 years, as the process may be complicated by, e.g., mutating pathogens, challenges related to finding an appropriate delivery method, or difficulties in activating an immune response. The subsequent "pre-clinical trial stage" often lasts around 1 to 2 years and is considered critical before proceeding onto human clinical trials. Pre-clinical trials are conducted in order to determine the candidate vaccine's ultimate safety profile. Such pre-clinical trials may include animal testing and testing on (human) tissue-culture systems. The most time-consuming stage of vaccine development, however, concerns the actual clinical trials. These typically take 5 to 9 years. There are usually three phases of such clinical trials, with each of these phases used to assess the response people have to the candidate vaccine. In normal cases, clinical trials take a lot of time to the extent that they involve large numbers of volunteers who are willing to test the new vaccine, as well as a process of trial and error based on emerging information on the safety and efficacy of the vaccine. Following successful clinical trials, the new vaccine then has to go through the process of regulatory approval in each jurisdiction where one wants to bring the vaccine on the market, in normal circumstances taking one to two years. This is due to complex regulatory requirements, which might include, e.g., reviews of the documentation of each of the phases, with an emphasis on the clinical trials documents, by ethics and/or biosafety committees. Finally, once the vaccine has been approved, often with an in-between temporary approval, large scale manufacturing can begin, which normally takes between 6 months and 3 years to regularize, depending on available manufacturing capacity and complexities involved in scaling up batch sizes.⁷⁹

In contrast, the Covid-19 vaccines have been made available for use in record time. While the development process for a new vaccine typically takes 10–15 years, the US FDA granted (emergency) approval to the Covid-19 vaccines manufactured by Pfizer-BioNTech, Moderna and Johnson & Johnson within a period of less than a year after the start of the Covid-19 outbreak.⁸⁰ (Cf., furthermore, Sect. 9.3.1.3) In a further past, more precisely in the 1960s, the fastest vaccine ever developed—for mumps—had taken four years.⁸¹ In addition, the EU and UK regulatory authorities similarly approved the Covid-19 vaccines within said time frame (give or take a few weeks).⁸²

The fact that the world has been able to develop Covid-19 vaccines so quickly has been attributed to years of prior research into related viruses and faster ways and technologies to make vaccines, huge funding that had allowed the Covid-19 pro-

⁷⁹Balawejder et al. (2021), pp. 9–10.

⁸⁰Ball (2020).

⁸¹McKeever and National Geographic Staff (2021).

⁸²Ball (2020).

ducing enterprises to run multiple trials at the same time, and regulatory agencies that acted more quickly than usual.⁸³

The scientific research that led to the development of the vaccines against the Covid-19 virus had indeed not begun in January 2020. For years before, researchers around the world had been investigating the related coronaviruses that cause SARS ("severe acute respiratory syndrome") and MERS ("Middle East respiratory syndrome"), and some had been working on vaccines for dealing with these other coronaviruses. Under the form of the extremely rapid development of the Covid-19 vaccines, these efforts would in the course of 2020 pay off in a significant manner.⁸⁴

In addition, large sums of money provided by a variety of public funders (such as the Trump administration's "Operation Warp Speed") and private philanthropists have enabled the Covid-19 vaccine producing enterprises to conduct pre-clinical and Phase I, II and III clinal trials, as well as manufacturing, in parallel, rather than sequentially. The possibility to conduct trials and manufacturing in parallel has also been indicated as one of the mains reasons for the rapid development of the Covid-19 vaccines.⁸⁵

According to Ball, conventional vaccines contain either viral proteins or inactivated forms of the virus itself. These then serve to stimulate the human body's immune defenses against infection by a live virus. In contrast, the two Covid-19 vaccines that were first reported to be effective in a series of large-scale ("Phase III") clinical trials—more in particular the Pfizer-BioNTech vaccine and the Moderna vaccine—only used a chain of mRNA in a lipid shell. Said mRNA encodes a key protein in Covid-19. Once the mRNA has then been entered into human cells, the human body starts producing this protein. This protein then acts as an antigen, i.e., the foreign molecule that triggers an immune response to the virus. The vaccines manufactured by Pfizer and BioNTech, respectively by the US pharmaceutical enterprise Moderna, both use this technology. (Cf. Ball (2020).) Basic research on DNA vaccines had already begun at least 25 years before the outbreak of the Covid-19 pandemic, and the development of RNA vaccines highly benefited from 10 to 15 years of intense research (some of it aimed at developing cancer vaccines). In 2020, the approach has matured at just the right time—5 years earlier, RNA technology would not have been ready. (Cf. Ball (2020).)

The third vaccine proven effective in Phase III clinical trials by November 2020 was manufactured by the pharmaceutical enterprise AstraZeneca in collaboration with Oxford University (UK). This vaccine was not based on mRNA. Instead, a viral vector (or carrier) contains additional genetic material that co-designates the peak protein of the Covid-19 virus. In a similar manner as with regard to the mRNA vaccines, the development of the Oxford-AstraZeneca vaccine also benefited from years of research for selecting the viral vector; in the case of this vaccine, the scientists had chosen a modified form of adenovirus isolated from chimpanzee stool. (Cf. Ball (2020).)

⁸⁵Ball (2020).

One of the main public funders has been the US Operation Warp Speed vaccine program that had been set up by the Trump administration. This program was reported to have contributed about USD 10 billion, the largest government stimulus package pharmaceutical enterprises had ever received at the time. (Cf. Ball (2020).)

⁸³Ball (2020).

⁸⁴Cf. Ball (2020).

9.3.1.2 Early Development of the Covid-19 Vaccines

Work on the Pfizer-BioNTech Covid-19 vaccine had actually begun in January 2020, with BioNTech researchers starting to use messenger RNA (mRNA) technology for creating the genetic instructions to build a Covid-19 protein, referred to as "spike", the idea being that, after being injected into human cells, the vaccine causes these cells to make spike proteins that are then released into the rest of the body and cause an immune system response which protects against future infection against the Covid-19 virus itself. By March 2020, BioNTech had finished the development phase of its vaccine and then decided to enter into a partnership with Pfizer in order to scale up the trial phases of the vaccine (and in order to ensure that the later production phase of the vaccine would be able to comply with future demand). The co-operating enterprises decided to give the vaccine the generic name "Tozinameran" and the brand name "Comirnaty". The trial phase soon proved to be successful as well. In Phase I trials, researchers of the co-operating enterprises found that the Comirnaty vaccine caused human test subjects to effectively produce both antibodies and T cells against the Covid-19 virus.⁸⁶

Also in January 2020, Moderna was another enterprise that began to develop its own Covid-19 vaccine based on mRNA technology. In this case, the US government decided to fund these efforts, which resulted in the American providing nearly USD 1 billion in financial support to Moderna. In close partnership with the US National Institutes of Health, it was then quickly established that the vaccine developed by Moderna effectively protected against the Covid-19 virus. By March 2020, Moderna scientists were subsequently the first to bring their Covid-19 vaccine into human trials. After these trials showed promising results as well, phase III testing of the vaccine on 30,000 voluntary human test subjects started on 27 July 2020.⁸⁷

The Ox/AZ vaccine was similarly developed and licensed within the short time frame of one year, with its development process having differed in many ways from the usual development process. With regard to the Ox/Az vaccine, the main time savings occurred at the discovery, clinical trial and regulatory approval stages (cf. Fig. 9.2).⁸⁸

Researchers at Oxford University had developed what would later become the AstraZeneca-Oxford vaccine in early 2020. The approach to this vaccine was based on the genetical modification of an adenovirus that normally contaminates chimpanzees. When the researchers then administered the vaccine to monkeys, they found that it protected said monkeys against the Covid-19 virus as well.⁸⁹ In case of the Ox/Az vaccine, the discovery phase took weeks instead of years, mainly because the Oxford scientists had been able to take advantage of technologies that had already emerged before the Covid-19 pandemic itself. As soon as the genetic sequence of the

⁸⁶Zimmer et al. (2021) (updated 23 March 2021).

⁸⁷Zimmer et al. (2021) (updated 23 March 2021).

⁸⁸Balawejder et al. (2021), p. 11.

⁸⁹Zimmer et al. (2021) (updated 23 March 2021).

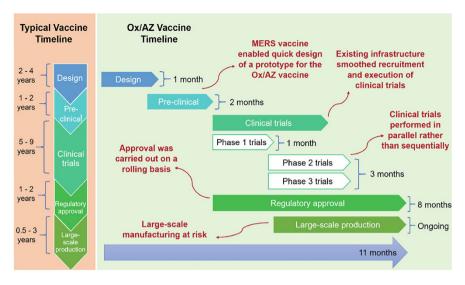


Fig. 9.2 Process adaptations and time savings for the Ox/AZ vaccine development schedule [Source: Balawejder et al. (2021), p. 11]

Covid-19 virus had become available in January 2020, the Oxford team of researchers had moved quickly to design a prototype vaccine. The rapid development of the prototype vaccine had especially been made possible by the technical expertise and clinical data that had been gained from developing a vaccine against another coronavirus, namely the Middle East Respiratory Syndrome (or MERS) virus.⁹⁰ In collaboration with AstraZeneca, the Oxford research team then conducted Phase I and II trials. The vaccine developers did not find any serious side effects during these trials, while at the same time coming to the conclusion that their vaccine effectively produced antibodies against the Covid-19 virus, as well as leading to other immune defences. AstraZeneca and Oxford then decided to undertake further Phase III trials in the United Kingdom, South Africa and in other countries. But the researchers made the error of conducting the trials (too) independently of each other, which made it difficult to combine their trial results into one clear and easily verifiable picture of vaccine efficacy.⁹¹ This is thought to be one of the causes of various regulatory problems that have subsequently arisen, including with the US FDA. (Cf. throughout the following subsections.)

Finally, the research that would result into Johnson & Johnson's Covid-19 vaccine had already started ten years before the outbreak of the Covid-19 pandemic at Beth Israel Deaconess Medical Center, located in Boston. There, researchers had come up with a method of developing vaccines from a virus called "Adenovirus 26",

⁹⁰Balawejder et al. (2021), p. 11.

⁹¹Zimmer et al. (2021) (updated 23 March 2021). Cf., furthermore, Balawejder et al. (2021), pp. 11–14.

or, in short, Ad26. Johnson & Johnson had already before used Ad26 for developing vaccines against Ebola and other Ad26-related diseases. In January 2020, the J&J enterprise and the researchers connected to Beth Israel decided to form a partnership for creating a vaccine against the Covid-19 virus. In March 2020, the partnership was granted 456 million from the US government to help them move into production. After experiments had indicated that the vaccine was shown to provide protection for monkeys, Johnson & Johnson initiated its Phase I and II trials in July 2020. Based on the promising results of these trials, Johnson & Johnson soon afterwards launched the Phase III trial with regard to its Covid-19 virus in September 2020. Different from the other Covid-19 vaccines that were at the time nearing completion as well, the J&J vaccine had as unique feature that it was based on a single dose instead of two. Although Johnson & Johnson had initially planned to recruit 60,000 volunteers for the Phase III trials, it capped the trials at 45,000 in December 2020 due to an increase in Covid-19 cases.⁹²

9.3.1.3 Some Milestones Regarding the Further Development, Testing and Regulatory Approval of the Covid-19 Vaccines

What follows in this subsection is a discussion, in outline, of some further milestones in the development, testing and approval of the Covid-19 vaccines that were at the time expected to be ready by the end of calendar year 2020, namely the Pfizer-BioNTech vaccine, the Moderna vaccine, the Oxford-AstraZeneca vaccine and the Johnson & Johnson vaccine. These four vaccines are also the four vaccines that were effectively deployed to combat the Covid-19 pandemic in the EU, the United Kingdom and the United States as of December 2020. The discussion is hereafter is in particular based on the findings of the AJMC staff, besides other sources, as referred to in footnotes.

One of these first further milestones has been that on 21 May 2020, the Trump administration and AstraZeneca announced that they would collaborate in order to accelerate the development of a Covid-19 vaccine called "AZD1222". The HHS announced that it expected the first doses of this vaccine to be available as early as October 2020. It was also declared that the Phase III clinical studies were already underway to be conducted during the summer of 2020.⁹³

On 16 June 2020, by means of a subsequent important milestone, officials associated with the Trump administration's Operation Warp Speed vaccination program announced that the Covid-19 vaccine(s), when ready, would be provided free of charge to elderly people and to other vulnerable members of the American population who would not be able to afford them.⁹⁴

⁹²Zimmer et al. (2021) (updated 23 March 2021).

⁹³ AJMC Staff (2021). Cf., furthermore, Balawejder et al. (2021), pp. 11-14.

⁹⁴AJMC Staff (2021).

Already on 14 July 2020, data from Phase I and II trials of the Moderna Covid-19 vaccine, the first vaccine to enter the trial phase, were made available. From these data, it appeared that the vaccine doses that had been provided to three groups of 15 volunteers, had all produced immunity responses.⁹⁵

As of 21 July 2020, it was announced that two of the other at the time investigational Covid-19 vaccines had shown promising results against the Covid-19-virus. One of these vaccines was from AstraZeneca, and the other from CanSino Biologics. Interim results of AstraZeneca's COV001 phase I and II trials of AZD1222 had demonstrated that the vaccine had been well tolerated and that it had generated a robust immune response against the Covid-19 virus in all test subjects concerned. In a CanSino phase II trial, it was reported that the Covid-19 vaccine had induced "significant" results.⁹⁶

On 22 July 2020, the United States placed its first Covid-19 vaccine purchase orders. The Department of Health and the Department of Defense had partnered with biotech giants Pfizer and BioNTech for the delivery of 100 million doses of the Covid-19 vaccine candidate of said companies, BNT162. The delivery was agreed for December 2020. It was, in addition, agreed that the purchasing order could be expanded by 600 million additional doses, provided that the US FDA would grant either its approval or an emergency use authorization (EUA) to the vaccine and even then only under the condition that the results of the Phase III clinical of the vaccine would confirm its safety and effectiveness.⁹⁷

On 27 July 2020, the start of the Phase III of the clinical trials of the Moderna Covid-19 vaccine candidate was announced. It was at the same time announced that the Trump administration had increased funding to Moderna by USD 472 million. These funds were said to have been made available for expanding the Phase III trials to 30,000 US participants. This decision, moreover, brought the total investment by the Biomedical Advanced Research and Development Authority to Moderna to USD 955 million.⁹⁸ Also on 27 July 2020, Pfizer and BioNTech announced the launch of the Phase II and III trials of their own Covid-19 vaccine in which 30,000 volunteers would be participating.⁹⁹

On 3 August 2020, the United States entered into an USD 2.1 billion agreement with "GlaxoSmithKline" and "Sanofi Pasteur", with as subject the development, manufacturing and scale up delivery of a Covid-19 vaccine.¹⁰⁰

On 11 August 2020, although the definitive results of the Phase III trials were not yet available, the Trump administration entered into a purchasing agreement with Moderna. In this agreement, parties agreed upon a price of USD 1.5 billion for 100 million doses of the Moderna Covid-19 vaccine candidate "mRNA-1273",

⁹⁵AJMC Staff (2021).

⁹⁶ AJMC Staff (2021).

⁹⁷AJMC Staff (2021).

⁹⁸ AJMC Staff (2021).

⁹⁹Zimmer et al. (2021) (updated 23 March 2021).

¹⁰⁰AJMC Staff (2021).

which implied an average price per single dose of USD 15. At the time, the Moderna vaccine candidate was still being studied in the Phase III "COVE" trial which Moderna was conducting in cooperation with the National Institute of Allergy and Infectious Diseases and with the Biomedical Advanced Research and Development Authority.¹⁰¹

In August 2020, the US federal government entered into an agreement with Johnson & Johnson in which the United States committed to pay USD 1 billion for 100 million doses of the J&J-vaccine candidate, provided the J&J-vaccine would be ultimately approved by the competent authorities.¹⁰²

On 1 September 2020, the United States announced its unwillingness to participate in the WHO initiative entitled "COVAX" which was aimed at developing, manufacturing and distributing Covid-19 vaccines in a fair manner and on a global scale. In total 172 countries had committed their willingness to join the COVAX initiative, which was in particular launched in order to ensure that potential Covid-19 vaccines would be distributed equitably, implying that poor and developing countries would have a sufficient access to the vaccines.¹⁰³

On 3 September 2020, nineteen American bioethicists defined guidelines the United States could resort to in order to insure a fair distribution of any of the Covid-19 vaccines, especially taking into account that there would be a shortage of stocks during the beginning period of the Covid-19 vaccination campaigns. The plan was entitled the "Fair Priority Model" and was based on a model which, on one hand, took three "types of harm" caused by the Covid-19 disease into consideration, and on the other hand, three values that had to be respected in order to reach a fair distribution of a presumed insufficient amount of the Covid-19 vaccines.¹⁰⁴

Also on 3 September 2020, "Sanofi" and "Glaxo SmithKline" (GSK) announced that they were launching the clinical trials of their protein-based vaccine candidate. The Sanofi-GSK vaccine candidate for dealing with Covid-19 vaccine had been developed from the protein-based technology that had already been used for developing Sanofi's influenza vaccines, in combination with an adjuvant, or booster, that had been developed by GSK.¹⁰⁵

On 8 September 2020, AstraZeneca announced its decision to suspend the phase III trial of its Covid-19 vaccine candidate. There appeared to be a need of a safety review of the vaccine candidate after an unknown adverse reaction to the vaccine had appeared in one test subject. The precise nature of the adverse reaction was still unknown, although AstraZeneca declared that the test subject was bound to recover. AstraZeneca, furthermore, qualified the suspension of the clinical trials for testing its vaccine candidate as a "routine action".¹⁰⁶

¹⁰¹AJMC Staff (2021).

¹⁰²Zimmer et al. (2021) (updated 23 March 2021).

¹⁰³AJMC Staff (2021).

¹⁰⁴AJMC Staff (2021).

¹⁰⁵AJMC Staff (2021).

¹⁰⁶AJMC Staff (2021).

On 14 September 2020, Pfizer and BioNTech declared that they would increase the number of test subjects partaking into the Phase III trials of their vaccine candidate by half, which brought the number of participants in the Phase III trials to 44,000. It had initially been the intention of the two enterprises to only recruit 30,000 trial participants. It was announced that the purpose of the trial expansion was to insure that the trial data would be sufficiently safe and reliable and to test the vaccine candidate on a more diverse population, including people aged 16 years and patients suffering from medical preconditions such as HIV, hepatitis C or hepatitis B.¹⁰⁷

Also on 14 September 2020, there was some further news how the competent authorities would deal with the suspension of the Phase III trial of the AstraZeneca vaccine candidate. The NIH announced that it wanted to launch a further investigation into the adverse effects of the vaccine candidate, before the FDA would be able to decide whether the Phase III testing trials could be resumed. In the meantime, the participant to the AstraZeneca trial who had been showing adverse effects appeared to suffer from spinal cord injuries, while there was, however, uncertainty as to the exact cause of these injuries.¹⁰⁸

On 16 September 2020, it was announced by the HHS and DOD that a Covid-19 vaccine would be freely available to all Americans and that the Covid-19 vaccination campaign would be rolled out as of January 2021. The joint plan, which was however still conditional upon one or more of the Covid-19 vaccine candidates receiving their license for use, also contained the aim of providing 6.6 million supply kits, necessary for administering the Covid-19 vaccine(s).¹⁰⁹

On 21 September 2020, Johnson & Johnson announced the commencement of its own large Phase III clinical trial of the J&J-Covid-19 vaccine candidate. It was, thereby, pointed out that the J&J-vaccine had as huge advantages that the vaccine did not need to be frozen and that it concerned a single shot vaccine, implying that there would only be a need for a single administration, instead of two. These two characteristics combined made the J&J-vaccine much easier to administer than, e.g., its mRNA counterparts. The announcement also indicated that the clinical trials were to include no less than 60,000 trial participants, making the J&J-trial phase the largest Phase III trial of any of the Covid-19 vaccines being tested at the time.¹¹⁰

Until then, the EU had been playing a very passive role with regard to the purchasing of Covid-19 vaccine candidates (cf., furthermore, Sect. 9.4), as a further consequence of which it was running months behind the United States that had at the time already entered into several purchasing agreements with a variety of vaccine producers. Finally, on 8 October 2020, the EU managed to enter into an own purchasing agreement with Johnson & Johnson. This agreement concerned the purchasing of 200 million doses of the J&J-vaccine. In light of the forementioned

¹⁰⁷AJMC Staff (2021).

¹⁰⁸AJMC Staff (2021).

¹⁰⁹AJMC Staff (2021).

¹¹⁰AJMC Staff (2021).

characteristics of the J&J-vaccine, it was also especially appealing to COVAX that itself managed to secure 500 million doses of the J&J vaccine.¹¹¹

However, only a few days later, more precisely on 12 October 2020, Johnson & Johnson announced its own decision to suspend the phase III (called "TOGETHER") trial of its Covid-19 vaccine. This decision was taken because one of the test subjects had fallen ill for reasons unclear. The J&J-enterprise further elaborated upon the matter by explaining that adverse events that temporarily halt the proceeding of the testing of a vaccine, were not uncommon and did by no means imply that the clinical trials were not being conducted in a sufficiently safe manner. The J&J-enterprise, furthermore, announced that it would continue to study its one-dose regimen, which at the time remained unique among the leading vaccine candidates. J&J also announced that it would soon start with ENSEMBLE 2, a study that had been designed for testing a two-dose version of the J&J-vaccine.¹¹²

On 23 October 2020, AstraZeneca and Johnson & Johnson announced that they each would rekindle the clinical trials of their respective Covid-19 vaccine candidates, after both—each on its own accord—had stopped the trials shortly before because of safety concerns. Johnson & Johnson had stopped its clinical trial on 11 October 2020, while the test subject that had been partaking to AstraZeneca's trial to fall ill afterwards, had in the meantime been diagnosed with a neurological condition.¹¹³

On 28 October 2020, CMS established new rules for insurance coverage. These rules dealt with what Medicare would pay hospitals for Covid-19 treatments, but also provided guidelines in light of the general policy objective announced by the Trump administration that the Covid-19 vaccinations would be at zero cost for the American population.¹¹⁴

On 9 November 2020, Pfizer and BioNTech released data from their Covid-19 vaccine candidate trials which indicated that their vaccine was 90% effective.¹¹⁵ On 16 November 2020, this positive Covid-19 vaccine news continued with Moderna's similar announcement that the Moderna Phase III trials had indicated that its vaccine candidate had been reducing the risks associated with Covid-19 by 94.5% in the test subjects to whom the Moderna vaccine had been administered.¹¹⁶

¹¹¹Zimmer et al. (2021) (updated 23 March 2021).

¹¹²AJMC Staff (2021).

¹¹³AJMC Staff (2021).

With regard to the AstraZeneca trials in particular, it was indicated that an independent monitoring committee had determined that the trial of the vaccine candidate was safe to resume. These new rules, amongst others, eliminated co-payments or deductibles on vaccines for seniors on Medicare. (Cf. AJMC Staff (2021).)

¹¹⁴It was thereby indicated that the Trump administration and the US Congress had passed legislation that provided for free Covid-19 vaccination, but new guidelines were needed to accommodate this policy objective to the various payment requirements of public and private insurance. (Cf. AJMC Staff (2021).)

¹¹⁵AJMC Staff (2021).

¹¹⁶AJMC Staff (2021).

Also on 16 November 2020, on CNBC's program "Squawk Box", US Health Secretary Alex Azar declared that the FDA would move "as quickly as possible" to grant the Pfizer-BioNTech and Moderna Covid-19 vaccine candidates approval for emergency use, provided that it would appear that the data with regard to the clinical trials of both vaccines would warranted such an emergency use authorisation. At the time, the applications for approval with regard to both these mRNA vaccines had been completed, with Azar further declaring that FDA teams were cooperating with both vaccine producing enterprises to "remove any unnecessary bureaucratic barriers."¹¹⁷

On 18 November 2020, it was announced that the Phase III trials of the Pfizer-BioNTech vaccine, to which nearly 44,000 test subjects had partaken, had indicated that the Pfizer-BioNTech Covid-19 vaccine was 95% effective.¹¹⁸ This implied that the Pfizer-BioNTech Covid-19 vaccine was as effective as the vaccines against shingles and measles. Pfizer and BioNTech, hence, announced that they were ready to request FDA approval within days, implying that it became likely that the distribution of the Pfizer-BioNTech vaccine could still start before the end of the year 2020.¹¹⁹ The submittal to the US FDA of the request for an emergency use authorization (EUA) with regard to the Pfizer-BioNTech vaccine then followed on

¹¹⁹AJMC Staff (2021).

¹¹⁷AJMC Staff (2021).

¹¹⁸These results were subsequently confirmed by various other research studies. For an overview, cf., furthermore, Olliaro (2021).

Olliaro has also tried to explain, in laymen terms, what this 95% efficacy means. According to this author, the Pfizer and Moderna mRNA-based vaccines showed 94-95% efficacy in preventing symptomatic Covid-19, calculated as $100 \times (1 \text{ minus the attack rate with the vaccine, divided by the})$ attack rate with the placebo). This implies that in a population such as the one that participated in the testing trials, with a cumulative Covid-19 attack rate over a 3-month period of about 1% without vaccine, about 0-05% of those vaccinated were expected to still become ill. This does however not mean that 95% of vaccinated people are protected from the disease by the vaccine - a misconception about vaccine protection that, according to Olliaro, can even found in a "Lancet Infectious Diseases"-editorial. In the examples used in the latter editorial, protected people are those who would have contracted Covid-19 disease if they had not been vaccinated. Olliaro explains that this distinction is especially important because, while we know the risk reduction achieved by the Covid-19 vaccines under trial III conditions, it was still unknown if and how this might vary if the vaccines were deployed in populations with different exposures, transmission levels and attack rates. According to Olliaro, simple mathematics may help us understand this phenomenon. If we vaccinated a population of 100,000 people and protected 95% of them, this would leave 5000 people sick in 3 months, which is almost the same as the overall rate of Covid-19 cases in the United Kingdom during the month of February 2021. In contrast, a vaccine efficacy of 95% implies that instead of 1000 cases of Covid-19 to be expected in a population of 100,000 without vaccine (from the placebo arm of the above trials, about 1% would be ill with Covid-19 and 99% would not), we would only expect 50 cases in a population of 100,000 with vaccine (99–95% of the population being free of disease, at least for 3 months). (Cf. Olliaro (2021).)

20 November 2020. This made Pfizer and BioNTech the first enterprises to apply for such authorisation in the United States with regard to a Covid-19 vaccine.¹²⁰

On 23 November 2020, further testing results with regard to the Oxford-AstraZeneca vaccine were announced. According to these, it appeared that when AstraZeneca's Covid-19 vaccine was administered as a half dose, followed by a full dose at least a full month later, the vaccine appeared to be 90% effective. The main advantages of this vaccine were also highlighted. It, more in particular, appeared that the AstraZeneca Covid-19 vaccine would be far easier to preserve, transport, distribute and scale up than the mRNA vaccines, with AstraZeneca, furthermore, declaring that it would be able to produce up to 200 million doses before the end of 2020, and 700 million by the end of Q1 2021.¹²¹

On 2 December 1920, the United Kingdom became the first Western country to approve a Covid-19 vaccine. On said date, the United Kingdom's competent authority was, more in particular, the first in the West to license the Pfizer-BioNTech Covid-19 vaccine candidate. This also made the Pfizer-BioNTech Covid-19 vaccine the first mRNA vaccine in history to be licensed for human use.¹²²

On 8 December 2020, AstraZeneca and Oxford published a joint scientific paper with regard to the phase III clinical trials of the Oxford-AstraZeneca Covid-19 vaccine. From this paper, it appeared that, although the Oxford-AstraZeneca vaccine would protect people against Covid-19, there were still many unanswered questions with regard to the trial results. Nevertheless, the vaccine's low production cost and ease of storage kept making it an attractive solution for responding to the Covid-19 pandemic, especially for the EU (as motivated by its austerity policy; cf., furthermore, Sect. 9.4.3). The first countries that subsequently would grant an emergency authorization to the Oxford-AstraZeneca Covid-19 vaccine were the United Kingdom and Argentina, which happened on 30 December 2020. Since then, several other countries followed suit. On 3 January 2021, India approved its own version of the Oxford-AstraZeneca called "Covishield" that was to be manufactured on a large scale by the Serum Institute of India.¹²³

On 10 December 2020, an advisory committee of the US FDA gave a positive advice with regard to the Pfizer-BioNTech Covid-19 vaccine. Said vaccine was, moreover, the first of the Covid-19 vaccines obtaining such a positive advice.¹²⁴ One

¹²⁰AJMC Staff (2021).

The EUA submission already included safety data with regard to 100 children aged 12–15 years. (Cf. AJMC Staff (2021).)

¹²¹ AJMC Staff (2021). We shall later see that these were, in part, idle promises and that it would, by contrast, be Pfizer and BioNTech that were the most efficient in producing and distributing their vaccine in sufficient doses. (Cf. Sect. 9.4.3.10.)

¹²²McKeever and National Geographic Staff (2021).

¹²³Zimmer et al. (2021) (updated 23 March 2021).

¹²⁴AJMC Staff (2021).

It was reported that Pfizer and BioNTech's application for obtaining an EUA with regard to their vaccine was heard at a one-day public meeting; by a vote of 17-4, with one abstention, the "Vaccines and Related Biological Products Advisory Committee" (abbreviated as "VRBPAC")

day after the committee's positive advice, on 11 December 2020, the full FDA granted approval for an emergency use authorization (EUA) for the Pfizer-BioNTech vaccine. This also implied that shipments of the vaccine could start. It was, furthermore, announced that the vaccination of healthcare laborers would already begin in the days to follow.¹²⁵ Since then, the Pfizer-BioNTech Covid-19 vaccine has received emergency approval in several other territories as well, including Canada, the EU and a variety of other countries.¹²⁶

On 10 December 2020, the New England Journal of Medicine published the results of Pfizer's and BioNTech's Phase III trials. From this, it appeared that the Pfizer-BioNTech vaccine "was 95% safe and effective in protecting against Covid-19 in people 16 years and older". The FDA simultaneously published a further analysis indicating that the Pfizer-BioNTech Covid-19 vaccine was considered safe and that it already provided a strong protection against Covid-19 within 10 days upon administration of a first dose, regardless of the recipient's race, weight or age. On 17 February 2021, the New England Journal of Medicine would publish a further (preliminary) report showing that the Pfizer-BioNTech Covid-19 vaccine remained effective in protecting against the Covid-19 virus variants that had some time before been found in the United Kingdom and Brazil (and that, at the time, were referred to as the UK variant and the Brazilian variant of the Covid-19 virus, respectively). However, the preliminary report added that the Pfizer-BioNTech Covid-19 vaccine might be less effective in providing protection against the South African variant of the Covid-19 virus, with the authors of the report adding that further research was necessary with regard to the matter.¹²⁷

Shortly after the Pfizer-BioNTech Covid-19 vaccine received a FDA granted EUA, the Moderna Covid-19 vaccine candidate would become the second Covid-19 vaccine to receive such a EUA in the United States. The Trump administration had already acted in a pro-active manner by, on 11 December 2020, having purchased an additional 100 million doses of Moderna's Covid-19 vaccine candidate.¹²⁸ Finally, on 17 December 2020, the same FDA advisory panel that only a week before had delivered a positive advice with regard to the Pfizer-BioNTech Covid-19 vaccine, met again and this time reached the conclusion that the Moderna vaccine was both safe and would benefit people aged 18 and older. The vote with regard to the Moderna vaccine was 20-0, with one abstention.¹²⁹ The day after, on 18 December

then reached the conclusion that the benefits of the Pfizer-BioNTech Covid-19 vaccine outweighed the risks for people 16 years and older. (Cf. AJMC Staff (2021).)

¹²⁵AJMC Staff (2021).

¹²⁶McKeever and National Geographic Staff (2021).

¹²⁷McKeever and National Geographic Staff (2021).

¹²⁸Two months later, in order to ensure that the United States would have sufficient stock of the Covid-19 vaccines (and regardless what this implied for the rest of the world's countries), the Biden administration would purchase another 100 million doses of the Moderna Covid-19 vaccine. (Cf. McKeever and National Geographic Staff (2021).)

¹²⁹AJMC Staff (2021).

2020, the US FDA issued its second EUA with regard to a Covid-19 vaccine. This also allowed for the start of shipments of the Moderna Covid-19 vaccine.¹³⁰

On 23 December 2020, the Trump administration placed a purchasing order for an additional 100 million doses of the Pfizer-BioNTech Covid-19 vaccine.¹³¹

On 28 December 2020, Novavax announced that it would begin its own Phase III clinical trials, named "PREVENT-19", to test its Covid-19 vaccine candidate (which had been given the temporary name NVX-CoV2373). Said Phase III trials were to be conducted among 30,000 volunteers residing in both Mexico and the United States.¹³²

On 30 December 2020, Covid-19 contamination cases in the United Kingdom were surging. This helps explaining why, on said date, UK regulators were proceeding extremely fast in approving the Oxford-AstraZeneca Covid-19 vaccine, with as further name "AZD1222", as safe and beneficial for people aged 18 and over.¹³³

As the year ended on 31 December 2020, the US CDC reported that already approximately 2.8 million people residing in the United States had received a first shot of a Covid-19 vaccine. The day before, on 30 December 2020, about 14 million doses of the Covid-19 vaccines had already been distributed throughout the United States, out of a total of 20 million doses allocated.¹³⁴

On 16 February 2021, the WHO provided a recommendation with regard to the Oxford-AstraZeneca Covid-19 vaccine allowing for its emergency use in adults 18 years of age and older. Brazil gave full approval to the Oxford-AstraZeneca Covid-19 vaccine on 13 March 2021.¹³⁵

Shortly before, on 14 February 2021, AstraZeneca had announced that it would start clinical trials of its Covid-19 vaccine in children as young as six years old.¹³⁶ Meanwhile, in the United States, AstraZeneca had filed a report in which it demonstrated that millions of doses prior to its Phase III trials conducted among US volunteers, had demonstrated that the Oxford-AstraZeneca Covid-19 vaccine was safe and delivered protection against Covid-19. By then, the Biden administration had already secured enough of the Oxford-AstraZeneca Covid-19 vaccines as well, so that it would be accessible for all adults who wanted it by May 2021. However, a combination of a lack of regulatory approval (which the United States had still not granted with regard to the Oxford-AstraZeneca Covid-19 vaccine by 15 May 2021) and the fact that the United States had, nevertheless, acquired a huge stockpile of this

The advice, furthermore, sounded that the Moderna vaccine was to be administered 28 days apar (while the Pfizer-BioNtech's vaccine was to be administered 21 days apart). (Cf. AJMC Staff (2021).)

¹³⁰AJMC Staff (2021).

¹³¹AJMC Staff (2021).

¹³²AJMC Staff (2021).

¹³³AJMC Staff (2021).

¹³⁴AJMC Staff (2021).

¹³⁵Zimmer et al. (2021) (updated 23 March 2021).

¹³⁶Zimmer et al. (2021) (updated 23 March 2021).

vaccine as well, implied that the role of AstraZeneca's Covid-19 vaccine in the US vaccination campaign remained uncertain. In addition, the United States had also been acquiring a more than sufficient stockpile of the Pfizer-BioNTech and Moderna Covid-19 vaccines, while it had also been preparing to start using the Johnson & Johnson vaccine. So it did not come as a real surprise when, on 18 March 2020, the United States announced that it would send millions of doses of its Oxford-AstraZeneca Covid-19 vaccine stockpile to its neighbouring countries Mexico and Canada. Meanwhile, AstraZeneca and Oxford University were still continuing to do research on the vaccine's safety and efficacy.¹³⁷

On 17 February 2021, the "New England Journal of Medicine" published a preliminary report with regard to the Moderna Covid-19 vaccine, showing that the vaccine remained effective in protecting against the Covid-19 variant of the virus that had been first found in the United Kingdom and that was, therefore (at the time), referred to as the "UK variant" of the Covid-19 virus. However, the said preliminary report also indicated that the Moderna Covid-19 vaccine might be less effective in protecting against the South African variant of the Covid-19 virus, with the authors of the report however noting that further research on the matter was still needed.¹³⁸

On 24 February 2020, the US FDA delivered an analysis confirming a previous report from the hand of Johnson & Johnson itself that had stated that the J&J Covid-19 vaccine was safe and effective in preventing Covid-19. Based on trials conducted in the United States, the J&J-report had indicated that the J&J Covid-19 vaccine was 72% effective in preventing Covid-19, and 85% effective in preventing severe disease in all regions. The report, furthermore, pointed out that the J&J Covid-19 vaccine had been 64% effective in preventing the disease in South African trials, which was higher than previously reported.¹³⁹

On 25 February 2021, the journal "The Lancet" published two (then) new studies that had been conducted in Great Britain, showing that the Pfizer-BioNTech Covid-19 vaccine already offered strong protection after a single dose of the vaccine. These results confirmed earlier research on the Israeli vaccination campaign, the latter having indicated that the Pfizer-BioNTech Covid-19 vaccine had in Israel been 85% effective in protecting vaccinated people against Covid-19 within 15–28 days of a first dose only. It was argued that these (and similar) research results could give governments around the world more leniency in expanding their vaccination campaigns by delaying the administration of the second dose.¹⁴⁰

On 27 February 2021, Johnson & Johnson announced that the FDA had issued an EUA with regard to its single-dose Covid-19 vaccine. In technical terms, the J&J

¹³⁷Zimmer et al. (2021) (updated 23 March 2021).

¹³⁸McKeever and National Geographic Staff (2021).

Previously, in December 2020, an FDA analysis with regard to the Phase III trial results of the Moderna Covid-19 vaccine had confirmed that it was 94.1% effective in preventing mild cases of Covid-19 and 100% effective in preventing severe cases, after two doses. (Cf. McKeever and National Geographic Staff (2021).)

¹³⁹McKeever and National Geographic Staff (2021).

¹⁴⁰McKeever and National Geographic Staff (2021).

Covid-19 vaccine was approved "for use under an EUA for active immunisation to prevent coronavirus 2019 (Covid-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)" in people aged 18 years and older.¹⁴¹ On 11 March 2021, the EMA similarly granted a conditional, temporary approval to the Johnson & Johnson Covid-19 vaccine. This, moreover, concerned the fourth Covid-19 vaccine that the EMA recommended for use in the European block of member states.¹⁴²

Also on 11 March 2021, Pfizer and BioNTeach announced the preliminary study results from the Israeli rollout of its vaccine. In this, it was suggested that that the Pfizer-BioNTech Covid-19 vaccine was even effective in preventing Covid-19 transmission. The companies, moreover, declared that their Covid-19 vaccine was 97% effective in preventing symptomatic cases of Covid-19, and 94% effective in preventing asymptomatic infections. These research results were, furthermore, supported by a "Mayo Clinic study". The latter study had indicated that the mRNA Covid-19 vaccines manufactured by, on one hand, Pfizer-BioNTech and, on the other hand, Moderna had significantly reduced asymptomatic Covid-19 transmission in the United States.¹⁴³

¹⁴²McKeever and National Geographic Staff (2021).

¹⁴¹ Johnson & Johnson (2021).

According to information provided on J&J's own website, the J&J Covid-19 vaccine had been developed by Johnson & Johnson's "Janssen Pharmaceutical Companies" for preventing Covid-19 in people 18 years of age and older. The decision reached by the FDA was made on the basis of the totality of scientific evidence, including data from the Phase III "TOGETHER" study that had been undertaken by J&J and from which it had appeared that the Johnson & Johnson Covid-19 vaccine was 85% effective in preventing severe disease in all regions studied and that it protected against Covid-19-related hospitalisations and deaths, starting 28 days after administration of the vaccine. The terms of the EUA granted by the FDA allowed that the vaccine would be used while further data were collected. Johnson & Johnson announced that it planned to file a "Biologics License Application" (BLA) with the FDA later in 2021. Johnson & Johnson expressed its belief that a J&J's Covid-19 vaccine single-injection would be a critical tool in combating the global Covid-19 pandemic, especially since the trials had pointed that the vaccine granted protection in several countries, with different variants. Johnson & Johnson also reaffirmed its commitment to make its Covid-19 vaccine available on a non-profit basis for emergency pandemic use. Johnson & Johnson also announced that it had begun shipping its Covid-19 vaccine and that it expected to be able to deliver enough single-injection vaccine doses by the end of March 2020, which would allow to fully vaccinate more than 20 million people in the United States. Shortly before, Johnson & Johnson had also announced the filing of a conditional marketing authorisation application with the "European Medicines Agency" (EMA), as well as the filing of an emergency use list application with the World Health Organization for its Covid-19 vaccine candidate. (Cf. Johnson & Johnson (2021).)

In the initial roll-out of the J&J Covid-19 vaccine, the company was only capable of providing a mere 4 million doses of its vaccine, with an additional 16 million doses to be provided by the end of March 2021, well short of the 37 million doses initially contracted for. The company declared that it would meet its commitment to supply 100 million doses by June 2021. On 2 March 1921, Merck announced that it would help Johnson & Johnson manufacture the vaccine. (Cf. Zimmer et al. (2021) (updated 23 March 2021).)

¹⁴³McKeever and National Geographic Staff (2021).

On 12 March 2021, the WHO issued an emergency use listing to the Johnson & Johnson Covid-19 vaccine, which allowed for the acceleration of its approval by more countries. The enterprise itself announced that it would be targeting a total production of one billion doses throughout 2021.¹⁴⁴

By 23 March 2021, a total of more than 60 (other) Covid-19 vaccines were still undergoing the three-step clinical trial process that is required before their producers would be able to ask for a regulatory approval, with many of them having commenced the three trial phases simultaneously.¹⁴⁵ By the same date, Pfizer and BioNTech had entered into several agreements with the US government that guaranteed the latter a supply of an additional 300 million doses of the vaccine by 31 July 2021.¹⁴⁶

In April 2021, Pfizer and BioNTech issued a new research report showing that their vaccine was 91% effective in preventing Covid-19 disease. The report cited updated research results that included data from more than 12,000 people fully vaccinated for a duration of at least 6 months.¹⁴⁷

On 3 May 2021, it was announced that the US FDA was preparing for the approval of the Pfizer-BioNTech's Covid-19 vaccine with regard to adolescents aged between 12 and 15 years. This approval for usage of the Pfizer-BioNTech Covid-19 vaccine on youngsters came highly anticipated, after Pfizer and BioNTech had themselves reported in March 2021 that, from a clinical trial, it had appeared that their Covid-19 vaccine had appeared to be safe and effective and to produce robust antibody responses in 12–15 year olds. It was thereby expected that licensing the vaccine for the age group of young people between 12 and 15 years old would boost the US immunisation campaign and help allay parents' fears about protecting their children against Covid-19 vaccines on children aged between 12 and 18. Furthermore, both Pfizer and Moderna had launched trials with even younger children, aged six months to 11 years. Both enterprises had indicated that they hoped to be able to start vaccinating children under 11 by early 2022.¹⁴⁸

On 7 May 2021, the Pfizer and BioNTech pharmaceutical partnership began its application with the US FDA for obtaining a full approval of the Pfizer-BioNTech Covid-19 vaccine. By that date, there had already been more than 170 million doses of the Pfizer-BioNTech Covid-19 vaccine dispensed throughout the United States under the in December 2020 obtained EUA. The two enterprises indicated that they had started the application procedure for full approval by submitting a so-called "Biologics License Application" (abbreviated as "BLA").¹⁴⁹ Under full licensure, it

¹⁴⁴McKeever and National Geographic Staff (2021).

¹⁴⁵McKeever and National Geographic Staff (2021).

¹⁴⁶McKeever and National Geographic Staff (2021).

¹⁴⁷Guardian Staff and Agencies (2021).

¹⁴⁸Reuters (2021).

¹⁴⁹SUCH A BLA requires the submitting of non-clinical and clinical data, including the most recent analyses from the vaccine's Phase III clinical trial. In the case of the Pfizer-BioNTech Covid-19

was expected that the enterprises would be able to market the vaccine directly to Americans and that employers and schools would be less reluctant in making vaccination a condition for maintaining employment or for retaining school attendance. Full licensure was also expected to help convincing parts of the population that had been reluctant to vaccinate.¹⁵⁰

On 10 May 2021, US regulators approved the Pfizer-BioNTech Covid-19 vaccine for use in children as young as 12 years old. This decision implied that the FDA had decided to include children aged 12 to 15 years in the already granted EUA, with the two vaccine manufacturers however indicating that they had started the full approval process with regard to this age group as well.¹⁵¹

Table 9.2 gives an overview of some characteristics of the main vaccines in March 2021.

9.3.1.4 Problems with AstraZeneca's and Johnson & Johnson's Regulatory Authorisation in the United States and Elsewhere

9.3.1.4.1 Regulatory Issues with AstraZeneca's Covid-19 Vaccine

By February 2021, COVAX (cf. Sect. 9.3.1.3) had finally began delivering millions of doses of the AstraZeneca Covid-19 vaccine to low- and middle-income countries. It was the enterprise's intent to supply these countries with Covid-19 vaccine doses based on a projected annual production capacity of two billion doses. However, after millions of people had received the vaccine, a major concern emerged. More in particular, in South Africa, a small trial with regard to the Oxford-AstraZeneca Covid-19 vaccine indicated that it might not protect people, in a sufficient manner,

vaccine, this trial included more than 40,000 people and showed that "the vaccine's efficacy and favourable safety profile were observed up to six months after the second dose", according to a press release issued by the two enterprises. The enterprises also provided the manufacturing and facility data, as required under BLA rules. The application sought full approval only for people aged 16 and over. However, the enterprises had also announced that they were applying at the same time for an extension of the EUA with regard to adolescents aged 12–15 years. (Cf. Aratani (2021).) ¹⁵⁰ Aratani (2021).

¹⁵¹Helmore (2021).

According to the US FDA, between March 2020 and April 2021, approximately 1.5 million Covid-19 contamination cases had been reported to the CDC in people aged 11–17 years. Pfizer was not the only enterprise that wanted to lower the age threshold for its vaccine. Moderna had also stated in the past that preliminary results from its study regarding 12- to 17-year-olds, had pointed to a strong protection and to no serious side effects. Another US company, Novavax, at the time had a Covid-19 vaccine in late-stage development and had also just started a study regarding 12–17-year-olds. Both Pfizer and Moderna had launched studies in children aged 6 months to 11 years in order to determine whether babies, pre-schoolers and school-age children would require different doses than adolescents and adults. Outside the United States, AstraZeneca has also begun studying the administration of its vaccine to 6–17-year-olds in Britain. And in China, Sinovac had announced that it had submitted preliminary data to Chinese regulatory authorities showing that its vaccine is safe for children as young as three years old. (Cf. Zimmer et al. (2021) (updated 23 March 2021).)

	1	1	1
II. to I States (Approved in several countries.
United States/			Emergency use in U.S., E.U., other
Germany	Pfizer-BioNTech	mRNA	countries.
United States	Moderna	mRNA	Approved in Switzerland.
			Emergency use in U.S., E.U., other
			countries.
Russia	Gamaleya	Ad26,	Early use in Russia.
		Ad5	Emergency use in other countries.
UK/Sweden	Oxford-	ChAdOx1	Approved in Brazil.
	AstraZeneca		Emergency use in U.K., E.U., other
			countries.
China	CanSino	Ad5	Approved in China.
			Emergency use in Mexico, Pakistan,
			Hungary.
United States/	Johnson &	Ad26	Emergency use in U.S., E.U., other
Belgium	Johnson		countries.
Russia	Vector Institute	Protein	Early use in Russia.
United States	Novavax	Protein	
China	Sinopharm	Inactivated	Approved in China, U.A.E., Bahrain.
			Emergency use in other countries.
China	Sinovac	Inactivated	Approved in China.
			Emergency use in other countries.
China	Sinopharm-	Inactivated	Approved in China.
	Wuhan		Limited use in U.A.E.
India	Bharat Biotech	Inactivated	Emergency use in India, other countries.

Table 9.2 Main vaccines in March 2021^a

^aZimmer et al. (2021) (updated 23 March 2021)

against the B.1.351 variant of the Covid-19 virus, which had become predominant in the country.¹⁵² As a result, on 7 February 2021, South Africa halted all plans to further distribute an additional one million doses of the Oxford-AstraZeneca Covid-19 vaccine.¹⁵³

¹⁵²Zimmer et al. (2021) (updated 23 March 2021); Rybicki, et al.

The AstraZeneca vaccine, which had been the first to reach South Africa and which had there already been administered to frontline health workers, was found to be "poorly effective" in preventing mild to moderate Covid-19 caused by the B.1.135 variant of the Covid-19 virus. Reassuringly, at the same time, there was little evidence that any of the changes identified so far in the S protein of this variant of the Covid-19 virus also affected the efficacy of the other vaccines available at the time. In fact, the efficacy of the Pfizer-BioNTech and Moderna mRNA vaccines and of the Johnson & Johnson adenovirus vaccine had been shown not to have been affected in a significant manner. This was because there were still many "epitopes"—i.e., binding sites—for antibodies in the S or RBD proteins that were not affected by the known mutations of the Covid_19 virus. According to Rybicki et al, it should be possible to remodel mRNA vaccines to counter any threat. A recent and encouraging recommendation was that Johnson & Johnson's single injection adenovirus vaccine would be good at controlling outbreaks, while Novavax's protein-based vaccine might offer better overall protection. (Cf. Rybicki et al. (2021).)

¹⁵³Zimmer et al. (2021) (updated 23 March 2021).

Meanwhile, on 22 March 1921, Oxford University and the Anglo-Swedish company AstraZeneca had become the fourth team to provide results from a largescale Phase III trial with regard to their Covid-19 vaccine that could result into the FDA issuing a EUA for a vaccine against Covid-19 in the United States. (Cf. Sect. 9.3.1.3) AstraZeneca had indicated that, according to a 32,000-person trial—which had included volunteers from the United States, Chile and Peru-its vaccine had shown 79% efficacy against Covid-19 with any symptoms. AstraZeneca had also claimed that the Oxford-AstraZeneca Covid-19 vaccine was 100 per cent effective against severe Covid-19. However, on that same night, the US National Institute of Allergy and Infectious Diseases made the surprising announcement that experts overseeing the trial had stated their concern that AstraZeneca might have included outdated data in its trial, possibly resulting in an incomplete picture of efficacy data.¹⁵⁴ Shortly afterwards, on 25 March 2021, AstraZeneca managed to present the full results of the primary analysis of its US Phase III clinical trials, this time indicating that the Oxford-Astrazeneca Covid-19 vaccine was 76% (instead of the original 79%) effective in protecting against Covid-19, and 100% effective for providing protection against severe cases. AstraZeneca's new study, moreover, did not show an increased risk of blood clots or other serious safety concerns.¹⁵⁵ (On the risks regarding blood clots or similar side effects, cf. Sect. 9.3.1.4.3).

In the meantime, at first the Oxford-AstraZeneca Covid-19 vaccine alone, but ultimately also the Johnson & Johnson Covid-19 vaccine, started to pose several major problems in Europe, including problems regarding the regulatory approval required for their (continued) use. After major uncertainties about the age categories for which the Oxford-AstraZeneca Covid-19 vaccine was-or was not-suitable, followed by major discussions between the EU and AstraZeneca about huge delivery delays-which caused the already slackening European vaccination campaign to be even delayed further (cf., furthermore, Sect. 9.4.3)-, as of the second half of March 2021, there also appeared to be major issues regarding serious side effects of the Oxford-AstraZeneca Covid-19 vaccine (limited in number, but large in consequences). In addition, the conflicting attitudes between the EMA-which kept proclaiming that the Oxford-AstraZeneca Covid-19 vaccine was sufficiently safe, and that its advantages outweighed its possible risks-and the medical regulators of some of the EU member states, made it impossible for the general public to still estimate the sufficient degree of effectiveness and safety of the vaccine, resulting in a crisis of confidence that endangered the EU vaccination campaign even further.

A major, underlying problem was that, driven by an extreme degree of neoliberal austerity, the EU had, in the fall of 2020, focused its purchasing policy largely on the two cheapest Oxford-AstraZeneca and Johnson & Johnson Covid-19 vaccines, and to a much lesser extent on the two more expensive, albeit more effective Pfizer-BioNTech and Moderna mRNA based vaccines. When later it appeared that AstraZeneca made its deliveries to the United Kingdom a priority, and that Johnson

¹⁵⁴Zimmer et al. (2021) (updated 23 March 2021).

¹⁵⁵Zimmer et al. (2021) (updated 23 March 2021).

& Johnson would be delivering its vaccines much later than originally planned, the EU vaccination campaign started already running behind schedule early in 2021. These delays would, moreover, determinate the EU vaccination campaigns until late April 2021 (cf. Sect. 9.4.3.10) By contrast, in some of the countries that had bet on the more expensive Pfizer-BioNTech and Moderna Covid-19 vaccines—including Israel and the United States, besides several Arab oil producing countries—the vaccination campaigns made more progress. Probably for this reason, the EMA—backed by the regulatory authorities of certain EU member states—was not readily inclined to revert the approvals with regard to the use of the Oxford-AstraZeneca Covid-19 vaccine, even after several people had died because of side effects.¹⁵⁶

However, some of the EU Member States gradually distanced themselves from the Oxford-AstraZeneca Covid-19 vaccine.¹⁵⁷

¹⁵⁶On 18 March 2021, the Medicines and Healthcare products Regulatory Agency (MHRA) and the European Medicines Agency (EMA) reaffirmed that the benefits of the Oxford-AstraZeneca Covid-19 vaccine continued to far outweigh the risks. (Cf. AstraZeneca (2021).) On the same date, the MHRA announced their review of-what they referred to as-"the small number" of thromboembolic events in over 11 million people who had received the Oxford-AstraZeneca Covid-19 vaccine in the United Kingdom. Also the UK regulator confirmed that the benefits of the Oxford-AstraZeneca Covid-19 vaccine for preventing Covid-19 far outweighed the risks, from which it was concluded that people were to continue to get vaccinated with said vaccine when asked-or told-to do so. Following a purportedly rigorous scientific review, the MHRA concluded that there was no evidence that blood clots in veins were occurring more than would be expected in the absence of vaccination. A detailed review of five UK reports of a very rare and specific type of blood clots in the cerebral veins (so-called "sinus vein thrombosis") occurring together with lowered platelets (so-called "thrombocytopenia") was said to be still ongoing. These side effects were, moreover, said to only have been reported in fewer than one in a million people vaccinated at the time in the United Kingdom, while a causal association with the Oxford-AstraZeneca Covid-19 vaccine was, purportedly, not established. (Cf. AstraZeneca (2021).) Subsequently, also on 18 March 2021, the EMA's "Pharmacovigilance Risk Assessment Committee" (PRAC) came to the conclusion that there was no increase in the overall risk of blood clots (i.e., thromboembolic events) with regard to the Oxford-AstraZeneca Covid-19 vaccine. However, the PRAC also pointed out that, with regard to very rare cases of serious thromboembolic events with thrombocytopenia, although a causal link with the Oxford-AstraZeneca Covid-19 vaccine was not proven, it remained possible and deserved further analysis. Furthermore, there was no evidence of a problem related to specific batches of the Oxford-AstraZeneca Covid-19 vaccine, or to particular manufacturing sites. (Cf. AstraZeneca (2021).) AstraZeneca itself announced that it would continue to work closely with health authorities to ensure the appropriate use of the Oxford-AstraZeneca Covid-19 vaccine. The enterprise recognized and promised to implement all recommendations of the PRAC, including the providing of a more detailed update of the product information, whilst continuing to understand the nature and relevance of these events to ensure the safe delivery of the vaccine would continue during the Covid-19 public health crisis. AstraZeneca also announced that an analysis of its safety database on tens of millions of records with regard to the Oxford-AstraZeneca Covid-19 vaccine did not show that these events occurred any more commonly than would be expected among millions of people. (Cf. AstraZeneca (2021).)

¹⁵⁷Denmark became the first country in Europe to suspend the use of the Oxford-AstraZeneca Covid-19 vaccine as part of its immunisation programme, after rare but serious cases of blood clots had been reported among people who had been administered the vaccine. More in particular, in Denmark, two cases of thrombosis, one of which had been fatal, were linked to vaccinations with the Oxford-AstraZeneca Covid-19 vaccine, after more than 140,000 people had received the jab.

Preliminary research¹⁵⁸ published on 20 April 2021 by a German team that had been focusing their research on unusual blood clots in people who had received the Oxford-AstraZeneca Covid-19 vaccine suggested that a number of components of the vaccine may indeed have been contributing to bloods clots in very rare cases. The conclusion of the research was that:¹⁵⁹

ChAdOx1 nCoV-19 vaccine constituents (i) form antigenic complexes with PF4, (ii) EDTA increases microvascular permeability, and (iii) vaccine components cause acute inflammatory reactions. Antigen formation in a proinflammatory milieu offers an explanation for anti-PF4 antibody production. High-titer anti-PF4 antibodies activate platelets and induce neutrophil activation and NETs formation, fueling the VITT prothrombotic response.

Professor Andreas Greinacher from the University of Greifswald, moreover, indicated that the proteins and other molecules in the Oxford-AstraZeneca Covid-19 vaccine produced "complexes" that, for some people, caused the immune system to overreact, ultimately leading to blood clots.¹⁶⁰ Greinacher, furthermore, expressed his belief that the risk of blood clotting could be reduced by removing the proteins that remain in vaccines after the manufacturing process and by reducing the levels of an additive named EDTA. However, Greinacher also stressed that vaccine producers would need to consider with great care what changes could be made to their vaccines without affecting their overall safety and efficacy.¹⁶¹

More than a dozen countries first followed the example of Denmark, but all but a few resumed the use of the Oxford-AstraZeneca Covid-19 vaccine soon after, more precisely, after the EMA had stressed that the benefits of the Oxford-AstraZeneca Covid-19 vaccine by far outweighed the risks and that the vaccine was sufficiently "safe and effective". Although by 4 April 2021, the EMA had received reports of 169 cases of cerebral venous sinus thrombosis (CVST), it did not consider this to be sufficient cause for further alarm. As we have said, the real reason for the EMA's tough stance was, most likely, that the EU authorities were at the time relying heavily on the cheap Oxford-AstraZeneca Covid-19 vaccine as the main weapon in their fight against the Covid-19 pandemic. (Cf. Beaumont (2021); Busvine (2021).)

On 14 April 2021, Denmark announced that it would no longer use the Oxford-AstraZeneca Covid-19 vaccine at all in its immunisation programme, becoming the first country to discontinue the use of the vaccine completely. Denmark made this decision despite strong recommendations from the WHO and the EMA to continue using this inoculation, as they kept believing that the benefits of the vaccine far outweigh its potential risks. (Cf. Beaumont (2021).)

¹⁵⁸Greinacher et al. (2021).

¹⁵⁹Greinacher et al. (2021).

¹⁶⁰Henley and Sample (2021).

¹⁶¹Henley and Sample (2021).

9.3.1.4.2 Regulatory Issues Concerning the Johnson & Johnson Vaccine

The Johnson & Johnson (J&J) Covid-19 vaccine received an EUA from the FDA on 28 February 2021, after which Johnson & Johnson could begin distributing doses of its vaccine throughout the United States.¹⁶² (Cf. Sect. 9.3.1.3.)

However, on 13 April 2021, the FDA urged states to temporarily stop using Johnson & Johnson's Covid-19 vaccine "out of an abundance of caution", after six women in the United States had developed a rare blood clotting disorder that resulted in the death of one woman and the critical condition of another.¹⁶³ Johnson & Johnson itself responded to the news with a statement in which it indicated that, while "no clear causal relationship" had been identified between the blood clots and its vaccine, the enterprise would be working closely together with the regulatory authorities in order to evaluate all relevant data.¹⁶⁴

Dr Anne Schuchat, at the time senior deputy director of the CDC, added to this explanation that people who had received the Johnson & Johnson Covid-19 vaccine more than a month earlier, had a very low risk of developing blood clots, but that people who had received the Johnson & Johnson Covid-19 vaccine within the previous two weeks should remain alert to any symptoms, such as severe headaches,

¹⁶²Berkeley and Kopecki (2021).

As explained earlier, such an EUA grants a conditional approval based on two months of safety data, pending a further application for full approval, the latter typically requiring at least 6 months of data. J&J had for the first time submitted its Covid-19 vaccine data to the FDA in February 2021, and no specific concerns had been identified at the time after analysis by age, race and comorbidities, according to the agency. The FDA had at the time said that the most commonly reported side effects of the J&J Covid-19 vaccine were headache and fatigue, followed by muscle pain, nausea and fever. (Cf. Berkeley and Kopecki (2021).)

¹⁶³Berkeley and Kopecki (2021). Cf., furthermore, Beaumont (2021).

On the FDA-website, it was announced that the FDA and CDC had begun reviewing data on six cases reported to the Vaccine Adverse Event Reporting System (abbreviated as "VAERS") of low platelet levels in the blood, associated with a rare and serious type of blood clot called "cerebral venous sinus thrombosis" (or "CVST") in people who had received the Johnson & Johnson Covid-19 vaccine. The FDA website, moreover, reported that one of the concerned persons had died, and that all cases had occurred in women between the ages of 18 and 48. In some of the reported cases of CVST, the blood clots had also involved large veins in the abdomen. The FDA, furthermore, said that "out of an abundance of caution", the FDA and CDC had recommended a pause in the use of the Johnson & Johnson Covid-19 vaccine, while the FDA and CDC, through their Advisory Committee on Immunisation Practices, would further investigate the reports with regard to the serious adverse events. The FDA thereby emphasised that it concerned an important matter, in part, as it had to be ensured that healthcare professionals would be well aware of the potential for these adverse events and would be able to plan for appropriate recognition and management due to the unique treatment required for CVST with low platelet levels. The FDA, hence, concluded that the safety monitoring programme put in place for monitoring the Covid-19 vaccines had been working, as it had been able to detect reports of these very rare and serious adverse events at an early stage and to take steps to evaluate them. The FDA also announced that the FDA and CDC would continue to thoroughly investigate all reports to determine if there was a causal relationship. (Cf. US Food & Drug Administration (2021) (as accessed on 14 April 2021).)

¹⁶⁴Berkeley and Kopecki (2021).

abdominal pain, leg pain or shortness of breath. According to Schuchat, blood clotting usually occurs within on and three weeks after being administered the vaccine, with median time frame being nine days.¹⁶⁵

The impact of the mandatory pause in Johnson & Johnson's goal of delivering 100 million doses in the United States by the end of May 2021 was at the time still unclear, as the company has already before faced manufacturing problems after a facility run by Emergent BioSolutions had ruined 15 million doses of the vaccine.¹⁶⁶

Meanwhile, on 20 April 2021, the EMA similarly announced that it had also found a plausible connection between Johnson & Johnson's Covid-19 vaccine and rare cases of unusual blood clotting disorders, "very similar" to those that had in some cases occurred after the administration of the Oxford-AstraZeneca Covid-19 vaccine. At the same time, the EMA recommended that a warning be added to the Johnson & Johnson Covid-19 vaccine's product information, while stressing that the benefits of the vaccine still outweighed its risks.¹⁶⁷ The EMA's announcement of 20 April 2021 came as the European Commissioner responsible for the EU vaccine procurement had expressed his continued confidence that the 27 EU Member States would have enough doses of Covid-19 vaccines in order to fully vaccinate 70% of their adult population by mid-July 2021,¹⁶⁸ although in reality the EU vaccination campaign had been progressing slowly compared to the one of the United States and the United Kingdom. (Cf. Sect. 9.4.3.1.)

According to scientific information and analytics provided by the company "Airfinity", the suspension of the Johnson & Johnson Covid-19 vaccine could

¹⁶⁵Berkeley and Kopecki (2021).

At the time, of the in total 120 million people to whom a Covid-19 vaccine had been administered in the United States, about 6.9 million had received the Johnson & Johnson Covid-19 vaccine. Dr Fauci, in his capacity of the White House's chief medical advisor, declared during a separate press conference that there had been no similar red flags with regard to the Pfizer-BioNTech and Moderna Covid-19 vaccines. Dr Fauci also explained that the pause with regard to the Johnson & Johnson Covid-19 vaccine was expected to last between a few days and a few weeks, which would give the FDA and CDC the necessary time to further investigate the six reported cases and to try and figure out what had been going on, and more in particular what the six women had had in common. (Cf. Berkeley and Kopecki (2021).)

¹⁶⁶Berkeley and Kopecki (2021).

¹⁶⁷Henley and Sample (2021).

In its statement, the EMA said that it had investigated eight serious cases of unusual blood clots associated with low blood platelet levels, including one death, in the United States, where, at the time, more than 7 million people had been administered the Johnson & Johnson Covid-19 vaccine by then. According to the EMA, all cases had occurred in people under 60 years of age, mainly women, within 3 weeks upon receiving the vaccination. As had been the case with regard to the Oxford-AstraZeneca Covid-19 vaccine, in most cases, the blood clots had occurred in the brain and abdomen. The EMA indicated that these events should be listed as "very rare side effects" of the vaccine. At its meeting on 20 April 2021, the PRAC, the EMA's safety committee, concluded that a warning about unusual blood clots with low blood platelet counts had to be added to the product information for the Johnson & Johnson Covid-19 vaccine. The PRAC also concluded that these events could be listed as "very rare vaccine side effects". (Cf. EMA (2021).) ¹⁶⁸Henley and Sample (2021).

delay efforts to inoculate most people in the EU by more than two additional months. Not being able to use the Johnson & Johnson vaccine, was more in particular expected to push the timeline for vaccinating 75% of the population back into December 2021, compared with an earlier expected date of 30 September 2021.¹⁶⁹ With regard to the United States, a lack of the Johnson & Johnson Covid-19 vaccine could push back reaching the 75% threshold to 17 September 2021, from an earlier expectation of 22 July 2021.¹⁷⁰ In the meantime, reports in the week between 13 April 2021 and 20 April 2021, suggested that the United States could decide to lift its suspension of the Johnson & Johnson Covid-19 vaccine on 22 April 2021, although possibly with restrictions for some age/gender groups.¹⁷¹

Concerns over the Johnson & Johnson Covid-19 vaccine were similar to earlier concerns over the Oxford-AstraZeneca in March 2021, when several European countries had temporarily suspended its use because of unusual blood clots that had occurred in a small proportion of the people to whom the vaccine had been administered (cf. Sect. 9.3.1.4.1).¹⁷² In addition to the above-mentioned eight cases in people who had been administered the Johnson & Johnson Covid-19 vaccine, all in the United States, the EMA reported about 287 similar incidents in people who had been administered the Oxford-AstraZeneca Covid-19 vaccine, 142 of them in Europe. In contrast, the figures on the Pfizer-BioNTech and Moderna Covid-19 vaccines only amounted to 25 and 5 respectively.¹⁷³ It was indicated that, with regard to the number of people who had been administered the latter two Covid-19 vaccines, the number of unusual clotting events observed so far were "lower than what we would expect in the general population".¹⁷⁴

The vaccination programme of the EU had already been suffering severely from a wide variety of supply shortages and logistical problems for all possible vaccines at the beginning of 2021 and was finally picking up some speed by the end of April 2021, which helps explaining why the EU did not feel alarmed by the problems with the Johnsons & Johnson Covid-19 vaccine, and simply ordered 200 million extra doses.¹⁷⁵

¹⁶⁹Beaumont (2021).

¹⁷⁰Busvine (2021).

¹⁷¹Henley and Sample (2021).

¹⁷²Henley and Sample (2021).

At that time, German and Norwegian scientists had indicated that some people to whom the Oxford-AstraZeneca Covid-19 vaccine had been administered, were experiencing an abnormal reaction of their immune system, leading some of these experts to suspect that a similar mechanism might be occurring with regard to the reaction to the Johnson & Johnson Covid-19 vaccine. This suspicion was further supported by the fact that both Covid-19 vaccines made use of the same technology, which causes the human body's immune system to recognize the spike protein that coats the Covid-19 virus by using a cold virus—called adenovirus—to carry the spike gene into the human body. (Cf. Henley and Sample (2021).) However, the issue was still under further investigation.

¹⁷³Henley and Sample (2021).

¹⁷⁴Henley and Sample (2021).

¹⁷⁵Henley and Sample (2021).

However, Johnson & Johnson's problems were far from over. E.g., on 22. April 2021, a US FDA inspection report of 4 April 2021 revealed that unsanitary conditions and other problems at a Johnson & Johnson manufacturing facility in Baltimore, Maryland, had been responsible for the destruction of over 15 million doses of the Johnson & Johnson Covid-19 vaccine. The FDA declared that the facility operated by Emergent BioSolutions—one of the Johnson & Johnson production companies—had "not [been] maintained under clean and sanitary conditions".¹⁷⁶

In addition, on 3 May 2021, Denmark announced that it would not include the Johnson & Johnson Covid-19 vaccine in its further national vaccination campaign, referring to the various concerns about serious side effects, involving blood clots.¹⁷⁷ The exclusion from the Danish vaccination campaign of the Johnson & Johnson Covid-19 vaccine—which had accounted for about one third of Denmark's prospected supply of Covid-19 vaccines—was expected to delay the country's vaccination campaign by four weeks. However, the health authority still indicated that it could reassess the use of both the Johnson & Johnson and Oxford-

¹⁷⁷Cf. Danish Health Authority (2021).

¹⁷⁶Cf. del Mar Murphy-Marcos (2021).

The report, e.g., stated that the paint on the walls of the factory was peeling in several places and that paint stains had been found on the floor (from which it could be assumed that it had also been dripping in the vaccine baches themselves). (For the text of the report, cf. https://www.fda.gov/ media/147762/download). The report also found brown residues on the walls and floors. By the end of March 2021, the drug manufacturer itself had reported that it had discovered a problem with an ingredient used in the Johnson & Johnson Covid-19 vaccine at the said Baltimore production site, and had stopped manufacturing there. The factory was, as indicated, owned by "Emergent Biosolutions", one of the more than 10 companies that Johnson & Johnson used to speed up manufacturing. FDA officials declared having reviewed security camera footage from the factory in order to prepare their report. The footage from 27 January 2021 until 3 February 2021, showed that laborers had failed to follow procedures to prevent cross-contamination in several instances. Product components, containers and closures had not been stored in a manner that could have prevented contamination, according to the FDA report. "We will not allow the release of any product until we feel confident that it meets our expectations for quality," read a statement from the FDA. "The firm has failed to adequately train personnel involved in manufacturing operations, quality control sampling, weigh and dispense, and engineering operations to prevent cross contamination," the report added. The report, furthermore, indicated that the equipment used in the plant had not been of adequate size to enable operations for its intended use or for cleaning. "Johnson & Johnson will exercise its oversight authority to ensure that all of FDA's observations are addressed promptly and comprehensively," sounded a responsive statement by Johnson & Johnson itself. "The company promised to redouble its efforts as it continued to work toward securing emergency use authorization in the USA for drug substance manufactured at Emergent Bayview as quickly as possible, so that the company could help bring an end to this global pandemic." (Cf. del Mar Murphy-Marcos (2021).)

The decision had been reached after the Danish health authority had come to the conclusion that the benefits of using the Johnson & Johnson Covid-19 vaccine did not outweigh the risk of causing the possible side effects in people to whom the vaccine would be administered. Because of this conclusion, the Danish health authorities announced that they would continue the Danish Covid-19 vaccination programme without resorting to the Johnson & Johnson Covid-19 vaccine. (Cf. Danish Health Authority (2021).)

AstraZeneca Covid-19 vaccines in case the situation would still change.¹⁷⁸ At that time, of the 5.8 million inhabitants of Denmark, 11.5% had been fully vaccinated against Covid-19, while a further 23.4% had received a first dose of a Covid-19 vaccine.¹⁷⁹

In contrast to the position taken by Denmark, on 10 May 2021, German Health Minister Jens Spahn announced that Germany would make the Johnson & Johnson's Covid-19 vaccine available to all adults, regardless of age or pre-existing health condition, as part of a two-pronged strategy to counter the reluctance of older people to receive viral vector-based vaccines. The Minister explained that anyone who wished to receive the Johnson & Johnson Covid-19 vaccine, would be able to do so on a single occasion, provided they were fully informed of the extremely low risk of a rare blood clotting disease associated with the vaccine.¹⁸⁰

9.3.1.4.3 Other Effects of Regulatory Issues Related to the Oxford-AstraZeneca and Johnson & Johnson Covid-19 Vaccines

The potential risk of blood clots from the Oxford-AstraZeneca and Johnson & Johnson Covid-19 vaccines would afterwards continue to prompt different policy responses across Europe: E.g., the French government retained confidence in the Oxford-AstraZeneca Covid-19 shot, at the same time announcing it would also start using the Johnson & Johnson Covid-19 vaccine.¹⁸¹

Nevertheless, by mid-April 2021, Denmark was not the only Scandinavian country that had developed serious doubts about one of the Covid-19 vaccines. At the moment that Denmark announced its decision that its vaccination campaign would go ahead without the Oxford-AstraZeneca Covid-19 vaccine (cf. Sect. 9.3.1.4.1), Sweden said that it planned to pause its own roll-out of the Covid-19 vaccine produced by Johnson & Johnson.¹⁸² Finland announced that it would continue to restrict the Oxford-AstraZeneca Covid-19 vaccine to people aged 65 and over, adding that it could possibly provide a second dose from another manufacturer to people who had already been administered a shot with the

¹⁷⁸The Danish health authority declared that it would continue to review the ongoing release of data from, e.g., the US Health and Drug Administration, which, due to the situation of the Covid-19 epidemic in the United States, had itself ultimately chosen to include the Johnson & Johnson's Covid-19 vaccine in its vaccination campaign. The Danish Health Authority stated that it needed more information and safety data with regard to the vaccine in order to determine whether women were at greater risk of unusual but serious blood clotting events than men, or vice versa. (Cf. Danish Health Authority (2021).)

¹⁷⁹France24, AFP and Reuters (2021). Cf., furthermore, Danish Health Authority (2021).

¹⁸⁰Oltermann (2021).

¹⁸¹Beaumont (2021).

¹⁸²Beaumont (2021).

Oxford-AstraZeneca Covid-19 vaccine, and that it was preparing a plan on how to continue its vaccinations.¹⁸³

Most other EU countries decided to resume vaccinations with the Oxford-AstraZeneca Covid-19 vaccine, but a dozen, including France, Germany, Italy and Spain, decided to restrict its use to people over 55, 60 or 65.¹⁸⁴

9.3.1.5 Interval and Mixed Dosing in Relation to the Need for a Third Dose and Regular Booster Injections

In the EU, given the shortages of Covid-19 vaccines at the start of the Member States' vaccination campaigns early-2021, scientists began to look for ways to manage shortages, e.g., by adjusting the dosing intervals of the vaccines.

As it became considered vital to roll out vaccinations more rapidly in order to protect as many people as possible and to reduce the possibility of Covid-19 virus spread, solutions had to be found to the disastrous management of the Covid-19 vaccine processing by the EU's responsible bureaucrats (cf., furthermore, Sects. 9.4.3.3 and 9.4.3.4). In order to achieve such a more rapid roll-out of the vaccination campaigns and given the limited number of doses available, the interval between doses 1 and 2 of the Covid-19 vaccines that require two doses, was hence widely discussed within the context of the EU/EEA, as well as by the WHO Strategic Advisory Group of Experts on Immunisation (abbreviated as "SAGE"). Before, the Covid-19 vaccine product information as recommended by the EMA, had indicated that the second dose of the BioNTech-Pfizer Comirnaty vaccine had to be administered three weeks (or 21 days) after the first jab. For the interval between the first and the second dose of the Moderna Covid-19 vaccine, 28 days were deemed advisory. However, in response to the extreme Covid-19 vaccine shortages the EU/EEA were facing, the WHO came up with new recommendations that the interval between the two doses of the Pfizer-BioNTech and Moderna Covid-19 vaccines could be expanded to 42 days (or 6 weeks). Similarly, with regard to the Oxford-AstraZeneca Covid-19 vaccine, the EMA had initially granted conditional approval for the use of the vaccine under the recommendation that the interval between the two doses of said vaccine would amount to four to twelve weeks. Here, the sudden new insight became that greater vaccine efficacy would be obtained by prolonging the interval between the first and the second dose of the vaccine, and that a single dose of the Oxford-AstraZeneca Covid-19 vaccine would be sufficiently effective for 90 days after the administration of the first shot of the vaccine. As a result, the WHO SAGE interim recommendations on the administration of the Oxford-AstraZeneca Covid-19 vaccine started advising that the second dose would best be administered between

¹⁸³Beaumont (2021).

¹⁸⁴Henley and Sample (2021).

8 and 12 weeks after the first jab. This was motivated under a purportedly increased immunogenicity in case of a prolonged interval between doses.¹⁸⁵

According to the same regulators, new evidence had also emerged on the efficacy of the different Covid-19 vaccines after the administration of a single dose.¹⁸⁶ Other evidence on the dosing of the Covid-19 vaccines referred to by the ECDC dealt with the number of doses of a Covid-19 vaccine that people who had already been infected with Covid-19 in the past (still) needed.¹⁸⁷ Mathematical modelling was used to estimate the impact of changing the dose interval.¹⁸⁸

Given the fact that all available Covid-19 vaccines target the Covid-19 virus' spike protein to induce immunity, the possibility of using a mixed vaccination schedule, by administering a second dose that was based on a different Covid-19 vaccine product than the first dose, were also explored. It was considered that such a mixed schedule could, potentially, contribute to better protection, as well as adding more flexibility to vaccine deployment.¹⁸⁹

In mid-April 2021, when most people in the European Union still had no clear idea when they would receive their first jab of a Covid-19 vaccine, and European and British scientists were beginning to play with ideas of intervals and dose mixes to cope with vaccine shortages, the United States in contrast started to prepare for the

¹⁸⁷Cf., furthermore, European Centre for Disease Prevention and Control (2021b), p. 15.

¹⁸⁸European Centre for Disease Prevention and Control (2021b), p. 15.

¹⁸⁹European Centre for Disease Prevention and Control (2021b), p. 15.

¹⁸⁵European Centre for Disease Prevention and Control (2021b), p. 14.

¹⁸⁶European Centre for Disease Prevention and Control (2021b), p. 15.

E.g., from an evaluation of real-world immune responses after vaccination with the Comirnaty mRNA vaccine developed by BioNTech-Pfizer in the United Kingdom, in which the recommended two-dose schedule had been respected by leaving an interval of three months among a small sample of 23 participants, it had appeared that a proportion of the vaccinated people over 80 years of age had had a sub-optimal neutralising antibody response three weeks after vaccination, while the subsequent second dose of the vaccine was associated with robust neutralising responses. The conclusion of this trial was that a significant proportion of people over 80 years of age appeared to require a second dose of the Pfizer-BioNTech Covid-19 vaccine at three weeks in order to achieve a sufficient degree of Covid-19 virus neutralisation. From an Israeli study, it had appeared that the efficacy of BioNTech-Pfizer's Comirnaty vaccine in an Israeli cohort consisting of participants aged 16 years and older with a median age of 59.7 years, increased progressively from day 14 onwards after a first jab, in order to reach a peak efficacy of about 90% immunity on day 21 before a second dose was given. However, it was not known how long this immunity after the first jab of the vaccine could last beyond said time frame of 21 days without the administration of a second dose. From the new evidence, it also appeared that the Oxford-AstraZeneca Covid-19 vaccine provided a good neutralising antibody response after one dose already. (Cf. European Centre for Disease Prevention and Control (2021b), p. 15.)

Such a trial was thus launched in the United Kingdom, in which a first jab with the Oxford-AstraZeneca Covid-19 vaccine was to be followed by a second jab with the BioNTech-Pfizer Covid-19 vaccine, and vice versa, with either four- or 12-week interval schedules. It was also considered to start similar trials based on other vaccines, such as the Johnson & Johnson vaccine and the Novavax vaccine. AstraZeneca similarly announced that there would be a mixed-dose trial between the Oxford-AstraZeneca Covid-19 vaccine and the Sputnik V Covid-19 vaccine, to be conducted in Azerbaijan. (Cf. European Centre for Disease Prevention and Control (2021b), p. 15.)

possibility that a so-called booster—or third—shot might be needed between nine and 12 months after the first jab of a Covid-19 vaccination. As the topic of postvaccination immunity got further investigated, it became clear that booster shots would most likely be needed, although there was not yet a clear insight about the ideal interval between the second jab and such a booster jab. It was, moreover, soon assumed that annual revaccination could become necessary, depending on the further behaviour of the variants of the Covid-19 virus.¹⁹⁰ Initial data had, in any case, indicated that the Covid-19 vaccines developed by Moderna and by the cooperating partners Pfizer and BioNTech retained most of their efficacy for a period of at least six months, although it was not known how much longer. Although it seemed that the protection provided by the mRNA Covid-19 vaccines would last well beyond these six months, the rapid spread of the already existing variants of the Covid-19 virus, as well as others that might still emerge in the future, added to the likelihood that regular booster shots would become necessary (as regarding annual flu vaccines).¹⁹¹

9.3.1.6 Ethical Considerations of the Catholic Church

Once some of the Covid-19 vaccines were getting ready for use, i.e., in November-December 2020, a debate started to emerge within the Catholic Church whether some of the Covid-19 vaccines were sufficiently compliant with the Church's teachings. This was because the development, but also the testing, of some of the Covid-19 vaccines relied on cell material (notably cell lines) from aborted fetuses. This was in particular the case for the Oxford-AstraZeneca and Johnson & Johnson Covid-19 vaccines, as regards the development, production, and testing of these vaccines, and for the Pfizer-BioNTech and Moderna Covid-19 vaccines, as regards the testing of the vaccines.¹⁹²

As of December 2020, this matter came to the attention of several church authorities, whereby the distinction between, on one hand, the vaccines which were deemed to be most in contradiction with the church doctrine (so especially the Oxford-AstraZeneca and Johnson & Johnson Covid-19 vaccines), and, on the other hand, vaccines which were to a lesser extent deemed in contradiction which church doctrine (notably the Pfizer-BioNTech and Moderna Covid-19 vaccines) was explicitly acknowledged.¹⁹³

¹⁹⁰Guardian Staff and Agencies (2021).

¹⁹¹Guardian Staff and Agencies (2021).

¹⁹²Cf. Europees Instituut voor Bio-ethiek (2020).

¹⁹³Otherwise put, the Pfizer-BioNTech and Moderna Covid-19 vaccines had (only) been tested on cells lines produced from cells that originally came from an aborted fetus. These vaccines, however, were not developed or used of abortion-derived cell lines in the manufacturing and/or development process (contrary to what was the case for the Oxford-AstraZeneca and Johnson & Johnson Covid-19 vaccines).

In this, church authorities seemed to rely on a "lesser" or "more" evil doctrine, whereby:

- (1) The bigger evil concerns the use of abortion-derived cell lines in the manufacturing and/or development of vaccines.
- (2) The lesser evil concerns the use of such cell lines only in the (confirmatory) test phase (in order to get approval) of the vaccines, and not in the research, development and production of the vaccines.

Already in the leading encyclical "Evangelium vitae" by Saint John Paul II, a clear position had been taken against the use of (tissue, or material from) aborted fetuses for medical purposes.

Thus, the encyclical determines:¹⁹⁴

63. This evaluation of the morality of abortion is to be applied also to the recent forms of intervention on human embryos which, although carried out for purposes legitimate in themselves, inevitably involve the killing of those embryos. This is the case with experimentation on embryos, which is becoming increasingly widespread in the field of biomedical research and is legally permitted in some countries. Although "one must uphold as licit procedures carried out on the human embryo which respect the life and integrity of the embryo and do not involve disproportionate risks for it, but rather are directed to its healing, the improvement of its condition of health, or its individual survival", it must nonetheless be stated that the use of human embryos or fetuses as an object of experimentation constitutes a crime against their dignity as human beings who have a right to the same respect owed to a child once born, just as to every person.

This moral condemnation also regards procedures that exploit living human embryos and fetuses-sometimes specifically "produced" for this purpose by in vitro fertilization-either to be used as "biological material" or as providers of organs or tissue for transplants in the treatment of certain diseases. The killing of innocent human creatures, even if carried out to help others, constitutes an absolutely unacceptable act.

In a formal letter from the Vatican (more precisely from the "Pontificia Academia pro vita") regarding vaccines based on aborted fetal material dated 9 June 2005, the position of the Vatican had even been made more clear.¹⁹⁵ This letter constituted a response to a question addressed at the time to His Eminence Pope Benedict XVI, then still a cardinal. In summary, the position of that letter (clearly building on "Evangelium vitae") was that the development and use of vaccines which rely on aborted fetal material is an "evil" thing (= "evil" in terms of Catholic teaching), and that participation in this evil increases the more knowledge and insight one has with regard to the matter.¹⁹⁶

It was hereby explicitly acknowledged that, e.g., doctors have a duty, if an alternative vaccine is available (which is not based on material from an aborted

¹⁹⁴Saint John Paul II (1995).

¹⁹⁵Cf. Pontificia Academia Pro Vita (2005).

¹⁹⁶Next to the term "evil", also the term "sinful act" is used in the letter to describe the practices involved in developing, producing and/or using such vaccines.

fetus), to work to ensure that this vaccine is used (even in their attitude towards the government):

Therefore, doctors and fathers of families have a duty to take recourse to alternative vaccines (if they exist), putting pressure on the political authorities and health systems so that other vaccines without moral problems become available. They should take recourse, if necessary, to the use of conscientious objection with regard to the use of vaccines produced by means of cell lines of aborted human fetal origin. Equally, they should oppose by all means (in writing, through the various associations, mass media, etc.) the vaccines which do not yet have morally acceptable alternatives, creating pressure so that alternative vaccines are prepared, which are not connected with the abortion of a human fetus, and requesting rigorous legal control of the pharmaceutical industry producers.

The letter of 9 June 2005, furthermore, speaks of a "duty of the physician", as well as of the householder, to invoke a fundamental conscientious objection in the event that the use of such a troubled vaccine is at stake.

See, e.g., explicitly footnote 14 of the June 9, 2005, letter:

Such a duty may lead, as a consequence, to taking recourse to "objection of conscience" when the action recognized as illicit is an act permitted or even encouraged by the laws of the country and poses a threat to human life. The Encyclical Letter Evangelium Vitae underlined this "obligation to oppose" the laws which permit abortion or euthanasia "by conscientious objection".

One of the general conclusions of the 9 June 2005 reached in the letter implies that there is a grave responsibility to use alternative vaccines, and to make a conscientious objection to those vaccines which cause moral problems.

The matter was readdressed in a 2008 Congregation for the Faith-statement "Dignitas personae",¹⁹⁷ dating back to the era of Pope Benedict XVI, in which the following was stated on the subject:

In this regard, the criterion of independence as it has been formulated by some ethics committees is not sufficient. According to this criterion, the use of "biological material" of illicit origin would be ethically permissible provided there is a clear separation between those who, on the one hand, produce, freeze and cause the death of embryos and, on the other, the researchers involved in scientific experimentation. The criterion of independence is not sufficient to avoid a contradiction in the attitude of the person who says that he does not approve of the injustice perpetrated by others, but at the same time accepts for his own work the "biological material" which the others have obtained by means of that injustice. When the illicit action is endorsed by the laws which regulate healthcare and scientific research, it is necessary to distance oneself from the evil aspects of that system in order not to give the impression of a certain toleration or tacit acceptance of actions which are gravely unjust. Any appearance of acceptance would in fact contribute to the growing indifference to, if not the approval of, such actions in certain medical and political circles.

¹⁹⁷Congregation for the Doctrine of the Fate (2008).

The statement "Dignitas personae" itself refers to the statement "Donum vitae", which calls in a general sense for the respect of human embryos (and also mentions a prohibition of their commercial use). However, this statement does not mention anything specific regarding vaccines based on cell material of aborted fetuses themselves. (Cf. Congregation for the Doctrine of the Fate (2007).)

In light of these official Church teachings, shortly after the first Covid-19 vaccines were reported about in medical journals and in the press, several US Catholic bishops expressed their viewpoints on the morality of the Covid-19-vaccines in an open letter dated 14 December 2020 (entitled "a letter to the faithful from the Colorado bishops on COVID-19 vaccines").¹⁹⁸ The letter, published on the website "Denver Catholic," reminded that Catholics have a duty to use vaccines that respect human life, when available. The bishops, while describing the vaccines for Covid-19 "necessary and urgent," also state that "a good end cannot justify evil means"¹⁹⁹:

In the case of the Pfizer and Moderna COVID-19 vaccines, their use is morally acceptable since neither company used fetal cell lines from an aborted baby at any level of design, development, or production. However, we must also acknowledge that these two vaccine options are not untouched by abortion, as both relied on fetal cells from an aborted baby for one of the confirmatory lab tests. In our current circumstances, when better options are not available, the use of the Pfizer and Moderna vaccines remains a morally valid option. On the other hand, vaccines such as AstraZeneca-Oxford use aborted fetal lines in design, development, production, and testing, and therefore are not a morally valid option because better options are available.

Catholics have the duty to use vaccines that respect human life, when they are available. We are thankful that many of the companies and countries working to protect human life and health from COVID-19 are also considering the ethical development and trials of their vaccines.

The letter of 14 December 2020 clearly opposed the use of the Oxford-AstraZeneca and Johnson & Johnson Covid-19 vaccines, to the extent that there are (ethically speaking) better alternatives available (e.g., the Moderna and Pfizer-BioNTech Covid-19 vaccines).

However, the US bishops did not have the final word in the matter. In a more recent statement of the Vatican itself of 21 December 2020, a slightly more liberal approach to the matter was considered²⁰⁰:

In this sense, when ethically irreproachable Covid-19 vaccines are not available (e.g., in countries where vaccines without ethical problems are not made available to physicians and patients, or where their distribution is more difficult due to special storage and transport conditions, or when various types of vaccines are distributed in the same country but health authorities do not allow citizens to choose the vaccine with which to be inoculated) it is morally acceptable to receive Covid-19 vaccines that have used cell lines from aborted fetuses in their research and production process.

This new position of the Vatican seemed to imply a slight step back with regard to the previously elaborated Church doctrine going back to "Evangelium vitae".

This relaxation was specifically justified in light of the Covid-19-pandemic.

¹⁹⁸Brown and Ingold (2020).

¹⁹⁹Archdiocese of Denver (2020).

²⁰⁰Oficina de prensa de la Santa Sede (2020).

In a news report from "Vatican news", this "step back" was explained as follows²⁰¹:

The "Note on the morality of using some anti-Covid-19 vaccines" recalls three previous pronouncements on the same topic: one from the Pontifical Academy for Life (PAV) in 2005; the CDF Instruction Dignitas Personae in 2008; and, another note from the PAV in 2017.

(...)

Therefore, argues the note published on Monday in summing up the Instruction of 2008, "when ethically irreproachable Covid-19 vaccines are not available", it is "morally acceptable to receive Covid-19 vaccines that have used cell lines from aborted fetuses in their research and production process.

In other words, there was no longer a "total" or "absolute" condemnation of vaccines that rely on cell lines from aborted fetal material in their research and development phase, although they may only be used if there are no less ethically compromised alternatives available.

Otherwise put, even in the new statement of 21 December 2020, (as in the 2005doctrine itself), the idea that one should preferentially fall back on the less ethically compromised vaccines remained expressed. From this, it can be inferred that a "gradation" was (still) at play, even in the 21 December 2020 statement (which was, in essence, what the position of the US bishops of 14 December 2020 amounted to). In this regard, the 21 December 2020 statement keeps considering vaccines that rely on cell lines from aborted fetal material in their research and development phase as (ethically) less valid, which implies that their use should preferably be avoided if other alternatives are available. Vaccines that have only used aborted tissue in the testing phase (such as the Pfizer-BioNTech and Moderna Covid-19 vaccines) were hereby, as such, not explicitly mentioned in the 21 December 2020 statement, and were, hence, not subject to the same moral judgement as vaccines that do rely on cell lines from aborted fetal material in their research and development phase (notably the Oxford-AstraZeneca and Johnson & Johnson Covid-19 vaccines).

From this, it seems to follow that the 21 December 2020 statement does not represent a complete caesura with the Episcopal Letter (from the hand of the abovementioned US Bishops) of 14 December 2020, since the 21 December 2020 statement also reflects greater moral judgment against vaccines that rely on cell lines from aborted fetal material in their research and development phase, than against vaccines that do not.

One of the major differences between the two approaches seems to be that the Episcopal letter of 14 December 2020, mentions the several Covid-19 vaccines by name, which is not the case in the Vatican statement of 21 December 2020. A second difference seems to regard the fact that in the Episcopal letter of 14 December 2020, the availability of alternative vaccines which, in their research and development phase, do not rely on cell lines of aborted foetal material, is an axiom (= it is

²⁰¹ Vatican News (2020).

acknowledged, in an outspoken manner, that such alternative vaccines do exist, notably the Pfizer-BioNTech and Moderna Covid-19 vaccines, which is why they are also mentioned by name in the letter), to which the Vatican's statement of 21 December 2020 only refers as a hypothetical possibility (which is somewhat strange, to the extent that, at the time the statement was made, vaccines that do not rely on cell lines from aborted fetal material in their research and development phase, already existed). A third difference is that the 21 December 2020 statement is somewhat more lenient regarding the logistical problems (e.g., transportation and preservation) posed by the ethically superior vaccines (i.e., the Pfizer-BioNTech and Moderna Covid-19 vaccines). Also on this point, the 21 December 2020 statement seems to make a concession to the earlier church statements and positions.

It is, however, noteworthy to mention that the Vatican itself purchased the Pfizer-BioNTech Covid-19 vaccine, which was then also used to vaccinate the two popes (Francis I and Benedict XVI).²⁰² It was also announced that all inhabitants and further personnel of the Vatican would all be vaccinated with the Pfizer-BioNTech Covid-19 vaccine. In other words, the Vatican itself clearly chose for the Pfizer-BioNTech Covid-19 vaccine, entirely in line with the gradation contained in its own statement of 21 December 2020, which stipulates that to the extent that less objectionable alternatives are available, a vaccine based on cell lines of aborted tissue in the production or development phase should preferably not be chosen. As a result, the Vatican's purchasing and vaccination behaviour was also, de facto, fully in line with the statement of the US bishops of 14 December 2020, which allows e.g., the use of the Pfizer-BioNTech Covid-19 vaccine, but rejects e.g., the Oxford-AstraZeneca Covid-19 vaccine.

It is, however, not only the American bishops who raised questions of conscience. This was also the case for, e.g., the Australian archbishop Anthony Fisher, in an opinion piece of 4 August 2020 already.²⁰³ In doing so, the Australian archbishop nicely summarized the possible positions any person, but especially a Catholic, may assume:

Of course, many people will have no ethical problem with using tissue from electively aborted fetuses for medical purposes.

Others may regard the use of a cell-line derived from an abortion performed back in the 1970s as now sufficiently removed from the abortion itself to be excusable.

But others again will draw a straight line from the ending of a human life in abortion, through to the cultivation of the cell-line, to the manufacture of this vaccine. They won't want to be associated with or benefit in any way from the death of the baby girl whose cells were taken and cultivated, nor to be thought to be trivializing that death, nor to be encouraging the fetal tissue industry.

I, for one, don't think it would be unethical to use this vaccine if there is no alternative available. To do so would not be to co-operate in any abortion occurring in the past or the future. But I am deeply troubled by it.

²⁰²Wooden (2020).

²⁰³ https://www.catholicweekly.com.au/archbishop-fisher-op-lets-not-create-an-ethical-dilemma/.

In summary: (1) a first group of people will be completely unconcerned. (2) A second group will point out that the cell lines used date back to the 1970s and that this provides a ground for exculpation. (3) But others will continue to feel that the matter at hand should not be trivialized. The Australian archbishop arrived at a position of his own that is very much in line with the teachings of the 2005 church letter: using the compromised vaccines only in the absence of alternatives, in addition to a continued call for medical science to work to develop alternatives. However, in the approach of the Australian archbishop, the idea is echoed that it is ultimately a question of (individual) conscience.

That the issue remained very much alive may be shown, e.g., by various Church positions that continued to emerge, also after the Vatican Declaration of 21 December 2020. Again, these several statements repeatedly resonate the "gradation idea" (= only falling back on vaccines that contain an aborted cell line in the production and/or development phase, if no other options are available).²⁰⁴

Even in the further course of 2021, the debate was still ongoing with, e.g., on 14 April 2021, Poland's Episcopate bioethical team declaring that the use of the Oxford-AstraZeneca and the Johnson & Johnson Covid-19 vaccines raised "serious moral opposition", because their technology is linked to lines of cells derived from aborted foetuses.²⁰⁵

9.3.2 Medicines and Treatments for Covid-19

9.3.2.1 General

According to Fadel et al., given that there does not exist a real treatment for the Covid-19 disease, the basic clinical management of Covid-19 consists mainly of providing supportive care, supplemental oxygen and mechanical ventilatory support. Adjunctive therapy with immunomodulatory agents that target the inflammatory cytokine storm that may occur has also often been resorted to.²⁰⁶

Since the emergence of Covid-19, several pharmaceuticals have been, or are being tested for safety and efficacy as possible treatments for Covid-19. These include corticosteroids, the antiviral nucleotide analogue "remdesivir", systemic

²⁰⁴For an interesting overview, cf. Carfleo (2020).

²⁰⁵AP (2021); Ali (2021).

Bishop Wróbel had noted that unlike the vaccines against Covid-19, which use mRNA-based technology and do not raise significant moral objections, cell lines created from biological material taken from aborted fetuses are used in the production of the Covid-19 vaccines of Oxford-AstraZeneca and Johnson & Johnson," which raises serious moral objections implying that Catholics should not receive these vaccines. According to the bishop, such vaccines could only be used "without moral guilt" only if people have no other choice and are directly required to be inoculated under certain conditions, such as for work, as in this case, use of the vaccine does would imply direct participation in, acceptance of, or coercion to have abortion. (Cf. Ali (2021).) ²⁰⁶Fadel, et al. (2020).

interferons and in particular interferon β -1a, monoclonal antibodies against components of the immune system, such as interleukin-6 (IL-6) and IL-4, other immune modulators and antibodies against components of SARS-CoV-2.

On its website, the Harvard Medical School gives an insightful overview mentioning most of these drugs. As we ourselves have, obviously, no medical expertise whatsoever, this overview, complemented by findings of other researchers and/or authors, has been used as a basis for the exploration of these medicines mentioned below, in full acknowledgment of the authorship of the researchers and institutions referred to in the footnotes.

9.3.2.2 Rest and Hydration

According to the Harvard Medical School, for people with Covid-19 who are recovering at home, the main medical advice is to get enough rest, although one does no not necessarily have to stay in bed. People with Covid-19 are also recommended to stay hydrated. To reduce fever and relieve pain, acetaminophen has been advised.²⁰⁷

9.3.2.3 Antiviral Drugs

9.3.2.3.1 General

According to the Harvard Medical School, an antiviral drug should be able to address the part of a virus' life cycle necessary for its reproduction. Moreover, an antiviral drug should be able to destroy a virus without killing the human cell the virus occupies. A specific problem is that viruses reproduce very rapidly, as a result of which they have many opportunities to mutate (= i.e., to change their genetic information) with each new generation (cf. Sect. 1.1.2). This implies that a virus may soon develop resistance to drugs or vaccines that before were still effective.²⁰⁸

9.3.2.3.2 Ibuprofen and Acetaminophen

According to the Harvard Medical School, a variety of French doctors initially advised against the use of "ibuprofen" (e.g., Motrin, Advil, besides many generic versions) for treating Covid-19 symptoms. Said French doctors based their opinion on reports concerning otherwise healthy people who had contracted Covid-19 and

²⁰⁷Harvard Medical School (2021) (updated on 4 March 2021).

With regard to acetaminophen, the total daily dose of all products taken should not exceed 3,000 milligrams. (Cf. Harvard Medical School (2021) (updated on 4 March 2021).)

²⁰⁸Harvard Medical School (2021) (updated on 4 March 2021).

had started taking an NSAID (short for a "non-steroidal anti-inflammatory drug") to relieve their symptoms, and then developed serious illness, including pneumonia. However, said reports were only containing observations but were not the result of scientific research. The WHO itself initially recommended the use of "acetaminophen", rather than "ibuprofen", for helping to bring the fever and the pain associated with Covid-19 infection down. Later, the WHO changed its opinion and said that both "acetaminophen" and "ibuprofen" could be used. Due to this variety of cautionary opinions, some doctors remained concerned about NSAIDs. For this, it became a general guideline to choose using acetaminophen first, for a total dose that should not exceed 3000 milligrams per day.²⁰⁹

9.3.2.3.3 Remdesivir

On 29 April 2020, data from a US National Institutes of Health (NIH) trial demonstrated that Remdesivir (a drug produced by the company "Gilead Sciences") gave better results than a placebo for treating Covid-19. It, more in particular, had appeared that patients with advanced Covid-19 and lung involvement who had been given the antiviral had a 31% faster recovery time, amounting to about 4 days.²¹⁰ Shortly after these trial data were published, on 1 May 2020, the US FDA granted an EUA for using Remdesivir as a treatment against Covid-19.²¹¹

On 22 October 2020, the FDA granted a full approval for using Remdesivir in order to treat Covid-19. The drug got approved to treat adults and children 12 years of age and older and weighing at least 88 pounds, provided they had been hospitalized with Covid-19. The FDA based its decision on the finding of clinical trials that had indicated that in these patients, Remdesivir could modestly speed up recovery

²⁰⁹Harvard Medical School (2021) (updated on 4 March 2021).

For people who suspect or know that they have contracted Covid-19 and cannot take acetaminophen, or who have taken the maximum dose and remain in need of relieving their symptoms, there is no need to specifically avoid taking over the counter ibuprofen. (Cf. Harvard Medical School (2021) (updated on 4 March 2021).)

²¹⁰AJMC Staff (2021).

²¹¹AJMC Staff (2021).

The results of the trial data on which the decision of the FDA was based, indicated that Covid-19 patients who had been given the treatment had a 31% faster recovery time than patients who had only been given a placebo (P < 0.001). This corresponded with an overall recovery time of 11 days in the Remdesivir intervention cohort, compared with 15 days in the control group. The trial data also suggested a survival advantage, with a mortality rate of 8.0% for the group of patients who had been given Remdesivir, versus 11.6% for the group who had been given the placebo (P = 0.059). Findings by an independent data and safety monitoring board (DSMB) concurred with these trial data. However, at the time, the research had not yet been subjected to peer-review. A separate multicentre placebo-controlled study, published on 29 April 2020, later indicated that Remdesivir offered no benefit to patients with Covid-19. (Cf. Melilo (2020).)

time.²¹² However, interim results appearing from the SOLIDARITY trial, an RCT short for "randomized controlled trial"—that had compared four medicines with a control treatment in 405 hospitals in 30 countries, indicated that Remdesivir had had no effect on mortality in 2743 patients, compared with 2708 controls.²¹³

On 25 June 2020, the EMA's Committee for human medicines (CHMP) recommended that Remdesivir would be granted a conditional marketing authorisation for the treatment of Covid-19 patients suffering from pneumonia and who are in need of supplemental oxygenation. On 3 July 2020, the European Commission acted on this recommendation by the EMA, by granting a conditional marketing authorisation to Remdesivir for the treatment of Covid-19 in adults and adolescents aged 12 years and above suffering from pneumonia and requiring supplemental oxygenation. At the same time, the EMA announced that it would continue to monitor the results of the SOLIDARITY trial. Meanwhile, the FDA itself issued a new warning against the use of Remdesivir in combination with hydroxychloroquine.²¹⁴

On 29 June 2020, Gilead Sciences set the price of Remdesivir at USD 520 per vial. With regard to the United States, this implied that for a 6-vial treatment, the typical treatment would be USD 3120 per patient for those with private insurance.²¹⁵

Critics of the price setting—such as the consumer group Patients for Affordable Drugs (abbreviated as "PAD")—quickly pointed out that taxpayers' money had been used for funding the trial from which the usefulness of Remdesivir for treating Vovid-19 had appeared through the National Institute of Allergy and Infectious Diseases.²¹⁶ PAD also referred to earlier government funding when the drug had in the past been tested for fighting Ebola.²¹⁷ Another group, the Pacific Business Group on Health, which represents employer concerns, similarly declared in a statement sent to The American Journal of Managed Care (abbreviated as "AJMC") that it had

²¹²Harvard Medical School (2021) (updated on 4 March 2021). Cf., furthermore, AJMC Staff (2021).

²¹³European Centre for Disease Prevention and Control (2021a) (as accessed on 25 March 2021).

The study pointed to a relative risk of death = 0.95, 95% CI 0.81-1.11, p = 0.50. The authors of this research reached the conclusion that resorting to Remdesivir did not have an effect on time of discharge among Covid-19 patients, although the study was not designed to answer this question. The results of a double-blind RCT, ACTT-1, in 1062 hospitalised patients with Covid-19, in contrast, pointed out that Remdesivir was associated with a shorter median recovery time than a placebo (10 versus 15 days). According to this research, mortality at 14 days was 6.7% in the Remdesivir group and 11.9% in the placebo group, but the difference was considered of being not statistically significant. Another randomised controlled trial involving 584 patients with moderate Covid-19 disease in 105 hospitals in Europe, the United States and Asia found a slight improvement in clinical status in the 5-day group, but no difference between the 10-day group and standard care. The authors of this study concluded that this result was of uncertain clinical significance. (Cf. European Centre for Disease Prevention and Control (2021a) (as accessed on 25 March 2021).)

²¹⁴European Centre for Disease Prevention and Control (2021a) (as accessed on 25 March 2021).

²¹⁵AJMC Staff (2021). Cf., furthermore, Inserro (2020).

²¹⁶AJMC Staff (2021). Cf., furthermore, Inserro (2020).

²¹⁷Inserro (2020).

"serious concerns" about the price, citing the ICER analysis and taxpayer-funded research support.²¹⁸ The group was quoted as saying:

It is another unfortunate example of drug manufacturers taking advantage of their monopolies to set prices at whatever level they want. It's also a worrisome indicator that they will exploit the COVID pandemic to maximize their profits at the expense of patients. The bottom line is that this adds to the financial burden on employers and their employees and families, many of whom are already struggling from the impact of the COVID pandemic," the group said.

By 24 August 2020, it appeared from a global, multi-centre study that Remdesivir showed little effect on patients hospitalised with Covid-19. The results of this study were published in *JAMA* and indicated that there were no significant differences with regard to the duration of the need for providing supplemental oxygen and of the hospitalization period itself between the intervention group that had been given Remdesivir and the control group that had only been provided with standard care.²¹⁹ When it granted full approval to the drug on 22 October 2020, the FDA did not mention the WHO trial in its assessment of the risks and benefits of Remdesivir for treating Covid-19, simply stating that an NIH-supported trial to support approval had been considered better for assessing recovery time than the WHO trial.²²⁰

9.3.2.3.4 Baricitinib

In November 2020, the US FDA issued an EUA for the use of Baricitinib, in combination with Remdesivir, in Covid-19 hospitalised adults and children aged 2 years and older who are in need respiratory support. However, it was pointed out that there was not yet sufficient evidence to support the use of this treatment, instead of, e.g., dexamethasone, with or without remdesivir.²²¹

9.3.2.3.5 Lopinavir and Ritonavir

Lopinavir and ritonavir are antiretroviral drugs of the protease inhibitor class. They are usually used in combination to treat HIV infection.²²²

From an RCT studying the use of lopinavir and ritonavir in 199 Covid-19 patients in China, it appeared that there had not been a statistically significant favourable effect on the clinical outcome or mortality in Covid-19 patients, compared to a control group of Covid-19 patients who had only received standard care. Similarly,

²¹⁸Inserro (2020).

²¹⁹AJMC Staff (2021).

²²⁰AJMC Staff (2021).

²²¹Harvard Medical School (2021) (updated on 4 March 2021).

²²²Harvard Medical School (2021) (updated on 4 March 2021).

the UK RECOVERY trial, which had enrolled 1616 Covid-19 patients on lopinavirritonavir and had compared the findings on these patients with the findings about 3424 other Covid-19 patients who had only been given standard care, did not identify any benefit of the use of lopinavir-ritonavir on survival, clinical course or duration of hospital stay of Covid-19 patients. However, it was pointed out that the study did not include a sufficient number of Covid-19 patients on invasive mechanical ventilation for allowing to study the effect of lopinavir-ritonavir in this category of patients. The reason why the latter group of Covid-19 patients had not been included in this study was that it had been too difficult to administer the drugs to these patients. The WHO SOLIDARITY trial had, in contrast, simply dropped the lopinavir-ritonavir arm of its research after an interim analysis of trial results.²²³

9.3.2.4 Immunosuppressive/Anti-Inflammatory Drugs

Tocilizumab is an anti-inflammatory drug normally used to treat arthritis.²²⁴

From the so-called "BACC Bay Tocilizumab trial", i.e., a randomised, doubleblind, placebo-controlled trial with regard to 243 Covid-19 patients in the United States, it appeared that tocilizumab had not been found effective for preventing intubation or death in moderately ill hospitalised patients suffering from Covid-19. However, on 19 November 2020, investigators that had conducted another RCT, entitled the REMAP-CAP trial, during a press release announced that the early analysis of the data of their trial pointed out that treatment with tocilizumab was effective in reducing death and the duration of time spent in intensive care in critically ill patients suffering from Covid-19.²²⁵

More recent research has shown even more encouraging results about the use of the anti-inflammatory drugs tocilizumab and sarilumab. From a trial that run in six countries, including the United Kingdom, and that involved around 800 ICU patients, it appeared that these drugs reduced the number of Covid-19 related deaths from 36% to 27%. In a similar manner, it appeared from the RECOVERY study that tocilizumab enforced the life-saving effects of dexamethasone. From this research, it hence appeared that tocilizumab (and sarilumab) reduces inflammation, a symptom of Covid-19 that can flare up in Covid-19 patients and cause damage to a variety of organs, including the lungs. Based upon these studies, it was suggested that doctors could start administering tocilizumab and sarilumab to a Covid-19 patient who, although receiving dexamethasone, are still deteriorating and in need of intensive care.²²⁶ According to said researchers, the combination of using tocilizumab and

 ²²³ European Centre for Disease Prevention and Control (2021a) (as accessed on 25 March 2021).
 ²²⁴ Roberts (2021).

²²⁵European Centre for Disease Prevention and Control (2021a) (as accessed on 25 March 2021). ²²⁶Gallagher (2021).

dexamethasone should reduce the risk of death by about one third for Covid-19 patients put on oxygen support and by half for patients put on ventilators.²²⁷ However, the downside of this treatment is that it is not cheap, amounting to a cost price of around £500 per patient, in addition to the £5 price ticket for the dexamethasone treatment. But the benefits of using the drugs are clear—and involve a cost that is less than the cost per day of an ICU bed amounting to about £2000.²²⁸

9.3.2.5 Corticosteroids

Around the world, many doctors, including in the United States, resorted to treating very sick Covid-19 patients with corticosteroids. This method has, moreover, been used since the early beginning of the Covid-19 pandemic. It is believed that such a treatment makes biological sense for Covid-19 patients who have developed a so-called "hyperimmune response" (also referred to as "a cytokine storm") to the viral infection. In these cases, it is an overreaction to the Covid-19 virus of the immune system itself that starts damaging the patients' organs, including the lungs, which may ultimately lead to the patient's death. Dexamethasone and other corticosteroids (e.g., prednisone, methylprednisolone ...) are powerful anti-inflammatory drugs. They have as further advantage that they are easily available and inexpensive. The NIH Covid-19 treatment guidelines, hence, started recommending the use of dexamethasone in selected Covid-19 patients hospitalised with severe Covid-19 illness.²²⁹

²²⁷Roberts (2021).

Professor Martin Landray, at the time co-principal investigator of the RECOVERY trial and medical expert at the University of Oxford, had declared: "Used in combination, the impact is substantial. This is good news for patients and good news for the health services that care for them in the UK and around the world." Dr Charlotte Summers, an intensive care medic at Addenbrooke's Hospital in Cambridge, said: "These findings are a tremendous step forwards. This therapy looks like it keeps people out of the intensive care unit so they never need to see people like me which can only be a good thing." (Cf. Roberts (2021).)

²²⁸Roberts (2021).

²²⁹Harvard Medical School (2021) (updated on 4 March 2021).

The NIH recommendation was based on the results of the already above-quoted RECOVERY trial. In this study, more than 6000 patients hospitalised with Covid-19 were randomly assigned to receive either dexamethasone or standard therapy. It had appeared that patients who required supplemental oxygen or ventilators and received dexamethasone were less likely to die within 28 days than those who received standard treatment. Dexamethasone, however, did not have a beneficial effect in patients who did not require respiratory support. (Cf. Harvard Medical School (2021) (updated on 4 March 2021; European Centre for Disease Prevention and Control (2021a) (as accessed on 25 March 2021). Cf., furthermore, The RECOVERY Collaborative Group (2021).)

9.3.2.6 Monoclonal Antibody Treatments

9.3.2.6.1 Overview

In the United States, three monoclonal antibody treatments for Covid-19 received an EUA from the FDA. All three treatments were allowed to be used to treat adults and outpatient children over 12 years of age who have tested positive for Covid-19 shortly before, who only show mild to moderate symptoms and who are at risk of developing more severe symptoms or of being hospitalised. This may include people over 65 years of age, obese people and people suffering from certain chronic diseases.²³⁰

These monoclonal antibodies are man-made versions of antibodies that the human body naturally produces to fight invaders, such as the Covid-19 virus. All three FDA-approved monoclonal antibody treatments attack the spike protein of the Covid-19 virus, making it more difficult for the virus to attach and enter human cells. The three monoclonal antibody treatments that have received said EUA are "bamlanivimab", manufactured by Eli Lilly; a combination of "casirivimab" and "indevimab", manufactured by Regeneron; and a combination of "bamlanivimab" and "etesevimab", again manufactured by Eli Lilly.²³¹

Monoclonal antibody treatments must be administered intravenously in a clinic or hospital. However, these treatments have not been not approved for patients already hospitalised with Covid-19 or receiving oxygen therapy. They have not shown any benefit for these patients and could lead to more serious outcomes.²³²

²³⁰Harvard Medical School (2021) (as updated on 4 March 2021). Cf., furthermore, European Centre for Disease Prevention and Control (2021a) (as accessed on 25 March 2021).

All of the three referred to monoclonal antibody treatments have been tested in separate clinical trials. From these, it appeared that Bamlanivimab alone and the combination of casirivimab and imdevimab significantly reduced the risk of being hospitalised because of Covid-19, or of having to pay a visit to the emergency room, within 28 days of starting treatment, compared to placebo. It similarly appeared that the combination of bamlanivimab and etesevimab significantly reduced the risk of hospitalization or death within 29 days of treatment compared to placebo. (Harvard Medical School (2021) (as updated on 4 March 2021). Cf., furthermore, European Centre for Disease Prevention and Control (2021a) (as accessed on 25 March 2021).)

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²³²Harvard Medical School (2021) (as updated on 4 March 2021). Cf., furthermore, Centre for Disease Prevention and Control (2021a) (as accessed on 25 March 2021).

9.3.2.6.2 Regulatory Approvals

It was not until 23 June 2020 that researchers for the first time announced that they had discovered an antibody cocktail that uses antibodies directed at different parts of the spike that gives the Covid-19 virus its crown. The scientists found that the antibodies could be distinguished into two distinct groups, with each group targeting different regions of the viral spike. This made said researchers suggest that the battle against the Covid-19 virus should be fought on separate fronts, much like the one against HIV and some forms of cancer.²³³

On 29 September 2020, Regeneron published the results of a study containing Phase I, II and III trials, still ongoing at the time, showing that its proposed monoclonal antibody treatment for Covid-19, entitled "REGN-COV2",²³⁴ was linked to several beneficial effects, amongst which quicker recovery, a reduced viral load, and the need for fewer medical visits.²³⁵

On 9 October 2020, the Trump administration signed a USD 486 million agreement with AstraZeneca to develop an antibody treatment for Covid-19, which called for the HHS and the DOD to cooperate with the company for initiating the late-stage development and large-scale production of AstraZeneca's own cocktail of two monoclonal antibodies, called AZD7442, which showed the potential to treat and/or prevent the Covid-19 disease.²³⁶

On 9 November 2020, the FDA issued an EUA for Eli Lilly's bamlanivimab.²³⁷

On 23 November 2020, the FDA granted a EUA for the antibody treatment for dealing with Covid-19 that was made by Regeneron. This also concerned the antibody cocktail that had been administered to President Donald Trump when he was admitted to hospital during his battle against Covid-19 in early October 2020. (Cf., furthermore, Sect. 2.5.4.7.)²³⁸

Almost six months later, on 6 May 2021, the newspaper The Guardian reported that three antibody drugs were under continuous review by the EMA: the abovementioned Regeneron antibody combination, a similar Celltrion monoclonal antibody, and the monoclonal antibody cocktails from Eli Lilly, which were said to show evidence of reducing the risk of Covid-19 related hospitalization and death by 87%.

²³⁸AJMC Staff (2021).

²³³AJMC Staff (2021).

²³⁴REGN-COV2 is a mixture of two monoclonal antibodies (namely REGN10933 and REGN 10987). (Cf. AJMC Staff (2021).)

²³⁵AJMC Staff (2021).

²³⁶AJMC Staff (2021).

²³⁷AJMC Staff (2021).

Bamlanivimab is a monoclonal antibody treatment that mimics the immune system's response to Covid-19 infection. It had appeared that bamlanivimab offers protection to high-risk Covid-19 patients from progressing to more severe forms of the Covid-19 disease. Clinical trials had, more in particular, shown a reduction in Covid-19–related hospitalizations or emergency room visits in these patients within 28 days of treatment, compared with patients that had been given placebo. (AJMC Staff (2021).)

While the Regeneron and Celltrion drugs had not yet been given marketing authorization, EU member states had been given permission by the EMA to use them on patients not requiring oxygen and at high risk of progressing to severe illness. An EMA review was also expected to start within days of a fourth antibody cocktail named Sotrovimab and produced by GlaxoSmithKline.²³⁹

9.3.2.7 Convalescent Plasma

According to the Harvard Medical School, when people recover from Covid-19, their blood contains natural antibodies that their body has produced in order to fight the Covid-19 virus and help them recover from the disease. These antibodies can then be found in plasma, a component of the blood. Convalescent plasma—literally referring to plasma taken from the blood of recovered Covid-19 patients—has been used for more than a century already to treat a variety of diseases, ranging from measles and polio to chickenpox and SARS. Its safety has been widely recognised.²⁴⁰

On 23 August 2020, the FDA issued an EUA with regard to the use of convalescent plasma in hospitalised patients suffering from Covid-19.²⁴¹

However, the donation of blood for retrieving convalescent plasma has in the United States been subjected to several severe criteria. Such a person donating blood must first have tested positive for Covid-19 himself. He must then have recovered and be symptom-free for 14 days. He must, moreover, be free of Covid-19 disease at the time of plasma collection. He must finally still have sufficiently high levels of antibodies in his blood plasma. In addition, the donor and the patient to whom the plasma will be administered must also have compatible blood types. Once plasma has been retracted, it will then be screened for other infectious diseases, such as HIV.²⁴² Plasma donation must not weaken the donor's immune system or make him (or her) more susceptible to reinfection with the Covid-19 virus.²⁴³

It has, furthermore, been indicated that each plasma donor produces enough plasma to treat one to three Covid-19 patients.²⁴⁴

²³⁹Boffey (2021c).

²⁴⁰Harvard Medical School (2021) (updated on 4 March 2021).

²⁴¹Harvard Medical School (2021) (updated on 4 March 2021). Cf., furthermore, AJMC Staff (2021).

²⁴²Cf. Harvard Medical School (2021) (updated on 4 March 2021). Cf., furthermore, AJMC Staff (2021).

²⁴³Harvard Medical School (2021) (updated on 4 March 2021). Cf., furthermore, AJMC Staff (2021).

²⁴⁴Harvard Medical School (2021) (updated on 4 March 2021). Cf., furthermore, AJMC Staff (2021).

A small but well-designed (based on randomised, double-blind and placebo-controlled trials) study was published in the New England Journal of Medicine in January 2021. This study had only included patients aged 65 and over. The researchers had screened the convalescent plasma in order

At the time of the announcement of the EUA, the treatment was still under debate, with some experts doubting whether all patient populations could benefit from the therapy, amongst others due to a purported lack of data on its effectiveness. Meanwhile, White House press secretary Kayleigh McEnany had referred to it as a therapeutic breakthrough.²⁴⁵ The European Commission, in collaboration with the EU/EEA Member States, the European Blood Alliance (EBA), ECDC and other health professionals, similarly developed guidelines on the collection, testing, processing, storage, distribution and controlled use of convalescent plasma for the treatment of patients with Covid-19. The European Commission also set up an open-access EU/EEA database in order to collect data on CCP donations and patient outcomes after transfusions.²⁴⁶

9.3.2.8 Steroids

By 3 September 2020, three studies reported that low-cost corticosteroids were the most effective treatment (at that date) for severe cases of Covid-19. From these studies, it had more precisely appeared that the use of systemic corticosteroids could reduce the risk of death in people hospitalised with Covid-19 by a third, compared to patients having received usual care or placebo only.²⁴⁷

A steroid can be used as a drug to the extent that it may help reducing inflammation by mimicking the anti-inflammatory hormones produced by the body itself. The beneficial effect usually consists of dampening the body's immune system.²⁴⁸ A Covid-19 infection triggers inflammation as the body tries to fight the virus that causes the infection. But sometimes the human immune system may go in overdrive. This overdrive reaction can prove lethal, in which it ends up attacking the body's own cells. Some steroids can calm this effect.²⁴⁹

to ensure that it contained sufficiently high levels of antibodies. The researchers had found that patients who had received convalescent plasma within three days of symptom onset had been 48% less likely to develop severe Covid-19 disease, compared to patients who had only been given a placebo. However, a meta-analysis of four peer-reviewed, randomised clinical trials that was later published in JAMA showed less promising results. The trials included in the latter analysis comprised 1,060 patients with Covid-19 who had received either convalescent plasma, placebo or standard therapy. Compared to the patients been given placebo or standard therapy, it appeared that convalescent plasma did not significantly improve the risk of death, duration of the length of hospital stay or the need for a ventilator. The study authors, however, noted that the number of cases used for this analysis had been small, and that future clinical trials might still suggest that convalescent plasma therapy is more beneficial. (Cf. Harvard Medical School (2021) (updated on 4 March 2021). Cf., furthermore, AJMC Staff (2021).)

²⁴⁵AJMC Staff (2021).

 ²⁴⁶European Centre for Disease Prevention and Control (2021a) (as accessed on 25 March 2021).
 ²⁴⁷AJMC Staff (2021).

AJVIC Stall (2021).

²⁴⁸BBC News (2020a).

²⁴⁹BBC News (2020a).

Steroids that, to some extent, have been shown effective against Covid-19 include (the already referred to) "dexamethasone" and "hydrocortisone". It has, more precisely, appeared that these steroids may reduce the risk of death by a third for Covid-19 patients on ventilators, and a fifth for those on oxygen.²⁵⁰

However, it has, furthermore, been pointed out that dexamethasone is only suitable for people already hospitalized with Covid-19 and put on oxygen or mechanical ventilation, in other words the sickest Covid-19 patients. In contrast, the drug does not seem work in people only showing milder symptoms of the Covid-19 infection, in which cases suppressing the immune system cannot be helpful.²⁵¹

Research has, furthermore, shown that with regard to Covid-19 patients on oxygen, steroid treatment could prevent one in five deaths.²⁵² Another advantage of steroid treatment is that it is cheap. Treatment with dexamethasone costs only about £5.40 per day per patient, with patients suffering from Covid-19 being in need of treatment for up to 10 days. The drug is, in addition, widely accessible. As it was first manufactured in 1957 and became available for use in the early 1960s, the drug has in most territories run out of patent protection. This implies that a wide variety of pharmaceutical enterprises can manufacture the drug.²⁵³

9.3.2.9 Interferon Beta

In January 2021, some UK hospitals decided to launch a large-scale trial of a new treatment²⁵⁴ aimed at preventing patients suffering from Covid-19 from developing a serious illness. The new treatment involves inhaling a protein called "interferon beta". This is a protein which the body itself produces when it has a viral infection. Hopes were that inhaling interferon beta would stimulate the immune system and

²⁵⁰Gallagher (2021); BBC News (2020a).

When this book went to press, research was still ongoing to find out if other steroids could be useful in the treatment of Covid-19. One of these studies highlighted that early use of a short course of methylprednisolone in patients with moderate to severe Covid-19 could prevent disease progression and improve outcomes, while noting that further research was needed to better define the role of corticosteroids in Covid-19 patients at high risk of clinical deterioration, identified early in the course of the disease by using prognostic markers or clinical prediction tools. (Cf. Fadel et al. (2020).)

²⁵¹BBC News (2020a).

According to the scientists who conducted the trials contained in said research, one in three deaths could thus have been prevented in patients on ventilators. There was no significant benefit for patients not receiving ventilators. (Cf. BBC News (2020a).)

²⁵²BBC News (2020a).

²⁵³BBC News (2020a).

 $^{^{254}}$ The new treatment was developed at Southampton University Hospital and is produced by the Southampton-based biotechnology company "Synairgen". One treatment with the new drug could cost around £2000. (Cf. Rowlatt (2021).)

prepare the cells to fight the Covid-19 virus.²⁵⁵ Initial research results already have suggested that the treatment may help reducing the risk of a Covid-19 patient from being hospitalised and developing serious illness, which could itself increase the need of ventilation, by up to 80%.²⁵⁶

In the course of 2020, there had already been conducted a Phase II clinical trial of the treatment, with promising results. From this Phase II clinical trial, it more in particular had appeared that, when receiving treatment with interferon beta, the chances of a Covid-19 patient of being hospitalised for Covid-19 treatment because of serious illness-e.g., in order to receive ventilation-were reduced by almost 80%. Moreover, patients who had received treatment with interferon beta had been two to three times more likely to recover to the point where their daily activities were no longer compromised by their illness. The Phase II trials had also found a very significant reduction in breathlessness among Covid-19 patients who had been given the treatment. Finally, the average duration of a hospital stay for Covid-19 patients who had been given the new drug, had been reduced by a third, from an average of 9 to 6 days.²⁵⁷ However, the trial sample of this first study had been small, consisting of only 100 patients, so that further testing was considered necessary before interferon beta could be approved for use. This resulted into a new "phase III" trial, in which a much larger group of test subjects were participating. It was more specifically announced that this Phase III trial would involve over 600 patients in 20 countries. In addition, as had been the case in the previous Phase II trial, half of the participants to the Phase III would receive the drug, the other half a placebo. The new trial was due to finish early summer 2021. If the results would appear to be as good as those of the previous Phase II trial, it was expected that approval to use the drug in Covid-19 patients in the United Kingdom and other countries would follow shortly thereafter.²⁵⁸

²⁵⁵ Beta interferon is explained to be part of the body's first line of defence against viruses, warning it of a possible viral attack. However, the Covid-19 virus appears to suppress the production of beta interferon as part of its strategy to evade the human immune system. The new drug itself is a special form of interferon beta to be delivered directly into the airways by a nebuliser that turns the protein into an aerosol. The further idea is that a direct dose of the protein into the lungs would trigger a strong antiviral response, even in patients whose immune systems are already weak. Beta interferon has already before been commonly used in the treatment of multiple sclerosis. Previous clinical trials conducted by Synairgen have shown that it can stimulate an immune response and that patients with asthma and other chronic lung diseases can tolerate the treatment without problems. (Cf. Rowlatt (2021).)

²⁵⁶Rowlatt (2021).

²⁵⁷Rowlatt (2021).

²⁵⁸Rowlatt (2021).

9.3.2.10 Hydroxychloroquine

9.3.2.10.1 The Science

Hydroxychloroquine is a drug that is mainly used for treating malaria, besides some other inflammatory diseases, including lupus and rheumatoid arthritis. The drug is inexpensive and readily available.²⁵⁹

Initial reports stemming from China and France on the use of the drug to treat Covid-19 had been promising. These earlier reports had, more in particular, suggested that patients suffering from severe Covid-19 symptoms had improved more rapidly when given hydroxychloroquine.²⁶⁰ However, in a paper that was published in JAMA December 2020, researchers, in contrast, reported that, in comparison to Covid-19 patients that had been given a placebo, hydroxychloroquine did not provide a clinical benefit to adults being hospitalised with Covid-19 respiratory disease. As a result, NIH treatment guidelines started to recommend against

²⁵⁹Harvard Medical School (2021) (updated on 4 March 2021).

²⁶⁰Data from experimental in vitro studies had initially indicated that hydroxychloroquine and chloroquine had an inhibitory effect on SARS-CoV-2. However, later RCTs, such as the already above-quoted WHO SOLIDARITY trial and RECOVERY, had found no evidence of a significant benefit of hydroxychloroquine for the treatment of Covid-19 patients, as a result of which said RCTs had dropped the hydroxychloroquine arm of their trials. The RECOVERY RCT had, e.g., compared 1542 patients randomised to receive hydroxychloroquine, with 3132 patients who had only been given usual care. RECOVERY had found no difference between the two groups in terms of mortality, hospital stay duration or other clinical outcomes. Two other clinical trials that had studied the effect of hydroxychloroquine when starting such a treatment early (within 4-5 days of Covid-19 symptom onset) in outpatients with mild symptoms, had in a similar manner showed no significant effect on symptom severity. A further randomised controlled RCT of post-exposure prophylaxis involving 821 people who had been detained, or exposed, to confirmed cases of Covid-19 showed no statistically significant difference in the subsequent incidence of Covid-19 disease among the hydroxychloroquine group versus the placebo group. (Cf. European Centre for Disease Prevention and Control (2021a) (as accessed on 25 March 2021). Cf., furthermore, AJMC Staff (2021).)

On 4 June 2020, the *New England Journal of Medicine* and *The Lancet* both retracted two studies on the use of hydroxychloroquine in Covid-19, after the authors had declared that they could not vouch for the data they had been referring to in said studies. More in particular, information that was derived from a private database of medical records compiled by a little-known company called "Surgisphere" had been used in both studies. The retractions highlighted the difficulty of disclosing research with regard to Covid-19, while being able to ensure the accuracy of the data resorted to. (Cf. AJMC Staff (2021).)

Just days after the WHO had halted its own trial, on 20 June 2020, the NIH announced that it was testing the safety and efficacy of hydroxychloroquine as a treatment for Covid-19. The study indicated that the treatment was not harmful, but that it did not provide any benefit either. (Cf. AJMC Staff (2021).)

By March 2021, only the UK COPCOV RCT, aimed at recruiting 40,000 healthcare laborers and other at-risk personnel worldwide, was still investigating the efficacy of hydroxychloroquine as a prophylaxis. (Cf. AJMC Staff (2021).)

the use of hydroxychloroquine for treating Covid-19 in both inpatients and outpatients.²⁶¹

9.3.2.10.2 The Politics

Clearly, hydroxychloroquine has gotten famous because it was one of the (unproven) treatments for Covid-19 endorsed by President Donald Trump on numerous occasions. Since this clearly shows what the man is capable of, let us first see what he had to say about using hydroxychloroquine to treat Covid-19 in March-April 2020 by literally referring to his own words:²⁶²

- (1) On 19 March 2020, Trump had for the first time announced that the FDA was on a fast-track of approving a number of unproven Covid-19 treatments, including hydroxychloroquine, which he said has "been around for a long time so we know if things don't go as planned it's not going to kill anybody."
- (2) On 20 March 2020, despite the fact that NIH Director Dr Fauci had declared that "the answer is no" upon having been asked if hydroxychloroquine is an effective Covid-19 treatment, Trump had still said "we ought to give it a try," adding, "I feel good about it. That's all it is, just a feeling, you know."
- (3) On 21 March 2020, Trump had referred to a paper that had later been ripped apart by experts, when tweeting that "HYDROXYCHLOROQUINE & AZIT HROMYCIN, taken together, have a real chance to be one of the biggest game changers in the history of medicine". Trump had, moreover, also said that the drugs should be "put in use IMMEDIATELY. PEOPLE ARE DYING, MOVE FAST, and GOD BLESS EVERYONE!"
- (4) On 30 March 2020, after having pointed to a trial of hydroxychloroquine on Covid-19 patients in New York (from which it would appear that the drug was useless for treating patients suffering from the Covid-19 virus), Trump had said that the country would have a "good idea" if the drug was effective in "the next three days."
- (5) On 3 April 2020, Trump had said the following: "Hydroxychloroquine, I don't know. It's looking like it's having some good results. I hope. That would be a phenomenal thing."
- (6) On 5 April 2020, Trump had said: "I'm not acting as a doctor, but there are some good signs," and "We don't have time to take a couple years and test it out, we have people dying today as we speak," while also asserting "it doesn't kill people."
- (7) On 7 April 2020, it was revealed in the press that, on one hand, Trump had small and distant financial links to Sanofi, an enterprise that produces

²⁶¹Harvard Medical School (2021) (updated on 4 March 2021).

²⁶²Solender (2020).

hydroxychloroquine,²⁶³ and, on the other hand, that dark money groups had been pushing Trump to publicly support the drug.

- (8) On 14 April 2020, while having a meeting with recovered Covid-19 patients, some of whom were reported to have taken hydroxychloroquine, Trump praised the drug as "an unbelievable malaria pill. Unbelievable lupus pill". Trump had, in addition, come up with the remarkable statement that, if a different president than himself would have been the one promoting the drug, "people would say, 'Gee, isn't that smart?""
- (9) On 5 May 2020, Biomedical Advanced Research and Development Authority Director Rick Bright alleged that he had been demoted because of his resistance to Trump's promotion of the unproven drug.
- (10) On 18 May 2020, after a period of silence that came after studies from which it had appeared that hydroxychloroquine is ineffective for treating Covid-19 and after the FDA had issued a warning against a too wide use of the drug, Trump surprised the public by stating that he himself had been taking hydroxychloroquine for "about a week and a half" with "zero symptoms," furthermore reiterating "what do you have to lose?", besides slamming a further VA (short for "the Department of Veteran Affairs") research report that had indicated the drug as ineffective for treating Covid-19 as "very unscientific."
- (11) On 19 May 2020, Trump felt a further need for defending his earlier promotion of the drug, saying that he "worked with doctors," referring to the abovementioned VA study as a "Trump enemy statement" and as a "false study", and incorrectly denying the existence of an FDA warning against use of hydroxychloroquine for treating Covid-19 patients.
- (12) On 20 May 2020, Trump announced that he would be finishing his still ongoing hydroxychloroquine regimen in "a day or two."

A few days after President Donald Trump had repeatedly proclaimed that the malaria drug hydroxychloroquine was suitable for preventing and treating Covid-19,

²⁶³It indeed appeared that Trump had a "small personal financial interest" in Sanofi, the French drugmaker that produces a branded version of the hydroxychloroquine drug. Sanofi, more in particular, was the producer of "Plaquenil", a branded form of hydroxychloroquine. It had, more in particular, appeared that the three Trump family trusts had been investing in a Dodge & Cox mutual fund, in which Sanofi was the largest holding. Forbes estimated that the financial value of Trump's stake in Sanofi amounted to less than USD 3000. However, it furthermore appeared that billionaire Ken Fisher, one of the major donors of the Republican party (including of Trump himself), was a major shareholder in Sanofi at the time, while US Commerce Secretary Wilbur Ross was conducting a fund that also invested in Sanofi. (Cf. Voytko (2020).)

In a statement of 6 April 2020, Fisher explained that Sanofi was neither a major holding of Fisher Investments, nor of Ken Fisher personally. (Cf. Fisher Investments (2020).) The statement added to this declaration that: "The company represents less than 0.8% of Fisher Investments' portfolio, and the company's stake is less than 0.7% of Sanofi. Neither the company nor Ken Fisher has ever promoted the drug described in the New York Times article in any way or discussed it with anyone." (Fisher Investments (2020).)

it was reported that the number of medical prescriptions for the drug skyrocketed, in spite of the majority of the scientific evidence pointing out his error.²⁶⁴

9.3.2.11 Medication for Blood Clots

It has been pointed out that practically all Covid-19 patients that require admittance to hospital for Covid-19 treatment, have to be administered medication to help prevent blood clots. Physicians usually prescribe low-dose heparin or enoxaparin. However, for some Covid-19 patients, e.g., those that have already formed blood clots or are at high risk of developing them, this does not suffice. These patients may need full doses of anticoagulants.²⁶⁵

9.3.2.12 Vitamins

According to the Harvard Medical School, there is some evidence that suggests that vitamin D may help protect against contamination and severe symptoms of Covid-19. It has, more in particular, appeared that people with low levels of vitamin D may, in general, be more susceptible to upper respiratory tract infections. From a further meta-analysis, it in addition has appeared that people taking vitamin D supplements, particularly those who had low vitamin D levels, are less likely of developing acute respiratory tract infections than those who do not. It is believed that vitamin D may protect against Covid-19 in two ways. Firstly, it may help strengthen the body's natural defences against viruses and bacteria in general. Secondly, it may

²⁶⁴Kravitz (2020).

Between 17 February 2020 and 27 April 2020, US physicians were reported to have written 483,000 more prescriptions for the malaria drug hydroxychloroquine than in the same period in 2019. It thereby appeared that in the week after President Donald Trump had first mentioned the efficacy of the drug for preventing and treating Covid-19 at a press conference, medical prescriptions had increased by more than 200% compared to the previous year. The vast majority of these excess medical prescriptions had been written between 14 March 2020 and 4 April 2020, but when news started spreading about shortages of the drug and about the lack of evidence for supporting the claim that it could be used for treating Covid-19, medical prescriptions quickly returned to normal. However, by the time it ultimately became clear that the once-promising malaria drug was probably useless for preventing or treating Covid19, a lot of damage had already been done. It was more in particular estimated that hundreds of thousands of Americans had been unnecessarily taking the drug that could have dangerous side effects. In addition, many people with a real medical need for hydroxychloroquine-such as those suffering from lupus or related autoimmune diseases—had found themselves temporarily unable to acquire the drugs they needed. It was believed that the unprecedented combination of dubious science, vocal public advocating by the US President himself, and patient influence over physicians, probably resulted in nearly half a million medical prescriptions before the public health benefits and risks were finally properly understood. (Cf. Kravitz (2020).)

²⁶⁵Cf. Harvard Medical School (2021) (updated on 4 March 2021), where it is also pointed out that physicians should always consider the risk of severe bleeding when prescribing full doses.

help prevent an exaggerated inflammatory response to the Covid-19 virus itself, which has been shown to contribute to severe disease in some people contraction Covid-19. 266

Some critically ill patients suffering from Covid-19 have been treated with high doses of vitamin C administered intravenously. The hope was that administering vitamin C in such a manner would speed up patient's recovery. However, there is no clear scientific evidence whatsoever that such a treatment could be effective for dealing with Covid-19 infection. It is, hence, in no way considered a standard part of treatment of Covid-19 patients. As regards prevention, there is also no clear evidence that taking vitamin C may help prevent contracting the Covid-19 virus.²⁶⁷

9.3.3 Covid-19 Tests

9.3.3.1 General

According to Duncan, there are Covid-19 tests that test for current Covid-19 infection and Covid-19 tests that test for past Covid-19 infection. Based on this criterion, two main types of Covid-19 tests may be distinguished: diagnostic Covid-19 tests that look for active Covid-19 virus infection in bodily fluids such as mucus or saliva,²⁶⁸ and blood tests that test for antibodies—evidence that the immune system of the body has already encountered the Covid-19 infection in the past.²⁶⁹ Antibody tests are not used to diagnose a current Covid-19 infection.²⁷⁰

The choice of the right test mainly depends on the purpose of the test, i.e. the reason for and circumstances of testing, e.g., to confirm (or deny) an active infection with Covid-19, to identify asymptomatic or pre-symptomatic people who may be

²⁶⁶Harvard Medical School (2021) (updated on 4 March 2021).

In normal circumstances, the human body itself makes vitamin D when exposed to the sun. It is hereby assumed that five to ten minutes of direct sun exposure on the arms, legs or back, during some or most days of the week and without using sunscreen, may allow a human being to make enough vitamin D. In addition, good dietary sources of vitamin D are oily fish (such as tuna, mackerel and salmon), foods fortified with vitamin D (such as dairy products, soya milk and cereals), cheese and egg yolk. According to the Harvard Medical School, the recommended dietary allowance of vitamin D consists of 600 IU per day for adults up to 70 years of age, and 800 IU per day for adults over 70 years of age. A daily supplement containing 1000–2000 IU of vitamin D is suspected to be probably safe for most people. For adults, the risk of harm is said to increase above 4000 IU per day. (Cf. Harvard Medical School (2021) (updated on 4 March 2021).)

²⁶⁷Cf. Harvard Medical School (2021) (updated on 4 March 2021), furthermore, pointing to the fact that, while standard doses of vitamin C may generally be considered harmless, high doses can lead to a number of side effects, including nausea, cramps and an increased risk of kidney stones.

²⁶⁸ A viral test may be resorted to in order to find out if a person suffers from an ongoing Covid-19 infection. There are two main types of such viral tests: nucleic acid amplification tests (NAATs) and antigen tests. (Cf. CDC (2021a) (as updated on 17 March 2021).)

²⁷⁰CDC (2021a) (as updated on 17 March 2021).

transferring the Covid-19 virus, or to determine whether a person has ever had Covid-19. This at the same time implies that there does not exist a single testing approach that is suitable for all needs and for solving all problems.²⁷¹

9.3.3.2 Molecular tests: RNA—PCR

Molecular tests (also known as "RNA" or "PCR" tests) are usually considered the most sensitive for detecting active Covid-19 infection. The results of such molecular tests are usually very accurate. These tests are, moreover, especially recommended in case a person is suspected of having contracted Covid-19. These tests are also useful to meet a burden of proof for a variety of reasons, such as when a person needs to prove to an employer or a HEI that they are not infected with Covid-19 before returning to the working floor or to the classroom.²⁷²

Molecular tests are also referred to as "PCR tests", with "PCR" being short for "polymerase chain reaction", a reference to the laboratory technique that is used for detecting the genetic material of the Covid-19 virus. The results of such a PCR test may be available within the time frame of a few minutes to several days or more, depending on whether the sample that is taken for testing is analysed on site or sent to an external laboratory.²⁷³ In most cases, the test is taken at a health centre by a health professional who will collect a bit of mucus from a person's nose or throat, by using a specialised swab. Nasopharyngeal swabs are hereby considered the gold standard for taking such a mucus sample.²⁷⁴

Some molecular testing is based on using saliva, which people may find more comfortable. This is, e.g., the case with most home test kits that allow people to collect their own sample of mucus or saliva, and then send it to a laboratory for overnight analysis. The advantage of these home testing kits is that they are easy to use and less burdensome than the long-swabs tests usually resorted to in health facilities.²⁷⁵

On 9 May 2020, the US FDA expanded the approval of saliva-based testing for detecting Covid-19 infection; an EUA for this purpose was granted to a test developed by Rutgers Clinical Genomics Laboratory. The test that had been developed by this company allows people who cannot visit an official testing centre, to be tested at home. The groups of people for whom such at-home testing may be relevant, include those who are at home because they are ill, quarantined or at

²⁷¹Duncan (2020).

²⁷²Duncan (2020).

²⁷³Duncan (2020).

²⁷⁴Duncan (2020).

²⁷⁵Duncan (2020).

One(small) study with regard to these at-home testing kits has indicated that when people learn the correct technique for collecting their own mucus or saliva sample, self-testing may provide with results that can be just as accurate as those performed by health care workers. (Cf. Duncan (2020).)

high risk of Covid-19 infection due to age or co-morbidities.²⁷⁶ The test developed by Rutgers Clinical Genomics Laboratory had, moreover, already before been cleared under a so-called "umbrella" EUA with regard to high-complexity molecular LDTs that had allowed for the use of self-collected saliva samples gathered through Spectrum Solutions LLC's SDNA-1000 Saliva Collection Device.²⁷⁷

On 15 August 2020, the FDA issued another specific EUA, this time for "SalivaDirect", a test that had been developed by researchers at the Yale School of Public Health and that was considered to be less invasive than standard nasal swabs tests. The principle of the Yale test is that, based upon shorter waiting times that have no negative impact on the sensitivity of the test, laboratories can run 90 test samples which are collected in sterile containers, in less than 3 hours. The test has as further advantages that it is inexpensive and that it provides comparable results as tests based upon nasal swabs.²⁷⁸

On 26 August 2020, the FDA granted another specific EUA for a portable rapid test for Covid-19 that provides test results in less than 15 min. This test was designed to be used in specific settings that may need having test results rapidly available, such as workplaces and schools.²⁷⁹

9.3.3.3 Antigen Tests

Antigen(ic) tests look for a piece of the Covid-19 virus envelope, while molecular tests rather aim at detecting a nucleic acid (such as RNA) belonging to the Covid-19 virus.²⁸⁰ Antigen tests are a type of diagnostic test also referred to as "rapid test", because the turnaround time is much faster than an RNA test. The test is also cheaper to produce. Therefore, antigenic tests are often resorted to for screening large numbers of people at the same time, e.g., at airports and similar settings.²⁸¹

From the patient's point of view, the antigen test works in much the same manner as a molecular test. The antigen test also starts with a health professional taking a mucus or saliva sample from the back of the nose or throat of the person to be tested. But instead of having to wait for testing results for days, an antigen test can lead to a result in an hour or less. If an antigen test provides a positive testing result, it is

²⁷⁶AJMC Staff (2021).

²⁷⁷ AJMC Staff (2020).

²⁷⁸AJMC Staff (2021).

²⁷⁹AJMC Staff (2021).

²⁸⁰Duncan (2020).

Duncan has, furthermore, pointed out that while RNA tests are very sensitive and can, e.g., still provide a positive testing result when a person is no longer actually ill and is no longer excreting viruses that can infect others, antigenic tests are faster and cheaper, but in many cases less accurate than RNA tests. Antigenic tests are also more likely to give false-negative results, which implies that they are more likely to miss cases of active Covid-19 infection. Neither antigenic nor RNA tests can predict when a person is no longer infectious. (Cf. Duncan (2020).)

²⁸¹Duncan (2020).

probably accurate. The problem with antigen tests however is that they are more likely to miss an active Covid-19 infection. This implies that in case a person tests negative while still experiencing Covid-19-like symptoms, it is advisable to order a molecular test anyway, in order to rule out a false negative provided by the antigen test.²⁸²

9.3.3.4 Antibody Tests

Antibody tests (also referred to as "serology" or "blood" tests) look for antibodies against the Covid-19 virus.²⁸³ The main disadvantage of a Covid-19 antibody test is that it cannot diagnose an active Covid-19 infection. Instead, it can only indicate whether a person has been infected with Covid-19 at some point in the past, even if this happened several months ago. Moreover, antibodies do not become detectable until at least a few days after the start of a Covid-19 infection, implying that the antibody tests are not useful for making a rapid Covid-19 diagnosis (even in people with symptoms).²⁸⁴

Upon completion of this book, there were not yet FDA-approved home antibody tests available. In contrast, antibody tests have to be performed by a health care provider who will have to take a blood sample (through either a finger prick or a blood draw from a vein in the arm). The vast majority of such antibody tests are, therefore, performed in a central laboratory, while the test results may take a few days to process.²⁸⁵ The accuracy of antibody tests varies depending on the test itself and on the moment of testing within the period of the Covid-19 infection.²⁸⁶

Antibody testing is, in addition, not recommended until at least 14 days after the onset of the symptoms related to Covid-19. The reason for this caution is that when an antibody test is taken too early—while the patient's immune system is still in the process of building up its defences—it may not give a sufficiently accurate result. Therefore, it can be advisory to conduct an antibody at the same time as a viral test, e.g., when a person is at an advanced stage of the Covid-19 disease. An antibody test can also help to confirm a diagnosis of multisystemic inflammatory syndrome in children, a condition that has been linked to Covid-19.²⁸⁷

²⁸²Duncan (2020).

²⁸³ Antibodies can be defined as proteins that the immune system of the body produces to fight a foreign invader, such as a virus. (Cf. Duncan (2020).)

 ²⁸⁴Duncan (2020). Cf., furthermore, Harvard Medical School (2021) (updated on 4 March 2021).
 ²⁸⁵Duncan (2020).

²⁸⁶Harvard Medical School (2021) (updated on 4 March 2021).

²⁸⁷Duncan (2020).

9.4 Vaccination Campaigns

9.4.1 General

When during the last months of 2020 the news broke that several of the Covid-19 vaccines were not only ready for use, but also relatively (e.g., the Oxford-AstraZeneca Covid-19 vaccine) to very (e.g., the Pfizer-BioNTech Covid-19 vaccine and the Moderna Covid-19 vaccine) effective, this raised great hope throughout the Western world that by the summer of 2021, most people would be vaccinated, with a prospect that society would start functioning—more or less—normal again.

For the average European, the months of January-March 2021 quickly tempered the initial enthusiasm: It soon appeared that the producers of the Covid-19 vaccines that were ready for use and had (at least temporary) been approved by the regulatory agencies of the Western countries in which they were to be deployed—more precisely (1) the Pfizer-BioNTech Covid-19 vaccine, (2) the Moderna Covid-19 vaccine, (3) the Oxford-AstraZeneca Covid-19 vaccine and, shortly after, (4) the Johnson & Johnson Covid-19 vaccine–, appeared to hardly make any deliveries to the EU member states, while at the same time, in various other countries, such as Israel, the United States, the United Kingdom, the United Arab Emirates and Chile, the vaccination campaigns appeared to make rapid progress.

This difference in treatment between the various countries can be traced back in large part to a completely failed European policy with regard to the procurement of the Covid-19 vaccines during the second half of 2020.

Once again it became clear how much more the EU is committed to the neoliberal principles that determine its functioning, including the classical EU austerity and the respect for public procurement rules (with its basic principle of haggling on prices), rather than looking out for the wellbeing of its citizens. The result of all these bad policy choices was disastrous: while several other Western or Western-oriented countries soon had a prospect of achieving group immunity by the summer of 2021,²⁸⁸ the EU was not even at a 15%-vaccination threshold by Easter 2021. This had no cause other than a mismanagement at the top-level of the EU decision-making bodies and of the national governments of the EU member states that had blindly swallowed the EU lead. And EU citizens were once again the victims of the political games that the leading EU elite are so fond of playing.

As Maçães has phrased it:²⁸⁹

With the arrival of the vaccines, state competition took a new form, but not a milder one: an ugly global race for enough doses in which the losers are denied a quick path out of the pandemic. Suddenly, the laggards from the previous iteration of the game seemed for the first time to be ahead. The United Kingdom was the first jurisdiction to approve the new vaccine

²⁸⁸Not that this argument was made before the breakthrough of the Indian—later referred to as "delta"—variant of the Covid-19 virus, which would lead to the questioning of the idea that the Covid-19 vaccinations would result in group or herd immunity.

²⁸⁹Maçães (2021).

and quickly pulled ahead of other large, advanced economies in the race to vaccinate its population, a rare pandemic success for the country.

The United States followed, with the European Union falling behind, but none could match the success of Israel. In just two weeks in December the state succeeded in vaccinating close to 20% of its citizens, leading the world by a very large measure and drawing on its origins as a tightly knit small nation fighting for survival. The country is now very close to the 70% mark that experts deem enough to put an end to infection growth.

Around the same time, the European vaccination policy was named a "complete fiasco" by none other than European Parliament member and former Belgian Prime Minister Guy Verhofstadt. (Cf., furthermore, Sect. 9.4.3.1) From this, it appeared that while most of the Covid-19 vaccines were produced in Europe, most of this production had been exported to non-European countries, where mass vaccinations had already been carried out, while the European population remained largely unserved. This imbalance between production and distribution was made even more aberrant, when considering that the development of the Covid-19 vaccines had been partly financed by European institutions.

As a result of this huge shortage of vaccines in the EU member states, vaccination campaigns in practically all European countries—except for the United Kingdom—were experiencing immense delays: Only a limited number of at-risk groups (especially the elderly residing in nursing homes), in addition to (some of) the staff of care institutions and (some of) the medical professionals had at the time Guy Verhofstadt formulated his criticism, been served with a Covid-19 vaccine.

The situation was even more perverse in light of the fact that the vaccines destined for export also turned out to be the highest-performing vaccines (notably the Pfizer-BioNtech Covid-19 vaccine and the Moderna Covid-19 vaccine, with an overall effectiveness of 95% and 94.5% respectively), while the EU had for its own use, to a large extent, opted for the much cheaper, but also less effective Oxford-AstraZeneca Covid-19 vaccine, with an (at the time) estimated effectiveness ranging between 60% to 80% according to a variety of sources contradicting each other on this matter.

The foregoing, manifest imbalance between local production and the unavailability for use on the EU market, already in the course of February 2021, inevitably caused fear that the Covid-19 pandemic on the European continent was to last much longer than in other territories, such as Israel, the United States and the United Kingdom. On a practical level, this implied that while some other Western countries were gradually achieving to have a sufficiently large part of their population vaccinated by the summer of 2021, most European countries were likely to lag several months behind.

In the following Sects. 9.4.2, 9.4.3 and 9.4.4, we shall look in more detail at the course of the Covid-19 vaccination campaigns in the United States, the EU and the United Kingdom, with special attention to examining what has gone wrong at the EU level with regard to the procurement of the Covid-19 vaccines.

9.4.2 Vaccination in the United States

9.4.2.1 December 2020: Successful Start of the American Vaccination Campaign (Notwithstanding a Vaccination Mistrust of a Substantial Part of the American Population)

By the end of December 2020, the United States started administering the first Covid-19 vaccines, notwithstanding the fact that misinformation and conspiracy theories pervaded a large part of the general public. Indeed, already in a survey dated October 2020, 25% of the respondents indicated that they would not get a Covid-19 vaccine when it would become available.²⁹⁰ According to another source, this percentage may even have amounted to 40%.²⁹¹

Several causes for this vaccination reluctance among a large part of the American population have been suggested.²⁹²

There is in the first place a large anti-vax community. These people are in principle opposed to vaccination, as in their opinion, no vaccine can ever be safe.²⁹³

Secondly, there was a faction of the American population that hat started peddling conspiracy theories about the Covid-19 vaccines in particular. According to one such conspiracy theory, the Covid-19 diseased has been caused by 5G cell towers, implying that a vaccine would be useless against it. A second conspiracy theory holds that the vaccines are a plot by the Bill and Melinda Gates Foundation—or alternately, by Elon Musk—aimed at injecting microchips into the American people, and by extension into the world population (in order to gain planet domination, or to

Gallup had for the first time asked Americans in July 2020 about their likelihood of being vaccinated on a voluntary basis, and at least three in five had then said they would do so. That proportion persisted throughout August 2020. However, in mid-to late September 2020, the public's readiness to be vaccinated suddenly dropped. This sharp decline followed an announcement by AstraZeneca that its vaccine trials were halted because of adverse participant reactions. Additionally, it is believed that statements by, on one side, President Donald Trump and, on the other side, Democratic vice-presidential nominee Kamala Harris may have affected Americans' views as well. Trump had declared in early September 2020 that a Covid-19 vaccine could already be available before Election Day, an announcement that started raising questions about pressure being put on the FDA to expedite approval. For her part, Harris had declared that she would not get a Covid-19 vaccine on Trump's advice alone, while, furthermore, expressing her concern about the potential for political interference in the Covid-19 vaccine approval process. By the end of October, started to rebound again, rising to 58%. (Cf. Brenan (2020).)

²⁹³Kluger (2021).

²⁹⁰Elflein (2021).

²⁹¹Kluger (2021).

These findings stem from a probability-based online Gallup Panel survey conducted between 16 and 29 November 2020, which started a week after the announcement by Pfizer and BioNTech that their Covid-19 vaccine had proved better than 90% effective in Phase III clinical trials. Shortly after, Moderna had made a similar announcement (cf. Sect. 9.3.1.3). (Cf. Brenan (2020).)

²⁹²Kluger (2021).

eradicate a part of humanity). The latter (absurd) theory even made Bill Gates himself respond.²⁹⁴

However, most people in the vaccine hesitancy camp were said to have more rational objections, in most cases being worried enough not to want to be at the head of the line for a new vaccine. One such worry sounded that the vaccines had come about too quickly, raising doubt whether they had been tested in a sufficient manner. A similar concern was about the side effects of the vaccines (e.g., the allergic reaction "anaphylaxis", or the partial facial paralysis "Bell's palsy", or blood clots), notwithstanding the fact that the odds of getting one of these side effects are extremely small.²⁹⁵

Even demographics were reported to play a role. As with so much else that is going on in the United States, opinion on Covid-19 vaccination got to a large extent determined by political affiliation.²⁹⁶ The Gallup organization which started tracking Covid-19 vaccine attitudes by alignment with a political party since July 2020, e.g., found that Democrats were consistently more willing of getting vaccinated for Covid-19 than Independents or Republicans.²⁹⁷ Figure 9.3 presents a schematic representation of Americans' willingness to be vaccinated for Covid-19 by political assignation, as measured in 2020.

Age also appeared to play a role. With regard to this criterium, it appeared that willingness for receiving a Covid-19 vaccine generally tracked age-determined susceptibility to the Covid-19 disease itself.²⁹⁸

But on no other criterium was the difference between willingness and unwillingness to receive a Covid-19 vaccine starker than on race and ethnicity. From one of the polls, it had, e.g., appeared that 83% of the in said poll surveyed Asian-Americans had indicated their intent to receive a Covid-19 vaccine, compared to 63% among those belonging to the Latinx community and 61% among White people. In Black American respondents, the numbers were said to completely "fall

²⁹⁵Kluger (2021). Cf., furthermore, Kluger (2020).

²⁹⁴Kluger (2021). Cf., furthermore, Kluger (2020).

Bill Gates rejected this conspiracy theory in a letter of 22 December 2020 which he posted on his website. For the text of the letter of Bill Gates, cf. Gates (2020).

In the said letter, Gates wrote: "It doesn't help that there are false conspiracy theories about vaccines, including some that involve Melinda and me. For our part, we will keep talking about the sole reason we fund vaccines: because we're passionate about saving lives and making sure all children have a chance to grow into adulthood. We feel a responsibility to give our wealth back to society, and we believe that no outlet for our giving returns more value to the world than helping develop and distribute vaccines. They are a medical miracle that made it possible to cut the childhood death rate in half in the past two decades." (Gates (2020).)

²⁹⁶Cf. Kluger (2021). In a poll taken at the end of November, 75% of Democrats said they would be willing to take a Covid-19 vaccine, compared to 61% for Independents and 50% for Republicans. (Cf. Kluger (2021). For more details, cf. Brenan (2020).)

²⁹⁷Kluger (2021).

²⁹⁸Kluger (2021).

In the December Pew Research Center poll, e.g., 75% of adults over 65 reported that they intended to be vaccinated, compared to just 55% under 30. (Cf. Kluger (2021).)

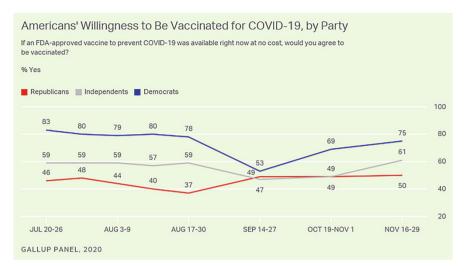


Fig. 9.3 Americans' willingness to be vaccinated for Covid-19 by political assignation [Source: Brenan (2020)—Copyright © 2021 Gallup, Inc. All rights reserved. Reprinted with permission]

off the table", with just 42% of surveyed Black Americans having declared their intent to be vaccinated.²⁹⁹ Figure 9.4 gives a schematic representation of Americans' willingness to be vaccinated against Covid-19, by subgroup, as measured in 2020.

Notwithstanding these objections of large groups of the American population, the vaccination campaign went ahead as of December 2020, starting with the administration of the at the time two (EUA) approved vaccines, namely the Pfizer-BioNTech and Moderna Covid-19 vaccines.³⁰⁰

9.4.2.2 Progress of the Covid-19 Vaccination Campaign in February and March 2021

By February 2021, on average 1.6 million Covid-19 vaccine doses were administered on a daily basis.³⁰¹

²⁹⁹Kluger (2021). Cf., furthermore, Brenan (2020).

According to Kluger, unwillingness to get vaccinated among Black Americans is the result of a long history of medical disenfranchisement and practices that are even much worse. A part of the mistrust dates back as far as infamous gynecological experiments undertaken by J. Marion Sims conducted on enslaved women—without anesthetic—in the nineteenth century. Kluger, furthermore, refers to the Tuskegee experiment that started in the 1930s and that involved decades of studying the progress of syphilis in Black men, without informing them that they had the disease or offering them the antibiotics needed to treat it. The structural inequality and bias with regard to enforced medical practices continues until this very day. (Cf. Kluger (2021).)

³⁰⁰Brenan (2020).

³⁰¹USAFACTS (2021); data update of 3 March 2021, as accessed on 6 March 2021.

		Sep 14-27	Nov 16-29
	%	%	%
Total U.S. adults	66	50	63
Gender			
Men	65	56	66
Women	67	44	60
Age			
18-44	68	60	68
45-64	62	36	52
65+	68	54	74
Education			
No college degree	62	45	61
College degree	75	60	68
Race/Ethnicity			
White adults	64	54	67
Non-White adults	72	40	53
GALLUP PANEL, 2020			

Fig. 9.4 Americans' willingness to Be Vaccinated Against Covid-19, by subgroup [Source: Brenan (2020)—Copyright © 2021 Gallup, Inc. All rights reserved. Reprinted with permission] (Answering the question "If an FDA-approved vaccine to prevent coronavirus/COVID-19 was available right now at no cost, would you agree to be vaccinated?" - % Yes-answers)

Health workers were reported to have handed out 61.2 million doses of a Covid-19 vaccine between 20 January 2021—when Joe Biden had become the new American president—and 1 March 2021. That pace was reported to be high enough to beat Biden's initial goal of 100 million Covid-19 vaccine shots during his first 100 days in office and was falling just shy of his revised goal of 150 million shots.³⁰² It was at the time also reported that the pace would even accelerate with the approval of a third Covid-19 vaccine from Johnson & Johnson.³⁰³

As of 2 March 2021, the United States reported 28,403,416 Covid-19 cases, with a total of 513,071 Covid-19 related deaths. According to one source, by then, already 54,035,670 people had been given a first dose of a Covid-19 vaccine, which made President Joe Biden start expressing his hopes that the country would reach herd immunity by the summer of 2021.³⁰⁴

³⁰²USAFACTS (2021); data update of 3 March 2021, as accessed on 6 March 2021.

³⁰³USAFACTS (2021); data update of 3 March 2021, as accessed on 6 March 2021. ³⁰⁴Julie (2021).

By 3 March 2021, according to another source, around 80.5 million Covid-19 vaccine doses had been administered, with 15.9% of the population having received at least one dose of a Covid-19 vaccine.³⁰⁵ This implied that at least 52.9 million Americans had received at least one dose of the Pfizer-BioNTech or Moderna Covid-19 vaccines. Overall, 27 million, or just under 8% of the American population, had been fully vaccinated. Alaska was in lead of all states, with 14% of its population fully vaccinated, while Utah ranked last with only 6% of its population fully vaccinated.³⁰⁶ The vaccination effort was, moreover, reported to prioritize older Americans. As of 3 March 2021, 13.4 million people aged 75 and older, or 60% of everyone in this age group, had received at least a single Covid-19 vaccine dose. Additionally, 6.8 million, or 30% of the age group, had been fully vaccinated.³⁰⁷

9.4.2.3 March 2021: President Joe Biden's Further Vaccination Efforts

While in March 2021, in the Member States of the EU, due to lack of Covid-19 vaccine supplies, the vaccination campaign was suffering huge delays (cf. Sects. 9.4.3.1 and 9.4.3.2), in the United States, after the flying start as of the end of December 2020 and after Joe Biden had taken office as new president on 20 January 2021, the vaccination campaign accelerated even further.

From a press briefing of 10 March 2021, it appeared that the United States had just received more supplies of the Pfizer-BioNTech and Moderna's Covid-19 vaccines, good for more than 20 million doses to be sent out to states, tribes, territories, and pharmacies. It was, furthermore, announced that the United States was on the verge of procuring an additional 100 million doses of the Johnson & Johnson Covid-19 vaccine.³⁰⁸

By that date, the United States had purchased enough Covid-19 vaccine doses for serving every adult living in the country. In addition, approximately 75% of the Covid-19 vaccines that had already been distributed to states, had effectively been administered.³⁰⁹ By the same date, more than 90 million Americans had received one or two jabs of a Covid-19 vaccine, with an estimated 61 million Americans having received at least one dose and an estimated 32 million Americans having been fully vaccinated.³¹⁰ The White House also reported that in the period between June 2020 and January 20, 2021, there had been a seven-day average of 890,000

³⁰⁵Elflein (2021).

³⁰⁶USAFACTS (2021); data update of 3 March 2021, as accessed on 6 March 2021.

This disparity could partly be explained by distribution of vaccines. The federal government's initial allocation of vaccines was based on a state's 18-and-over population. (The Moderna and Johnson & Johnson vaccines were only approved for adult use, while the Pfizer/BionNTech vaccine was approved for those 16 and older). Utah had at that date a smaller proportion of adults in its population, and therefore was being allocated fewer vaccines.

³⁰⁷USAFACTS (2021); data update of 3 March 2021, as accessed on 6 March 2021.

³⁰⁸The White House Briefing Room (2021a).

³⁰⁹The White House Briefing Room (2021a).

³¹⁰The White House Briefing Room (2021a).

Covid-19 vaccine shots per day. By 20 March 2021, the United States averaged above 2 million shots per day.³¹¹

On the day President Joe Biden entered office, 8% of the American people over 65 had been inoculated for Covid-19. By 10 March 2021, that percentage had already risen to $60.^{312}$ It was even reported that on 9 March 2021, Alaska became the first state to make the Covid-19 vaccines available to all people over the age of $16.^{313}$

On Monday, 8 March 2021, the CDC for the first time issued guidance on social activities that fully vaccinated people would be able to safely resume, with limited risks for themselves and others. E.g., fully vaccinated people were allowed to meet other fully vaccinated people in small groups, without having to wear a face mask or without having to distance themselves from one another physically. Fully vaccinated people were also given permission to start visiting unvaccinated people belonging to another household, without wearing face masks or having to physically distance themselves, as long as no one in the unvaccinated people did no longer need to be quarantined or tested after contact with a Covid-19 contaminated person, as long as the fully vaccinated person himself remained asymptotic after such a contact had taken place.³¹⁴

On 11 March 2021, President Joe Biden declared that he would urge states to make a Covid-19 vaccine available to all American adults by no later than 1 May 2021. The Biden administration had already previously indicated that the United States had acquired enough of the Covid-19 vaccines to inoculate every adult American citizen by the end of May 2021. By that time, the Biden administration had committed nearly USD 20 billion to the Covid-19 vaccine rollout programme, as part of the USD 1.9 trillion Covid-19 rescue package that the Biden administration had proposed in January 2021 and that had been signed into law by President Biden on 11 March 2021.³¹⁵

By 19 March 2021, more than 115 million doses of a Covid-19 vaccine had been administered throughout the United States, while the United States had managed to distribute more than 151 million Covid-19 vaccine doses.³¹⁶

On 23 March 2020, the rollout of the American Covid-19 vaccination campaign even gained further momentum. There were then, on average, more than 2 million doses of a Covid-19 vaccine administered on a daily basis. This was in part due to the increased supply of Covid-19 vaccines, resulting from the EUA that had been granted to the Johnson & Johnson Covid-19 vaccine, which helped accelerate the

³¹¹It was further reported that on Saturday, March 6, 2021, the United States had set an all-time, single-day record: nearly 3 million Americans had been vaccinated—"a pace seen nowhere else in the world". (Cf. The White House Briefing Room (2021a).)

³¹²The White House Briefing Room (2021a).

³¹³The White House Briefing Room (2021a).

³¹⁴The White House Briefing Room (2021a).

³¹⁵McKeever and National Geographic Staff (2021).

³¹⁶McKeever and National Geographic Staff (2021).

rollout on the basis of three EUA approved vaccines instead of two.³¹⁷ In the meantime, states remained the ones responsible for making the practical decisions about vaccine implementation, with most of them having defined eligibility to first include frontline laborers, such as those employed by the healthcare industry, and people aged 65 and over. A handful of states had already expanded eligibility to include people belonging to even younger age groups³¹⁸

9.4.2.4 25 March 2021: New Vaccination Targets

On 25 March 2021, Joe Biden held his first official press conference as President of the United States.³¹⁹

During the press conference, President Biden announced his additional efforts to (1) further accelerate the US Covid-19 vaccination campaign, (2) ensure that all American individuals and communities would obtain access to a Covid-19 vaccine, and (3) especially expand access to the Covid-19 vaccines to the most affected and at-risk communities throughout the country. It was, furthermore, announced that, with funding largely provided under the American Rescue Plan (cf. Sect. 4.4.3), the US Department of Health and Human Services (HHS) would invest nearly USD 10 billion for increasing access to the Covid-19 vaccines and for ensuring a better distribution of the vaccines among communities of colour, rural areas, low-income populations and other underserved communities, as part of the federal Covid-19 response policy.³²⁰

President Biden also highlighted that "equity"³²¹ was one of his top policy priorities. This included the setting up of federally run community-based Covid-19 vaccination centres in the most affected areas of the United States, sending Covid-19 vaccines directly to local pharmacies and community health centres that had to serve vulnerable population groups in a disproportionate manner, launching hundreds of mobile clinics in order to reach people where they are, and creating the "Covid-19 Health Equity Task Force".³²²

³¹⁷McKeever and National Geographic Staff (2021).

³¹⁸McKeever and National Geographic Staff (2021).

³¹⁹Reklaitis and Schroeder (2021), containing a video recording of the press conference.

³²⁰Cf. The White House Briefing Room (2021b).

³²¹However, this equity applied only with regard to mutual relations between Americans among each other, and not to the relationship of the United States and its citizens with the rest of the world. In the latter relationship, the America(ns) first principle simply continued to apply, even though President Biden himself had criticised his predecessor President Donald Trump, for having adhered to this principle too much. (Cf. Bowden (2021).)

We shall return to this point in Sect. 9.6.

³²²The White House Briefing Room (2021b).

According to the further information provided by The White House, already in the preceding two months, 60% of the Covid-19 vaccine doses administered at federally run community-based vaccination centers had been administered to people of color. In addition, under the federal retail pharmacy programme, 45% of these sites were located in postcodes with high social vulnerability scores. Finally, over 65% of federal doses distributed to community health centers had been intended for administration to people of colour. (Cf. The White House Briefing Room (2021b).)

	-	
People vaccinated	At least one dose	Fully vaccinated
Total	109,995,734	64,422,618
% of Total Population	33.1%	19.4%
Population \geq 18 Years of Age	109,408,066	64,286,560
% of Population \geq 18 Years of Age	42/4%	24.9%
Population ≥ 65 Years of Age	41,793,053	31,413,778
% of Population \geq 65 Years of Age	76.4%	57.4%

Table 9.3 Number of vaccine doses administered on 7 April 2021^a

^aCDC (2021b), as consulted on April 8, 2021

The announcements of 25 March 2021 included:³²³

- (1) A USD 6 billion investment in community health centres for expanding access to the Covid-19 vaccines among underserved communities.
- (2) Extending eligibility for the Covid-19 vaccines to people served by community health centres.
- (3) An investment of USD 3 billion to build confidence in the Covid-19 vaccines.
- (4) The launching of a partnership for the Covid-19 vaccination of dialysis patients.
- (5) An investment of USD 330 million in community health workers.

As of 7 April 2021, a total of 225,294,435 Covid-19 vaccines had been delivered to the United States, of which 171,476,655 had been effectively administered. Table 9.3 provides an overview of the status of the Covid-19 vaccinations at that date.³²⁴

By 2 May 2021, according to information provided by the CDC, the number of Americans fully vaccinated against Covid-19 exceeded 101 million. More than 43% of Americans had by then received at least one dose of a Covid-19 vaccine.³²⁵

9.4.2.5 Biden's Approval Rating in Mid-April 2021

By mid-April 2021, the rapid roll-out of the Covid-19 vaccination programme, together with the USD 1.9 billion Coronavirus relief programme (cf. Sect. 4.4.3), helped assure President Biden a high approval rating as he was approaching his 100th day in presidential office.³²⁶

This appeared from a poll that had been organized by the Pew Research Center.

For its research, the Pew Research Center had surveyed 5109 American adults throughout April 2021. These were all members of the Pew Research Center's American Trends Panel (ATP) and had been recruited to be representative of the

³²³The White House Briefing Room (2021b).

³²⁴CDC (2021b), as accessed on 8 April 2021.

³²⁵CBS News (2021).

³²⁶Luscombe (2021).

general population by gender, race, ethnicity, party affiliation, education and other categories.³²⁷

It resulted from this survey that President Joe Biden received the support of 59% of the people surveyed in the Pew study. The Pew Research Center also made a comparison of Joe Biden's performance to that of other recent presidents with regard to their first days in the White House. From this comparison, it appeared that after 100 days in office of his first and only term as president, Donald Trump had an approval rating of just 39%. In contrast, twice-elected President Barack Obama had a 61% approval rating in the month of April after his first term instalment, while Obama's immediate predecessor, President George W. Bush, was at 55%. Ronald Reagan had been the one with the highest approval rating at the same stage, more precisely at 67%.³²⁸

According to the Pew study, while a new immigrant crisis on the US southern border manifested itself as a nearly test of Biden's determination, the issue of illegal immigration had overtaken Covid-19 as the issue Americans considered "a very big problem".³²⁹

In the April 2021 Pew survey, a clear majority—more precisely consisting of 72% of the surveyed respondents—had rated the Biden administration's Covid-19 vaccine rollout as "good" (43%) or "excellent" (29%). A majority of 67% of the surveyed respondents had, moreover, given their approval to Biden's coronavirus aid programme, including 36% who had indicated it as "very good".³³⁰ Remarkably, the 72% presidential approval rating with regard to the federal Covid-19 vaccination programme included a majority of Republicans and Republican-leaning voters at age 55.³³¹ Still, deep partisan divisions remained over Biden's ratings on a variety of other policy issues. A total of 81% of the Republicans, or those who lean Republican, generally disapproved of Biden's overall presidency, while 93% of the Democrats or those who lean Democratic, generally approved. According to the Pew

³²⁷Luscombe (2021).

³²⁸Luscombe (2021).

³²⁹Luscombe (2021).

In a June 2020 Pew survey, 58% of the surveyed respondents had still said that the Covid-19 pandemic was at the top of the list of concerns, a figure that had fallen to 47% in the April 2021 survey, as more American adults got vaccinated and states began to reopen again. Also in April 2021, health care affordability (56%), the federal budget deficit (49%) and illegal immigration (which has risen from 28% to 48%) were all considered topics of greater concern to Americans than the Covid-19 pandemic. (Cf. Luscombe (2021).)

³³⁰ It was however pointed out that the survey had been conducted just before Johnson & Johnson's Covid-19 vaccine rollout was suspended in early April 2021. (Cf. Sect. 9.3.1.3.; cf., furthermore, Luscombe (2021).)

³³¹Luscombe (2021).

Research Center, this pointed to a wide partisan divide within the American society.³³²

9.4.2.6 Vaccination of the US Health Sector

According to another survey,³³³ released on 6 April 2021, at the beginning of March 2021, only just over half (52%) of the American frontline healthcare laborers indicated that they had been administered at least one dose of a Covid-19 vaccine, amongst which 42% who had received both doses. This implied that no less than 48% of the frontline laborers employed in the healthcare sector in the United States had not yet received a single dose of a Covid-19 vaccine. These numbers were considered astounding to the extent that healthcare laborers who had to deal with patients, including patients suffering from Covid-19, were among the highest priority groups for access to the Covid-19 vaccines.³³⁴

According to the same survey, the majority of healthcare professionals employed in hospitals (66%) and outpatient clinics (64%) indicated that they had been administered a Covid-19 vaccine. These relatively high figures were in contrast to the far lower figures concerning healthcare laborers employed elsewhere. The percentages of healthcare laborers having been administered a Covid-19 vaccine employed elsewhere amounted to 52% for those working in doctors' surgeries, to 50% for those employed in long-term nursing homes or assisted living facilities, and to only 26% for home healthcare laborers. Similarly, around seven in ten (68%) of healthcare laborers involved in everyday diagnosing and treating patients, such as (general-practice) physicians or nurses, indicated that they had been administered a

³³²Luscombe (2021).

A recurring theme of Biden's January 2021 inaugural speech had been "unity", which had formed a response to the turbulence and divisions of the four years of the Trump administration and to the events during the presidential campaigns of 2020 and their aftermath. According to President Biden, Americans needed to "show respect to one another. Politics need not be a raging fire destroying everything in its path. Every disagreement doesn't have to be a cause for total war." (Cf. Luscombe (2021).)

In terms of his own personal conduct, President Biden appeared to be making progress. More Americans (44%) had declared that they liked the way Biden conducts himself than did not (27%), with another 27% having mixed feelings. Meanwhile, 46% had indicated that Biden had changed the tone of political debate for the better, with 29% indicating for the worse and 27% declaring that they saw little change. According to the Pew study, on both matters there were sizable differences in views of Biden and Trump. In 2020, only 15% of the participants to the Pew survey had declared that they liked the way Trump conducted himself as president, a figure that barely fluctuated throughout his presidency. In 2019 and 2020 surveys, 55% of the surveyed people had said that Trump had changed political debate in the United States for the worse. (Cf. Luscombe (2021).)

³³³The survey was conducted from 11 February to 7 March 2021, by which time the Pfizer-BioNTech and Moderna Covid-19 vaccines had already received the FDA EUA. Johnson & Johnson's single-dose Covid-19 vaccine was licensed during the survey field period, notably on 27 February 2021. (Cf. Kirzinger et al. (2021).)

³³⁴Cf. Kirzinger et al. (2021).

Covid-19 vaccine, compared to only around four in ten of healthcare laborers involved in administrative tasks (44%) or in assisting with more practical patient care, such as bathing, feeding, cleaning, exercise, and housekeeping (37%).³³⁵

There again appeared to be huge differences based upon race. Only 39% of black and 44% of Hispanic frontline healthcare laborers had indicated that they themselves had been administered a Covid-19 vaccine, compared to 57% of the white healthcare laborers. These figures were said to reflect the similar disparities in vaccine uptake rates based upon race among the national adult population of the United States.³³⁶ (Cf. Sect. 9.4.2.1.)

From the survey, it appeared that worries about the safety and efficacy of the Covid-19 vaccines had been among the main factors for explaining why a lot of the American, frontline healthcare laborers had indicated not yet taking a Covid-19 vaccine. Of the 48% of healthcare laborers who had indicated not yet taking a Covid-19 vaccine, 82% had said that they were concerned about potential side effects of the vaccines. 81% had indicated that they considered that the Covid-19 vaccines were too new and that they wanted to wait and see how the vaccines would work for other people. In addition, about two-thirds (i.e., 65%) had indicated that they did not trust the American government for ensuring the safety and efficacy of the vaccines. It was thereby pointed out that these concerns of the unvaccinated healthcare laborers again mirrored those living among the general American population.³³⁷

9.4.2.7 Prognosis on Herd Immunity

Notwithstanding the huge success of the US vaccination campaign in the period between December 2020 and April 2021, many scientists and experts, already soon after the US vaccination campaign had started, had issued warnings that the United States was not likely to reach group immunity in 2021, or perhaps not even in 2022. This was due to many reasons, including the high levels of vaccine hesitancy in the country, besides the fact that the Covid-19 virus was still globally widespread, which led to new variants (and to a fear that there would follow others).³³⁸

According to Glenza, herd immunity rates change based on (1) how contagious a given virus is, (2) the efficacy of available vaccines, (3) the number of people who

³³⁵Kirzinger et al. (2021).

³³⁶Kirzinger et al. (2021).

Although the KFF Vaccine Monitor found a steady increase in the proportion of black and Hispanic adults who reported having been administered a vaccine against Covid-19, or who indicated that they would get vaccinated as soon as they had access to a Covid-19 vaccine, these populations remained more likely than white adults to say that they were waiting to see how the Covid-19 vaccines would work for other people before getting vaccinated themselves. (Cf. Kirzinger et al. (2021).)

³³⁷Kirzinger et al. (2021).

³³⁸Glenza (2021).

receive the vaccine, and (4) the propensity of the virus to evolve, (5) among other factors. 339

The virus that causes Covid-19 (or "Sars-CoV-2"), is subject to the same pressures as e.g., measles, albeit having a serious of elements playing in its advantage. First, a worldwide and ongoing circulation of the Covid-19 virus gives it millions of opportunities to mutate, evolve and eventually evade vaccine conferred immunity. Very high vaccination rates have been able to prevent this phenomenon in measles. That is why experts refer to the Covid-19 immunization campaign as "a race between vaccines and variants", implying that the Covid-19 vaccines must be distributed and administered quickly enough in order to tamp down on variants. Otherwise, as explained by Glenza, a vaccine may become nothing more than a static solution to a moving target.³⁴⁰

Further, the Covid-19 virus is still a novel virus. Unlike measles, scientists are uncertain how long immunity (provided by either earlier contamination or a Covid-19 vaccine) will last, though for natural immunity it could be as short as a few months. Therefore, already early 2021, many experts started believing that already vaccinated people will continue to need either boosters, or variant-specific vaccines, in the future.³⁴¹ (Cf. Sect. 9.3.1.5.)

A third factor is that even before more contagious "escape variants" of the Covid-19 virus were identified, such as the B.117 variant first discovered in the United Kingdom (cf. Sect. 1.1.2), the United States was still facing a very difficult task in achieving herd immunity, due to the fact that when the vaccination campaign had started, there was not yet a vaccine available for roughly 20% of the American population—notably children.³⁴² That is precisely why in May 2021, both Pfizer-BioNTech and Moderna applied for a EUA that would allow their vaccines to be used on children (cf. Sect. 9.3.1.3).

High levels of vaccine hesitancy and continued inequities in how the vaccines are distributed, could, furthermore, continue to contribute to localized outbreaks of the Covid-19 virus, especially in areas where inoculation rates are lower.³⁴³

³³⁹Glenza (2021).

Glenza referred to measles as a classic example. According to Glenza, being one of the most contagious viruses known to humans, measles has already for years a very safe and effective vaccine, which prevents 93% of cases. The huge degree of infectiousness of measles implies that a very high proportion of the population needs to be vaccinated in order to prevent breakout infections—about 95%, according to the WHO. With more than 90% of the American population inoculated against measles which is a very high vaccination rate—this is still not enough for preventing localized outbreaks in social groups characterized by lower vaccination rates. These outbreaks can then spill over into the larger community. (Cf. Glenza (2021).)

³⁴⁰Glenza (2021).

³⁴¹Glenza (2021).

³⁴²Glenza (2021).

³⁴³Cf. Kaiser Family Foundation (2021).

By May 2021, especially US conservative states still proved hesitant to get vaccinated. Among adults, 20% of these told surveyors with the Kaiser Family Foundation that they would either "definitely not" (13%) get a Covid-19 vaccine, or only do so "if required" (7%). Another 17% said

Health inequality was expected to amplify the impacts of vaccine hesitancy even more. Some conservative regions with the highest rates of vaccine hesitancy tended to have worse overall health, weaker public health infrastructure and higher overall levels of poverty and poor housing, which could make Covid-19 spread in this region even worse.³⁴⁴ (On the further impact of these determinants of health inequality, cf., furthermore, Chap. 10.)

By May 2021, it was feared that the "new normal" was going to depend on where a person lives and how local officials would decide to implement or ignore public health measures.³⁴⁵

9.4.3 The EU's (initially) Failed Vaccination Strategy

9.4.3.1 A Wrong Sense of Solidarity as the Starting Point of the EU's Failed Vaccination Strategy

Already in March 2020, the EU had reached the decision in principle to base the vaccination strategy of its Member States on a vague principle of (European) solidarity.

However, it would soon appear that the EU Commission's strategy of joint vaccine procurement turned out to be disastrous, with national leaders of EU Member States soon afterwards starting to accuse the EU of having been too bureaucratic, too limiting to its members and simply too slow in procuring Covid-19 vaccines,³⁴⁶ as a result of which, at a moment when several other Western countries were starting, at high speed, to vaccinate their respective populations, the EU Member States did not yet have access to a supply of the Covid-19 vaccines that would have allowed for the vaccination of only their risks groups. Hence, while from January to March 2021, several other countries, such as Israel, the United States, the United Kingdom, Saudi-Arabia and Chile, were very successful in deploying their vaccination strategies, in EU countries, the population remained confronted with continued severe lockdown measures due to a third wave of the Covid-19 pandemic (cf. Sect. 2.4.3), besides with a shortage of vaccines.

that they would "wait and see" whether to get the vaccine. In all of this, republicans remained the most vaccine hesitant group. (Cf. Kaiser Family Foundation (2021).)

As the Kaiser Family Foundation (2021), as accessed on May 5, 2021, reported: "When asked separately about each of the three FDA authorized COVID-19 vaccines, majorities of those planning or considering getting vaccinated say they would be open to getting each one. About seven in ten say they would "probably" or "definitely" get each of the three vaccines, including at least one-third who say they would "definitely get" each. About one in seven say they would definitely not get each of the vaccines. (Note: This survey was conducted before distribution of the J&J vaccine was paused)." (Kaiser Family Foundation (2021).)

³⁴⁴Glenza (2021).

³⁴⁵Glenza (2021).

³⁴⁶Deutch and Wheaton (2021).

As already mentioned before (cf. Sect. 9.4.1), this even made none other than European Parliament member Guy Verhofstadt, at the end of February 2021, sound the alarm bell through an emotional outcry which he shared in a video posted on his Facebook page. According to the information that Guy Verhofstadt shared, while (about) 75% of the world's production of vaccines against the Covid-19 virus took place in Europe, only 4% to 6% of European citizens had received their first shot of a Covid-19 vaccination. It appeared that, even though Europe was the world leader in the production of the Covid-19 vaccines, there was an acute shortage of vaccines in almost every European country (the United Kingdom that had just before left the EU, excepted), resulting in a huge vaccination backlog. By contrast, several non-European countries had mass access to the most performing Covid-19 vaccines. E.g., according to press reports, by the end of February 2021, Israel had already been administering a Covid-19 vaccine to large parts of its adult population. In the United States, around 20% of the population had already been vaccinated, and in the United Kingdom almost 30%. In the United States, the Covid-19 vaccination coverage achieved was, moreover, (almost) entirely based on the two (at the time) best performing vaccines, namely the Pfizer-BioNTech and Moderna Covid-19 vaccines. On 26 February 2021, the US press even reported that, on a single day, no less than 2.2 million vaccinations had been administered throughout the United States.347

Hence, as so many of the EU's neoliberal policies (such as, before in history, the liberalization of the banking market and the energy market in the 1990s, which had turned out to be advantageous for big market players, but disastrous for the general consumer's interests³⁴⁸), also its Covid-19 vaccination strategy turned out to be a disaster. More specifically, the EUs decisions to (1) prioritize process and price over reasonable progress, and to (2) put a purported form of "solidarity" between EU countries ahead of giving individual governments sufficient room to manoeuvre, would turn out to hold back an adequate Covid-19 response throughout the EU's Member States during the first months of 2021. As a result, the EU vaccination strategy that was supposed to be a powerful demonstration of European solidarity, an affirmation of the EU single market's purchasing power and an ethical stand against the by US President Donald initiated "vaccine nationalism", soon resulted in a rollout that would leave the EU lagging far behind more successful countries such as Israel, Saudi-Arabia, the United Kingdom and the United States,349 and that would be described by even some of the EU's leading politicians themselves as an utter fiasco.

As a result of a number of poor EU policy decisions regarding the procurement of the Covid-19 vaccines, EU countries thus simply stood by when, already at the end of December 2020, the United States and the United Kingdom bought, approved, and started injecting Covid-19 vaccines at a high tempo. Under the rhetoric of having

³⁴⁷McPhillips (2021). Cf., furthermore, Byttebier and Vanstraelen (2021).

³⁴⁸Byttebier (2017), pp. 1–11.

³⁴⁹Deutch and Wheaton (2021).

agreed upon on lower prices and a purported higher accountability for drug makers, next to ensuring shots for the whole of the EU, European delays in delivery only caused tensions among EU member countries resentful about the trade-offs, while the European population was throughout Q1 2021 completely left in the dark on the questions if and when they would ever get access to a Covid-19 vaccine jab.³⁵⁰

The emergence of this—in the words of Guy Verhofstadt—"disastrous" take off of the European vaccination strategy as of the end of December 2020, moreover, came hardly as a surprise. On the contrary, during the entire first year of the global Covid-19 vaccine race, the EU had continuously been one or more steps behind: its move to start securing vaccine Covid-19 vaccine doses for itself came only after warnings that the United States had already started monopolizing production output. Its deliberative approaches to regulatory approval would leave EU citizens lagging behind the United States and the United Kingdom when it came to getting access to the Covid-19 vaccines—at a moment when delays were counting in lost lives.³⁵¹ As the EU shamefully discovered, wielding the market power and moral authority of 27 sovereign nations—with different budgets and perspectives on risk—, while at the same time complying with neoliberal policy principles (such as "austerity") and technical procedures (such as the "public procurement" procedure), implied moving far more slowly than the one-and-done competition.³⁵²

9.4.3.2 March-May 2020: Choosing Prestige Over Common Sense and Efficiency

The EU's decision of deploying a joint vaccine procurement strategy, purportedly, started when the EU leadership began realizing that then US President Donald Trump and his coronavirus task force were already in March 2020 sitting together with a group of pharmaceutical executives in order to secure US access to the Covid-19 vaccine candidates which, at the time, were not even ready yet.³⁵³

³⁵⁰Deutch and Wheaton (2021).

³⁵¹Deutch and Wheaton (2021).

³⁵²Deutch and Wheaton (2021).

³⁵³Deutch and Wheaton (2021).

According to Deutch and Wheaton, a meeting of 2 March 2020 that gathered in the White House Cabinet room started to cause waves throughout Europe, in particular in Berlin, where German journalists zeroed in on a pitch purportedly made to US President Trump by Daniel Menichella, CEO of "CureVac", a German biotech firm. At that time, CureVac had developed an experimental rabies vaccine by resorting to a new mRNA technology that instructs a body's cells to train the immune system in order to fight off a virus. According to Menichella, the enterprise's vaccine could be reengineered for fighting of the Covid-19 virus in just a few months times. As a result, German health ministry officials were left alarmed that, already as early as the beginning of March 2020, the American president had offered CureVac "large sums of money" in exchange for exclusive dibs on a-the-time-still-nonexistent Covid-19 vaccine. But a few days later, on 16 March 2020, the EU Commission President Ursula von der Leyen and the European Investment Bank's vice president for innovation Ambroise Fayolle held a virtual face to face with CureVac's management. Both the

This would result in a new policy deployed by the EU Commission to start working together to inoculate not just citizens in every EU country, but the entire world.³⁵⁴ Solidarity was thereby not only expected of EU member states regarding one another, but towards the entire world. This was a noble vision, but in light of the monopoly positions of the vaccine-producing enterprises rather naïve. This would, moreover, but a year later prove to be yet one more lost gamble with the lives of the European population.

As a result of the foregoing, instead on starting to secure Covid-19 vaccine candidates in progress, shortly after US President Donald Trump had announced a freeze on the US funding of the WHO, the Commission von der Leyen instead hosted a big fundraiser campaign. This campaign took place on the initiative of the EU, together with the UN and other big philanthropy players, on 4 May 2020, and would ultimately garner almost USD 8 billion, loosely earmarked for research on treatments and tests of Covid-19 vaccine candidates.³⁵⁵ However, the USD 8 billion

In the further opinion of Deutch and Wheaton, behind von der Leyen's first (public) Covid-19 vaccination mistake lay a startling truth: Europe was already as early as March 2020 losing the race to secure access to the Covid-19 vaccine candidates. This was in particular due to the fact that, as early as mid-February 2020, while the US President Donald Trump was downplaying the threat posed by the Covid-19 virus before the cameras, his government was nevertheless making firm connections with America's in the field of vaccine development leading pharmaceutical enterprises, such as Pfizer, Moderna and many others. As a further example, the US "Biomedical Advanced Research and Development Authority" had already on 11 February 2020 teamed up with Johnson & Johnson to look for Covid-19 vaccines and a collaboration with the French leading pharmaceutical enterprise "Sanofi" would be announced only a week after that. (Cf. Deutch and Wheaton (2021).)

³⁵⁵Deutch and Wheaton (2021). Cf., furthermore, Herszenhorn and Paun (2020).

While the fundraising event was portrayed partly as an effort to guarantee that developing countries would not be left out while rich nations would start benefiting from newly developed Covid-19 treatments and vaccines, some global public health experts were particularly and to an increasing extent concerned about the fact that wealthier nations would end up fighting among

enterprise and the White House denied any attempt by the United States to monopolize the potential CurVac vaccine. Nevertheless, both von der Leyen and Fayolle were said to be sufficiently spooked afterwards and announced plans to offer CureVac up to EUR 80 million in loans to test and manufacture its vaccine in Europe—even without having assessed the business case at hand. Fears that the United States would monopolize Covid-19 remedies would continue to dominate the discussion at the European Council of the day after, when EU leaders met for one of their first Covid-era videoconferences. At a subsequent press conference, von der Leyen crowed about convincing CureVac to stay in Europe, bragging that it was the front-runner in the field of Covid-19 vaccination research. (Cf. Deutch and Wheaton (2021).)

This would later prove to be but one of the EU's many early mistakes in securing access to the Covid-19 vaccines, because, in reality, CureVac was well behind American, British, and even European competitors, such as another medium-sized German firm, named "BioNTech" which would be among the first to successfully develop an mRNA based Covid-19 vaccine (cf. Deutch and Wheaton (2021)). Indeed, while normally focusing on cancer research, in a joint press release with Pfizer (cf. https://investors.pfizer.com/investor-news/press-release-details/2020/Pfizer-and-BioNTech-to-Co-Develop-Potential-COVID-19-Vaccine/default.aspx), BioNTech would already on 17 March 2020 announce that it would team up with the American behemoth Pfizer to manufacture its mRNA-based Covid-19 vaccine. (Cf. Deutch and Wheaton (2021).)

would be spent without any guarantee that the EU itself would benefit from its generosity in getting priority access to the Covid-19 vaccines, when ready.

This policy approach, not hindered by much insight on how the private pharmaceutical market in practice functions, regretfully implied that, rather than taking the immediate health interests of the European population at heart, the EU Commission purportedly noble goals in the end would prove to be fatal for getting quick access to the Covid-19 vaccines, when ready.

The United States itself wisely abstained from participating in the prestigious event. Instead, on 15 May 2020, President Trump formally launched his USD 10 billion "Operation Warp Speed". The goal of this programme of the Trump administration was to invest in experimental Covid-19 vaccine candidates and to make their development speedily enough in order to be able to deliver 300 million doses to the American people by January 2021.³⁵⁶ This strategy of the Trump administration would less than a year later prove highly beneficial for Trump's successor, President Joe Biden who, as a result, immediately after entering the presidential office in January 2021, could continue the by then already initiated American vaccination program by having a seemingly monopolized access to the two most performant Covid-19 vaccines, namely the Pfizer-BioNTech and the Moderna Covid-19 vaccines which were by then ready for use. (Cf. Sect. 9.3.1.3.)

9.4.3.3 June 2020: The EU's New Vaccine Strategy—Choosing Stinginess Over Human Lives and Economic Sense

In May 2020, the vaccination race was just beginning³⁵⁷ and it should have been clear already then that, as far as a speedy access to the Covid-19 vaccines was concerned, the bets were far more on Trump's business-driven sense of reality, than on von der Leyen's idealistic yet unworldly attitude.

Already before, when it came down to securing medical supplies during the early months of the Covid-19 pandemic, the EU had not acquired a great track record. On the contrary, during the early days of the Covid-19 crisis, EU countries had unilaterally closed their borders and accused each other of hoarding precious personal

themselves, as leaders faced pressure to protect their own citizens. (Cf. Herszenhorn and Paun (2020).) In this regard, the Trump administration's unwillingness to join the common effort, obviously, even raised more concern around the world about his intentions. (Cf. Herszenhorn and Paun (2020).) However, already by the end of December 2020, said intentions would become quite clear, as the United States had by had gotten a sufficient access to Covid-19 vaccines to successfully initiate its Covid-19 campaign, with a clear intent of having all senior and adult Americans vaccinated within a period of more or less half a year, at a time when the EU was facing huge shortages so it could not even successfully vaccinate the risk groups among its population.

³⁵⁶Deutch and Wheaton (2021).

³⁵⁷Deutch and Wheaton (2021). Cf., furthermore, Maçães, referring to the "Covid-19 vaccination race" as: "an ugly global race for enough doses in which the losers are denied a quick path out of the pandemic." (Maçães (2021).)

protective equipment (PPE), so that it did not reach the places where it was most needed. (Cf. Sects. 2.3 and 2.4) Brussels' response had been the deployment of a system meant to wield the purchasing power of 37 countries—the EU27 and 10 of their neighbours—for buying face masks and ventilators, besides a variety of medical equipment, which in part helps explain why these remained unavailable for the common European during the entire first months of the Covid-19 pandemic (except for buying face masks themselves on the private market at extremely high prices).³⁵⁸ One of the main problems in all of this had been EU bureaucracy itself. E. g., before it could place an order, the EU Commission had to wait for each EU country to sign the purchasing agreement. Some countries, fed up with the endless back and forth, thus simply went ahead and purchased medical items on their own.³⁵⁹

The same strategy was initially deployed as part of the EU's vaccination program, which turned out to be just as disastrous.³⁶⁰

What the EU especially underestimated was that its bureaucratic logic was no match for the working principles of the private, pharmaceutical market (although the neoliberal set-up of the latter had, to a large extent, been made possible thanks to the free market reforms of the EU itself; cf. Sect. 9.2). Thus, vaccine procurement presented a formidable challenge, with EU bureaucracy having to deal with a bewildering array of Covid-19 vaccine producing candidates, including pharmaceutical enterprises—all driven by the pursuit of profits, and none of which had yet produced a deliverable end product.³⁶¹

Meanwhile, some EU countries had decided to stop waiting for the EU Commission to strike a deal. E.g., France and Germany initiated talks with Moderna separately. By mid-April 2020, Paris and Berlin were even reported working together on a bilateral basis for buying Covid-19 vaccines.³⁶²

Eventually, after having regrouped the EU27 Member States, the EU27 health ministers signed off on a EU Commission plan to buy the Covid-19 vaccines on their behalf, on 12 June 2020.³⁶³

In parallel, the separate Franco-German initiative continued to make progress and had invited both The Netherlands and Italy to join its select buyers' club. This

³⁵⁸Deutch and Wheaton (2021).

³⁵⁹Deutch and Wheaton (2021).

³⁶⁰Deutch and Wheaton (2021).

³⁶¹Deutch and Wheaton (2021).

Some enterprises were reported "to take a page from the CureVac playbook": capitalize on the FOMO (or, in full, "the fear of missing out"). E.g., the United States' early investment in Sanofi's vaccine candidate would again translate into priority access for Americans. In the meantime, another front-runner in the vaccine race had been emerging. More in particular, Oxford researcher Sarah Gilbert told The Times on, 11 April 2020, that the Covid-19 vaccine candidate that she was developing in cooperation with AstraZeneca could be ready by September 2020, while expressing a "80 percent confidence" that it would work. (Cf. Deutch and Wheaton (2021).)

³⁶²Deutch and Wheaton (2021).

³⁶³Deutch and Wheaton (2021).

initiative proved relatively successful, as by 13 June 2020 the "quartet"—also known as the "Inclusive Vaccine Alliance"—announced that it had reached an agreement for 300–400 million doses of the Oxford-AstraZeneca Covid-19 vaccine.³⁶⁴ However, some small EU countries saw this elect initiative as a threat.³⁶⁵ E. g., the then Belgian Health Minister Maggie De Block denounced the deal between the Vaccine Alliance and Oxford-AstraZeneca as the result of an "unreasonable" decision that would hurt everyone.³⁶⁶

Shortly before, on 1 June 2020, Health Commissioner Stella Kyriakides had presented what could be called the "new EU vaccine plan". Rather than continuing negotiations with vaccine producers by going back and forth to get approvals from each individual EU country, the European Commission came up with the idea of reusing a mechanism called the "Emergency Support Instrument". This concerned a very rarely used tool that would allow Brussels to buy Covid-19 vaccines directly and without a further need of signatures from the individual EU Member States, for an initial amount of EUR 2.1 billion. Once approved by the central EU authorities, the Covid-19 vaccines would then be distributed among the EU countries in accordance with the size of their population.³⁶⁷ In addition, the von der Leyen Commission also strengthened the firepower of "DG SANTE", an until then relatively low-profile EU procurement service that had little real authority, but that would be granted the responsibility for the actual negotiations with drug and vaccine producing enterprises.³⁶⁸

³⁶⁴Deutch and Wheaton (2021).

The agreement with Oxford-AstraZeneca was described as little more than a one-page term sheet between AstraZeneca and the health ministers of the countries involved. Nevertheless, the agreement was politically extremely important. It demonstrated that the four countries of the Vaccine Alliance—which represented four of the EU's five largest economies and about a third of the EU's total population—were not afraid to use their significant purchasing power and to leverage their powerful pharmaceutical industries, even at a moment in time when the European Commission itself still did not know what it was doing. The Vaccine Alliance declared that it would continue to discuss with the European Commission the possibility of working together "as far as possible" and that other countries might join, but "the four countries realised at some point that it was not time to wait until everyone was on board," declared a senior European diplomat from one of the Vaccine Alliance countries. (Cf. Deutch and Wheaton (2021).)

³⁶⁵Deutch and Wheaton (2021). Cf., furthermore, Deutch (2020).

³⁶⁶Deutch (2020).

In a private WhatsApp group, some EU diplomats half-joked that the big countries would monopolise all the Covid-19 vaccines—a sign that many did not trust the "inclusive" Vaccine Alliance to be truly all that inclusive. One EU diplomat outside the alliance declared that other countries had feared that there would be two competing tracks: one with the alliance, the other, supported by the European Commission, consisting of Spain and the poorest EU countries. (Cf. Deutch and Wheaton (2021).)

³⁶⁷Deutch and Wheaton (2021).

³⁶⁸Deutch and Wheaton (2021).

Only a few hours after Kyriakides presented her strategy, the much discreter announcement was made that Sandra Gallina, Deputy Director General of the Commission's Trade Department, would be taking over as head of DG SANTE's Health Division, despite having no relevant health experience whatsoever. (Cf. Deutch and Wheaton (2021).)

After the plan was approved by all 27 EU member countries, the four countries belonging to the Vaccine Alliance decided to close shop, allowing the European Commission to resume its own exclusive negotiations with "Johnson & Johnson" and "Oxford-AstraZeneca", two producers of Covid-19 vaccines that would ultimately prove less effective than the Pfizer-BioNTech and Moderna Covid-19 vaccines that the European Commission initially neglected, but on which the United States was focusing.³⁶⁹

The strategy for implementing the new Covid-19 vaccine plan was that, rather than one drug producing enterprise negotiating with 27 governments, the EU would wield its full market power, leaving drug producers in the dark about what terms were being agreed to with their competitors.³⁷⁰ This new strategy, as conceived by the EU Commission, was even made public in a "Communication from the Commission" of 17 June 2020. This communication was named "EU Strategy for COVID-19 vaccines" (COM/2020/245 final)³⁷¹ and stressed the importance of a both global and European solidarity:

This is not only a European challenge, it is also a global one. All regions of the world are affected. The spread of the virus has shown that no region is safe until the virus is under control everywhere. In addition to it being in their clear self-interest to do so, high-income countries have a responsibility to accelerate the development and production of a safe and effective vaccine and make it accessible for all the regions of the world. The EU recognises this task as its responsibility.

To this end, the EU is leading the global effort for universal testing, treatment and vaccination by mobilising resources through international pledging and by joining forces with countries and global health organisations through the Access to Covid-19 Tools (ACT) Accelerator collaborative framework. The Commission will continue to support this global mobilisation and collaboration.

As part of the effort to help protect people everywhere and EU citizens in particular, the Commission is proposing an EU strategy to accelerate the development, manufacturing, and deployment of vaccines against COVID-19.

The strategy has the following objectives:

- Ensuring the quality, safety and efficacy of vaccines.
- Securing timely access to vaccines for Member States and their population while leading the global solidarity effort.
- Ensuring equitable access for all in the EU to an affordable vaccine as early as possible.

The strategy rests on two pillars:

 Securing sufficient production of vaccines in the EU and thereby sufficient supplies for its Member States through Advance Purchase Agreements (APAs) with vaccine producers via the Emergency Support Instrument (ESI). Additional financing and other forms of support can be made available on top of such agreements.

³⁶⁹Deutch and Wheaton (2021).

³⁷⁰Deutch and Wheaton (2021).

³⁷¹European Commission (2020).

9.4 Vaccination Campaigns

• Adapting the EU's regulatory framework to the current urgency and making use of existing regulatory flexibility to accelerate the development, authorisation and availability of vaccines while maintaining the standards for vaccine quality, safety and efficacy.

With regard to the joint purchasing strategy, the EU Commission's approach was made crystal-clear:³⁷²

Joint action at EU level is the surest, quickest and most efficient way of achieving that objective. No Member State on its own has the capacity to secure the investment in developing and producing a sufficient number of vaccines. A common strategy allows better hedging of bets, sharing of risks and pooling investments to achieve economies of scale, scope and speed.

An important step towards joint action between Member States has already been taken in the formation of an inclusive vaccine Alliance by France, Germany, Italy, and the Netherlands. This alliance was formed to pool the national resources of those countries and secure fair access to vaccine supplies for the European population. The current proposal builds on the important groundwork undertaken by that Alliance.

In order to scale this approach up to cover the whole EU, the Commission proposes to run a central procurement process, which creates a number of important advantages. In particular, all EU Member States will be able to benefit from an option to purchase vaccines via a single procurement action. This process also offers vaccine producers a significantly simplified negotiation process with a single point of contact, thus reducing costs for all. Centralising vaccine procurement at EU level has the merit of speed and efficiency by comparison with 27 separate processes. A truly European approach would avoid competition between Member States. It creates solidarity between all Member States, irrespective of the size of their population and their purchasing power. A pan-EU approach will increase the EU's leverage when negotiating with industry. It will also enable us to combine the scientific and regulatory expertise of the Commission and the Member States.

A common EU approach will always respect the principle of subsidiarity and Member States' competences in health policy: vaccination policies remain in the hands of Member States.

In other words, at a moment in time when US President Donald Trump, as befitting to a conniving businessman, had already concluded far-reaching agreements with several of the Covid-19 vaccine candidate developing enterprises, the EU itself was still mainly in its usual rhetoric phase, without yet any concrete action to improve the health and safety of its citizens.

All of the above would prove not to be of much help in securing a fast access to the Covid-19 vaccines, rather on the contrary, although the importance of proceeding fast had at the same time been explicitly recognized in the Commission communication of 17 June 2020, which stated:³⁷³

Against that background, it is essential that all 27 EU Member States have access to a vaccine as early as possible. The same applies to the Member States of the European Economic Area (EEA).

The practical leadership of the EU-wide Covid-19 vaccine purchases was then entrusted to EU director-general for health policy Sandra Gallina, a former Italian translator.³⁷⁴ In the Covid-19 vaccine negotiations on behalf of the EU, EU

³⁷²European Commission (2020).

³⁷³European Commission (2020).

³⁷⁴Van de Wiel (2021).

bureaucrat Gallina and her team would soon start putting great importance on three things: (1) a wide selection of potential vaccines, (2) low prices per dose, and (3) the principle that drug makers would bear legal responsibility if anything went wrong.³⁷⁵ This approach was, moreover, in line with the guidelines that the EU Commission itself had put forward in its June 17, 2020 communication:³⁷⁶

The aim of the negotiations is to conclude Advance Purchase Agreements with individual companies under the best possible conditions. These APAs will specify a number of details with respect to expected payments (such as payment amounts, schedule and financial structure), delivery details of the vaccine if and when successful (such as price per person vaccinated, quantity of vaccines and delivery timeline after approval) and any other relevant conditions (such as production capacity in the EU, possible availability of production facilities for the manufacturing of other vaccines or medicines in case of failure, or liability arrangements).

A speedy conclusion of procurement contracts was not the top priority of the Gallina task force; neither was securing quick delivery of the Covid-19 vaccines as of the respective dates on which they would, eventually, be ready. This, notwith-standing the communication of the EU commission of 17 June 2020 had explicitly mentioned otherwise.³⁷⁷

The EU, moreover, mainly went after the cheaper vaccines, notably the Oxford-AstraZeneca and Johnson & Johnson Covid-19 vaccines, as opposed to the more expensive mRNA vaccines developed by BioNTEch-Pfizer and Moderna, and this notwithstanding the fact that the latter had a much higher effectiveness.³⁷⁸

Precisely this stinginess later motivated the pharmaceutical enterprises to give priority to countries that had been willing to pay a higher price for the (more performant) mRNA vaccines (such as Israel and the United States). Perhaps even more ironic has been the fact that, while the EU had announced that its procurement policy emphasized concerns about vaccine quality and safety, including related liabilities to be granted by the Covid-19 vaccine producers, the EU would, ultimately, bet mostly on purchasing the two Covid-19 vaccines—notably the Oxford-AstraZeneca and Johnson & Johnson ones-that would cause the most problems with side effects, e.g., due to blood clots, from March 2021 on. (Cf. Sect. 9.3.1.4) In fact, when the latter problems surfaced in March-April 2021, the EMA would consistently downsize these problems, proclaiming that the risks posed by the Oxford-AstraZeneca and Johnson & Johnson Covid-19 vaccines did not outweigh the benefits of their continued use in the EU vaccination campaign. There was, in other words, by April 2021, not much left of the earlier concerns about product liabilities, unless in the form of meaningless EMA recommendations that the possibility of side effects should be mentioned on the package inserts of both

³⁷⁵Deutch and Wheaton (2021).

³⁷⁶European Commission (2020).

³⁷⁷Cf. European Commission (2020), esp. under its Point 2.3. "Selection criteria for vaccine candidates".

³⁷⁸Deutch and Wheaton (2021).

vaccines. These were of course hardly read by anyone, to the extent that most of the vaccinations in EU Member States were administered by doctors or nurses, either in hospitals, home practices or vaccination centres, of course without the administrators of the vaccines making their packaging available to the vaccinees, let alone offering the rows of vaccinees standing in line to get a jab, the opportunity to first attentively read said package inserts.

In the period January-April 2021, delivery problems with the cheaper Oxford-AstraZeneca and Johnsons & Johnson Covid-19 vaccines, would result into immense delays of the EU vaccination campaign, even to the extent that the EU was afterwards forced to initiate court proceedings against AstraZeneca for breach of contract with regard to the performance of its delivery obligations. (Cf. Sect. 9.4.3.10.)

The failure of European bureaucracy in swiftly procuring enough Covid-19 vaccines would thus appear from two main levels, on the one hand, from a complete unfamiliarity with the working methods of the pharmaceutical sector and, on the other, from a very naive view on how the economy functions by assuming that small savings on the price of the (cheap) Covid-19 vaccines would ever be able to outweigh the damages that the European economy continued to suffer due to the delays in vaccinations.³⁷⁹

Be this as it may, the EU Commission's negotiations with the producers of the more efficient mRNA vaccines kept dragging on. Apparently, Covid-19—and the many lives it costs, next to the detrimental economic impact of the continued lockdown measures throughout the EU—did not lend any sense of urgency to the negotiation talks of the EU bureaucrats who, moreover, felt no need of making sure that the EU would have sufficient access to the more efficient mRNA vaccines as well. All negotiation talks were, furthermore, held virtually, adding an intangible complication to the whole ordeal.³⁸⁰

Because of these factors, talks with Pfizer-BioNTech and Moderna, proved especially thorny³⁸¹ (as a result of which, by January 2021, the mRNA vaccines would hardly be accessible in the EU countries who, since then, saw it necessary to try and explain to their population that the much cheaper Oxford-AstraZeneca and Johnson & Johnson-vaccines were more than good enough for European use, notwithstanding a wide variety of concerns about their safety and side-effects).³⁸²

³⁷⁹Deutch and Wheaton (2021).

At the time, only Germany kept showing some more common sense and some more willingness to throw enough money at the problem. Specifically, Germany wanted to bet bigger on purchasing the mRNA vaccines. By mid-September, Berlin, hence, announced it was giving EUR 375 million to BioNTech and EUR 252 million to CureVac. (Cf. Deutch and Wheaton (2021).)

³⁸⁰Deutch and Wheaton (2021).

³⁸¹Deutch and Wheaton (2021).

³⁸²In an interview with AFP in November 2020, Moderna CEO Stéphane Bancel griped that dealing with 27 member countries was slowing everything down. CEO Bancel also declared that, in contrast, his company had wrapped a deal with Canadian authorities two weeks after starting talks. "A delayed order", Bancel had, furthermore, said, "is not going to limit the total amount, but it is going to slow down delivery". (Cf. France24 (2020).)

9.4.3.4 Being the Last in Entering Into Contracts with the mRNA-Vaccine Producers, But Still Being Proud of It

When BioNTech-Pfizer had reported efficacy results of their Covid-19 vaccine higher than 90 percent on 9 November 2020 (cf. Sect. 9.3.1.3), and, moreover, promised to soon send their available testing and trial data to the European regulators, the EU Commission projected calm. Next, Moderna had reported efficacy rates higher than 90 percent on 16 November 2020 (cf. Sect. 9.3.1.3). In response, the United Kingdom made a deal with Moderna on that same day. But again, the EU Commission's Gallina task force showed no urgency to speed up its negotiation processes.³⁸³

On 17 November 2020, it seems that the US biotech company Moderna had lost its patience, when it had deemed it necessary to warn the EU countries that further dragging out negotiations to purchase its very promising Covid-19 vaccine, would ultimately slow down deliveries, and that, to the extent that several other countries had already signed deals, the latter were (obviously) bound to get priority. At the time, Moderna had just announced that its experimental mRNA Covid-19 vaccine promised to be almost 95% effective in protecting people from Covid-19, thus further boosting hopes of an end to the Covid-19 pandemic, only shortly after Pfizer-BioNTech had released similar promising findings about their own Covid-19 vaccine a while before (cf. Sect. 9.3.1.3). Moderna, furthermore, explained that while already since the summer of 2020, it had engaged in fierce discussions with the EU Commission about the EU buying 80 million doses of its Covid-19 vaccine, still no contract had been signed by 17 November 2020. In the meantime, Moderna had already signed agreements to provide its Covid-19 vaccine to Canada, Japan, Israel, Qatar and the United Kingdom. Moderna thereby pointed out that there was a lot of red tape involved in getting a deal with the EU, while, by contrast, it took just two weeks to cement a deal on providing the vaccine to Canada from the time the two sides had started talks to the signing of a contract.³⁸⁴ Already then, it became clear that the EU would not be among the first to receive the Moderna Covid-19 vaccine deliveries when it would ultimately be ready, after having obtained the necessary regulatory approvals).³⁸⁵

At the same time, also the United States had been showing far more eagerness to make a deal with Moderna. As explained before (cf. Sect. 9.4.3.2), already on 2 March 2020, Moderna and other Big Pharma executives had been meeting in The White House with (then) US President Donald Trump. By April 2020, the United States had already paid USD 500 million to bankroll Moderna's clinical trials. Moderna received, on the whole, USD 2.5 billion in US government financial support under the notorious "Operation Warp Speed", the initiative that the Trump administration had unveiled on 15 May 2020, to establish a close cooperation

³⁸³Deutch and Wheaton (2021).

³⁸⁴France24 (2020).

³⁸⁵France24 (2020).

between the US federal government and the vaccine industry for developing a vaccine that would put a stop the Covid-19 pandemic. While for Moderna, Operation Warp Speed had proven to be one of the most efficient forms of support in the development of its Covid-19 vaccine, the EU from its side had merely committed to a lot of idle talk.³⁸⁶

The result of all this was that, the United States would be able to start using the Moderna Covid-19 vaccine by the end of 2020, while the EU had not yet shown a concrete willingness to place an order.³⁸⁷

Eventually, the purchase agreement between the EU and Moderna would get signed on 25 November 2020.³⁸⁸ At that moment, most of the other (non-EU) Western countries had already weeks before signed their own Moderna purchasing contracts. As Moderna had already pointed out on 17 November 2020, the consequence of this would be that the EU would be the last to receive Moderna-deliveries, which helps to explain the slow start of the Covid-19 vaccinations in the EU member countries as of January 2020, while in many other Western countries, millions of doses of the Covid-19 vaccines had been administered already.

Moreover, the EU was similarly late in purchasing the BioNTech-Pfizer Covid-19 vaccine which was also purchased in November 2020. Again, the United Kingdom had acted more quickly, having bought its BioNTech-Pfizer Covid-19 vaccine supplies already in July 2020. Pfizer had offered the EU 500 million doses in the same month, but Brussels had simply turned the proposal down, deeming it too expensive.³⁸⁹

As a result of all this, the United Kingdom had also reached a basic "deal in principle" with AstraZeneca 3 months earlier than the EU, and its later purchasing contract itself came with sharper teeth, although the EU would later keep stressing that it had signed its actual purchasing agreement a bit earlier than the United Kingdom (namely on 27 August 2020, while the UK's actual purchasing agreement with AstraZeneca was dated on 28 August 2020—one day after the EU agreement).³⁹⁰

The EU, hence, took in some cases months longer than the United Kingdom and the United States to sign purchasing agreements with the Covid-19 vaccine producers. Making matters even worse, the EMA, a body by definition particularly receptive to the precautionary principle that plays such a dominant role in EU policy-making, would later also take its time to approve the first vaccines. Its first approval bioNTEch-Pfizer Covid-19 vaccine came some weeks after the one granted by the United Kingdom, and ten days after the one granted by the United States.³⁹¹

³⁸⁶France24 (2020).

³⁸⁷France24 (2020).

³⁸⁸Deutch and Wheaton (2021).

³⁸⁹Wheeldon (2021).

³⁹⁰Owen (2021).

³⁹¹National Review Editors (2021).

According to Nicolas Bouzou, head of a Paris-based advisory firm called "Asterès", the EU had simply made its orders too late and only focused on price, seemingly considering that getting access to the Covid-19 vaccines was not a priority. For Bruno Maçães, a political scientist at Washington DC's Hudson Institute and former Portuguese secretary of European affairs, there was in the summer of 2020 simply "no sense of urgency" at the side the EU.³⁹²

Maçães expressed this concern as follows:³⁹³

There is a lot that went wrong with the European Commission's vaccination strategy. But before everything else, there was complacency. Back in the summer, the predominant feeling in Brussels and many European capitals was that the virus could be controlled through savvy policy measures. The contrast with the health calamity in the United States made European officials forget that the pandemic was in fact a state of emergency requiring a decisive approach to vaccination. Instead, most believed that vaccines would eventually be needed to root out the problem, but the process could be conducted against the background of a waning pandemic, at least in Europe. There was no urgency in signing the necessary contracts with the most promising manufacturers, with protracted haggling over prices further delaying the process.

We now know that time was of critical importance and that the sooner procedures could be tested and perfected, the sooner a high yield of vaccine doses could be expected. The lack of urgency was also reflected in the attempt to bring a number of exogenous considerations into the process. For many months the European Union seemed more interested in scoring political points on solidarity, market power and negotiating clout than in focusing laser-like on the task at hand: getting as many vaccines as fast as possible into the arms of its citizens. It was easy to see all these problems coming. They were like bad omens and they kept piling up.

(...)

During a pandemic, it makes a vital difference whether vaccines are available now or in two months' time, both in terms of saving lives and resuscitating the economy.

This was never understood in Brussels, with the Commission insisting it had secured billions of doses but forgetting to consider when these doses would be available. Even in normal times, being able to lead in key technological areas will sooner or later be translated into more visible forms of global power.

Surprisingly, EU bureaucrats themselves would continue to perceive their actions as a huge success. They kept on showing great confidence that the terms of the EU Commission's procurement contracts were robust in best serving the interest of the European consumers and their pocketbooks. European bureaucrats were particularly proud that they had managed to drive down prices for the Covid-19 vaccines lower than their counterparts in Washington.³⁹⁴

³⁹²Wheeldon (2021).

³⁹³Maçães (2021).

³⁹⁴France24 (2020).

There could have hardly been a more alienated way of reasoning at the EU policy level, since as a result of this completely unworldly stance, the vaccination campaign in EU countries would run into months-long delays, as of January 2021.³⁹⁵

9.4.3.5 Lack of Awareness That, Ultimately, the European Population Would Have to Pay the Price for the EU's Many Mistakes in Procuring the Covid-19 Vaccines

In our opinion, the EU purchasing strategy was a severe debacle. It was deeply callous of the EU to reason that savings of a few million euros could ever weigh up against the loss of lives that every delay in starting the vaccination campaign implied. Moral objections aside, it was also mind-bogglingly naive to strike a bargain which would be immediately wiped out by the massive, economic losses from the continuation of the lockdowns (cf. Sect. 2.4.3), at a time when countries such as Israel and the United States already would be able to start functioning relatively normally again.

At the beginning of 2020, the European population could start to see for themselves how badly they fared under the policy choices the EU had made. The (at the time prevailing) prospect that most of the EU population would, at best, only have access to the less effective Oxford-AstraZeneca Covid-19 vaccine (where it remained for a long time unclear whether this vaccine was still sufficiently effective from a certain age threshold, next to protecting against certain mutations/variants of the Covid-19 virus³⁹⁶) caused a great concern among a large part of the EU population, with even those first summoned to receive the Oxford-AstraZeneca jab refusing to show up. Incidentally, among those who refused the Oxford-AstraZeneca Covid-19 vaccine, was a large proportion of healthcare workers themselves.³⁹⁷

³⁹⁵In fact, it appeared from the early start of the vaccination campaigns that the EU would only have access to enough of the mRNA vaccine-doses for inoculating its population, after the population of the countries that had ordered earlier would have been served first. As a result of all this, as of January 2021, the EU still had to make frantic efforts to conclude additional purchasing contracts with a view to acquiring the less performing vaccines, such as the Oxford-AstraZeneca vaccine.

³⁹⁶Cf. McEvoy (2021), pointing to the fact that by 21 February 2021, roughly a dozen European countries had limited the Oxford-AstraZeneca Covid-19 vaccine for people over 65 due to a lack of data about its efficacy among older people.

³⁹⁷Cf. McEvoy (2021), reporting that, during the second half of February 2021, thousands of healthcare laborers throughout the EU were refusing to take the Oxford-AstraZeneca Covid-19 vaccine over concerns about side effects and efficacy, with some arguing that they should be prioritized for the more effective Covid-19 vaccine doses from BioNTech-Pfizer and Moderna. McEvoy even pointed to the fact that, mid-February 2021, a group representing 3000 doctors in Italy had written a letter to the Italian government demanding that "private doctors and dentists be inoculated with mRNA vaccines" like those developed by Moderna and Pfizer and BioNTech, as opposed to AstraZeneca's because of the evidence the latter were more effective. Around the same time, Germany and France both reported that hundreds of thousands of Oxford-AstraZeneca's doses specifically. (Cf. McEvoy (2021).)

The EU and the national authorities of several of the EU Member States responded to this hesitancy with regard to the Oxford-AstraZeneca Covid-19 vaccine by means of a campaign of persuasion (worthy of a dictatorial regime), increasingly—and against all facts—advocating that the Oxford-AstraZeneca Covid-19 vaccine, in reality, did not exhibit any of the flaws reported previously, which, of course, has been but another factor of distrust for many.

As phrased by Franklin³⁹⁸:

The European Union is now waking up to what it needlessly missed out on. Worried EU governments are now desperately reassuring their populations that the Oxford AZ vaccine is safe and effective. The French have just relaxed the restriction on the vaccine's use among the over 65s. The Germans are likely to follow suit. Thomas Mertens, head of Germany's expert panel on vaccine use, has promised an "update" to the current regulations. He was at pains to point out that the existing restriction were never about safety concerns and added that "somehow the whole thing went kind of badly wrong." Yeah, "somehow".

In Flanders (Belgium), public policy was during some time even such that people who refused the Oxford-AstraZeneca Covid-19 vaccine would not be given any other choice (i.e., a "take it or leave it"-principle),³⁹⁹ with the Flemish government not even appearing to have questioned how such an approach related to some of the fundamental rights guaranteed by the ECHR, which imply a minimum protection with regard to the right to integrity of the human body, in addition to an elementary right to a full and adequate medical treatment.⁴⁰⁰

9.4.3.6 Further Comparison with the Approach of the United Kingdom and the United States

How delusional can policymakers and bureaucrats get?

Convinced that by, supposedly, having negotiated with the Covid-19 vaccine manufacturers in a "hard", rather than a swift and efficient manner, they had done the EU citizen (and by extension the European economy) a huge favour (notably by having obtained the lowest possible prices for the Covid-19 vaccines), European policymakers and bureaucrats then also tried to get the ((Br)exiting) United

By mid-March 2021, the same scenario occurred in Canada (cf. McCully (2021)), and one more month later, again in Australia, with, on 22 April 2021, the Sydney Morning Harold reporting that most NSW healthcare workers who had been booked for the Oxford-AstraZeneca Covid-19 vaccine had cancelled their appointments following advice which recommended the BioNTech-Pfizer shot for under-50s, leaving one Sydney hospital delivering no vaccinations in a week. (Cf. Ward (2021).) Cf., furthermore, Pailliez and Ahlander (2021).

³⁹⁸Franklin (2021).

³⁹⁹Cf. on the Q&A website of the Flemish government https://www.laatjevaccineren.be/vaccinatietegen-covid-19-vraag-en-antwoord (accessed on May 15, 2021), where it was explicitly mentioned that people had no say whatsoever in the choice of the Covid-19 vaccine they were to receive.

⁴⁰⁰By mid-February 2021, this was reported to be the policy of many European countries, resulting in many cases in people not turning up to appointments to get the Oxford-AstraZeneca Covid-19 vaccine. (Cf. Pailliez and Ahlander (2021).)

Kingdom behind the EU vaccination policy choices. The European Commission thus offered the United Kingdom the chance to join its disastrous Covid-19 vaccine procurement programme, but London—already having to deal with the harsh reality of Brexit—wisely turned down the offer. Instead, the United Kingdom simply signed its own purchasing agreements. In addition to purchasing the Oxford-AstraZeneca developed Covid-19 vaccine, the UK government also signed deals for procuring the Covid-19 vaccines developed by BioNTech-Pfizer and—shortly after the release of the preliminary trial data—from Moderna as well.⁴⁰¹

But where the United Kingdom would really get ahead of the EU in the Covid-19 vaccination race was in approving the actual deployment of the several Covid-19 vaccines.

By 20 November 2020, BioNTech-Pfizer had already submitted its request to obtaining an EUA to the US FDA.⁴⁰² (Cf. Sect. 9.3.1.3) Given the EU's own apparent complete lack of interest in making the mRNA Covid-19 vaccines available within the EU as soon as possible, BioNTech-Pfizer waited until 1 December 2020 to submit a similar application to the EMA (short for the "European Medicines Agency").⁴⁰³ However, the United Kingdom wisely chose to pre-empt both the US and EU supervisory agencies, thus becoming the first Western country to give a formal green light to a Covid-19 vaccine, by dispensing some of the requirements under the formal application procedure. More in particular, the UK Medicines and Healthcare products Regulatory Agency, already on 2 December 2020, gave a temporary approval to the BioNTech-Pfizer Covid-19 vaccine, based simply on the report about the Phase III trial data with regard to this vaccine it had earlier received.⁴⁰⁴ A few days later, a first dose of the BioNTech-Pfizer Covid-19 vaccine, outside the scope of trial testing, was administered in the United Kingdom (cf. Sect. 9.4.4). It was for many observers clear that this would have been impossible without Brexit, which according to some also indicated a differences in priorities that prevailed on the two different sides of the Channel.⁴⁰⁵

At about the same time, the US FDA—11 days ahead of the EU EMA—also rushed to give a EUA to the BioNTech-Pfizer Covid-19 vaccine.⁴⁰⁶ Eleven days would under normal circumstances be considered an insignificant delay in the land of drugs regulation. However, against the background of a raging global pandemic, lost days very likely equalled thousands of lost lives,⁴⁰⁷ as well as huge economic damage.⁴⁰⁸

⁴⁰¹ Deutch and Wheaton (2021).

⁴⁰²News from Pfizer (2020).

⁴⁰³Deutch and Wheaton (2021).

⁴⁰⁴Deutch and Wheaton (2021).

⁴⁰⁵Deutch and Wheaton (2021).

⁴⁰⁶Deutch and Wheaton (2021).

⁴⁰⁷Deutch and Wheaton (2021).

⁴⁰⁸Deutch and Wheaton (2021).

Being one of the United States' biggest pharmaceutical enterprises, Pfizer itself had not received any form of financial support under the Trump administration's Operation Warp Speed. However its partner (and actual developer of the BioNTech-Pfizer Covid-19 vaccine), BioNTech, had itself received a loan from the EIB, besides actual financial support from the German government. One could have thus expected that BioNTech-Pfizer would first have turned to the EU for getting a regulatory approval on the use of their vaccine. However, most probably in the light of Pfizer's own bad experiences in its contract negotiations with the EU, the New York-based enterprise Pfizer wisely chose to coordinate the clinical trials needed for getting regulatory approval in close cooperation with the US supervisory agency FDArather than with the EU supervisory agency EMA-as well as with Germany's own vaccine regulator, the Paul Ehrlich Institute.⁴⁰⁹ This at the same time helps explaining why the request for (temporary) approval of the BioNTech-Pfizer Covid-19 vaccine was first made in the United States. In the end, the US FDA granted an EUA for the BioNTech-Pfizer Covid-19 vaccine on 11 December 2020, which was just three weeks after the two enterprises had submitted their application. The EMA granted a similar temporary permission some 10 days later. (Cf. Sect. 9.3.1.3.)

Notwithstanding the fact that it took the EMA one day less than the FDA to make its decision between the date of the formal application and the ultimate decision, it was clear that, by then, the EU had not only lost the Covid-19 vaccination race with regard to the procurement of the Covid-19 vaccines, but also with regard to granting the necessary regulatory approvals, adding a further cause to the fact that the Covid-19 vaccines, by early 2021, were much less available in the EU than in the United States, besides a variety of other countries that had all been much quicker in responding to the challenges posed by the ongoing Covid-19 pandemic itself in relation to the rapid development of functional Covid-19 vaccines.

9.4.3.7 Late Start of the Vaccination Campaign in the EU and Problems with Supply Shortages

In early 2021, political leaders across the European continent began to protest about the delays of the EU vaccination campaigns.⁴¹¹ Worse still, it appeared that EU citizens were mostly denied access to the most effective Covid-19 mRNA vaccines that could slow the epidemic on the continent and save their lives.⁴¹²

Vaccinations within the EU slowly began on 26 December 2020, when three EU countries—Hungary, Germany and Slovakia—had rushed to accept the European Commission mission's invitation to begin inoculating people as of 27 December

⁴⁰⁹Deutch and Wheaton (2021).

⁴¹⁰Deutch and Wheaton (2021).

⁴¹¹Deutch and Wheaton (2021).

⁴¹²Deutch and Wheaton (2021).

2020).⁴¹³ This was almost 2 weeks after the first Covid-19 vaccinations had been administered in the United States and almost three weeks after pictures of the first woman being vaccinated with the BioNTech-Pfizer Covid-19 vaccine by the UK National Health Service had been released to the world's media.⁴¹⁴ (Cf., furthermore, Sect. 9.4.4.2.)

Notwithstanding the delays and clearly not in the least embarrassed about the many mistakes that had been made during the negotiations and the procurement process for acquiring the Covid-19 vaccines, European Commission's mission chairwoman, Urusla von der Leyen, was surprisingly quick to call the coordinated deployment a "true European success story", although many other politicians, let alone the EU citizens themselves, did not share this over-enthusiastic assessment.⁴¹⁵

Given the terms of the agreed upon purchase agreements, and even though the initial EU order for doses of the BioNTech-Pfizer Covid-19 vaccine had been double that of the United States, it soon got clear that the cooperating vaccine producers had planned to deliver the purchased doses of their Covid-19 vaccine at a much faster rate to the United States than to the EU itself. Pfizer thus explicitly committed to deliver 200 million doses of the BioNTech-Pfizer Covid-19 vaccine to the United States by the end of July 2021, for which Pfizer would resort to the production that it accomplished through its American factories, while the EU itself was not even guaranteed that it would receive this same number by the end of September 2021.⁴¹⁶ Moreover, at the beginning of 2021, supply disruptions started to occur which BioNTech and Pfizer completely passed on the EU, while deliveries to the United States largely continued as agreed upon. When on 15 January 2021 Pfizer-BioNTech thus announced that they would have to reduce supplies of the vaccine to some countries for a few weeks in order to upgrade their plants to be able to produce doses more quickly, it was mainly the EU that was affected by this measure, while the vaccination campaign in the United States itself could go ahead as planned.⁴¹⁷

Deliveries to the EU by Moderna were even worse, as Moderna itself had already warned around the middle of November 2020. Moderna's Covid-19 vaccine had ultimately been approved on a temporary basis by the EU EMA on 6 January 2021, several weeks after the US FDA had granted the Moderna Covid-19 vaccine a EUA for use within the United States.⁴¹⁸ Most probably due to the experiences that Moderna had endured during its negotiations with the EU, Moderna from the outset

⁴¹³Deutch and Wheaton (2021).

⁴¹⁴Deutch and Wheaton (2021).

⁴¹⁵Deutch and Wheaton (2021).

⁴¹⁶Deutch and Wheaton (2021).

Washington and Brussels have since added hundreds of millions of doses to their orders.

⁴¹⁷Deutch and Wheaton (2021).

⁴¹⁸Deutch and Wheaton (2021).

announced a limited supply to the EU throughout 2021, committing only 10 million doses of its Covid-19 vaccine for delivery to the EU throughout Q1 2021.⁴¹⁹

When, on 22 January 2021, AstraZeneca as well announced that deliveries of its Covid-19 vaccine to the EU would not be a top priority, the European vaccination campaign was down and out before it even began, and would remain so until the end of April 2021.⁴²⁰

At the same time, it appeared from preliminary customs data that millions of Covid-19 vaccines produced on EU soil, had simply been exported from the EU to Britain, Canada, Israel and China. Britain, Israel and Canada all declared that they received their doses of the BioNTech-Pfizer Covid-19 vaccine exclusively from EU countries. Britain also declared that it received doses of the Oxford-AstraZeneca Covid-19 vaccine from the EU, notwithstanding the fact that AstraZeneca had two operational production plants on British soil.⁴²¹ So, while, on the receiving end, the EU was facing huge delivery problems with regard to all three main Covid-19 vaccines—bearing in mind that the Johnson & Johnson Covid-19 vaccine was at the time not yet ready—it nevertheless allowed a massive export of Covid-19 vaccines produced within the EU itself to other territories, in this manner denying its own citizens access to the life-saving product.

The afore-mentioned drastic announcements by the three main Covid-19 vaccinesuppliers the EU had been counting on, would eventually force health ministries all over the European continent to completely rewrite their vaccination plans throughout Q1 2021 and the month of April 2021,⁴²² with a single EU Member State, notably Hungary, even starting to look at Russia and China for deliveries of their own Covid-19 vaccines.

9.4.3.8 Criticism on the EU's Stinginess

While throughout the months January-April 2021, panic over Covid-19 vaccine shortages in all EU member states mounted, many started questioning the EU Commission's policy of having pursued low prices to the detriment of fast deliveries.⁴²³

Israel, which at the time was taking the lead in inoculating its population, made no attempt at hiding the fact that its "whatever-it-takes approach" for acquiring the

⁴¹⁹Deutch and Wheaton (2021).

⁴²⁰Deutch and Wheaton (2021). Cf., furthermore, Guarascio and Chalmers (2021).

⁴²¹Guarascio and Chalmers (2021).

⁴²²Deutch and Wheaton (2021).

⁴²³Deutch and Wheaton (2021).

Covid-19 vaccines had involved shelling out more,⁴²⁴ a strategy which had proven highly effective, to the extent that Israel soon became the country most likely to reach herd immunity because of its vaccination strategy.⁴²⁵

The United Kingdom and the United States had, in a similar manner, also been willing to pay more per dose of the Covid-19 vaccines than the EU. Published figures about the prices paid for the Covid-19 vaccines indicate that the EU had been willing to pay less than USD 2 per dose of the Oxford-AstraZeneca Covid-19 vaccine, while the United States had been willing to pay around USD 4. When considering these figures, one has to bear in mind that the United States did not rely on the Oxford-AstraZeneca vaccine in their own campaign (nor did it intend to), while for the EU, the Oxford-AstraZeneca Covid-19 vaccine had at the time been indicated as the central piece of the EU vaccination campaigns. The United States had, phrased differently, been willing to pay the double for something it did not consider all that important. From the aforementioned data, it also appeared that the United States had negotiated a USD 20 price tag per dose for acquiring the BioNTech-Pfizer Covid-19 vaccine, and Israel even a price tag of more than USD 40 per dose. In contrast, the

According to Winer, the price tag per person for the Covid-19 vaccines that Israel had acquired from the Pfizer-BioNtech and Moderna pharmaceutical enterprises had amounted to USD 47 per person. In total, the country was reported to have paid NIS 1 billion (USD 315 million) to the manufacturers for their two-shot vaccination products. Pfizer was reported to have received NIS 775 million (USD 245 million), whereby it was also indicated that the bulk of Covid-19 vaccines to be used for the Israelian vaccination campaign were expected to come from Pfizer-BioNTech. Moderna was reported to have received NIS 320 million (USD 101 million). These sums imply that the average price for each dose of a Covid-19 vaccine from the vaccine producing enterprises was about USD 23.50, slightly higher than the amount that Pfizer had initially said the shots of its Covid-19 vaccine would cost. The higher price was because Israel had pushed to buy large numbers of the Covid-19 vaccines and to have them delivered quickly to keep the vaccination drive in Israel in high gear. These prices, furthermore, indicated that Israel had been paying significantly more for the BioNTech-Pfizer Covid-19 vaccine than either the United States or the EU. It had been reported before (by the Washington Post) that the United States had been paying Pfizer-BioNTech USD 19.50 per dose, while the EU 27-country bloc was paying a mere USD 14.76 per dose. The same source cited the Moderna Covid-19 vaccine prices at USD 15 per dose for the United States and USD 18 per dose for the EU. (Cf. Winer (2021).)

⁴²⁴Regev (2021).

Israel has indeed made no secret of the reasons behind the success of its vaccination program: already on 7 January 2021, Netanyahu revealed that Israel had struck an agreement with Pfizer-BioNTech to exchange Israelian citizens' data in exchange for 10 million doses of the BioNTech-Pfizer Covid-19 vaccine, including a promise of shipments of 400,000–700,000 doses of the vaccine per week. Under this agreement, Israel was to provided details to Pfizer (as well as to the World Health Organization) about the age, gender and medical history of the people that would be receiving the BioNTech-Pfizer Covid-19 jab, as well as data on its side effects and efficacy. On 5 January 2021, Israelian officials had, furthermore, disclosed off-the-record that Israel had paid a price for the BioNTech-Pfizer Covid-19 vaccine of USD 30 per dose. That was more than twice the amount listed by Belgium, e.g., which had accidentally revealed its Covid-19 vaccine price list when Belgium's secretary of state had tweeted it by mistake. (Cf. Regev (2021). Cf., furthermore, Winer (2021).)

⁴²⁵Deutch and Wheaton (2021).

price that the EU had been willing to pay for a dose of the BioNTech-Pfizer Covid-19 vaccine only amounted to USD 15, which presents a further insight in the value the EU warrants to the lives of its citizens in comparison to less stingy countries.⁴²⁶

On January 23, 2021, in a column named "Our worst policy error", Wolfgang Münchau, the then-head of the London-based "Eurointelligence" think tank and a frequent critic of Brussels initiatives, gave the following assessment of the EU's stinginess, in which he severely criticized the EU's wrongheaded policy choice of prioritizing price over delivery.⁴²⁷ Considering this opinion being so right on the money, it is hereafter quoted completely:⁴²⁸

It looks like I might have been a bit premature when I predicted that austerity would go down as the EU's worst policy error during my lifetime. In one sense this prediction from the time of the eurozone crisis will probably turn out to be correct.

Austerity triggered economic divergence that will be hard to reverse.

But the EU vaccine's policy must be a close contender for that title. As of January 22, the EU had vaccinated only 1.89% of its population, whereas the UK vaccinated 9.32%. Moreover, the daily rate of increase is faster in the UK. UK vaccinations not only started earlier, but the gap is also still widening.

You can't blame logistical errors. What happened is that the EU did not secure enough vaccines. That, in turn, slowed down the pass-through. The Commission's headline numbers are not deliveries. Already in November, the head of Moderna warned that the EU was dragging out negotiations. AstraZeneca, which is distributing the Oxford vaccine, said deliveries to the EU will take longer than previously anticipated. Pfizer, which distributes the German BioNTech vaccine, is now warning the EU of supply bottlenecks because of problems with a production site in Belgium.

What happened here is that the EU did a Brexit trade deal with the pharma industry: it tried to lock in a perceived short-term price advantage at the expense of everything else. Instead of prioritizing the speed and security of supplies at any price, the EU prioritized the price. The EU paid 24% less for the Pfizer vaccine than the US, for example. For the Oxford/ AstraZeneca vaccine, the price gap is 45%. The UK almost certainly paid a lot more. It is no wonder that the manufacturers are prioritizing orders on a first-come, first-serve basis, and from countries that pay the full price. The price difference is macroeconomically irrelevant. But if vaccine shortages lead to longer lockdowns, the indirect effect of that short-sighted policy will be massive.

At one point, the cost of this policy error will also be measurable in terms of human lives. This is not possible now because we don't know the future spread of the virus. We know that the UK mutant has arrived on the continent but has not yet unleashed its full pandemic force. In the most benign scenario, the current lockdown might prevent the worst. In the worst-case scenario, the vaccination delay would be a calamity that could costs tens of thousands of lives.

So why did EU governments shift responsibility for vaccination procurement to the EU in the first place? Angela Merkel reasoned that it would have strained EU cohesion if Germany had procured privileged supplies of the BioNTech vaccine. What she did not consider is that

⁴²⁶Deutch and Wheaton (2021).

⁴²⁷Münchau (2021).

⁴²⁸Münchau (2021).

9.4 Vaccination Campaigns

the EU is ill-equipped for this task. To this day, the EU's DNA is that of a producers' cartel. Its priority is not to secure supplies but reduce costs and achieve some balance between French and German interests. Triangulation is what Brussels does for a living. *Whatever-it-takes* is not part of its culture.

On a broader perspective, the vaccine disaster is the culmination of a trend that started with the Maastricht Treaty. Until then, the EU did only a few things well: the customs union, the Schengen travel zone, and to a lesser extent, the single market. The EU's competencies have progressively widened since, but the results are mostly disappointing. In the early 2000s, the EU obsessed about the Lisbon Agenda for structural reforms, which brought few concrete benefits. Nor did the Juncker investment programme a decade later. The vaccination disaster differs in only one respect: it will be blamed for the loss of human lives.

There will undoubtedly be calls for resignations. But for me, the more important issue is the conclusions EU citizens will draw from it. For starters, the EU has just provided a hindsight argument in favor of Brexit. The UK would not have proceeded with vaccinations as quickly if it had subjected itself to the same policy. The last thing the EU ever wants to do is give people a rational, non-ideological reason for Euroscepticism.

It has just done that.

In a similar manner, albeit a bit shorter, on the same date, Guntram Wolff, director of the Bruegel think tank in Brussels, tweeted the following⁴²⁹:

The EU spends less per vaccine shot than other industrial countries. This stingy approach cost lives. It's incomprehensible, why budget line for vaccine purchases was so limited while lockdowns cost hundreds of billions. More financial incentives needed to boost production now.

To the extent that the EU Commission sacrificed speed for stinginess and solidarity, while at the same time trying to reach an understanding with the Covid-19 vaccine providers concerning possible liabilities, it remains an open question whether it got what it wanted.⁴³⁰ For a supranational institution that prides itself on consistently prioritizing both economic interests and principles, this approach demonstrated a clear lack of insight into the basic dynamics of capitalist economies: when negotiating the purchase of Covid-19 vaccines, the EU was not on a buyer's market. Speed was of the essence, as countries from all over the world vied for priority access in the vaccine queue, while it was also clear that production and supply of the Covid-19 vaccines would not be able to meet demand.⁴³¹ Also, the heavy-handed treatment of, e.g., manufacturer Moderna—cf. the public statement of the latter of 17 November 2020, quoted before at Sect. 9.4.3.4—apparently testified to little insight from the part of the EU on how to deal with suppliers of a scarce and vital product.

There has also been strong criticism regarding the poor quality of the EU vaccines purchasing task force itself which has been considered not being up to the task. Wheeldon has in this regard pointed out that, while the EU Commission is very good

⁴²⁹ https://mobile.twitter.com/GuntramWolff/status/1352899970517626880.

⁴³⁰Deutch and Wheaton (2021).

⁴³¹Cendrowicz (2021).

at negotiating things like trade deals, it traditionally did not have any competence whatsoever in matters as vaccines and vaccine contract negotiations which had in the past always been left to the Member States themselves. For some, the EU Commission, had mistakenly aggrandized its competence, although it was clearly not up to the job, lacking both the competent people and the experience for such an undertaking. By contrast, the United Kingdom had put a successful venture capitalist specialised in biosciences, notably Mrs Kate Bingham, at the head of its Covid-19 vaccine acquisition program. Bingham's specific professional expertise was in purchasing vaccines and drugs, as well as in drawing up purchasing agreements with pharmaceutical enterprises, while none of that was the competence of Ursula von der Leyen or anyone within the Gallina task force.⁴³² (Cf. Sect. 9.4.3.3)

The policy choice of deploying an unqualified task force, which then moreover prioritized price above speed, caused great delays by December 2020. Further policy choices and austerity measures doomed all other attempts at a truly equal approach to the vaccination process,⁴³³ both in terms of the relationship between the EU member states, as between individual European citizens.

Be this as it may, on 19 January 2021, when just over 5 million Covid-19 vaccines had been administered throughout the EU, the EU Commission still deemed it fit to announce targets according to which at least 80% of EU health laborers and the elderly above the age of 80 would be served with a Covid-19 vaccine by March 2021, and 70% of the EU adult population by the end of the summer of 2021. Moreover, while at the time hardly having received deliveries of the Covid-19 vaccines for itself, the EU announced that it would start donating excess doses of the Covid-19 vaccines to poorer countries.⁴³⁴

There is little room for denying that, while, during the months of January and February 2021, the variety and the available numbers of Covid-19 vaccines in the United Kingdom were not as wide and big as they were across the Atlantic Ocean, but at the same time, no European country had vaccinated more people than the United Kingdom. If the United Kingdom had then still been a member of the EU, already on 22 January 2021, it would have been the only country on track to achieve the EU Commission's goal of vaccinating 70% of the adult population by the summer of 2021 (and, hence, for once being among the best students of the EU class).⁴³⁵ What is as clear is that the EU's prioritizing price over speed has cost not only precious time, but also precious lives.

⁴³²Wheeldon (2021).

⁴³³Deutch and Wheaton (2021).

⁴³⁴Guarascio and Chalmers (2021).

⁴³⁵Cf. Guàrdia et al. (2021) have made the following remarks in this regard: "The European Commission wants 70 percent of all adults in the EU to get the coronavirus jab by the summer. At this point, that goal is wildly off. If the current pace of vaccination persists, the bloc as a whole would reach only 15 percent by the end of September. Based on the average of the past week, the bloc would have to ramp up vaccination by a factor of five to hit its target. The vaccination goal is part of a list of non-binding recommendations from the Commission. Health Commissioner Stella Kyriakides described this target on Tuesday as "ambitious," but the Commission has resisted

As Maçães has phrased it:⁴³⁶

I now fear that the European Union will find itself in the impossible situation of having to prolong some of the existing restrictions beyond the summer, while both Britain and the United States start to normalize. That is the cost of the vaccine delays: a very high cost in lives, prestige and further economic losses. The current crisis has the potential to spiral out of control. The imperative was to reduce the risks of that happening, no matter what the immediate financial cost.

As the EU vaccine procurements came under increasing attack from all possible sides during the second half of January 2020, EU bureaucrats, Gallina in the lead, were still particularly notable for the fervour with which they continued to defend the EU's strategic choices. In clear denial of all contradictory facts, Gallina said that she was still convinced that the EU was better off than Israel, the United Kingdom and the United States, pointing out that the EU had managed to "reserve" many different Covid-19 vaccines and had also managed to negotiate the best prices.⁴³⁷ Gallina, in addition, argued that the EU was in the "top league" of Covid-19 immunization process worldwide, while denying that the Covid-19 vaccines rollout was hobbled by delays arising from the contracts with the vaccine producing pharmaceutical enterprises.⁴³⁸ Gallina, furthermore, argued that, by the end of January 2021, the EU had already vaccinated more than 12 million people and that unfavourable comparisons with more successful countries such as Israel, at the time the world leader in Covid-19 inoculation, were not at all helpful.⁴³⁹

However, the EU bureaucrats remained unable to answer the real questions regarding the extreme slowness of Covid-19 vaccine deliveries to the EU, throughout Q1 2021 and deep into April 2021.

In early February 2021, EU Commission President Ursula von der Leyen herself acknowledged that, when negotiating and signing the Covid-19 procurement agreements, the EU had been too optimistic about the rapid production and delivery of the Covid-19 vaccines, but also continued to emphasize that the joint purchase by Brussels had been the right strategy.⁴⁴⁰ von der Leyen, furthermore, came up with

offering a specific date for the summer cut-off. A Commission official told POLITICO that they meant the end of the summer, so September 22 has been used for the calculations in this article. The catch: At the current pace, the EU as a whole wouldn't hit that target until March 2024. On the extreme end is Bulgaria, which wouldn't get there until 2040 and would need to pick up vaccination by a factor of 29. Latvia would need to accelerate its pace by a factor of 17; Italy by 10; and Hungary by nine. So far, Malta is the EU champion: It could meet the Commission's target in time if it doubled its number of daily doses. The U.K., which is no longer a member of the bloc and started vaccinating a few weeks earlier than the EU, will have vaccinated 83 percent of adults by the end of the summer if it maintains its current pace." (Guàrdia et al. (2021).)

⁴³⁶Maçães (2021).

⁴³⁷ van de Wiel (2021).

⁴³⁸Khan and Peel (2021).

⁴³⁹Khan and Peel (2021).

⁴⁴⁰van de Wiel (2021).

the remarkable argument that "the battle against the virus is a marathon, not a sprint".⁴⁴¹

This desperate defence of the EU's strategic choices by both Von der Leyden and the chair of the vaccine procurement task force, however, had no impact whatsoever on the failure of the deliveries—and, hence, of the vaccine administrations—themselves.

As Franklin has assessed this attitude of the EU leadership⁴⁴²:

As an institution, the EU displays a pattern of behavior that in an individual would be diagnosed as petty narcissism. We all know the type of person: the character flaw isn't obvious at first, but they soon give themselves away. In place of the usual give-and-take of a healthy human relationship, they think they're doing you a favor just by allowing you to interact with them. Furthermore, you will be expected to pay for the privilege. This means abiding by their rules; having to guess what they want without being told; prioritizing your relationship with them above any other attachment. Resist their nonsense and you'll be accused of being the unreasonable one.

9.4.3.9 In Between-Conclusions Regarding the EU's Failed Covid-19 Vaccines Procurement Policy

In light of the foregoing, the EU policy of dealing with Covid-19 has failed in many ways and on many occasions.

Especially since the enactment of the 1992 Maastricht Treaty, the EU has committed itself heavily to implementing neoliberal doctrine. Already before the creation of the EMU, the emphasis on the interests of the trade, financial and industrial sectors have been high on the European Communities' agenda, at the expense of other possible interests within the socio-economic sphere, such as care for the environment⁴⁴³ and public health (of which, incidentally, hardly any trace can be found in the European treaties), and certainly not in case these other socio-economic interests would collide with economic interests themselves.

As has been demonstrated throughout the previous Chapters of this book, the European neoliberal political agenda has during the past three to four decades increasingly, and on a wide variety of policy topics, determined the policy of the EU member states as well. The combined effect of submitting EU policy and the policy of the EU Member States to the doctrines of economic neoliberalism, has in times of Covid-19 proven to be especially detrimental.

⁴⁴¹Szucs (2021).

⁴⁴²Franklin (2021).

⁴⁴³Only since the emergence of the climate change debate has the EU started to pay some more consideration on matters such as the protection of the environment, which in 2020 resulted in the announcement of the so-called Green Deal, an according to EU standards ambitious action program for fighting climate change. (Cf. https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en. Accessed on 15 May 2021).

Let us briefly summarize some of the findings of the previous Chapters about what this has implied for the European policy responses to Covid-19.

First, in full accordance with neoliberal logic, most EU Member States have during the past decades increasingly pursued an austerity policy in the field of healthcare. (Cf. Chap. 5) As a result, when Covid-19 hit Europe as of January 2021, little was left of any preventive health policy in most EU Member States, nor was there much to be seen thereof at the EU level itself, to the extent that the EU had no significant competences in this area. The combination of these two elements-a far-reaching austerity policy at the level of the EU Member States and the absence of significant competence, or even interest, regarding public health matters at the EU level itself-implied that, when Covid-19 reached the European territory in January 2020, both the EU itself, as its Member States, could only stand by and watch. There were, e.g., no EU institutions mandated to cope with a pandemic. Nor were there any stocks of protective or other medical equipment needed to combat such a health crisis available anywhere. This dearth of equipment ranged from ordinary facemasks for general use, to more advanced medical protection gear or equipment needed for the treatment of Covid-19 patients (such as, e.g., respirators). The leaders of certain European Member States would even bluntly lie to the public, explaining that face masks offered no protection against the Covid-19 virus anyhow, even while Asian countries, far more experienced in such health crises, generally relied on facemask wearing to combat coronavirus outbreaks. In addition, in many European countries, after decades of neoliberal austerity policy decisions in the field of healthcare, the capacity of the hospital sector turned out to be unable to cope with the large wave of Covid-19 contamination cases. In many EU Member States, this led to the most dramatic situations, including the systematic refusal of admitting members of the elderly population (in particular long-term nursing home residents) to hospitals, implying that they were left to die in their retirement home, or even at home, under the most appalling conditions. (Cf. Chap. 6) There was, furthermore, a complete lack of knowledge on how to respond to the Covid-19 pandemic, which resulted in completely wrong advice to the general public—such as statements that the Covid-19 outbreak was no worse than a seasonal flu or that face masks did not offer any protection whatsoever -, as well as in terms of failing to work out sound policy measures for several months after the outbreak of the pandemic. In the meantime, throughout the months of February and early-March 2021, the Covid-19 pandemic spread wildly throughout Europe, resulting in astronomical death rates, while in various Asian countries-but also in some countries of Oceania -, thanks to much more efficient government response, the Covid-19 pandemic was in many cases contained far more quickly. (Cf. Sect. 2.4.2.4) It is in this regard most significant that, even at a time after the WHO had already issued clear warnings about the seriousness of the situation, and after several cases of Covid-19 had already been identified on the European continent (by the end of January 2020), the EU would still continue for the next one and a half month to give absolute priority to all kinds of economic matters, in addition to the migrant problem and the EU relationship with Turkey, but did not deign itself to any significant action to combat Covid-19. As a result of this completely lax attitude on the part of the EU

(in addition to numerous EU Member States), the Covid-19 virus had all this time free rein to spread across the entire European continent (besides Great Britain). The consequences have been correspondingly dire: already by the end of March 2020, the EU had the dubious status of being the Covid-19 pandemic's centre of gravity.

Those who think that, after having learned these painful lessons, the EU would have been inclined to correct its past mistakes by embracing the quickly developed Covid-19 vaccines (cf. Sect. 9.3.1) and by aiming at acquiring them as quickly and efficiently as possible, would find himself again mistaken.⁴⁴⁴

Faced with the negotiators of the Covid-19 vaccine producers who mainly envision a profit-making goal (cf. Sect. 9.2), EU officials tried to drive a hard bargain, as neoliberal doctrine equally teaches that every cent spent on the common good, e.g., on public health, is a waste of resources. Precisely this attitude is the reason why the EU negotiators would later proudly declare that they had managed to negotiate the lowest possible prices for the Covid-19 vaccines. (Cf. Sects. 9.4.3.3 and 9.4.3.4)

The combination of these elements has ensured that the EU, next to the EU Member States themselves (which had submitted to an unworldly principle of European solidarity on the subject of vaccine negotiations, apparently under the guise that the bulk purchaser would be able to negotiate a lower price) were among the last in the Western world to secure their contracts with the Covid-19 vaccine manufacturers, albeit at the lowest price. At least one of the vaccine producers, namely Moderna, explicitly warned that the actual vaccine deliveries would be based on a "first come, first served" logic (cf. Sect. 9.4.3.4), which should have led the EU to suspect that the actual deliveries would turn out to be problematic.⁴⁴⁵

⁴⁴⁴Indeed, notwithstanding anyone with an ounce of common sense should be aware that the pharmaceutical sector, after decades of neoliberal policies (both in the United States and in Europe), is interested in nothing else than big money making, has been living with its head in the sand for the past quarter of a century, thus apparently the EU officials who were in charge of the procurement of the Covid-19 vaccines for the entire EU.

After all, Adam Smith, the guru of selfish economics, taught us that if everyone behaves as selfishly as possible, it will best serve everyone's interests. Applied to the pharmaceutical sector, this implies that pharmaceutical enterprises are not to be expected to show any concern for public health, but only for their own financial profits which must be realized at all costs in the interests of their shareholders, whose excessive efforts for the benefit of all of us, after all, should be rewarded as much as possible by paying out huge dividends. (Cf. Sect. 2.1).

The EU should have realized all of this, as it has itself been one of the main architects of the implementation of this neoliberal way of thinking into binding rules and regulations.

⁴⁴⁵Cf. Bloomberg and Weber (2021). Cf., furthermore, The Straits Times Editorial (2021), in which the following was stated on the matter: "'In vaccine economics there is only black or white: Economies that finish the race first will be rewarded with strong positive multiplier effects supercharging consumption and investment activity in the second half of 2021," economists led by Ludovic Subran said in a report. "Vaccination laggards will remain stuck in crisis mode and face substantial costs - economic as well as political." Nor will the pain be evenly distributed. For the hard-hit travel sector, even a partial opening around the Easter holidays at the beginning of April would bring much-needed revenue, according to Reinhard Cluse, an economist at UBS Group. Southern countries including Spain and Italy - already the worst-affected by the pandemic - will

As Andreas Kluth wrote:

(...) the Eurocrats have unwittingly staged something like a parody of Brussels.

The EU was slow to strike deals and timid in the haggling. Its regulators took too long to approve vaccines that came on the market, including home-grown ones. Brussels then reacted badly to production shortfalls.

And thus, it happened.

When three of the most promising Covid-19 vaccines became available for distribution by the end of 2020, the EU (and with it, the EU Member States) could but observe how various other countries were getting off to a flying start with vaccinating their population, while the EU itself was barely receiving any deliveries. This also gave immediately rise to the suspicion that this situation would only come to an end after the entire population of the "first-in-line countries" would be vaccinated, with as result that, as the calendar year 2021 progressed, all hope that the entire European population would still be vaccinated in that same year, gradually diminished.

A far-reaching neoliberal policy has disrupted the population of the European continent on two levels: (1) On the one hand, by having to live under a regime that was completely unprepared for the arrival of a pandemic and, (2) on the other hand, by reaching the painful conclusion that even a health crisis of the size of a global pandemic, has, regretfully, not been able to motivate EU leadership to abandon the subordination of public healthcare to neoliberal economic principles.

Even Paul Krugman saw himself, on 18 March 2021, compelled to comment on the EU vaccination failure, in an opinion piece that appeared in The New York Times, in which Krugman wrote the following:⁴⁴⁶

(...) at this crucial moment in the Covid-19 saga, when new vaccines finally offer a realistic prospect of returning to normal life, policy in the European Union has been marked by one bungle after another. Jabs in arms got off to a slow start: Adjusted for population, Britain and the U.S. have administered around three times as many doses as France or Germany. And the E.U. countries are still lagging, administering vaccines less than half as rapidly as we are.

Europe's vaccination debacle will almost surely end up causing thousands of unnecessary deaths. And the thing is, the continent's policy bungles don't look like isolated instances, a few bad decisions made by a few bad leaders. Instead, the failures seem to reflect

suffer most from a delay. "With the slow progress on vaccinations, it's not clear we'll have a good Easter season," he said, adding that the summer is also under threat, as many travellers books their holidays in the spring and may opt to stay closer to home for another year. Each extra week the economy is subject to restrictions also increases the risk that companies that ate into their financial buffers for the last year will be pushed over the edge and file for insolvency. That would raise unemployment and undermine the prospect of rapid rebound. The EU could still catch up with its peers, or all nations could yet be plunged into another crisis, for example if coronavirus mutations emerge that are resistant to the current vaccines. On current form though, the likelihood is that continental Europe is headed for a painful reckoning. "To the extent that we don't get the necessary run rates in the coming weeks and months, our concerns will rise on a daily basis," said Cluse." (The Straits Times Editorial (2021).)

⁴⁴⁶Krugman (2021).

fundamental flaws in the continent's institutions and attitudes — including the same bureaucratic and intellectual rigidity that made the euro crisis a decade ago far worse than it should have been.

The details of the European failure are complex. But the common thread seems to be that European officials were not just risk averse, but averse to the wrong risks. They seemed deeply worried about the possibility that they might end up paying drug companies too much, or discover that they had laid out money for vaccines that either proved ineffective or turned out to have dangerous side effects.

So they minimized these risks by delaying the procurement process, haggling over prices and refusing to grant liability waivers. They seemed far less worried about the risk that many Europeans might get sick or die because the vaccine rollout was too slow.

9.4.3.10 Aftermath

9.4.3.10.1 March 2021: Searching for a Scapegoat

According to information provided by the European Centre for Disease Prevention and Control, as of December 2020, all EU/EEA countries started to develop strategies or plans for the roll-out of the available Covid-19 vaccines. The majority of said countries thereby aimed at launching their national Covid-19 vaccination campaigns at the end of December 2020, shortly after the delivery of the first batches of the Comirnaty vaccine, i.e., the name for the Covid-19 vaccine developed by BioNTech-Pfizer. By February 2021, all EU/EEA countries also started administering the Moderna Covid-19 vaccine and the Oxford-AstraZeneca Covid-19 vaccine.⁴⁴⁷

Vaccinations in the EU/EEA countries were to be rolled out in phases, with all EU/EEA countries starting with the inoculation of certain priority groups that had been selected based on their higher risk for developing severe Covid-19 disease. This mainly concerned the elderly and the residents of long-term nursing facilities. A second priority group were the healthcare laborers and certain other frontline workers.⁴⁴⁸

At that time, ECDC and the WHO Regional Office for Europe jointly established a tracking system for collecting information on the roll-out of the Covid-19 vaccines in Europe, including data on the precise number of doses of the Covid-19 vaccines shipped to EU/EEA countries by the vaccine producing enterprises, as well as data on the exact number of Covid-19 vaccine doses administered to people divided by age group and other ranking criteria. The objective of this tracking system was to gather data on (1) the effectiveness of the vaccination campaigns at a national level in terms of delivering doses of the Covid-19 vaccines to the targeted priority groups; (2) the capacity of countries to deliver all available doses of the Covid-19 vaccines to the members of their population; and (3) the identification of any gaps in the Covid-

⁴⁴⁷European Centre for Disease Prevention and Control (2021b), p. 6.

⁴⁴⁸European Centre for Disease Prevention and Control (2021b), p. 6.

19 vaccine deployment and vaccination campaign progress. As of 15 January 2021, these data were assembled through the European surveillance system (abbreviated as "TESSy") and could be consulted on the ECDC website under the form of Covid-19 vaccine tracking tables.⁴⁴⁹

Already at the beginning of February 2021, it started to become clear that the EU would be dealing with a cost of tens of billions of euros because of the delayed and chaotic roll-out of its Covid-19 vaccination campaigns, compared to countries where the vaccination campaigns were making rapid progress, such as the United States and the United Kingdom. It was then estimated by Bloomberg Economics that the ongoing need for lockdowns throughout the EU because of delayed inoculations, implied that the EU bloc's economy was only functioning at about 95 per cent of its pre-Covid-19 pandemic level, equating to about 12 billion euros (USD 19 billion) per week of lost economic output.⁴⁵⁰

At the time, the EU was already running weeks behind some of its peer countries in terms of Covid-19 inoculations, while at the same time proceeding at a much slower pace with scheduling new vaccination appointments. Unless the EU would, somehow by miracle, start to gain ground, it was expected to be compelled to maintain lockdowns, or similar Covid-19 containment measures, while the other major economies, notably those of the United States and the United Kingdom, would be able to fully return to work. Bloomberg estimated that a further vaccination delay of 1 to 2 months would imply economic losses of 50–100 billion-euro (USD 80 billion—USD 160 billion), while it was already then feared that the delays would be much longer than only 1–2 months.⁴⁵¹ These early calculations on the economic loss of the EU vaccination procurement failure highlighted the massive stakes for the EU Commission, which at the time, moreover, became entangled in a public discussion with vaccine producer AstraZeneca over supply delays and over threats that the EU would start imposing export restrictions for Covid-19

⁴⁴⁹European Centre for Disease Prevention and Control (2021b), p. 6.

As of 7 February 2021, a total of 29 EU/EEA countries reported full or partial data on the progress of their Covid-19 vaccination campaigns on TESSy. Among the 29 reporting countries, the estimated uptake of the first dose of a Covid-19 vaccine among adults (18 years and older) ranged from 0.3% to 7.6% (median: 3.5%). Among the 29 countries reporting information to TESSy, uptake of two doses of a Covid-19 vaccine among adults (18 years and older) ranged from 0.2% to 3% (median: 1.1%). (Cf. European Centre for Disease Prevention and Control (2021b), p. 6.)

Between mid-December 2020 and January 2021, ECDC and the European Commission's Directorate-General for Health and Food Safety jointly organised a stress test with regard to the logistical aspects of the Covid-19 vaccination roll-out plans. The exercise was conducted in two phases, involving twelve EU/EEA Member States. The stress test concerned a targeted simulation exercise in which participating countries were asked to describe their deployment plans for delivering a Covid-19 vaccine with strict cold chain requirements to their target priority groups. All participating Member States were able to describe the process, although with varying levels of detail, indicating that they were at different stages of planning. (Cf. European Centre for Disease Prevention and Control (2021b), p. 6.)

 ⁴⁵⁰The Straits Times Editorial (2021). Cf., furthermore, Bloomberg and Weber (2021).
 ⁴⁵¹The Straits Times Editorial (2021).

vaccines.⁴⁵² At the time, according to the Bloomberg Vaccine Tracker, the EU had been serving a mere 2.9 doses of the Covid-19 vaccines per 100 people, far under the 14.7 of the United Kingdom and the 10 of the United States.⁴⁵³

As if all of this was not disastrous enough, as of February 2021, many further problems occurred with the Oxford-AstraZeneca Covid-19 vaccine. For the EU, the Oxford-AstraZeneca Covid-19 vaccine had from the beginning been an important component of its vaccination plans, despite the obvious disadvantages of the vaccine that were already clear when the EU went ahead with its procurements, most notably the fact that the efficacy rates of the Oxford-AstraZeneca Covid-19 vaccine were far under these of its mRNA counterparts, notably the Pfizer-BioNTech and Moderna Covid-19 vaccines, implying that being inoculated with the Oxford-AstraZeneca Covid-19 vaccine would for many people all over the world never be their first choice, further exacerbated by the fact that it was becoming clear that several of the clinical trials of the Oxford-AstraZeneca Covid-19 vaccine had been conducted in such a manner as to elicit further criticism. It later also appeared that the Oxford-AstraZeneca Covid-19 vaccine was less effective than the other Covid-19 vaccines for protecting against new variants of the Covid-19 virus. But the EU-which had convinced its Member States that a joint procurement of the Covid-19 vaccines was preferable to a scenario in which individual Member States would have competed one another for access to the scarce Covid-19 vaccine supplies-had made a huge bet on acquiring doses of the Oxford-AstraZeneca Covid-19 vaccine, most probably because it was the cheapest vaccine available on the market, and for the EU bureaucrats who were in charge of purchasing the Covid-19 vaccines, nothing else had mattered more than paying the lowest possible prices. (Cf. Sects. 9.4.3.3 and 9.4.3.4.)

Obviously, the EU's big bet on the Oxford-AstraZeneca Covid-19 vaccine came before AstraZeneca had notified the European Commission that it would be unable to meet its initially promised deliveries of 270 million doses during the first half of 2021, and that it would only be capable of delivering around 100 million doses during said time period. Then, to make things even worse, in the second half of March 2021, news started to make the front pages about blood clots being found in several people to whom the Oxford-AstraZeneca Covid-19 vaccine had been administered. Vaccine politics are of an extremely sensitive nature. Already, all over the world, the Covid-19 vaccines had themselves been met with a lot of criticism and even suspicion, which was in particular the case for the Oxford-AstraZeneca Covid-19 vaccine, due to the fact that the vaccine was considered less effective than the mRNA Covid-19 vaccines. The United States had even still not granted an EUA to the Oxford-AstraZeneca Covid-19 vaccine. This explains why some countries

⁴⁵² "Every week that the lockdown has to be extended because the population isn't vaccinated and vulnerable means substantial economic costs," said Guntram Wolff, director of the Bruegel think tank in Brussels. "Those costs are a lot higher than the costs of the vaccinations themselves." (The Straits Times Editorial (2021).)

⁴⁵³The Straits Times Editorial (2021). Cf., furthermore, Bloomberg and Weber (2021).

reacted to the fact that side effects were reported about the Oxford-AstraZeneca Covid-19 vaccine by immediately putting its use to a halt, "out of an abundance of caution" and in order to prevent further undermining public confidence in the vaccine. Ironically, a wide variety of other EU countries then followed suit, which in turn hurt the public confidence in the Oxford-AstraZeneca Covid-19 vaccine even more. A notable exception was Belgium, usually not reluctant for brutalizing its population, that simply went ahead with administering the vaccine as if nothing was going on, even making an offer to purchase the stocks other countries would not be using any more.⁴⁵⁴

These problems with the Oxford-AstraZeneca Covid-19 vaccine resulted in a complete crisis of confidence, which endangered the already troublesome EU vaccination campaign even more. Scepticism about the Oxford-AstraZeneca Covid-19 vaccine has since then persisted no matter what scientists said and was, moreover, bound to deepen even more. From a survey undertaken by "YouGov" around that time—by Matthew Smit announced under the headline: "Europeans now see AstraZeneca vaccine as unsafe, following blood clots scare⁴⁵⁵—, it more precisely appeared that less than half of the population of Spain, Italy, France and Germany deemed the Oxford-AstraZeneca Covid-19 vaccine safe. Ironically, as the EU mounted pressure to get a fair share of deliveries the of Oxford-AstraZeneca Covid-19 vaccine, just as fewer and fewer of EU citizens actually still wanted it.⁴⁵⁶

With each additional headline about the Oxford-AstraZeneca Covid-19 vaccine, the EU's reputation was dinged again. The EU has long been chastised as an undemocratic and bureaucratic behemoth, but as it kept struggling with acquiring sufficient vaccines, the EU was accused of gross incompetence as well. At the same

⁴⁵⁴Cf. Verschelden (2021).

⁴⁵⁵Smith (2021).

⁴⁵⁶Cendrowicz (2021); Smith (2021).

According to Smith: "A YouGov study in late February showed that Europeans were already more wary of the AstraZeneca vaccine, which hadn't seen nearly the same level of growth in confidence that the Pfizer and Moderna alternatives had in the preceding months. Nevertheless, in all countries studied except for France, more people considered the AZ vaccine to be safe than unsafe. That is no longer the case. In the four continental European countries studied in both the February and March surveys - France, Germany, Spain and Italy - people are more likely to see the vaccine as unsafe than safe. In each case this represents a substantial decline in perceived safety. In our previous survey in Germany, 43% said they believed the vaccine to be safe, compared to 40%who considered it unsafe. As of now, a majority of Germans think the vaccine is unsafe (55%) and just a third think it safe (32%). In France, where people had already considered the vaccine unsafe (43%) than safe (33%), those figures have now worsened to 61% unsafe and 23% safe. In Italy and Spain, most people had previously felt that the AstraZeneca vaccine was safe (54% and 59% respectively). Since then those numbers have fallen to 36% and 38% - in both cases lower than the proportion who feel the vaccine is unsafe. Only in Britain can the blood clots story be considered to have little to no impact, with the vast majority still considering the vaccine safe, at 77% (down 4pts from February, and still on a par with Pfizer's 79% safe rating). New entrants to the survey this month are Sweden and Denmark. In Sweden the AstraZeneca vaccine is still seen as safe by more people than not (43% vs 34%), while Danes are tied 42%-42%. In both cases, however, the drug is seen as safe by far fewer people than the Pfizer and Moderna alternatives." (Smith (2021).)

time, the majority of EU citizens still did not get access to any of the vaccines, regardless their reputation of being good (namely the Pfizer-BioNTech and Moderna Covid-19 vaccines), or second-rate and even dangerous (notably the Oxford-AstraZeneca Covid-19 vaccine).⁴⁵⁷

For all their struggles with Covid-19 vaccine rollouts at home, the EU had on the other hand been good at allowing Covid-19 vaccines produced on European soil to be exported, by mid-March 2021 having sent more than 40 million vaccines abroad.⁴⁵⁸

End-March 2021, as the EU started looking for a way out of the mess it had created, officials thought of a new strategy to help them speed up the vaccination process: controlling vaccine exports to countries like the United Kingdom and the United States. In order to justify this approach, Von der Leyen started referring to the principles of "reciprocity" and "proportionality" in exports. Von der Leyden also declared that the EU was willing to use whatever instrument needed to ensure compliance with these principles. The EU had by then exported an estimated 34 million doses of Covid-19 vaccines,⁴⁵⁹ including about 10 million to the United Kingdom.⁴⁶⁰

⁴⁵⁷Bremmer (2021).

⁴⁵⁸Bremmer (2021).

According to Bremmer, the EU's Covid-19 vaccine export generosity was especially pronounced, compared to countries like the United States, where there were virtually no Covid-19 vaccine exports allowed before the summer of 2021. This has been mainly attributed to the fact that, in the United States—even after Donald Trump had left office as president–, "the Americans first policy" was prevailing more than ever. However, the fact was also true compared to the United Kingdom, which, despite having no formal export ban, had secured priority delivery from AstraZeneca as part of its purchasing agreement, adding even further to the reasons for the repeated surprise cuts to the EU supply (in addition to production delays in European plants). All of this implied that, by mid-March 2021, the delivery delays with regard to the Oxford-AstraZeneca Covid-19 vaccine ran into the tens of millions of doses that had failed to arrive since the start of the year. In contrast, 10 million Covid-19 vaccine doses sent to the United Kingdom had originated from the EU. (Cf. Bremmer (2021).)

⁴⁵⁹In a Press Release of March 11, 2021, the EU Commission had mentioned: "The EU continues to be the leading provider of vaccines around the world. Six weeks into the existence of this mechanism, 249 export requests to 31 different countries have been granted for a total of 34,090,267 doses, as they did not threaten the contractual engagements between the EU and the vaccine producers. Only one export request was not granted. The main export destinations include the United Kingdom (with approximately 9.1 million doses), Canada (3.9 million), Mexico (3.1 million), Japan (2.7 million), Saudi Arabia (1.4 million), Hong Kong (1.3 million), Singapore (1 million), United States (1 million), Chile (0.9 million) and Malaysia (0.8 million)." (Cf. European Commission (2021)).

⁴⁶⁰It was not of much help that the UK's smug triumphalism about its Covid-19 vaccine rollout added a further sting in the already febrile post-Brexit era. The numbers on the Covid-19 vaccine exports incensed people across the EU, as they imagined the EU bloc leaching doses of the Covid-19 vaccines to everyone else than the own EU population. A French official even warned that the EU should no longer be the pandemic's "useful idiot"—these had been the words of an adviser to the French President (cf. Reuters Staff (2021))—while other countries, such as the United States and the United Kingdom, hoarded and hid heaps of the vaccines. The United Kingdom itself had not

Notwithstanding the complete disaster of the EU vaccination campaign during Q1 2021, it would take EU officials until the end of March 2021 before starting to admit mistakes had been made regarding the Covid-19 vaccination procurements. This, moreover, only happened after six EU Member States, mid-March 2021, made a public complaint about the vaccine-distribution which they considered unfair. In a joint letter to the EU Commission and the EU Council, the leaders of Austria, the Czech Republic, Bulgaria, Slovenia, Latvia, and later Croatia, had more precisely urged for opening a debate on the issue of the distribution of the available Covid-19 vaccines within the EU. On 13 March 2021, the EU Commission responded that the available doses of the Covid-19 vaccines had been divided among the EU Member States in relation to the population numbers of each EU Member State and by further taking into account epidemiological data, adding that it was up to Member State governments to establish how to distribute them further among their population.⁴⁶¹

Shortly after, in an article that appeared in the German newspaper "Der Tagesspiegel", EU Commission Vice-President Timmermans was quoted admitting that mistakes had been made on the Covid-19 vaccine-orders.⁴⁶²

By 23 March 2021, the United Kingdom had been administering about 46 Covid-19 vaccine doses per 100 people, and the United States 38. Meanwhile, the EU had only been serving 14 Covid-19 vaccine doses per 100 people, at a moment when, for the umpteenth time, more lockdowns all over the EU Member States were either on the horizon or already effectively being put in place.⁴⁶³ (Cf. Sect. 2.4.3) The EU

been exporting any Covid-19 vaccines, and it had craftily written clauses into its purchasing agreements with the Covid-19 vaccine manufacturer AstraZeneca to be prioritized above everyone else. As for the United States, it also prioritized domestic orders by drawing on the 70-year-old "Defence Production Act" which granted the executive power extraordinary powers over manufacturing in times of crisis. The strategies deployed by the United Kingdom and the United States raised the question why the EU and/or the EU Member States did not start using the similar legal tools at their disposal. The argument for a more assertive EU policy got louder when the travails with AstraZeneca were raised even sharper: by 25 March 2021, the Anglo-Swedish pharmaceutical giant had only delivered 30 million of its promised (and already reduced number of) 120 million doses, and yet continued to provide uninterrupted supply to United Kingdom, still sourcing from its factories located in the EU itself. (Cf. Cendrowicz (2021).)

Shortly before, Austrian Chancellor Sebastian Kurz had declared that the Covid-19 vaccine doses were not being spread evenly among the EU Member States, despite an agreement within the bloc to do so in accordance with levels of population. He blamed, albeit without offering evidence, separate deals that had purportedly been struck between the EU's vaccination steering board and individual drug enterprises. (Cf. Tallis (2021).)

⁴⁶²Meier (2021). Cf., furthermore, dpa.international (2021), where parts of the interview appear in English: ""It is true that mistakes were made when ordering the vaccines in Brussels as well as in the member states," Timmermans told Germany's Tagesspiegel newspaper in an interview released Sunday. "I am ready to take stock at the end of the pandemic - then we can see what we did wrong and what we did right," he said. The first thing to do, however, is to ensure that "all of Europe gets vaccine," Timmermans said. A European approach is "also in the interests of richer member states" like Germany, Commission President Ursula von der Leyen added in the interview." (Cf. dpa. international (2021).)

⁴⁶³National Review Editors (2021).

Commission president, Ursula von der Leyen, at the time, still kept declaring that 70% of all EU adults would be fully vaccinated for Covid-19 by the end of the summer of 2021, although at the preceding pace, it became increasingly feared that it would be well into 2022 when the EU would reach that target.⁴⁶⁴

By the end of March 2021, EU leaders themselves started venting their own frustration over the sluggish deliveries of Covid-19 vaccines and manufacturing delays, while anxiety was rising among the EU population over the rapid spread of new Covid-19 variants. (Cf. Sect. 1.1.2.)

The contrast between the grim picture within the EU and the inoculations in its renegade member country, "Brexit Britain", obviously did not improve the mood in Brussels. The leadership continued to deny its own culpability, while searching for a scapegoat, most notably AstraZeneca itself that continued to face production problems in its plant in Belgium, and therefore failed to deliver to the EU in accordance with what had been agreed upon. The EU more in particular blamed AstraZeneca that it favoured the United Kingdom, all the while ignoring the terms of its own purchasing agreement with the company, and the extremely slow pace at which it had reached this agreement.⁴⁶⁵ None of these doubts, however, prevented the EU Commission from threatening to trample over the property rights of various Covid-19 vaccine manufacturers located within the EU,⁴⁶⁶ although as often with regard to the United Kingdom, the EU's bark would continue to prove to be worse than its bite.

9.4.3.10.2 Situation on 1 April 2021: Hardly an April Fools-Joke

From statistics released by the ECDC on 31 March 2021, it appeared that no EU country had achieved the twin goals that the EU had set out for the end of March 2021, namely that (1) 80% of healthcare laborers and (2) 80% of those aged 80 or older would by then be vaccinated. Only five countries in the EU and the EEA considered together had administered at least a first Covid-19 vaccine dose to at least 80% of those aged 80 and over. Iceland appeared to have been most successful, with a vaccination rate of 98% in vaccinating healthcare workers. Iceland also had fully vaccinated 88.5% of its elderly people. Ireland and Malta had administered the first dose to 90% of its elderly, while Sweden and Finland had vaccinated more than 85% of the elderly. Three other countries—namely Denmark, Norway and Portugal—were just under the 80% threshold. Meanwhile, half of the EU/EEA countries had not even vaccinated 60% of its elderly population. One of these was Bulgaria, with a mere 5.1% of those over 80 years old vaccinated. No data were available for several other countries, including Germany and the Netherlands.⁴⁶⁷

⁴⁶⁴Cendrowicz (2021).

⁴⁶⁵National Review Editors (2021).

⁴⁶⁶National Review Editors (2021).

⁴⁶⁷Xinhua (2021).

Statistics regarding the Covid-19 vaccination uptake among healthcare laborers painted a similar worrisome picture. Only four countries had achieved the goal set by the EU, with Estonia and Hungary reporting having vaccinated 100% of healthcare workers with the first dose of a Covid-19 vaccine, while Romania and Spain were both over 90%. Hungary, moreover, reported a 99.6% uptake of full vaccination among healthcare workers, while Romania was just under 80%.⁴⁶⁸

By 4 April 2021, Hungary—that had shortly before suffered the most Covid-19 deaths per capita in the EU and had one of the world's highest Covid-19 fatality rates—was near the top of the charts for vaccinations out of the 27 EU member states, with more than 20% of its people having received at least one jab. This compared with an average of 12.5% across the EU. That was because Hungary had not waited for EMA jab approvals and had imported two Chinese and one Russian Covid-19 vaccine in order to supplement its supply shortages.⁴⁶⁹

By 1 April 2021, just 11% of the EU bloc's population had received at least one dose of a Covid-19 vaccine, compared to nearly 30% in the United States and more than 45% in the United Kingdom.⁴⁷⁰ This in light of the fact that, besides the 80% goal for the abovementioned two target groups, the EU Commission had in January 2020 also set another target, namely that EU Member States were to vaccinate a minimum of 70% of all adults by the summer of 2021.⁴⁷¹

The ECDC statistics also revealed that 86,000,000 Covid-19 vaccine doses had been distributed to EU/EEA countries by 31 March 2021, of which 71,200,000 had been administered.⁴⁷²

According to the ECDC, there were several reasons behind the missed deadlines. Among these, most countries reported as the main reason challenges related to the supply and delivery of the Covid-19 vaccines. Six countries reported staffing shortages, and another six countries reported communication challenges due to misinformation and disinformation around the Covid-19 vaccines, which had affected Covid-19 vaccine acceptance among the population. Among the latter countries were Croatia, Cyprus, Czech Republic, Germany, Romania and Sweden.⁴⁷³

On 1 April 2021, when most EU Member States started to experience their "third wave" of the Covid-19 pandemic, with variants of the Covid-19 virus being present in all 27 EU member states (cf., furthermore, Sect. 2.4.3.1), Bloomberg made its own assessment of the EU vaccination campaign. According to Bloomberg, EU's vaccine rollout remained "sluggish" because of the following reasons⁴⁷⁴:

⁴⁶⁸Xinhua (2021).

⁴⁶⁹Mallet et al. (2021).

⁴⁷⁰Nardelli (2021).

⁴⁷¹Xinhua (2021).

⁴⁷²Xinhua (2021).

⁴⁷³Xinhua (2021).

⁴⁷⁴Nardelli (2021).

- (1) Unlike the United Kingdom and the United States, the EU's procurement efforts had not bothered to prioritize domestic deliveries first.
- (2) At the end of March 2021, some 77 million Covid-19 vaccination doses had been exported from the EU to 33 non-EU countries, in addition to millions of doses of the Covid-19 vaccines to lower income countries through the COVAX facility. While since January 2020, the EU had issued legal measures in accordance with which enterprises needed export permissions, by that time, only one delivery to a foreign country had effectively been halted.
- (3) The EU's vaccination campaign was mainly suffering from significant delays of deliveries of the Oxford-AstraZeneca Covid-19 vaccine. By the end of March 2021, AstraZeneca had only delivered about 18 million doses of the Oxford-AstraZeneca Covid-19 vaccine since January 2021, while it had committed to providing at least 30 million doses before the end of March 2021, still well below the 120 million doses it had originally promised.
- (4) The vaccination campaigns of each EU member country was characterized by several differences. By the end of March 2021, some countries—like Ireland, Malta and Sweden—had vaccinated more than 85% of their elderly population over 80, while several other countries, such as France and Italy, only about half of the same population group.
- (5) A multitude of EU Member States had decided to temporarily use the Oxford-AstraZeneca vaccine only in some age groups; others had started to purchase vaccines from Russia, China or Israel, and some Member States were embroiled in a discussion over how the Covid-19 vaccine deliveries had to be divided across the EU bloc.

Internal fights over access to vaccines started highlighting just how difficult it was for a bloc of 27 countries to remain united under pressure.⁴⁷⁵

On 1 April 2021, Bloomberg, in addition, announced that it had had access to an internal EU document in which EU authorities themselves had made their own assessment of the Covid-19 vaccination debacle. From this document, it appeared that five countries that had earlier before turned away more expensive BioNtech-Pfizer Covid-19 vaccine doses in favour of the cheaper vaccine version from Oxford-AstraZeneca were under the impression of having paid a high price for their mistake. Because of this, Bulgaria, Croatia, Estonia, Latvia and Slovakia, which all had declined part of their expensive BioNtech-Pfizer Covid-19 vaccine allotments in order to wait for deliveries of AstraZeneca doses, were among the slowest in the EU bloc to be able to administer Covid-19 vaccines. While Pfizer had met its commitments, AstraZeneca had delivered just 30 million of its originally committed 120 million doses throughout Q1 2021. As a result, Bulgaria and Croatia were expected to only vaccinate 45% of their populations by the middle of 2021, according to the document, the lowest in the EU after the Czech Republic. Estonia

⁴⁷⁵Dendrinou and Nardelli (2021).

was expected to vaccinate 50%, Latvia 53% and Slovakia 46%. This in comparison to e.g., 61% in Germany, 80% in Denmark and 93% in Malta.⁴⁷⁶

The EU Commission declared, on 31 March 2021, that more than 100 million doses of the Covid-19 vaccines had been delivered to its Member States in Q1 2021, matching its lowered target. The EU expected the pace to pick up in Q2 2021, when it was forecast to receive 360 million doses of Covid-19 vaccines.⁴⁷⁷

Still according to information provided by Bloomberg, based upon its reading of the abovementioned EU internal document, on 31 March 2021, the EU had administered 15.5 doses per 100 people (an assessment slightly above the 11% that appeared from the above-quoted ECDC figures of the same date). This was in any case less than a third of what the United Kingdom had managed, while the United States had administered 45 doses per 100 people. The internal document concluded that the governments of the EU Member States had failed to hit the targets set by the EU Commission to vaccinate 80% of healthcare workers and people aged 80 and above by the end of March 2021, and that they would also most likely fail in achieving the 70% vaccination threshold of all adult population by the summer of 2021.⁴⁷⁸

Be this as it may, by 2 April 2021, it had become abundantly clear that the EU had already fallen short of its (moderate) target of having at least 80% of elderly people (aged 80 years and older) and 80% of healthcare professionals vaccinated against Covid-19 before the end of March 2021.⁴⁷⁹ Figure 9.5 presents a schematic

⁴⁷⁶Chrysoloras and Nardelli (2021).

⁴⁷⁷Chrysoloras and Nardelli (2021).

⁴⁷⁸Chrysoloras and Nardelli (2021).

⁴⁷⁹ Nicolás (2021).

From data published by the European Centre for Disease Prevention and Control, it however appeared that Covid-19 vaccination rates were accelerating in a moderate manner in many Member States, but the figures were still falling well below the 80% threshold for people over 80. In Q1 2021, EU Member States had received 107 million doses of the Covid-19 vaccines, of which 89 million had been administered. As of 2 April 1921, the median uptake of a first dose of a Covid-19 vaccine among people aged 80 years and over was almost 57%, while full vaccination with two doses was only 30% (= figures about 23 EU Member States). For healthcare laborers, it appeared that the acceptance rate for the first dose was almost 63% and for the second dose 50% (= figures about only 11 EU countries). Surprisingly, Hungary had come out on top in the race to vaccinate the population against Covid-19 in the EU, but, as has been said, only because it had abandoned Brussels' "solidarity diktat" and had started developing its own Covid-19 vaccination strategy, which included vaccines obtained through the EU, as well as the purchase of Covid-19 vaccines developed by Russia and China. As a result of this common sense, almost all (99%) of the health personnel in Hungary had been fully vaccinated. In addition, Romania, Spain, Estonia, and Ireland had vaccinated over 60% of their doctors and nurses. Meanwhile, Malta and Denmark were leading the EU in the race for vaccinating the elderly—with more than 50% of people aged 80 and over fully vaccinated. According to further estimates provided to Bloomberg, only 55% of the EU population was expected to be vaccinated by the end of June 2021. However, the figures also revealed significant disparities between EU Member States. E.g., Malta expected 93.1% of its population to be vaccinated by the end of O2 2021, followed by Denmark with a forecast of 79.8%. But the Member States whose vaccination strategy relied heavily on the Oxford-AstraZeneca Covid-19 vaccine were sad to be completely running behind. (Cf. Nicolás (2021).)

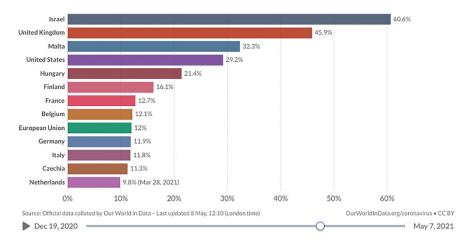


Fig. 9.5 Share of people who received at least one dose of Covid-19 vaccine, 31 March 2021 [Our World in Data (2021). Statistics as of 8 May 2021]

representation of the share of people who received at least one dose of a Covid-19 vaccine on 31 March 2021 in some countries.

9.4.3.10.3 Further Covid-19 Vaccine Problems and the Search for Solutions

Whereas the EU at the beginning of 2021 was still desperate for doses of the Oxford-AstraZeneca Covid-19 vaccine, by April 2021, it started pivoting to the BioNTech-Pfizer Covid-19 vaccine instead, finally indicating that it would not seek further doses from AstraZeneca beyond those already purchased. Instead, the bloc started negotiating a new contract with Pfizer-BioNTech for 1.8 billion additional doses of their Covide-19 vaccine over the next 2 years.⁴⁸⁰

The pivot away from AstraZeneca, which had initially been the main pillar of the EU inoculation program (cf. Sects. 9.4.3.3 and 9.4.3.4), came after months of discord over delayed shipments and worries over rare potential side effects of the Oxford-AstraZeneca Covid-19 vaccine shots. The European vaccine campaign got, moreover, also confronted with Johnson & Johnson's own delays in its rollout in Europe because of similar concerns and after regulators had paused the use of its vaccine in the United States.⁴⁸¹

By April 2021, with most EU citizens still having no clue when they would finally get vaccinated and with what vaccine, the EU was facing growing criticism for its extreme slow procurement of Covid-19 vaccine doses. The EU had fallen even further behind the United States and the United Kingdom, as it suffered blow after

⁴⁸⁰Stevis-Gridneff (2021); Mueller et al. (2021).

⁴⁸¹Stevis-Gridneff (2021).

blow in its inoculation campaign, first with major supply disruptions from AstraZeneca in late January 2021, and then with the emergence of the potential rare blood clotting disorder in both the Oxford-AstraZeneca and Johnson & Johnson Covid-19 vaccines, which battered the general public's confidence in the Covid-19 vaccines even more, leading to numerous appointment cancellations all over Europe.⁴⁸²

All this finally made the EU finally turn to Pfizer during the second half of April 2021, raising the question if the EU should not have done this from the start instead of having bet on the cheaper and less effective Oxford-AstraZeneca Covid-19 vaccine (cf. Sect. 9.4.3.4). The new agreement between the EU and Pfizer-BioNTech was even to include potential booster shots to increase the immunity of people who had already been inoculated, as well as possible new shots or boosters targeting emerging variants of the Covid-19 vaccine that might prove resilient against existing vaccines.⁴⁸³

On 25 April 2021, Ursula von der Leyen claimed to The New York Times that AstraZeneca had squandered the EU bloc's trust. By Monday 26 April 2021, the EU Commission, backed by all 27 EU Member States, announced that it had decided to take AstraZeneca to court.⁴⁸⁴

At the time, AstraZeneca had only succeeded in delivering about a quarter of the 120 million doses planned for Q1 2021.⁴⁸⁵ Officials at the EU's executive branch had become particularly angry at AstraZeneca's continued reluctance in delivering vaccine doses to the EU that were produced in Oxford and Staffordshire, however, this production was supposedly prioritized for delivery to UK residents on a contractual basis. When announcing its decision to take AstraZeneca to court, a spokesman for the European Commission declared that the complaint had been filed because certain terms of the purchasing agreement between AstraZeneca and the EU had not been respected, and the enterprise had not been willing to propose a reliable, alternative strategy to ensure timely deliveries to the EU. The complaint was officially filed with the Belgian courts on Friday 22 April 2021. A first hearing before the Enterprise Court ("Ondernemingsrechtbank") located in Brussels was scheduled for Wednesday 27 April 2021.⁴⁸⁶

⁴⁸² Stevis-Gridneff (2021).

⁴⁸³ Stevis-Gridneff (2021).

⁴⁸⁴Mueller et al. (2021).

⁴⁸⁵As explained before, AstraZeneca blamed production problems at its plant located in Belgium, which prompted fierce rebuttals from Brussels. (Cf., furthermore, Boffey (2021a); Sánchez Nicolás (2020); Mueller et al. (2021).)

⁴⁸⁶Boffey (2021a); Sánchez Nicolás (2020); Mueller et al. (2021).

According to legal experts, the "best efforts" clause in the purchasing agreement put the burden of proof on the EU and the 27 EU Member States that must prove that AstraZeneca has not acted with sufficient diligence to deliver the promised doses. But said experts also stated that this clause did not entirely shield AstraZeneca from a breach of contract. (Cf. Mueller et al. (2021).)

9.4.3.11 Some Final Data from April-May 2021

An interim assessment of the mid-April 2021 EU Covid-19 vaccination debacle showed that, in most EU countries, vaccine rollout had remained extremely slow during the early months of 2021. E.g., in Belgium, after facing some of the worst mortality statistics in the world, the government had focused on vaccinating the most vulnerable: by 3 May 2021, 86.8% of the elderly over 80 had been fully vaccinated, and 84.18% of the people aged between 65 and 84.⁴⁸⁷ But at the beginning of May 2021, Belgium was only just starting to administer Covid-19 vaccines to the younger parts of its population as well. The good news was that Belgium had managed to reduce the time between the delivery of the Covid-19 vaccine doses and their actual administration, from on average 18 days in March 2021, to about four days in the last week of April 2021.⁴⁸⁸

A similar trend could be observed in many other EU countries. Apart from the latecomers Bulgaria, Latvia, Croatia and Romania, just over 20% of the population in each of the other EU Member States had received a dose of a Covid-19 vaccine by 3 May 2021, with Malta leading the way at 52.43%.⁴⁸⁹

For the 23 EU Member States that managed to report their Covid-19 vaccine administration data to the European Centre for Disease Prevention and Control, the median uptake rate for the people over-80 was 73.1% as of 3 May 2021. Some countries were, similar to Belgium, starting to make progress with vaccinating their general population as well. E.g., Germany was celebrating the milestone of one million doses administered in a single day on Thursday 20 April 2021, and France had broken its own record by administering 545,000 doses of a Covid-19 vaccine on Thursday, 29 April 2021 and 549,000 on Friday 30 April 2021.⁴⁹⁰

Importantly, from internal estimates of the European Commission that were shared with the newspaper the Guardian, it appeared that shortage of supply, which had been the main and continuing problem during the early months of 2021, no longer was the main barrier by the end of April 2021.⁴⁹¹ While only 14 million Covid-19 vaccine doses had been delivered to EU Member States in January 2021, this increased to 28 million in February 2021, and 60 million in March 2021, after which EU officials claimed that an additional 105 million doses of Covid-19 vaccines had been delivered throughout April 2021, while the European Commission was expecting further deliveries of 125 million Covid-19 vaccine doses in May 2021, and 200 million in June 2021. Provided that these prospects were more or less accurate, this was expected to put the EU back on track to reach an annual capacity of 4 billion Covid-19 vaccine doses for 2021.⁴⁹² According to The

⁴⁸⁷Boffey (2021b).

⁴⁸⁸Boffey (2021b).

⁴⁸⁹Boffey (2021b).

⁴⁹⁰Boffey (2021b).

⁴⁹¹Boffey (2021b).

⁴⁹²Boffev (2021b).

Guardian, this was a huge departure from the rut the EU was in a few months earlier, when the two moments on which AstraZeneca had cut its planned deliveries to the EU, had led to a huge panic in Brussels and the rest of the EU.⁴⁹³ It appeared that the turning point had come when, after several meetings⁴⁹⁴ with officials from BioNTech-Pfizer, Moderna, AstraZeneca, Johnson & Johnson, Curevac and Sanofi, on 14 April 2021, European Commission President Von der Leyen was able to announce that a delivery of 50 million additional BioNTech-Pfizer Covid-19 vaccine doses that had initially been scheduled for Q4 2021 would be brought forward to Q2 2021.⁴⁹⁵

Table 9.4 presents an overview of the number of Covid-19 vaccines administered on 16 April 2021 in some countries.

After all of this, by 6 May 2021, Ursula von der Leyen, still kept claiming that the EU vaccine strategy had been a "success", although (only) a quarter of EU citizens had received a first jab of a Covid-19 vaccine.⁴⁹⁶

9.4.4 The UK Vaccination Campaign

9.4.4.1 The Successful Procurement Approach of "Kate The Great"

The differences in approach, but also in success rate, regarding both the purchases of the Covid-19 vaccines and the actual vaccination campaigns themselves, could not have been bigger than those between the EU and the United Kingdom. The United Kingdom had, moreover, shortly before the outbreak of the Covid-19 pandemic, left the EU, which in the eyes of some confirmed that Brexit had been the right political choice.

As described before (cf. Sect. 9.4.3), the EU's way for purchasing Covid-19 vaccines had been purely bureaucratic, with: (1) a seasoned EU official at the head of the negotiating and purchasing team, (2) an actual purchasing approach based on the most stringent EU procedures imaginable, and (3) a strategy of focusing on the cheapest prices, instead of on fast orders and deliveries.

We have already discussed in the previous Sect. 9.4.3 to which debacle this led during Q1 2021 and the biggest part of April 2021.

On the other hand, there was the completely opposite approach of the United Kingdom, with: (1) placed at the head of the Covid-19 vaccines purchasing team, a

⁴⁹³Boffey (2021b).

⁴⁹⁴These negotiations had been conducted with the support of Thierry Breton, an industrialist and former French finance minister who was at the time the European Commissioner for the Internal Market. Under his leadership, the European Commission succeeded in convincing Pfizer-BioNTech to make deliveries to the EU earlier than planned, which basically caused a reversal in the EU vaccination campaign. (Cf. Boffey (2021b).)

⁴⁹⁵Boffey (2021b).

⁴⁹⁶Boffey (2021c).

Country	Doses administered	Adults with first dose	Adults with second dose	Vaccinations per day, per 100,000
Britain	41m	62.2%	16.3%	849.9
Malta	265k	51.5%	22.6%	1265.4
Hungary	4.42m	39.7%	17.0%	1441.0
San Marino	18.8k	38.8%	31.2%	1814.5
Monaco	20.5k	37.7%	28.3%	531.1
Finland	1.34m	28.2%	2.5%	745.5
Iceland	95.4k	26.5%	11.2%	706.6
Estonia	339k	25.2%	7.3%	506.2
Lithuania	728k	24.3%	9.1%	767.7
Belgium	2.82m	23.8%	7.6%	811.1
France	15.8m	23.4%	8.3%	733.1
Norway	1.26m	23.1%	7.2%	621.8
Austria	2.33m	22.9%	9.3%	736.1
Spain	11.9m	22.8%	8.6%	785.7
Germany	20.7m	22.6%	7.9%	777.9
Denmark	1.49m	22.3%	10.6%	770.9
Netherlands	3.78m	22.0%	6.2%	516.4
Luxembourg	148k	21.7%	8.2%	826.4
Slovenia	497k	21.6%	8.2%	540.2
Ireland	1.09m	21.4%	9.0%	537.5
Slovakia	1.24m	7.6%	7,6%	500.3
Sweden	2.24m	20.6%	8.2%	591.1
Poland	8.48m	20.5%	7.4%	535.4
Portugal	2.36m	20.5%	7.8%	532.0
Italy	14.3m	20.2%	8.5%	574.6
Andorra	19.1k	20.1%	11.3%	1091.5
Greece	2.39m	19.1%	9.1%	557.9
Czech Republic	2.35m	17.9%	9.6%	616.9
Switzerland	1.81m	16.2%	9.9%	358.9
Romania	3.92m	15.9%	9.8%	397.8
Croatia	618k	15.1%	3.5%	340.9
Liechtenstein	7.41k	14.9%	9.7%	430.8
Cyprus	183k	14.0%	5.6%	305.8
Latvia	196k	11.3%	1.8%	241.9
Bulgaria	620k	8.9%	2.2%	183.1

 Table 9.4
 Covid-19 vaccines administered on 16 April 2021^a

^aThe Economist (2021a, b)

highly specialized and seasoned businesswoman (2) took a purchasing approach based upon broad investments in the vaccine candidates from various producers, coupled with quick purchasing decisions once a Covid-19 vaccine candidate seemed to be ready for use, and (3) had as overall aim liberating the United Kingdom as quickly as possible from the Covid-19 crisis into which the UK government had plunged the country throughout the year 2020.

The first step on the road to the United Kingdom's highly successful vaccination campaign was taken when, in May 2020, UK Prime Minister Boris Johnson had taken the bold step of appointing Kate Bingham to chair the new UK Covid-19 Vaccine Taskforce, a crucial new body that was to oversee the investment and procurement of Covid-19 inoculations. According to the British press, it is not entirely clear how Johnson appointed Bingham, as no formal procedure seems to have been followed, but the mission given to Bingham was clear: to invest billions of taxpayers' dollars in Covid-19 vaccine candidates that could offer the United Kingdom a way out of its continued lockdown situations. The Vaccine Task Force itself had mainly been the brainchild of Sir Patrick Vallance, the UK government's chief scientific adviser, who had seen the need "for a dedicated, nimble privatesector team of experts embedded in the Government to drive forward the development of vaccines for the United Kingdom and internationally".⁴⁹⁷ The new Vaccine Task Force was then installed under the Department for Business, Energy and Industrial Strategy in May 2020, and Kate Bingham was, as said, invited to chair it, reporting directly to the Prime Minister, alongside Vice President Clive Dix.⁴⁹⁸

No one better than Bingham herself can explain the unorthodox (from a government's point of view) approach she took in leading the Vaccine Task Force, which she described in a statement published in The Lancet:⁴⁹⁹

The Vaccine Taskforce aims to ensure that the UK population has access to vaccines as soon as possible, while working with partners to support equitable access for populations worldwide, whether rich or poor.

⁴⁹⁹Bingham (2021).

⁴⁹⁷Bingham (2021).

⁴⁹⁸Syal (2020).

At the time, Kate Bingham was said to have 30 years of relevant experience in the pharmaceutical industry. She, moreover, had a reputation for knowing her stuff. The daughter of the late Lord Tom Bingham, a former Lord Chief Justice described as the greatest lawyer of his generation, Kate Bingham had been educated at the independent St Paul's girls' school located in west London. One of her school mates was the Prime Minister's sister, Rachel Johnson. Bingham went later on to study biochemistry at Oxford, before joining Harvard Business School. She was afterwards employed by the private equity firm SV Health Investors for nearly 30 years, where she was the managing partner and where her work had led to the launch of six new drugs for treating patients with inflammatory and autoimmune diseases and cancers. When asked to head the new UK Vaccine Task Force, she took the decision to temporarily retire from SV in order to be able to fully devote her time for working on the government's vaccine task force. Prior to joining SV, Ms Bingham had worked in business development for Vertex Pharmaceuticals, a US biotech company, and Monitor, a strategy consultancy firm, which had given her a good understanding of the pharmaceutical sector. (Cf. Syal (2020).)

(...)

Our strategy has been to build a diverse portfolio across different formats to give the UK the greatest chance of providing a safe and effective vaccine, recognising that many, and possibly all, of these vaccines could fail. We have focused on vaccines that are expected to elicit immune responses in the population older than 65 years: over three-quarters of deaths caused by SARS-CoV-2 infection are in this older population, so it is essential that any vaccine is able to protect this group. Scalability of vaccine manufacture was also a key criterion, with the goal being to manufacture in the UK, if possible, to secure supply and create long-term resilience.

(...)

The Vaccine Taskforce has now secured access to six vaccines (from more than 240 vaccines in development) across four different formats: adenoviral vectors, mRNA, adjuvanted proteins, and whole inactivated viral vaccines, which are promising in different ways. The most advanced vaccines, such as those developed by AstraZeneca and the University of Oxford, BioNTech and Pfizer, and Janssen, are based on novel formats for which we have little experience of their use as vaccines, although the initial immunogenicity and safety data are encouraging.

Vaccines based on frequently used vaccine formats, such as adjuvanted protein vaccines developed by Novavax, and by GSK and Sanofi, and inactivated whole viruses developed by Valneva, will not be available until late in 2021.

We also have an agreement with AstraZeneca to supply a neutralising antibody cocktail as a prophylactic treatment once clinical trials are completed and it is approved by regulators. This treatment will be provided in the short term for people who cannot receive a vaccine, such as people who are heavily immunosuppressed and cannot mount an immune response, or people who need immediate protection, such as health-care workers.

The Vaccine Taskforce has options to purchase sufficient doses of each vaccine type to vaccinate the appropriate UK population.

(...)

A major challenge is that the global manufacturing capacity for vaccines is vastly inadequate for the billions of doses that are needed, and the UK manufacturing capability to date has been equally scarce. The Vaccine Taskforce has provided funding for flexible and surge production in several new UK sites for vaccine manufacture to provide the UK population with a new vaccine in less than 9 months from the identification of the pathogen. We also plan to bring new vaccine technologies and capabilities to the UK for future pandemic preparedness.

No-one has ever done mass vaccination of adults anywhere in the world before and the two-dose regimen, plus cold-chain restrictions for some vaccines, adds to the complexity of this deployment operation. National Health Service England has flexible deployment plans to start the vaccination of prioritised cohorts as soon as the vaccines are approved by the regulatory authorities (...).

Bingham's statement already indicates the huge difference about both approach and priorities, compared to the EU task force (cf. Sect. 9.4.3.3), as well as her much greater sense of reality.

The Bingham team, basically, behaved like a consumer who really wanted to acquire a scarce commodity, while the EU team had acted like a cumbersome administration that did not particularly care whether or not the Covid-19 vaccines would be acquired quickly, and who only seemed interested in bidding on the price.

Bingham herself commented on these differences as follows (in an interview with "Der Spiegel" of 18 February 2021):⁵⁰⁰

Being quick and nimble was definitely important. The fact that I've been in the industry for 30 years and the team that I work with have been in the industry at least as long, if not longer, meant that we had connections very broadly across the industry. So that meant I could just pick up the phone and speak directly to a company. With one company we had our first meeting on a Thursday and we had a follow up meeting on Saturday, and would agree the rough outline of a deal the following week.

(...)

So we had to make ourselves good customers to make people want to supply to the UK because there was going to be limited amount of vaccine initially. Our goal was to do whatever we could do to encourage the companies to talk to us. That meant we had a sort of "UK offer", as it were, which is if the company needed support in the scale of the manufacturing and fill finish and if we could offer that, we offered it and if the company needed us to help with running the clinical trials, we did that, too.

(...)

The UK had a very strategic approach, which was to secure vaccines quickly. And the European approach seems to be more sort of a more typical procurement approach, which was more about making sure you got the best value for money for your vaccines.

During the first hearing of 2021 of the Public Accounts Committee of the UK House of Commons on Monday 11 January 2021, Binghman added to this the following:⁵⁰¹

We talked about this in our report that was published in December. The conditions that the EU set to allow us to participate were conditions we felt were not attractive. We were not able to join any decision making on which vaccines; we had to abandon the negotiations we either had under way or had concluded with AZ; and we also were not able to talk to future potential vaccine companies that they may not be talking to currently, but would do in the future. We felt the conditions were too tight, and that we would be able to act more quickly if we did it independently. Equally, we remained very close and supportive, and continued discussions throughout to help them with their decision making and anything else that we could do. We just thought it was a better approach for us, and I think with hindsight that was the right decision, because we were able to secure the vaccines quicker and start vaccinating more quickly.

(...)

To nail your point about value for money, if we wanted the cheapest vaccines, we would have said that we would be happy to receive them in 2022. I have no idea how much cheaper they would be, but they would be cheaper, because what we wanted was the most scarce resource, which is the vaccines that were available as soon as they came off the production line in those early days. It is a trade-off to say, "What are the costs we're paying?", which are about £10 a dose. Again, I do not think that is excessive and it is in line with what we pay for

⁵⁰⁰Bolzen and Guerrera (2021); Smirmova (2021).

⁵⁰¹House of Commons (2021).

flu. If we wanted to focus purely on price, however, which we did not, that would have been at the cost of the delivery date.

Shortly after the huge success of the Covid-19 vaccination approach that the United Kingdom had resorted to became clear, Bingham started being hailed as the "vaccine tsarina" by the British press, a term used in the United Kingdom to refer to people who are hired by the government to coordinate major social tasks. Another nickname she received was "Kate The Great".⁵⁰²

Her merits go without saying, most certainly in comparison to the disastrous consequences of the approach that had been applied by the EU vaccination purchasing team (cf. Sect. 9.4.3.9). Thanks to the efforts of Bingham and her team, the United Kingdom became the first country to sign a contract for the BioNTech-Pfizer Covid-19 vaccine, which ensured a quick launching of the UK vaccination campaign already at the end of December 2020. Although the United Kingdom was not the biggest buyer of Covid-19 vaccines when compared to the United States and the EU, Bingham and her team were able to act more skillfully and had better contacts in the industry. All the Western pharmaceutical enterprises Bingham and her team approached, were enterprises with which she herself or one or more members of her team had existing, good relationships, in one form or another. Bingham also brought with her what has been referred to as a best-practices habitus from the private sector: for the first few weeks after being installed, the Vaccine Taskforce worked around the clock and on weekends to identify the Covid-19 vaccine candidates with the best prospects of rapid regulatory approval. Bingham also insisted on speeding up the decision-making process. Throughout the whole proceedings of the UK Vaccine Task Force, Bingham acted on the feeling that she only had one chance to be right and no time.⁵⁰³

Be this as it may, thanks to the extremely successful approach of the Bingham Vaccine Task Force, the United Kingdom succeeded to both launch and proceed with its vaccination campaign in a fast manner from the early start, which was welcome after the manner in which the UK government had responded to the Covid-19 crisis in general.⁵⁰⁴ (Cf. Sect. 2.4.2.3.5.)

⁵⁰⁴Schiffling and Breen (2021).

As explained before (cf. Sect. 2.4.2.3.5), the UK government's manner of dealing with the Covid-19 pandemic has been criticized severely to the extent that the United Kingdom had been

⁵⁰²Smirmova (2021).

⁵⁰³Smirmova (2021).

Although this leadership style is believed to have been crucial for the success of the UK's vaccination campaign (by having ensured a fast access to enough doses from the early start), it is also believed to have caused incomprehension among some officials. E.g., Bingham came under fire for allegedly spending more than \pounds 600,000 in taxpayers' money on PR consultants. Her closeness to the Conservative Party also became a matter of some debate (as she is married to a Secretary of State in the Treasury and knows Boris Johnson from her time at Oxford University). (Cf. Smirmova (2021).)

The success of the approach of the Bingham task force was in a symbolic manner validated on 8 December 2020, when the United Kingdom got to be the first country in the world to start serving a Covid-19 vaccine to its population.⁵⁰⁵ The UK government later pledged that all adults living in the UK would be receiving a Covid-19 vaccine before the end of July 2021. This would imply that the United Kingdom would accomplish its vaccination campaign within less than eight months. Contrary to similar promises made by the EU, it moreover soon became likely that the United Kingdom would be able to live up to this promise. As, initially, the deadline had been late autumn of 2021, the fact that the United Kingdom got even ahead of schedule demonstrated the success of its Covid-19 vaccination campaign, which is to a large extent thanks to the professional approach of Bingham's Vaccine Taskforce.⁵⁰⁶

One of the main differences in approaches between the EU and the United Kingdom regarded their different purchasing agreements. While the purchasing agreements with AstraZeneca were superficially similar, the UK negotiators had nevertheless shown a much better insight in the production and supply chain of vaccines. As a result, the UK purchasing agreement contains an explicit clause in which it was stated that AstraZeneca was to ensure that the UK supply chain would be "appropriate and sufficient" for delivering the necessary doses of the Oxford-AstraZeneca Covid-19 vaccine to the country for guaranteeing a smooth vaccination campaign. This implied that in case that production in the UK plants would turn out to be insufficient for delivering vaccines to the United Kingdom at any time, AstraZeneca was bound to be getting the necessary doses from elsewhere in its global production network. In contrast, the purchasing agreement between the EU and AstraZeneca did not mention a similar clause. Other key elements in the purchasing agreement between the United Kingdom and AstraZeneca concerned clauses dealing with commitments of the suppliers of AstraZeneca and the willingness to invest in the development of the Covid-19 vaccine beforehand.⁵⁰⁷ (Cf. Sect.

among the countries with the highest number of recorded Covid-19 contamination cases and Covid-19 related deaths. (Cf. Schiffling and Breen (2021).)

⁵⁰⁵On 8 December 2020, Margaret Keenan, a UK grandmother about to turn 91 the week after, became the first person in the world to be administered the BioNTech-Pfizer Covid-19 jab outside a testing trial. The Covid-19 vaccine was administered to her at University Hospital, Coventry by matron May Parsons. On the same day, various other patients and health workers at some 50 hospitals around the country were administered the vaccine as well. (Cf. BBC News (2020b).) ⁵⁰⁶ Smirmova (2021).

⁵⁰⁷Ensuring production capacity had, moreover, been part of a long-term investment by subsequent UK governments. (Cf. Sect. 9.2.) As a result, the United Kingdom had already a vaccine production infrastructure in place before the start of the Covid-19 pandemic, which could, moreover, be expanded rapidly. This made it possible to immediate start manufacturing the three vaccines that were ready in the United Kingdom itself, which helped ensuring rapid supply. This, in addition, allowed the United Kingdom to quickly iron out any production problems, whereas the EU had to deal with such matters after the start of the Covid-19 pandemic itself, which has been a huge disadvantage for the development, production and deliveries of the Covid-19 vaccines. (Cf. Smirmova (2021).)

9.4.3.3) Another key factor that helps explain the high success rate of the UK approach is that the procurement strategy of the UK Vaccine Taskforce, contrary to the one of the EU, was based on rapid deliveries, rather than on the price of the vaccine doses.⁵⁰⁸ As a result, already by December 2020, the United Kingdom had purchased enough doses of the approved Covid-19 vaccines to serve its entire population.⁵⁰⁹

9.4.4.2 The Result: An Accelerated Vaccination Campaign

Based on early approvals of the Covid-19 vaccines by the Medicines and Healthcare products Regulatory Agency (abbreviated as "MHRA"), the United Kingdom started to administer Covid-19 vaccines as of December 2020.⁵¹⁰ The vaccination campaign proved to be highly successful from the early start, which explains why, already In February 2021, the UK government made the announcement that every adult living in the United Kingdom would be administered a first dose of a Covid-19 vaccine by the end of July 2021, which, as said earlier, was even one month earlier than had originally been intended.⁵¹¹

On 3 March 2021, the United Kingdom reported that 20,982,571 people had received the first dose of a Covid-19 vaccine, while 20 million people had already been fully vaccinated.⁵¹²

By 6 March 2021, already more than 21 million people living in the United Kingdom had been administered at least one dose of a Covid-19 vaccine. On said date, the UK vaccination programme also entered the second part of its first phase. This implied that as good as all members of the first four priority groups—namely elderly people aged 70 and over, nursing home residents, healthcare laborers and those with special seclusion needs—had already been offered a Covid-19 vaccine. Around that same date, more than one million people living in the United Kingdom had also been administered a second dose of a Covid-19 vaccine.⁵¹³ By the same date of 6 March 2021, most regional parts of the United Kingdom had managed to serve high proportions of the population belonging to the priority age groups with a Covid-19 vaccine.⁵¹⁴

⁵⁰⁸For a profound, legal analysis between the UK purchasing agreement regarding the Oxford-AstraZeneca Covid-19 vaccine and the one of the EU, cf. Isaac and Deutsch (2021).
⁵⁰⁹Smirmova (2021).

⁵¹⁰The BBC's Visual and Data Journalism Team (2021).

⁵¹¹Northam (2021).

⁵¹² Julie (2021).

The average number of first doses of a Covid-19 vaccine administered daily had been rising steadily since the start of the vaccination campaign in December 2020. By mid-February 2020, this number already reached over 400,000 doses per day by mid-February 2021. (Cf. The BBC's Visual and Data Journalism Team (2021).)

⁵¹³The BBC's Visual and Data Journalism Team (2021).

⁵¹⁴The BBC's Visual and Data Journalism Team (2021).

Until 6 March 2021, the United Kingdom had been relying on two Covid-19 vaccines that had obtained approval by the MHRA for its vaccination campaign. The BioNTech-Pfizer Covid-19 vaccine was the first to have been given the green light in December 2020. It, moreover, appeared that the doses of this vaccine used in the UK vaccination campaign were exclusively imported from Puurs, Belgium, while the Belgian population itself had at the time virtually no access to the BioNTech-Pfizer Covid-19 vaccine. The second Covid-19 vaccine that the UK vaccination campaign relied on was the Oxford-AstraZeneca one. The doses of the latter vaccine used in the United Kingdom were mostly manufactured in Britain by two biotech plants, namely Oxford BioMedica, based in Oxford, and Cobra Biologics, based at Keele Science Park, Staffs. Deliveries of a third Covid-19 vaccine, manufactured by the US enterprise Moderna, were expected to become available as of April 2021, with the doses to be delivered to the United Kingdom also stemming from EU production lines.⁵¹⁵

According to MedicalNewsToday, by 9 April 2021, more than 6 million people in the United Kingdom had been administered with both doses of one of the approved Covid-19 vaccines that require two doses. Some even started to hold that the United Kingdom was approaching herd immunity.⁵¹⁶ From an Opinium online survey of 2,006 adults conducted between 8 and 9 April 2021, it appeared that 44% of the respondents were approving of the UK government's management of the Covid-19 pandemic, compared to 36% who disapproved. These were the best results since May 2020.⁵¹⁷

However, the UK vaccination campaign also had some drawbacks. E.g., according to a study published in The Lancet on 25 March 2021, there were huge inequalities in Covid-19 vaccine uptake. It more precisely appeared that people living in socio-economically deprived areas, in particular people belonging to certain ethnic minority groups, were less likely to obtain a Covid-19 vaccine. This was

Among people aged 65 and over, Scotland had administered a first dose of a Covid-19 vaccine to around 97% of people. The average for England amounted to 94%, with most English regions having reached a percentage in the early to mid-90s. London was somewhat lagging behind with a percentage amounting to about 85% only. Wales had been serving a Covid-19 vaccine to about 90% of the people belonging to the same age group, while Northern Ireland had delivered the first doses of a Covid-19 vaccine to 83% of its elderly people. There were, however, some disparities between ethnic groups and between poor and rich areas. E.g., London areas proved to be under-represented in the data. Generally speaking, 89% of people aged 80 and over living in the poorest areas had received a vaccine by 24 February 2021, compared to 96% in the better-off areas. (Cf. The BBC's Visual and Data Journalism Team (2021).)

⁵¹⁵BBC Visual and Data Journalism Team (2021). Cf., furthermore, Northam (2021).

⁵¹⁶Huizen (2021).

⁵¹⁷Savage (2021).

The increase in the approval rates of the UK Government's management of the Covid-19 pandemic was indicated to be driven by an overwhelming support of the general population for the Covid-19 vaccine distribution programme, with 72% of the surveyed respondents approving of these efforts and with only 8% disapproving. A majority of the surveyed persons (namely 54%) had indicated that the UK government's "roadmap out of the Covid-19 restrictions" was about right. (Cf. Savage (2021).)

attributed to a number of reasons, including barriers to access and distrust of the authorities. 518

On 10 May 2021, England recorded zero daily deaths from Covid-19 for the first time since July 2020, a situation that was welcomed by experts who declared that it reflected the impact of the Covid-19 mitigation measures and of the Covid-19 vaccinations. In addition, at the same date, no Covid-19 related deaths were recorded in Scotland or Northern Ireland. However, four Covid-19-related deaths were still recorded in Wales. Experts such as Rowland Kao—a professor of epidemiology at the University of Edinburgh who was part of the Spi-M modelling subgroup of Sage, a scientific advisory group that dealt with emergencies—and Dr Michael Head, a senior research fellow in global health at the University of Southampton, declared that the drop in Covid-19 related deaths mainly reflected the impact of the Covid-19 vaccination campaign.⁵¹⁹

However, around mid-May 2021, a new concern arose as more and more cases of the Indian variant of the Covid-19 virus—known as B.1.617.2—started spreading in the United Kingdom, with scientists however at the time still expressing their belief that the Covid-19 vaccines remained effective against this variant.⁵²⁰

9.5 Face Mask Wearing

It is clear that face mask wearing has been one the most important methods to help prevent the spread of Covid-19.

Universal face mask wearing thus became one of the prevention strategies that got recommended by the US CDC that indicated face mask wearing as an important method for slowing the spread of the Covid-19 virus. As a result, in the United States, on 1 February 2021, 38 states and the District of Columbia had mandated universal face mask wearing. Face mask use was also mandated by executive order on federal property, as well as on domestic and international transportation.⁵²¹ Similarly, the EU's ECDC also recommended face mask wearing for the prevention of Covid-19, with several of the EU countries also having resorted to the measure.⁵²²

Prior to the Covid-19 pandemic, the Western world had never showed much attention to the medical practice of face mask wearing for containing airborne viruses. Some even considered the effectiveness of community face mask wearing

⁵¹⁸Kluge and McKee (2021).

⁵¹⁹David (2021).

⁵²⁰Faulkner (2021).

⁵²¹Brooks et al. (2021).

⁵²²European Centre for Disease Prevention and Control (2021c).

for reducing the spread of respiratory infections controversial, because there was, supposedly, no solid scientific evidence supporting its use.⁵²³

However, during the Covid-19 pandemic itself, the scientific evidence on face mask wearing grew. There is convincing evidence (amongst others, collected in the United States itself) that community-based face mask use is an effective NPI (short for "non-pharmacological intervention") for curbing the spread of the Covid-19 virus, particularly as a method to prevent further spread by contaminated individuals. A face mask, when properly used, prevents a contaminated wearer from passing the disease to others, and can also reduce exposure of the wearer to unknown carriers of Covid-19.⁵²⁴ According to scientific research, face masks protect by significantly reducing that respiratory droplets and aerosols exhaled by contaminated carriers reach uncontaminated people, and by reducing the exposure of the uninfected to such particles.⁵²⁵

According to said scientists, a community use of face masks significantly reduces the transmission of the Covid-19 virus in two manners. First, face masks prevent contaminated individuals from infecting others by blocking the exhalation of droplets containing the Covid-19 virus into the air (known as "source control"). This aspect of face mask wearing is considered particularly important because it is estimated that at least 50%, or more, of all Covid-19 transmissions come from people who never develop symptoms or from people who still are in the pre-symptomatic phase of the Covid-19 disease. Second, face masks provide protection for the uninfected people. Masks form a barrier against large respiratory droplets that could be deposited on mucous membranes such as the

⁵²³This is most likely an assessment that is only valid with regard to the United States and the EU, as Asian countries had already a much greater tradition of using face masks in the fight against contagious diseases, with indications that more scientific research with regard to the practice had already been undertaken in these territories, albeit largely ignored by Western scientists. Such research can even already be traced back to the Manchu plague of 1910–1911. Face mask waring was reportedly already used in the fight against this plague in China, and appears to have been used again in subsequent pandemics throughout Asia afterwards, such as the influenza pandemic of 1918, the SARS pandemic of 2003... (Cf. Goodman (2020).)

As Goodman has put it: "Asian countries never forgot the lessons of the Manchurian Plague. In Asia, wearing masks in public is considered a part of good hygiene. Many people keep them at home and wear them in public if they feel ill, especially during cold and flu season. People seen coughing or sneezing uncovered in public are shunned for shirking their civic duty to protect the health of other people." (Goodman (2020).)

⁵²⁴Brooks and Butler (2021).

⁵²⁵Brooks et al. (2021).

According to Brooks and Butler, the Covid-19 virus is mainly passed by respiratory droplets that are exhaled when contaminated people breathe, speak, cough, sneeze or sing. Most of these droplets are smaller than 10 μ m in diameter (i.e., so-called "aerosols"). The number of such small droplets and particles is said to increase with the speed and force of the airflow during exhalation (e.g., shouting, singing, vigorous exercise . . .). The risk of exposure is, moreover, greater the closer a person is to the source of the exhalations. A further finding is that large droplets fall rapidly from the air but that small droplets—and the dry particles they form (i.e., so-called "droplet nuclei")—can remain airborne. Under circumstances where air ventilation is inadequate, often in enclosed indoor spaces where a contaminated person is (or has been) present for a prolonged period of time, concentrations of these small droplets and particles may accumulate sufficiently for transmitting infection. (Cf. Brooks and Butler (2021).)

Face mask wearing, however, comes with certain disadvantages. It has e.g., been acknowledged that prolonged face mask wearing can be uncomfortable, particularly in hot environments. It has also been recognized that blocking one's nose and mouth may inhibit verbal and non-verbal communication, particularly for children and deaf people. Concerns about reduced oxygen intake and carbon dioxide retention have, however, not been confirmed by the available scientific data.⁵²⁶

The overall benefit of face mask wearing to the community derives from its combined ability to limit both exhalation of the Covid-19 virus by infected people and inhalation of Covid-19 virus by uninfected people. Similar to the principle of herd immunity with regard to Covid-19 vaccination, the more the NPI—face mask wearing in this case—is resorted to by the larger community, the greater the benefit for all its members. Certain research even indicates that the general prevalence of face mask wearing in the community is of higher relevance than the type of face masks worn.⁵²⁷ According to Brooks and Butler, when face masks are generally worn, and thus the more they are combined with other recommended NPIs, this does not only protect the individual wearers, but the community as a whole. This implies that even after vaccination, in light of the emergence of more transmissible variants

Still according to Brooks and Butler, a further variety of research has indicated that universal mandatory face mask wearing policies have been associated with reductions in the number or rate of infections and deaths from Covid-19. This research did, moreover, not distinguish between face mask types (e.g., cloth, surgical or N95/FFP2). (Cf. Brooks and Butler (2021).) ⁵²⁶Brooks and Butler (2021).

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eye, nose and mouth. Face masks can also partially filter out small droplets and particles from inhaled air. (Cf. Brooks and Butler (2021).)

In contrast, the 2021 ECDC recommendations sill remained more sceptical about the use of face mask wearing, stating: "The evidence regarding the effectiveness of medical face masks for the prevention of COVID-19 in the community is compatible with a small to moderate protective effect, but there are still significant uncertainties about the size of this effect. Evidence for the effectiveness of non-medical face masks, face shields/visors and respirators in the community is scarce and of very low certainty. Additional high-quality studies are needed to assess the relevance of the use of medical face masks in the COVID-19 pandemic." (Cf. European Centre for Disease Prevention and Control (2021c).)

Epidemiological has tried to quantify the benefits of face mask use in preventing the spread of the Covid-19 virus. E.g., in one hair salon where members of staff and customers were required to wear face masks by local ordinance and/or company policy, two symptomatic and contaminated hair-dressers had attended to 139 clients with no contamination being found in the 67 clients who were afterwards interviewed and tested. During an outbreak of Covid-19 on the USS Theodore Roosevelt, it appeared that those who had been wearing face masks showed a 70% reduction in the risk of testing positive for Covid-19. (Cf., furthermore, Brooks and Butler (2021).)

⁵²⁷Brooks and Butler (2021).

Brooks and Butler point out that one study has been mischaracterized by some sources as showing no benefit from cloth or surgical masks. This randomised trial in Denmark was designed to detect at least a 50% reduction in risk for people wearing surgical masks. The results were inconclusive, most likely because the actual reduction in exposure that these masks provided to the wearer was smaller. More importantly, the study was far too small (i.e. it involved about 0.1% of the population) to assess the community benefit achieved when protection of the wearer is combined with a reduction in transmission from the source of mask wearers to others. (Cf. Brooks and Butler (2021).)

of the Covid-19 virus (cf. Sect. 1.1.2), it remains important to continue widespread face mask use, as well other NPIs until sufficient levels of Covid-19 vaccination are achieved.⁵²⁸

The supervisory health authorities have continued to monitor the practice and have issued (evolving) guidelines at several moments in time. E.g., one year after the start of the Covid-19 pandemic, on 10 February 2021, the CDC issued new mask guidelines based on a study of how mask fit affects the wearer's exposure to airborne particles. It was thereby deemed important to explain how to use the right types of face masks correctly.⁵²⁹ E.g., N95/FFP2 face masks were indicated as the gold standard among lightweight respirators, indicated as being at least 95% efficient at filtering out particles as small as 0.3 microns and more than 99% efficient for particles between 2 and 5 microns.⁵³⁰ Medical masks—specifically ASTM F2100-19 Class 1 masks, the blue or green paper face masks seen everywhere—were indicated of being about 80% effective. Cotton masks were indicated as providing some protection, but of being of no help in blocking small aerosols.⁵³¹ On 13 May 2021, the CDC, furthermore, announced new guidelines for face mask wearing for fully vaccinated individuals.⁵³²

9.6 Conclusions

9.6.1 The Good, the Bad and the Ugly

Like so many events which occurred during the Covid-19 pandemic, the turnout of the Covid-19 vaccination campaigns as of December 2020, presents one more illustration of how the logic of capitalism and neoliberal public policy—combined with conservative, nationalistic reflexes—can turn something intrinsically "good", into something "bad" and "ugly".

Indeed, the way the Covid-19 vaccination campaigns in the West proceeded as of December 2020, can even be referred to in terms of the three title words of one Sergeo Leone's western movie, "The good, the bad and the ugly".

First, came the good: Reference is, obviously, made to the hard work of scientists, from various disciplines, who made the study of (corona)viruses and/or vaccines

⁵²⁸Brooks and Butler (2021).

⁵²⁹Schiffres (2021).

E.g., some practices—such as removing one's face mask in order to start speaking or wearing one's face mask under one's nose—were indicated as clearly problematic. The CDC guidelines however also listed other mistakes which may be less obvious. E.g., it was pointed out that some scientists assume that everyone should continue to wear a face mask as much as possible—even people who have been vaccinated or previously infected with Covid-19. (Cf. Schiffres (2021).) ⁵³⁰Schiffres (2021).

⁵³¹Schiffres (2021).

⁵³²CDC (2021c).

their life's work. Because of their efforts, research into new coronavirus vaccines was already in an advanced stage at the time of the outbreak of Covid-19 (cf. Sect. 9.3.1.1): several of the Covid-19 vaccines were made ready for use in less than a year after the outbreak of the Covid-19 pandemic (namely already in early-December 2020).

Second, came the bad, notably the pharmaceutical sector: Once a drug is patented by them, the capitalist game is as good as played, and the winner clear. Indeed, a pharmaceutical patent, by definition, implies that the production of a patented drug is monopolized by the patent holder for a considerable period. The fact that a drug, in this case a Covid-19 vaccine, may save millions of lives, and could even put an end to a pandemic, is of no relevance under the logic of the free market. In the eyes of a patent holder—in full accordance with the capitalist principles underlying such patents -, a patented drug is just one more method of maximizing short-term, private profits—ultimately to the benefit of the shareholders of the big pharmaceutical enterprises owning the patents. (Cf. Sect. 9.2.3.)

In the years preceding Covid-19, the pharmaceutical sector had already been discredited a number of times because of its blind devotion to the harsh logic of capitalism,⁵³³ but probably never so much as during the Covid-19 crisis. The main consequence of this "bad" guy's working methods has been that the Covid-19 vaccines-although to a large extent based upon technology developed by largely government-funded academic scientists (cf. Sect. 9.2)—were only available through buying them at high prices from the few private pharmaceutical enterprises that own the patents necessary for producing the actual vaccines. With hospitals overwhelmed and fatalities on the rise, some of the vaccine producers made it explicitly clear that they had no intention of relinquishing their patents, indicating that whoever wanted Covid-19 vaccines, had to come and buy them at high prices.⁵³⁴ The billions in public funding were not even taken into consideration, as is common under capitalist and neoliberal logic. It should also be noted that these aforementioned amounts, pointed out in Sect. 9.2, are just the tip of the iceberg, as the real contribution of the public sector to the development of such drugs is undoubtedly much higher. E.g., there is also the societal cost of organizing general education, and every other societal effort and public investment that goes into enabling talented individuals to become proficient enough in medical science to create such vaccines in the first place.

As a result, once the Covid-19 vaccines were ready at the end of 2020, they were only accessible on the terms of the capitalist, and made subject to the principles that govern every form of industrial production and commercialization, particularly: (1) Ownership/proprietorship (through patents) by private companies, who (2) maximise their profits through sales, and (3) then distribute their—gigantic—profits to their private shareholders by means of dividend payments or share buyback operations (whatever is the most interesting tax-wise).

⁵³³Cf. Byttebier (2015b) p. 124.

⁵³⁴Scally (2021).

Third came the ugly. In our Covid-19 vaccination debacle, this role was reserved for the EU, and more specifically its overbearing reliance on a neoliberally inspired stinginess in procuring the Covid-19 vaccines.

From the foregoing, we know that "the good" in our Covid-19 vaccination story—namely an invention that could have enabled mankind's rapid rescue from a pandemic–, due to the working methods of capitalism, soon came into the hands of "the bad", the pharmaceutical industry who soon managed to foreclose access to the Covid-19 vaccines by means of medicine patents, in such a manner that those in need of the Covid-19 vaccines, i.e., practically every country in the world where the Covid-19 pandemic was raging, first had to put the necessary amounts of money on the table to pay for them. Indeed, like everything in the free capitalist markets, products go to those who are willing to pay the highest price for them, so also the Covid-19 vaccines. It was, moreover, not entirely clear how this related to statements from e.g., the part of Covid-19 vaccine producers Johnson & Johnson and AstraZeneca that they would make their vaccines available on a non-profit basis. (Cf. Sect. 9.2.)

And thus, already throughout 2020, it happened: Countries that wanted Covid-19 vaccines, had to knock on the doors of the private vaccine manufacturers, and make their purchasing bids known. Some countries, such as the United States, the United Kingdom and Israel, very quickly acknowledged this basic truth-to the extent that it was really not hard science, but simply one the basic premises of capitalism-and acted on it. The EU, however, had been blindly adhering to the dictates of neoliberal thinking, at the very least since 1992, and had never shown much willingness to deviate from them for the good of common people. No lessons had been drawn from the free market-induced 2008 financial crisis, and, in a similar manner, the EU also kept its disastrous course when a pandemic was keeping the entire world in its grip. Especially for the EU, issues such as public health and human lives are but secondary to upholding neoliberal logic, as we have already seen in Chaps. 5 and 6, when we dealt with what went wrong in the neoliberalized sectors of the hospitals and long-term nursing homes respectively, in the decade prior to the outbreak of Covid-19. Under severe, neoliberal austerity logic, governments should spend as little as possible for the general good, and certainly not overspend on something like public health.535 Regretfully, we have all been able to witness the outcome of this approach during the first half of 2021: while certain countries (e.g., the United States and the United Kingdom, among other countries, but with Israel taking the lead) secured massive access to the Covid-19 vaccines, the EU-and with it many other countries—remained largely in the cold (at least until the United States would have been served completely). By the end of March 2021, this had resulted in a two-speed vaccination policy, whereby vaccination campaigns in a limited number of countries were proceeding at high speed, while in other countries, including the member states of the EU itself, almost no progress whatsoever could be made due to a shortage of vaccines.

⁵³⁵Cf. Friedman (1993).

Finally, there was also a large group of (poor) countries who did not have the financial means to make purchasing bids themselves, but became entirely reliant on initiatives the likes of COVAX and/or on donations from rich countries or vaccine producers themselves, implying that they had hardly any vaccines available at all ...

Capitalist principles (as deployed by private market players), in combination with neoliberal austerity policy on one continent and conservative-nationalist—"we-first"—policies in other countries, made something inherently "good" intrinsically "bad" at lightning speed, and "ugly" neoliberal public policy managed to make things even worse.

9.6.2 Vaccine Nationalism

As a result of the capitalistic forces described in the previous Sect. 9.6.1, the way vaccination campaigns started rolling as of December 2020, soon became the triumph of "vaccine nationalism" with the three most "exemplary countries"— namely Israel, the United States and the United Kingdom—basically only reasoning for themselves, in contrast to the EU.⁵³⁶

Already in December 2020—unlike the EU–, the United States and the United Kingdom had decided to hardly export any of their vaccine-production.⁵³⁷

Globally, as of 25 March 2021, the number of Covid-19 vaccine doses administered per 100 people amounted to 6.5. There were, however, significant differences across countries and continents. There were, e.g., 115 doses of a Covid-19 vaccine per 100 people administered in Israel, and only 35 and 15 doses per 100 people in the United States and the EU respectively. Asian countries had on average administered 4.5 doses per 100 people, mainly because of a huge Covid-19 vaccine production and administration in India and China. With regard to the African continent, there were either no data available, or, in countries for which there were data available, there were no Covid-19 vaccines administered at all.⁵³⁸ By 27 April 2021, already 25% of Americans had been fully vaccinated. In contrast, in Ghana, less than 2% of the population had been administered a Covid-19 vaccine. Within Israel itself, an

⁵³⁶Goossens (2021); Ravi (2021).

⁵³⁷Goossens (2021).

That soon resulted in absurd situations. E.g., in Kalamazoo, not far from the border with Canada, a US Pfizer factory produced millions of vaccines. Nevertheless, the pharmaceutical giant supplied Canada for months from Puurs, Belgium, due to an American export ban, while at the same time, the Belgian people themselves had hardly any access to the Puurs production output. Israel, on the other hand, outdid all other countries in the blink of an eye, basically by opening its checkbook and by lowering all privacy limits. As explained (cf. Sect. 9.4.3.8), Israel thus managed to convince Pfizer that they were an ideal testing ground, giving Pfizer access to all the big data about what happens to people after vaccination, regardless of any privacy considerations. (Cf. Goossens (2021).).

⁵³⁸Ravi (2021).

Israeli was reported to be 20 times more likely to have been administered a dose of a Covid-19 vaccine than a Palestinian. Even apart from the exceptional situation in Israel, there were still many other inequalities prevailing within several other countries, partly because of Covid-19 vaccine hesitancy. This was, e.g., in particular the case for the United States. (Cf. Sect. 9.4.2.6) Probably because there had been few Covid-19 contamination cases and deaths in Hong Kong, people living there reportedly stayed away from Covid-19 vaccine centres in huge numbers, a phenomenon that became referred to as the "prevention paradox".⁵³⁹

In the meantime, the COVAX facility—short for "Covid-19 Vaccines Global Access"—had been activated. This facility was intended to counteract vaccine nationalism, with as overall aim to get a first Covid-19 vaccine dose administered to at least one fifth of the global population by the end of 2021, though by 27 April 2021, this stated goal was far from achieved.⁵⁴⁰ In contrast, by 9 April 2021, high-income nations, only representing 14% of the global population, were together controlling up to 53% of the global supply of the promising Covid-19 vaccines. This meant that the high-income countries possessed 100% of the Moderna Covid-19 vaccine supply and 96% of the BioNTech-Pfizer Covid-19 vaccine supply.⁵⁴¹

Basically, some rich countries, mainly the United States and the United Kingdom, besides a number of oil producing countries, had made use of their huge economic and political muscle to hoard as many Covid-19 vaccine doses for the exclusive benefit of their own population as possible, while the poor nations had to count on the COVAX initiative, and on institutions such as UNICEF, GAVI and WHO for defending more equitable access.⁵⁴²

Notwithstanding these initiatives, Covid-19 vaccine inequity already started with production, to the extent that only some socio-economic and political superpowers had managed to have pharmaceutical enterprises producing Covid-19 vaccines in their territories.⁵⁴³ In addition, production remained largely constrained, as most pharmaceutical enterprise refused to share the knowledge and technology to make Covid-19 vaccines, with intellectual property rules, furthermore, preventing other countries from creating their own generic versions of the Covid-19 vaccines. This implied that the whole world was dependent on the limited supply chains of a few patent-holding enterprises. Because of this impediment, just a fraction of the world's

⁵³⁹Spinney (2021).

⁵⁴⁰Spinney (2021).

⁵⁴¹Huizen (2021).

⁵⁴²Ravi (2021).

⁵⁴³Tran (2021).

According to the science-analytics company "Airfinity", as of mid-March 2021, China had produced 169 million doses of the Covid-19 vaccines; the United States, 136 million doses; the EU, 96 million doses; India, 68 million doses; the United Kingdom, 19 million doses; and Russia, 11.8 million doses. (Cf. Tran (2021).)

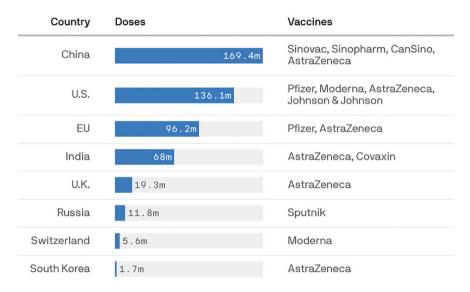


Fig. 9.6 Vaccine production by country as of 17 March 2021 [Source: Axios (2021)]

pharmaceutical manufacturing capacity got effectively deployed against the pandemic.⁵⁴⁴

Figure 9.6 gives a general overview of the status of vaccine production in some countries as of 17 March 2021.

The foregoing relates to the matter which countries had been both technically capable of developing Covid-19 vaccines and capable and willing of throwing big money at the pharmaceutical enterprises in order to finance the rapid development of the Covid-19 vaccines. E.g., already on 15 December 2020, The New York Times reported that the United States had been giving billions of dollars to back the research, development and production of five of the most promising Covid-19 vaccine candidates. This had allowed researchers to proceed with the Covid-19 vaccine development at an unprecedented speed and scale. (Cf. Sect. 9.2) While it was generally perceived that without his huge financial support, the Covid-19 vaccines would not have been developed so quickly, this came at a cost, namely that Americans would have priority access to the Covid-19 vaccine doses developed or produced in their country.⁵⁴⁵ Soon, other wealthy countries started following the early example of the United States in placing large Covid-19 vaccine pre-orders that, moreover, often contained contractual options to expand the acquisitions even further, in this manner even more undermining other countries' capacity to make timely purchases for themselves. E.g., already by 15 December 2020, the United

⁵⁴⁴ Scally (2021).

⁵⁴⁵Twohey et al. (2020).

States had secured 100 million doses from the BioNTech-Pfizer Covid-19 vaccine, with a contractual option of buying 500 million more doses of the vaccine. In a similar manner, the United States had already purchased 200 million doses of the Moderna Covid-19 vaccine, with an additional 300 million under option. And if this was not enough, the United States had also managed to pre-order 810 million doses from the AstraZeneca, Johnson & Johnson, Novavax and Sanofi Covid-19 vaccines combined, in many cases with no clear intention for ever using these alternative vaccine doses. It was, moreover, pointed out that expansion deals that the United States had concluded by that same date allowed it to push the number of "other" Covid-19 vaccines to 1.5 billion. The United Kingdom had in a similar manner already claimed 357 million doses from all of these Covid-19 vaccine producing enterprises, along with some additional doses of a small enterprise named Valneva, with options to buy an additional 152 million doses of the Covid-19 vaccines. Also by 15 December 2020, the EU had managed to secure 1.3 billion doses of Covid-19 vaccines from most of the same vaccine producing enterprises, besides the German enterprise CureVac. The EU, moreover, had options for acquiring an additional 660 million doses.⁵⁴⁶

With specific regard to the BioNTech-Pfizer Covid-19 vaccine, it was clear that, in the period between December 2020 and April 2021, deliveries of the vaccine had been disproportionately reaching the world's rich countries, while hardly any doses had been shipped to poorer countries.⁵⁴⁷ By mid-April 2021, based on data provided by the WHO, it was indicated that high-income countries had been receiving around 87 percent of the more than 700 million doses of the Covid-19 vaccine that Pfizer had managed to deliver worldwide, while poor countries had only received about 0.2 percent of these deliveries. In high-income countries, roughly a quarter of the people had been administered with a shot of the Pfizer Covid-19 vaccine. In poor countries, this figure only amounted to one in 500. Nevertheless, Pfizer kept declaring that it remained committed to ensure that its Covid-19 vaccine would be made available everywhere and accessible to anyone.⁵⁴⁸

⁵⁴⁶Twohey et al. (2020).

⁵⁴⁷Robbins and Goodman (2021); Wintour (2021). It has been remarked that this outcome was strangely at odds with Pfizer's CEO's pledge to ensure that poorer countries would have an equal access to the Covid-19 vaccine as the rest of the world. (Cf. Robbins and Goodman (2021).) ⁵⁴⁸Robbins and Goodman (2021).

Hence, on 4 May 2021, Pfizer announced that it had shipped 430 million doses of its Covid-19 vaccine to 91 countries or territories, but it remained unclear how many of these doses were meant for poor countries. From WHO figures which were made available around that date, it appeared that Pfizer had only provided very minimal help to the world's poorest countries. E.g., while Pfizer had pledged that it would contribute up to 40 million doses of the BioNTech-Pfizer Covid-19 vaccine to the COVAX initiative, that number represented less than 2% of the in total 2.5 billion doses that Pfizer and its partner, BioNTech, were aiming to produce throughout 2021. Since deliveries of the BioNTech-Pfizer Covid-19 vaccine had begun in February 2021, roughly 960,000 doses of said vaccine had been shipped to middle- and low-income countries that received the vaccines through COVAX. Nevertheless, the doses of the vaccine that Pfizer had been pledging to the COVAX

According to Ravi, the unequal distribution of the Covid-19 vaccines, once more, exposed the neglect of the world's poor, who were said to be "routinely deprived of basic human rights, in general, and justice, in particular".⁵⁴⁹

All of this raised increasing concerns of "vaccine apartheid", indicated as a stark inequality in global access to the Covid-19 vaccines. All of this came, moreover, down to the fact that, while some high-income countries had been able to roll out massive Covid-19 vaccination drives following a fast development, production and emergency authorization of multiple Covid-19 vaccines, poorer countries saw no hope of gaining access to any of the Covid-19 vaccines in the near future.⁵⁵⁰

According to Bhattacharjee, if Covid-19 has taught the world anything, it is that the Western emphasis on human rights is downright farcical. At a time—more precisely on 23 April 2021—when India was suffering a tragedy dealing with the Covid-19 pandemic, western countries did nothing but offer sermons and lectures, instead of sympathy and real support. Bhattacharjee, e.g., made reference to a statement of German Chancellor Angela Merkel who, amidst the second wave of the Covid-19 pandemic that hit India beyond all proportion, had said that there were concerns that India would not be able to meet pharmaceutical demands in Germany, which would make the latter country to have to 'rethink' their policies should that be the case. Merkel was quoting having said the following:⁵⁵¹

Of course, we have only allowed India to become such a large pharmaceutical producer in the first place, also from the European side, in the expectation that this should then also be complied with. If that is not the case now, we will have to rethink.

Regretfully, Germany was not the only country that had been making such insensitive remarks. The United States was at the time enforcing an embargo on the export of raw materials essential to produce Covid-19 vaccines, which jeopardized vaccine production in India. The CEO of the Serum Institute of India (SII), Adar Poonawalla, had even explicitly appealed to the Biden administration to lift said embargo, but to no avail. When asked about the matter, State Department spokesperson Ned Price had simply replied that the US government has a special responsibility to the American people. The Western media, which had before demonized India over its nationalist concerns (namely that it would not allow the export of Covid-19 vaccines produced in factories on its soil⁵⁵²), did not see any hypocrisy in the approach of the United States and kept its silence on the matter.⁵⁵³

These approaches are completely logical under the dictates of neoliberal capitalism, which gladly embraces caring for oneself to the detriment of the other. They are however incompatible with the solidarity required for a civilized world-order and

initiative were but "a drop in the ocean," according to Clare Wenham, a health policy expert at the London School of Economics. (Cf. Robbins and Goodman (2021); Wintour (2021).)

⁵⁴⁹Ravi (2021).

⁵⁵⁰Ravi (2021).

⁵⁵¹Bhattacharjee (2021).

⁵⁵²BBC News (2021).

⁵⁵³Bhattacharjee (2021).

undermine efforts to effectively respond to the global health-crisis that is Covid-19. With such an approach, it was unlikely that the core problem caused by the Covid-19 pandemic would ever be solved.⁵⁵⁴

Indeed, vaccine inequity only reinforces the existing disparities between health and economic well-being. WHO Director-General Tedros Adhanom Ghebreyesus has in this regard expressed his huge concern that because of inequities in immunisation, "[t]he world is on the brink of a catastrophic moral failure, and the price of this failure will be paid with lives and livelihoods in the world's poorest countries."⁵⁵⁵

The best way for illustrating this simple truth is by referring further to the disastrous events that were taking place in India in April 2021, with media all over the world reporting that the Indian health system had completely collapsed, while only a small fraction of the Indian population had already been administrated a dose of a Covid-19 vaccine.⁵⁵⁶

⁵⁵⁴Goossens (2021).

⁵⁵⁵Cf., for the text of Tedros Adhanom Ghebreyesus' speech, at WHO (2021): "More than 39 million doses of vaccine have now been administered in at least 49 higher-income countries. Just 25 doses have been given in one lowest-income country. Not 25 million; not 25 thousand; just 25. I need to be blunt: the world is on the brink of a catastrophic moral failure - and the price of this failure will be paid with lives and livelihoods in the world's poorest countries. Even as they speak the language of equitable access, some countries and companies continue to prioritize bilateral deals, going around COVAX, driving up prices and attempting to jump to the front of the queue. This is wrong. 44 bilateral deals were signed last year, and at least 12 have already been signed this year. The situation is compounded by the fact that most manufacturers have prioritized regulatory approval in rich countries where the profits are highest, rather than submitting full dossiers to WHO. This could delay COVAX deliveries and create exactly the scenario COVAX was designed to avoid, with hoarding, a chaotic market, an uncoordinated response, and continued social and economic disruption. Not only does this me-first approach leave the world's poorest and most vulnerable people at risk, it's also self-defeating. Ultimately, these actions will only prolong the pandemic, the restrictions needed to contain it, and human and economic suffering. Vaccine equity is not just a moral imperative, it is a strategic and economic imperative. A recent study estimated that the economic benefits of equitable vaccine allocation for 10 high-income countries would be at least 153 billion U.S. dollars in 2021, rising to 466 billion dollars by 2025. That's more than 12 times the total cost of the ACT Accelerator. It's not too late. I call on all countries to work together in solidarity to ensure that within the first 100 days of this year, vaccination of health workers and older people is underway in all countries. It's in the best interest of each and every nation on Earth." (Tedros Adhanom Ghebreyesus; see WHO (2021).)

⁵⁵⁶On 21 April 2021, 314,835 new cases of Covid-19 were officially registered in India. This was by then the highest number of Covid-19 contamination cases recorded in a single day in any country since the Covid-19 pandemic began, pushing the country's hospitals to the brink. The unprecedented spread of the Covid-19 virus, attributed to a more contagious strain of the Covid-19 virus (at the time still referred to as the "Indian variant" of the Covid-19 virus), as well as lax security measures, had overwhelmed hospitals, creating severe shortages of hospital beds, oxygen and medicines in major cities. Social media were flooded with desperate calls from people whose loved ones were ill but who had been repeatedly turned away by hospitals. Hospitals themselves warned that they would not be able to cope with the demand, with some even indicating that they had only a few hours of oxygen left. "Covid-19 has become a public health crisis in India, leading to the collapse of the healthcare system," Krutika Kuppalli, an assistant professor in the division of

By 9 April 2021, it was estimated that at the then current global rate of 6.7 million doses of the Covid-19 vaccines per day, it would take approximately 4.6 years to achieve global herd immunity, which implied that there would be millions of additional infections and deaths. In the case of Covid-19, it was estimated that herd immunity would be achieved when 70–85% of the global population would have been administered two doses of a Covid-19 vaccine. By the said date of 9 April 2021, experts however estimated that 80% of people in low-income countries would not have received the vaccine by the end of 2021. Other estimates suggested that it was unlikely that at least 90% of the population in 67 low-income countries would have been administered the Covid-19 vaccine by the end of 2021.

According to an article in The Economist on 27 January 2021, widespread immunisation coverage in developing countries was not likely to be reached before 2023, if ever at all.⁵⁵⁸

The economic reality is that there were/are simply too few Covid-19 vaccines available to serve everyone. In pre-Covid-19 times, 3.5 billion vaccine doses were produced annually, e.g., against measles. Because of Covid-19, there was, suddenly, an urgent demand for 15 billion vaccine doses, preferably immediately. Although

By 22 April 1921, India had administered nearly 130 million doses of Covid-19 vaccine, the most in the world after the United States and China. Yet, with a population of 1.38 billion, this still meant that only 8% of the Indian people had received at least one dose of a Covid-19 vaccine. The government had planned to administer the Covid-19 vaccines, which had first been offered to frontline workers and people aged 45, to all adults as of May 2021. However, stocks began to run out in many states, and the Serum Institute of India, which manufactures AstraZeneca's Covid-19 vaccine for the Asian market, had had to scale back its production plans. It had planned to increase its monthly production to 100 million doses, up from 60–70 million by the end of May 2021, but new forecasts suggested that this would only be possible as of July 2021. (Cf. Ratcliffe (2021).) ⁵⁵⁷Huizen (2021).

⁵⁵⁸The Economist (2021a, b).

infectious diseases at the Medical University of South Carolina in the US, declared on Twitter. In the Western Indian state of Maharashtra, at least 24 patients at Covid-19 hospital had died on 21 April 2021 when the oxygen supply to their ventilators broke down due to a leak. The state tightened its closure late the same day, announcing that all offices had to close, that private vehicle travel was to be allowed only for medical emergencies, and that only medical workers and government employees could still use the railway system. A total of 2104 Covid-19 related deaths were recorded on 21 April 2021, a record for India. More than one million Covid-19 contamination cases had been recorded in the previous four days. Some of India's most prominent politicians fell ill, including former Prime Minister Manmohan Singh, who was admitted to hospital shortly before after testing positive, although he had been vaccinated. It was also confirmed, on 22 April 2021, that former Delhi minister Dr AK Walia had died. Sitaram Yechury, General Secretary of the Communist Party of India, announced that his son, Ashish, had died. As of 22 April 1921, since the start of the Covid-19 pandemic, India recorded 15.93 million cases, according to health ministry data. Prior to 21 April 2021, the record for the highest number of daily cases in the world was 300,310, recorded by the United States on 2 January 1921. Kiran Mazumdar Shaw, executive chairman of Biocon & Biocon Biologics, an Indian healthcare company, wrote in the Economic Times that complacency has led to unforeseen shortages of drugs, medical supplies and hospital beds. Health experts said that the country had relaxed security measures too quickly, wrongly assuming that the Covid-19 virus had disappeared. Weddings and major festivals had been allowed to go ahead, while Modi addressed crowded political rallies for local elections. (Cf. Ratcliffe (2021)).

the few pharmaceutical enterprises that had a Covid-19 vaccine prepared were doing their best to increase production, upscaling still went far too slow.⁵⁵⁹

In this time of need, the United States was basically instigating a harsh and false competition between the interests of its citizens and that of the rest of the world. What was completely incomprehensible were the (initial) western efforts to block a request by India, South Africa and other developing countries to suspend intellectual property rights over the vaccines for the immediate future. Such a waiver of IP rights would have allowed developing countries to ramp up Covid-19 vaccine production to meet both domestic and foreign demands. As a result, developing countries such as India were by April 2021 faced with a situation where the United States even started blocking raw materials required for vaccine production, while other western countries were blocking requests for an IP waiver. On top of that, countries such as Germany were even issuing thinly veiled threats.⁵⁶⁰

This all helps to explain why the scarcity problem should have been solved differently from the early start, e.g., via international planning and strategy. This method should then not only have applied to states, but also to large pharmaceutical enterprises, that should have automatically released their IP rights, or at the very least started cooperating with competitors in efforts to attain joint production, based upon models of cheap and far-reaching licensing. It is clear that the efforts of both states and pharmaceutical enterprises in this regard have been completely insufficient.⁵⁶¹

There was, obviously, no magic solution. Producing a vaccine is complex, requiring more than just exchanging a formula of ingredients. It also implies the exchange of a lot of additional know-how, which necessitates that releasing IP rights should go hand in hand with an intense cooperation between pharmaceutical enterprises. Nevertheless, from the part of the governments, the lifting of patent rules could in itself have been a way for the political world to finally withdraw from the strong hold of the pharmaceutical sector. It could also have been a lever to force pharmaceutical enterprises to at least try and start cooperating more with each other and with others. And by lifting or easing on patents, another injustice could have been corrected: in 2020, numerous governments had given several pharmaceutical enterprises substantial financial injections to finance the search for a Covid-19 vaccine candidate. But, to the annoyance of the WHO, no conditions were set in

⁵⁵⁹Goossens (2021).

⁵⁶⁰Bhattacharjee (2021).

⁵⁶¹Goossens (2021).

E.g., in October 2020, Moderna—as the only company with an (at the time almost) ready vaccine—announced that it would not enforce its intellectual property right, showing willingness to cooperate at an international level. But at the beginning of 2021, Moderna was still in full control of the production of its vaccine and did not yet participate in Covax. Finally, on 3 May 2021, Gavi announced that it had signed an advance purchase agreement with Moderna for its mRNA vaccine against Covid-19. The agreement was for 500 million doses of the Moderna vaccine, secured on behalf of the Covax Facility. Initial supply under the agreement was intended for AMC-eligible participants, with the potential to allocate and supply to self-financing participants in the future. (Gavi (2021).)

return to ensuring global access to these vaccines, which afterwards became one more factor explaining the excess in some countries and the shortages in others.⁵⁶² (Cf. Sect. 9.2.2.)

This is how, according to Goossens, at the beginning of 2021, the world ended up "in the subterranean dynamics of vaccine nationalism", making it almost impossible for politicians to resist "that capitalistic monster". Harried by impatient populations—and after Israel, the United States and the United Kingdom had throughout the period from December 2020 until April 2021 "practically cleared the shelves of the vaccine shops"–, many other countries, especially EU Member States, had simply started grabbing whatever was left, even threatening to start a dangerous game of export prohibitions that could have led to mutual blockages, while most developing countries, for the time being, ended up with nothing.⁵⁶³ (Cf. Sect. 9.4.3.10.)

There is a further concern which makes it unlikely that one country would in the long run be successful in beating Covid-19 on its own, namely that further mutations (variants) of the Covid-19 virus may be resistant to the Covid-19 vaccines that have thus far been created. The whole vaccination circus would then have to start all over again. Governments would again have to pump fortunes into research departments and pharmaceutical to design and produce new vaccines. It is uncertain if this new drive would have the same success as the last one, but we can rest assured that, in complete correspondence to the dictates of (neoliberal) capitalism, the pharmaceutical giants will once again be the big financial winners of such a continued game, unless, at last, the rules of the game are changed.⁵⁶⁴

According to Tran, nationalism, and competition over the Covid-19 vaccines—in addition to numerous other forms of irrational and nationalist behaviour, ranging from acrimony between countries over China's early handling of the viral outbreak to a general lack of cooperation in investigating the origin of the Covid-19 pandemic—all contributed to the delayed and uncoordinated rollout of the Covid-19 vaccines around the world. This slow and totally uneven distribution of vaccines, in this manner, prolonged the Covid-19 pandemic itself, and, as illustrated before, risks prolonging it even more.⁵⁶⁵

⁵⁶⁵Cf. Tran (2021).

According to Tran (referring to an initial estimate by the International Chamber of Commerce), this at the time came at an economic cost of an estimated USD 9.2 trillion. (Cf. Tran (2021).)

It was at the time, moreover, considered that such an uncooperative behaviour was unlikely to change in the future. According to Tran, this did not bode well for the world's ability to cope with a future pandemic, which in the opinion of various scientists is but a matter of time. E.g., in addition

⁵⁶²Goossens (2021); Morris (2021).

⁵⁶³Goossens (2021).

⁵⁶⁴Goossens (2021). From research of the IMF referred to by this author, it, moreover, appeared that some large enterprises had been able to firmly increase their market power during the Covid-19 pandemic. Only in one sector were the large market players able to make more extra profits than in the tech industry: In the sector of the pharmaceutical enterprises. Precisely for this reason has the IMF advised governments to thoroughly scrutinize the use of intellectual property law in particular. (Cf. Goossens (2021).)

9.6.3 Calls for an Alternative Approach

In spring 2021, in the midst of all of this confusion and debate—and, moreover, in complete opposition to the basic, neoliberal working principles that usually determine EU public policy—EU Commission chairwoman Ursula von der Leyen all of a sudden declared that Covid-19 vaccines were to be viewed as "a global common good", even as powerful players such as the newly elected US President Joe Biden seemed content to simply continue the "America first"-policy that had been initiated by his predecessor, Donald Trump.⁵⁶⁶

The argument that Covid-19 vaccines should be treated as a "global commons" had already been made before by several other individuals and institutions, such as the People's Vaccine Alliance, founded in 2020 as a coalition of organisations and activists united under a common goal of campaigning for a "people's Covid-19 vaccine", based on shared knowledge and available free to all and everywhere as "global commons".⁵⁶⁷

The People's Vaccine Alliance more in particular identified the following elements to achieve such a goal, which we have summarised in a list of concrete action points:⁵⁶⁸

(1) Pharmaceutical enterprises should share knowledge and abstain from enforcing IP rights in the interest of public health.

It is hereby considered particularly important that pharmaceutical enterprises and research institutes would start sharing knowledge, know-how, people,

to the ten infectious diseases for which there was at the time no licensed vaccine or cure—including Marburg, Lassa, Zika and Nipah viruses as identified by the Gavi vaccine alliance—a team of scientists in China discovered in early 2021 no fewer than twenty-four new bat coronaviruses with surprising genomic divergence within a radius of just a couple of kilometres. (Cf. Tran (2021).) More precisely, in early March 2021, it was reported that in the search for the origin of the Covid-19 virus, an international team of scientists had discovered 24 previously unknown bat coronaviruses, four of which were related to the strain responsible for Covid-19, within a 4 km radius in southwest China. (Cf., furthermore, ANI (2021).) Any one of the variants of the Covid-19 virus themselves, any of the newly discovered other viruses, or any yet completely undiscovered new virus, could trigger a new viral epidemic that could quickly develop into another pandemic, after or even during the existing Covid-19 pandemic. The serious risk that the world faces, therefore, is in the opinion of Tran not so much that another pandemic will occur, but rather that, when this inevitably happens, the world will react in the exact same manner as it has reacted against Covid-19. In line with what Tran suggests, perhaps citizens around the globe could finally start to put sufficient pressure on their governments to learn from the past and strive to do much better in the future. (Cf. Tran (2021).)

⁵⁶⁶According to Morris, the United States has throughout 2020 and the first four months of 2021 taken an overtly nationalist approach to the matter of Covid-19 vaccination. Under former President Donald Trump, the United States had even explicitly withdrawn any participation and funds from the WHO and its COVAX initiative. Trump officials at the time emphasized the importance of only focusing on vaccinating Americans. The Biden administration has throughout the first four months of 2021 been continuing the approach, albeit in a more nuanced way. (Cf. Morris (2021).)

⁵⁶⁷The People's Vaccine Alliance (2021).

⁵⁶⁸The People's Vaccine Alliance (2021).

biological material and technology for producing the Covid-19 vaccines with other enterprises, especially those that have the capacity for manufacturing them as well.⁵⁶⁹

- (2) Given that there is a pandemic occurring and that most of the research and development (R&D) expenses for developing the Covid-19 vaccines were financed through public funding resources, it is completely unacceptable for enterprises to monopolise the Covid-19 vaccines and to charge the excess prices that they have started to charge as of 2020 (cf. Sect. 9.2.3). E.g., the high prices charged by BioNTech-Pfizer and Moderna put their Covid-19 vaccines beyond the reach of all but the richest countries.
- (3) As the development of most of the Covid-19 vaccines (and other forms of treatment to deal with Covid-19) have been funded out of taxpayers' money, governments should start imposing conditions on their funding, such as the removal of patents and other IP barriers, the open sharing of knowledge and the transfer of technology to as many producers all over the world as possible.
- (4) The objective of public policy should be to maximise a fast and global supply of the Covid-19 vaccines (and other treatments), rather than aiding to maximise the profits of the private pharmaceutical enterprises. This, obviously, implies that some of the most fundamental working principles of capitalism would be abandoned, or at the very least diminished.⁵⁷⁰
- (5) Covid-19 vaccines, tests and treatments all have to be provided at transparent and affordable prices, so that all governments and donors around the globe can afford buying enough of them to provide them free of charge to their entire population.
- (6) A more equitable and efficient system is needed for the distribution of Covid-19 vaccines (but also for other drugs for treating Covid-19, as well as for PPE), and should prioritize people at risk in all countries.⁵⁷¹ E.g., Covid-19 vaccines should be distributed according to the needs of priority groups, rather than sold to the countries that are able to pay the highest price.
- (7) Governments and pharmaceutical enterprises both share a responsibility to increase people's willingness to be vaccinated against Covid-19. To achieve this, governments have a duty to put science before politics, in order to build a sufficient degree of trust among their population. Pharmaceutical enterprises and research institutes for their part must contribute to building this trust by always

⁵⁶⁹The People's Vaccine Alliance (2021), furthermore, observed that the WHO COVID-19 Technology Access Pool (C-TAP) already provides a global mechanism for such sharing. C-TAP can more in particular promote technology transfer and licensing of production to a wider range of enterprises and institutions capable of making safe and effective Covid-19 vaccines, in order to maximise supply.

⁵⁷⁰As has been argued in some of our previous work. (Cf. Byttebier (2018, 2019, 2021).)

⁵⁷¹Within the WHO equitable allocation framework, priority groups for vaccination were healthcare workers, people over 60 years of age and all people with chronic diseases. (Cf. The People's Vaccine Alliance (2021).)

ensuring transparency in terms of the results of clinical trials, safety and efficacy data, costs and prices.

According to Tran, it is in all of this equally important that the general public would continue to put pressure on their leaders to learn the lessons of the Covid-19 pandemic and to strive to perform much better in the future.⁵⁷²

9.6.4 A Surprising Response from US President Joe Biden

On 5 May 2021, US President Joe Biden surprised the world by expressing his support for waiving IP rights for Covid-19 vaccines. It was reported that in doing so, Biden had bowed to the mounting pressure from both Democratic lawmakers and more than 100 other countries, while at the same time angering various pharmaceutical enterprises.⁵⁷³ Amid growing concerns that large outbreaks of Covid-19 in India⁵⁷⁴ at the time could lead to vaccine-resistant strains of the deadly Covid-19 virus, which threatened to jeopardise the global recovery, Biden became more cautious in favour of a temporary IP waiver—a dramatic reversal of the previous US position.⁵⁷⁵ This had, more in particular, become clear from a speech at the White House, followed by a formal statement from Biden's chief trade negotiator, Katherine Tai.⁵⁷⁶ In the latter statement, Tai stressed that the global health crisis and the extraordinary circumstances of the Covid-19 pandemic called for extraordinary measures.⁵⁷⁷ Tai also announced that the United States would continue to push for increased Covid-19 vaccine production and distribution on a global scale.⁵⁷⁸

Of course, this realisation came to the US head of state only after (1) the United States had ensured that it had first captured a sufficient stock of the mRNA and other Covid-19 vaccines to serve the entire US population; (2) a large proportion of the US adult population had already received at least one dose of a Covid-19 vaccine, and (3) there was even talk of administering the Covid-19 vaccines to US children and youth (notwithstanding the fact that the risk of Covid-19 for children and young people is very low, and in most other countries, even risk groups and healthcare

⁵⁷²Tran (2021).

⁵⁷³Shalal et al. (2021).

⁵⁷⁴In the week before Biden's announcement, India accounted for 46% of the new Covid-19 cases worldwide, and there were signs that the epidemic was further spreading to Nepal, Sri Lanka and other neighbouring countries. (Cf. Shalal et al. (2021).)

⁵⁷⁵Earlier, the United States and several other countries had blocked negotiations at the WTO on a proposal led by India and South Africa to waive protections for certain patents and technologies and to boost Covid-19 vaccine production in developing countries. (Cf. Shalal et al. (2021).)

⁵⁷⁶Shalal et al. (2021).

⁵⁷⁷Shalal et al. (2021).

⁵⁷⁸Shalal et al. (2021).

providers had not yet been served). In this sense, the American conscience only began to awaken after the "Americans First" principle had been fully satisfied.

Following President Biden's announcement, the shares of a number of Covid-19 vaccine producers sharply fell.⁵⁷⁹ However, Biden's decision was welcomed by WHO chief Tedros Adhanom Ghebrevesus, who on Twitter referred to it as "a monumental moment in the fight against Covid-19". ⁵⁸⁰ Biden's statement was meant to pave the way for what could be months of negotiations to work out a specific exemption plan, as WTO decisions require a consensus of all 164 members.⁵⁸¹ From her part, Helen Clark, head of the expert panel reviewing the WHO's handling of the Covid-19 pandemic and former Prime Minister of New Zealand, called on countries that had been blocking the temporary suspension of IP rights with regard to Covid-19 vaccines, such as the United Kingdom, Switzerland and some EU Member States (cf. Sect. 9.6.3), to follow the American lead and support the initiative as well.⁵⁸² Helen Clark, furthermore, proclaimed that pharmaceutical enterprises should recognise that the Covid-19 vaccines are a public good and urged them to cooperate or to brace themselves for a "tough" treatment. Clark also indicated that the WHO and the WTO had to start urging countries that had been funders of Covid-19 vaccine research and pharmaceutical enterprises that had been on the receiving end of such funding, to reach an agreement on early voluntary licensing and transfer of technical knowledge. The Gavi Vaccine Alliance, similarly, welcomed President Biden's support for the abandonment of IP rights and urged Washington to ensure that vaccine producer would start to transfer their know-how to boost global Covid-19 vaccine production.⁵⁸³

The next day, on 6 May 2021, European Commission President Ursula Von der Leyen declared that after initially having remained cautious about abandoning IP protection with regard to Covid-19 vaccines, the EU was ready to discuss the matter with the White House further.⁵⁸⁴ Similarly, French President Emmanuel Macron announced that he was "absolutely in favour" of the plan. Macron's support for the US initiative had marked a shift for France, which had previously argued that a waiver of IP protection, such as patents, would discourage innovation. Meanwhile, a German government spokesman declared that the plan would create "serious complications" for the Covid-19 vaccine production.⁵⁸⁵ Gordon Brown, former British

⁵⁷⁹Shalal et al. (2021).

The Biden administration had informed pharmaceutical enterprises—which had already reported strong revenue and profit increases during the Covid-19 crisis (cf. Sect. 9.2.3)—of its plans before the announcement. The pharmaceutical industry's largest lobby group had warned that Biden's unprecedented action would undermine the corporate response to the Covid-19 pandemic and global security. (Cf. Shalal et al. (2021).)

⁵⁸⁰Shalal et al. (2021).

⁵⁸¹Shalal et al. (2021).

⁵⁸²Wintour (2021).

⁵⁸³Wintour (2021).

⁵⁸⁴Boffey (2021c); Wintour (2021).

⁵⁸⁵Wintour (2021).

prime minister, UN global ambassador and leader of the campaign for equal access to the Covid-19 vaccines, welcomed the US decision to temporarily waive patents as it would make Covid-19 vaccines available. UK Shadow Foreign Secretary Lisa Nandy and Shadow Trade Secretary Emily Thornberry similarly welcomed President Biden's move.⁵⁸⁶

9.6.5 And Furthermore ...

Although the Covid-19 crisis has brought to light numerous problems caused by neoliberal capitalism, probably none of them has caused more turmoil than that of unequal access to Covid-19 vaccines. (Cf. Sect. 9.6.2.)

Nevertheless, if we are to follow the working methods of neoliberal capitalism, there could hardly have been any controversy. The Covid-19 vaccines, after the technology to make them had been developed at universities and/or with government support elsewhere, were—via patents—neatly placed in the hands of a number of pharmaceutical enterprises, from where they were then sold on—entirely according to the dictates of capitalism—to those who needed them. That the pharmaceutical enterprises aspired to usurious profits, destined afterwards to be granted to their shareholders, was hardly to be blamed on them, to the extent that in doing so, they behaved exactly as capitalism demands of them.

Nevertheless, after this "normal state of affairs" had quietly run its capitalist course in the period from December 2020 to March 2021, serious questions gradually arose, as the consequences of applying capitalist logic to public health became clearer and clearer. By April 2021, while a hellish second wave of Covid-19 erupted in India and the media started to show harrowing images of burned bodies on the streets of Indian cities, even some fervent defenders of neoliberal ideology finally started to feel a twinge of conscience (or perhaps a fear of escalation), which shifted the political debate on releasing the patents on the Covid-19 vaccines into higher gear at the WTO.

Obviously, as long as capitalism (and the neoliberal ideology that maintains it) will prevail, these problems may never be truly solved.

Precisely for this reason, already in various of our earlier work,⁵⁸⁷ we called for a fundamental rethinking of the working principles on which the economy is to be based, and of the legal methods for shaping it. One approach could be to thoroughly moderate enterprises, where the pursuit of profits should no longer be their main objective but would make way for more sustainable business models. Similarly, business should no longer aim at unbridled wealth creation to the exclusive benefit of a couple of happy few shareholders.⁵⁸⁸ On the contrary, states could, e.g., start

⁵⁸⁶Wintour (2021).

⁵⁸⁷Cf. especially: Byttebier (2015a, b, 2017, 2018, 2019, 2021).

⁵⁸⁸Byttebier (2017), pp. 469–472.

setting maximum caps on private wealth accumulation, where, once the maximum cap would be reached, any excess income would simply be taxed away.⁵⁸⁹ The mere application of such an approach to the pharmaceutical industry might have been able to alleviate much of the suffering caused by Covid-19.

Personally, we would like to see the reforms go even further and, in line with our earlier proposals, see the world work towards a universal basic health system in which what went wrong during 2020–2021, could never happen again. Vaccine policy, too, could then be framed within such a universal health policy (the contours of which we have already outlined in more detail in the conclusions to Chaps. 5 and 6, to which we therefore refer here) (cf. Sects. 5.5.2 and 6.3).

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⁵⁸⁹Byttebier (2017), pp. 403–409.

Such a way of reasoning goes back to the teachings of some of the ancient Greek philosophers, such as Plato and Aristotle, who, from the very early breakthrough of the merchant class—the historical precursor of the current capitalist classes—strongly warned against too great wealth accumulation that would go at the expense of the interests of the rest of society. (Cf. Byttebier (2017), pp. 91–94 and pp. 117–120.)

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Chapter 10 Covid-19 and Inequality



10.1 Introduction: Historical Precedents

In an article that appeared in 1931, Edgar Sydenstricker highlighted the inequalities between socio-economic classes during the 1918 Spanish flu epidemic in the United States. From Sydenstricker's research, it appeared that there was a significantly higher incidence of the Spanish influenza disease among the members of the working classes than of the rest of society. Sydenstricker's findings implied an important breakthrough, as it challenged the until then prevailing popular and scientific consensus that the Spanish influenza was a disease that struck the rich as well as the poor.¹

¹Cf. Sydenstricker (1931) who started his article as follows: "Perhaps no observation during the great influenza epidemic of 1918–1919 was more common than the familiar comment that "the flu hit the rich and the poor alike." Apparently there was ample ground for a belief in the impartiality of the disease. Its widespread prevalence throughout the country, the frequency with which households in every social class were attacked, and the fact that prominent persons in every community were struck down, were among the outstanding, undeniable experiences in the epidemic. A certain consolation seemed to be afforded by the thought that the pestilence was democratic, even in so dreadful a sense, in its behaviour." (Sydenstricker (1931).)

And furthermore: "This suggestion is upon the rather broad but generally favoured hypothesis that the mortality rate among a given group of persons of middle age or over is usually a fair indication of their resistance to the effects of disease when compared with that of a standard or normal group. The greater fatality among poorer children under 5 years of age and among poorer adults under 30 or 35 years of age does not fit in with this hypothesis so well. While unfavourable heredity conceivably might be assigned as an important cause of the high fatality rate from influenza among young, children in the poorer classes, other factors cannot be left out of consideration. Among these factors should be included that of medical and nursing care, in which respect the poor were usually at a disadvantage. The strain upon parents who were themselves attacked at the same time as their children must have been more severe among, the poor than among the well-to-do, particularly in view of the fact that the families of the poor more frequently were larger and composed of younger children than those classed as economically better off. But we can only speculate as to the various conditions that possibly or probably might have been involved. The

In 2020, shortly after the outbreak of Covid-19, there soon arose similar claims by both policymakers and the media about the Covid-19 disease. It was, e.g., argued that "we are all in this together" and that the "Covid-19 virus does not discriminate".²

In one of the earliest research articles on the matter, Bambra et al. have made an attempt to dispel this myth of indicating the Covid-19 disease as a purportedly "socially neutral disease". Said authors demonstrated how, during the Covid-19 pandemic, just as a century ago during the Spanish flu pandemic, socio-economic inequalities occurred in the numbers of Covid-19 contamination and mortality rates, that at the same time mirrored pre-existing inequalities about the socio-economic determinants of health and pre-existing chronic disease.³ Similar research was

²Bambra et al. (2020), p. 964.

³Bambra et al. (2020), p. 964.

Several other studies referred to by Bambra et al., similarly demonstrated the impact of pre-existing socio-economic qualities during the 2009 "H1N1 pandemic". From this research, it e.g., had appeared that, on a global scale, Mexico had experienced a higher mortality rate than higher income countries. In addition, the death rate from H1N1 within the most deprived parts of England, characterized by the hugest socio-economic inequalities, had been three times higher than in the least deprived areas. The H1N1 death rate in England was also much higher in urban areas than in rural areas. Similarly, a Canadian study about the situation in Ontario had pointed out that H1N1 hospitalisation rates were associated with low education and living in high-poverty neighbourhoods. Another study referred to by Bambra et al., found positive associations between people living in the United States who faced financial problems (e.g., financial barriers of accessing healthcare) and influenza-like illnesses in general, such as the 2009 H1N1 pandemic more in particular. Various studies about the cyclical winter influenza in North America also pointed to associations between, on one side, mortality, morbidity and symptom severity and, on the other side, socioeconomic status in both adults and children. (Cf. Bambra et al. (2020), p. 964.)

circumstances at the time of the epidemic were such that more de—tailed data were not obtainable for a sufficiently large sample of our population." (Sydenstricker (1931).)

In addition, several other international studies, referred to by Bambra et al., largely confirmed Sydenstricker's research that the Spanish flu pandemic of 1918 had pointed to significant effects from socio-economic inequalities. It had, e.g., appeared that there had been inequalities (1) in both prevalence of the Spanish influenza and mortality rates (2) between the impact of the Spanish influenza in high- and low-income countries, (3) between how the diseased had affected richer and poorer neighbourhoods, (4) between the impact of the disease on different socio-economic classes, and (5) between the impact of the disease in urban and rural areas. From this research, it e.g., appeared that the mortality rate of the Spanish influenza pandemic in India had been 40 times higher than the one of Denmark, and that the mortality rates of some South American countries had been 20 times higher than in Europe. Within Norway, Spanish influenza death rates had been the highest in the poorest parts of Oslo. In the United States, mortality rates had been in general been the highest among unemployed people, and more in particular among the poor of the urban parts of Chicago. In Sweden, there appeared inequalities in mortality rates between the highest and lowest working classes, especially among men. In contrast, countries that at the time were characterized by less pre-existing socio-economic inequalities, such as New Zealand, had not experienced a same degree of socio-economic inequalities in mortality due to the Spanish influenza. It also appeared that, on a global scale, an urban-rural effect had occurred. E.g., in England and Wales, mortality rates had been between 30 and 40% higher in urban areas than in rural areas. There was also evidence about the United States that the Spanish influenza pandemic had led to a long-term impact on inequalities in children's health and development. (Cf. Bambra et al. (2020), p. 964.)

undertaken by Nolan, who also found that the Covid-19 pandemic has confirmed inequalities originating from the prevailing capitalist socio-economic order.⁴

10.2 Covid-19 and Socio-Economic Inequalities in General

For various authors, already soon after the outbreak of the Covid-19 disease, it was clear that prevailing socio-economic inequalities had deep implications for the manner in which Covid-19 affected different groups of people.

Saad-Filho has phrased this as follows:⁵

The social implications of the pandemic emerged rapidly, for example, through the differential ability of each social group to protect itself. In brief, the uber-rich moved into their yachts, the merely rich fled to their second homes, the middle class struggled to work from home in the company of overexcited children and the poor, already having worse health, on average, than the privileged, either lost their earnings entirely or had to risk their lives daily to perform much-praised but (needless to say) low-paid 'essential work' as nurses, care workers, porters, bus drivers, shopkeepers, builders, sanitation officers, delivery workers and so on; meanwhile, their families remained locked up in cramped accommodation. Since they were, effectively, treated as being expendable, it is not surprising that poor and Black, Asian and minority ethnic (BAME) people are dramatically over-represented in the death statistics (...).

The class and racial impact of the pandemic overlaps with its gender implications, as women tend to crowd the lower and more precarious rungs of the labour market, cluster in the 'caring' professions, take primary responsibility for their households and the well-being of elderly parents and children and suffer more heavily from loneliness as well as the burdens of caring for others. They are also highly vulnerable to violence, abuse and neglect at home during the lockdown.

Robert Reich expressed the same idea as follows:⁶

The super-rich have always found means of escaping the perils of everyday life. During the plagues of the 17th century, European aristocrats decamped to their country estates. During the 2020 pandemic, wealthy Americans headed to the Hamptons, their ranches in Wyoming or their yachts.

The rich have also found ways to protect themselves from the rest of humanity – in fortified castles, on hillsides safely above smoke and sewage, in grand mansions far from the madding crowds. Some of today's super rich have created doomsday bunkers in case of nuclear war or social strife.

Since they had been for decades already treated as de facto disposable, it was in the further opinion of Saad-Filho not surprising that, in many Western countries, the poor black, Asian and minority ethnic people (also referred to as "BAME") were dramatically over-represented in the Covid-19 contamination and death statistics.

⁴Nolan (2020).

⁵Saad-Filho (2020).

⁶Reich (2021).

According to the same author, the class and racial impact of the Covid-19 pandemic also had specific gender consequences. This was attributed to the fact that, at the outbreak of Covid-19, women, especially women belonging to the mentioned minority groups, were over-represented in the lower and more precarious segments of the labour market, such as lower healthcare professions.⁷

Also according to Ali, Asaria and Stranges, international data pointed to the fact that marginalised groups were much more likely to become contaminated with and/or die from Covid-19. According to these authors, three groups suffered disproportionately from this inequal health impact of the Covid-19 pandemic: (1) ethnic minorities; (2) the socio-economically disadvantaged; and (3) the elderly.⁸

According to Bambra et al., already as early as April 2020, evidence on the impact of socio-economic inequalities on the risks associated with Covid-19 emerged in many countries, such as Spain, the United States and the United Kingdom. These authors, e.g., refer to interim data that were published by the regional Catalan government in Spain, showing that the rate of Covid-19 contamination was between six and seven times higher in the most deprived areas of the region, compared to the least deprived parts. Similar evidence was found with regard to the Covid-19 cases in New York City, from which it appeared that there was a significantly increased risk of Covid-19 related death among people living in the most deprived counties.⁹

Again in terms of the ethnic inequalities of the risks of Covid-19, research with regard to England and The Netherlands demonstrated that black, Asian and minority ethnic ("BAME") people accounted for 34.5% of the 4873 earliest patients that had been struck with severe Covid-19 illness (in the period ending 16 April 2020). This was, moreover, indicated as a much higher than the percentage of 11.5% that had

⁷Saad-Filho (2020).

Another impact of the impact of the Covid-19 pandemic on women was that women also had to bear the primary responsibility for their households and for the welfare of their elderly parents and children. Being thus more impacted by lockdown measures, women generally suffered more from loneliness, as well as from the burden of caring for others. Women were also more vulnerable to violence, abuse, and neglect in home settings during periods of confinement. (Cf. Saad-Filho 2020; cf., furthermore, Sect. 7.2.2.)

⁸Ali et al. (2020).

These authors, e.g., pointed out that early data regarding the United States had already soon upon the outbreak of Covid-19 identified so-called "hot spots" in black counties where the risk of Covid-19 related mortality appeared to be six times higher than in white counties. The authors, moreover, referred to similar data regarding the United Kingdom, from which it appeared that black and Asian Covid-19 contamination cases and Covid-19 related deaths amounted to almost the double of their population share in the Covid-19 statistics. As in the 2009/2010 H1N1 pandemic, whereby socioeconomic deprivation had doubled the risk of death, socio-economic deprivation was again found to exacerbate vulnerabilities during the 2020–2021 Covid-19 pandemic. According to these authors, the most vulnerable age group were the elderly, especially those living in nursing homes, who accounted for almost half of the deaths in the Covid-19 pandemic. (Cf. Chap. 6) The authors also pointed out that, despite these known vulnerabilities, routine case reports have rarely disaggregated by socio-demographic determinants.

⁹Bambra et al. (2020), p. 965.

occurred for viral pneumonia in the period between 2017 and 2019. Even more striking were the data on racial inequalities in Covid-19 contamination and death cases that, shortly upon the outbreak of Covid-19, were published by various US states and municipalities. E.g., in Chicago (in the period ending on 17 April 2020), 59.2% of the Covid-19 related death cases were among black residents. The Covid-19 mortality rate among black residents of the city of Chicago, more precisely, amounted to 34.8 per 100,000 population, compared to 8.2 per 100,000 population among white residents.¹⁰

10.3 Covid-19 and Health(Care) Inequalities

10.3.1 Postulates by Bambra, Riordan, Ford, and Matthews

10.3.1.1 General

According to the already referred to research of Bambra et al., the Covid-19 pandemic has occurred against a background of prevailing socio-economic inequalities regarding a variety of class determined, non-communicable diseases (NCDs), as well as inequalities in the socio-economic determinants of health.¹¹ This meant that both the occurrence and the severity of Covid-19 cases were amplified by pre-existing occurrences of chronic diseases, which are themselves socio-economically determined and associated with various socio-economic determinants of health.¹²

Research made possible by the UK Health Foundation and the UK Institute of Health Equity on the situation in the United Kingdom has confirmed the hypothesis that inequalities in the early Covid-19 death rates mirrored socio-economic gradients about all types of death, and that the causes of the inequal impact of Covid-19 were, therefore, similar to the prevailing socio-economic inequalities in matters of health in general. This research in particular pointed out that while health behaviours significantly contribute to the causes of a variety of non-communicable diseases (NCDs), they are also "the socio-economic determinants of health" that lie at the root of these health behaviours, making the socio-economic determinants of health the "causes of the causes".¹³

¹⁰Bambra et al. (2020), p. 965.

¹¹Bambra et al. (2020), p. 965.

¹²Bambra et al. (2020), p. 965.

¹³Marmot et al. (2020), p. 5.

10.3.1.2 Covid-19 as a "Syndemic"

According to Bambra et al., the concept of "a syndemic" has originally been developed by Merrill Singer for helping to understand the relationship between a wide variety of diseases and behaviours, ranging from HIV/AIDS, drug use and violence, as these occurred in the United States in the 1990s. In this viewpoint, a "syndromic condition" exists when risk factors (or, in case of diseases, co-morbidities) are "intertwined, interactive and cumulative", which may increase the burden of disease and enhance its possible negative effects. A syndemic has thus, generally speaking, been defined as a set of closely related and mutually reinforcing health problems that significantly affect the overall health status of a population, against the background of a perpetual pattern of deleterious socio-economic conditions.¹⁴

Based on these observations, Bambra et al., have argued that, for the most disadvantaged communities, Covid-19 has had all the characteristics of a syndemic disease, i.e., a synergistic and concomitant pandemic that interacts with and exacerbates existing NCDs and socio-economic conditions.¹⁵

E.g., people belonging to minority ethnic groups, people living in areas of high socio-economic deprivation, people generally living in poverty and people belonging to other marginalised categories (such as the homeless, (ex-)criminals and prostitutes) generally suffer from a greater number of co-existing NCDs. Among these population groups, NCDs are not only more general and severe than among other populations, but they also often already occur at a young age. This implies that people living in socio-economically deprived neighbourhoods and people belonging to minority ethnic groups, whereby these two categories often overlap, showed higher rates of almost all the known underlying clinical risk factors that may increase the severity and mortality of Covid-19. These clinical risk factors include diseases and medical conditions such as hypertension, diabetes, asthma, chronic obstructive pulmonary disease (COPD), heart disease, liver disease, kidney disease, cancer, cardiovascular disease, obesity and smoking. This, moreover, appeared to be the case for people belonging to ethnic minority groups in Europe, the United States and other high-income countries. In Europe, a particular vulnerable group of people were the Gypsy/Roma community. It concerns one of the most marginalized ethnic groups in Europe, characterized e.g., by a smoking rate that is two to three times higher than the European average and by higher rates of respiratory diseases (such as COPD), besides a variety of other Covid-19 risk factors.¹⁶

These findings were largely confirmed by the research of Ali, Asaria and Stranges. These authors indicated that people belonging to (often overlapping) ethnic minorities and/or materially disadvantaged groups, were much more likely

¹⁴Bambra et al. (2020), p. 965.

¹⁵Bambra et al. (2020), p. 965.

¹⁶Bambra et al. (2020), p. 965.

to suffer from so-called "chronic multi-morbidities", making them more vulnerable during an epidemic or pandemic.¹⁷

These findings have been, furthermore, confirmed by research in the United Kingdom, from which it appeared that there were "shockingly" high rates of Covid-19 mortality among people living in the United Kingdom who identify as black, Bangladeshi, Pakistani and Indian.¹⁸

According to the quoted research, all of these inequalities in chronic disease are, in essence, the result of inequalities with regard to the so-called "socio-economic determinants of health". These socio-economic conditions of health concern factor such as the conditions in which people live, work, grow up and age, such as working conditions, being unemployed oneself or belonging to a family where one or both parents are (often) unemployed, access to essential life-necessities and services (e.g., water, sanitary facilities and even food), housing and access to healthcare.¹⁹ In the opinion of Ali, Asari and Stranges, the above outcomes are by no means accidental, but the result of persistent structural and socio-economic inequalities.²⁰

10.3.1.3 Impact of Some Socio-Economic Determinants of Health

10.3.1.3.1 Housing and Working Conditions

According to Marmot et al., much of the above comes down to living and/or working in deprived areas, often in overcrowded housing. This had during the Covid-19 pandemic itself led to a higher exposure to the Covid-19 virus, both at work as at home. Such poor housing and working conditions are themselves the result of longstanding socio-economic inequalities and, with regard to people belonging to minority ethnic groups, even to structural racism. Many people belonging to black, Asian and minority ethnic (i.e., "BAME") groups were, phrased differently, not well protected at work and at home and were in general less protected than their white colleagues.²¹

From research it has e.g., appeared that there are considerable occupational inequalities that determine exposure to unhealthy labour conditions (e.g., ergonomic hazards, boring and repetitive work, long working hours, having to work in shifts, low wages, being employed in temporary jobs, job insecurity ...), which are highly concentrated in low-skilled jobs. Such labour conditions are in their own turn associated with increased risks of a wide variety of diseases, such as respiratory diseases, certain cancers, musculoskeletal diseases, and mental diseases, such as hypertension, stress and anxiety. In addition to being exposed to such long-term

¹⁷Ali et al. (2020).

¹⁸Marmot et al. (2020), p. 6.

¹⁹Bambra et al. (2020), p. 965.

²⁰Ali et al. (2020).

²¹Marmot et al. (2020), p. 6.

factors that are detrimental for one's general health, inequalities in labour conditions also had an impact on the unequal distribution of the burden of the Covid-19 disease among groups of working people. An obvious example concerns the fact that many low-paid laborers (where, again, people belonging to BAME groups were represented in a disproportionate manner)—particularly people employed in the service sector, such as food preparing and delivery, cleaning and general delivery services—were during the Covid-19 pandemic much more at risk of being designated as key laborers. As a result, they were to a far bigger extent required to keep traveling to and back from work, often relying on public transport to do so as, because of their low wages, many of them did not have their own car. People belonging to these groups were also at higher risk of being obliged to keep showing up on the physical working floors. All these factors added to a much higher degree of exposure to the Covid-19 virus.²²

Similarly, access to healthcare appeared to be generally lower for people belonging to such disadvantaged and marginalised communities, even in countries that have universal healthcare systems.²³ E.g., In England, the number of patients per GP-short for "general practitioner"-was on average 15% higher in the most deprived areas of the country than in the least deprived areas, implying that access to the services of such a GP was more difficult in the former areas than in the latter ones. Medical and healthcare appeared to be even more unevenly distributed in countries such as the United States, where an estimated 33 million people belonging to the most disadvantaged and marginalised populations were said to have little or no access to medical and healthcare. Such reduced access to healthcare-both before the outbreak of Covid-19 and during the Covid-19 pandemic itself-is also believed to have added to the prevailing inequalities because of pre-existing chronic diseases. This inequal access to medical and healthcare services thus led to poorer Covid-19 outcomes for people living in such deprived areas and/or belonging to such marginalised communities. Another factor that added to this problem of inequal medical and healthcare access concerned the fact that people with pre-existing chronic diseases, such as cancer or cardiovascular disease, were also less likely to have access to treatment and diagnosis for such diseases in these deprived areas, to the extent that healthcare service-providers were overwhelmed by the Covid-19 epidemic itself.²⁴

Housing conditions have been indicated as one of the most important examples of socio-economic inequalities that qualify as socio-economic determinants of health. Exposure to poor quality housing has thus—already in times pre-Covid-19—been associated with a wide variety of health conditions and problems. E.g., damp, or ill-ventilated housing may result into respiratory diseases, such as asthma. Overcrowding can result into higher rates of infection from contaminated diseases but may also generate an increased risk of injury from domestic accidents.

²²Bambra et al. (2020), p. 965. Cf., furthermore, Ali et al. (2020).

²³Bambra et al. (2020), p. 965. Cf., furthermore, Ali et al. (2020).

²⁴Bambra et al. (2020), pp. 965–966.

(Cf. already in Sect. 7.11.1., on the poor housing conditions of laborers employed in the meat processing industries.) Housing may also have a wide impact on health in terms of equality, both materially because of costs (e.g., due to high rents) and psychosocially because of insecurity (e.g., short-term tenancies, poor renting agreements . . .). It is, hereby, a well-known fact that people belonging to the lowest socioeconomic groups are less likely to be able to afford good quality housing. As a result, they are more likely to become victims of the socio-economic determinant of health associated with bad housing conditions. Research has pointed out that some of these inequalities in housing conditions have a significantly contributed to the inequalities in Covid-19 exposure. E.g., deprived neighbourhoods are more likely to contain houses that are occupied by more households and/or houses with a lack of outdoor space, such as a garden. Such deprived neighbourhoods are also more likely of having higher population densities (which especially appeared to be the case for deprived urban areas), alongside a much lower access to communal green spaces. Already from the outset of the Covid-19 pandemic, it was considered likely that such housing and living conditions would add to the transmission rates of Covid-19, as had some years before been the case for H1N1, when strong associations had been found between infection rates and degree of urbanization. Even in cases when people in marginalised communities had no underlying health problems, the socioeconomic determinants of health associated with poor housing have contributed to making them more vulnerable to Covid-19 infection.²⁵

10.3.1.3.2 Mental Conditions

According to Bambra et al., decades of research on the socio-economic determinants of health associated with psycho-social factors has indicated that chronic stress due to material or psychological deprivation can suppress the immune-system, causing various related diseases. E.g., psycho-social emotions of subordination or inferiority resulting from one's position in the social hierarchy can stimulate physiological stress responses (such as elevated cortisol levels). Prolonged exposure to such stresses is believed to have long-term negative consequences on both physical and mental health.²⁶

By way of illustration, studies have indicated that there are consistent associations between, on one side, low occupational status (e.g., low control in the working environment, combined with high demands) and stress-related morbidity, besides a wide variety of chronic diseases, including coronary and/or heart disease, hypertension, obesity, musculoskeletal disorders and psychological ill health. There is also growing evidence that living in a deprived neighbourhood can attribute to a general sense of powerlessness and collective threat among residents. All these elements may, furthermore, result in what has been referred to as "chronic stressors" that can

²⁵Bambra et al. (2020), p. 966.

²⁶Bambra et al. (2020), p. 966.

ultimately damage health. Research has also pointed to the fact that such adverse psychosocial circumstances may have increased susceptibility—influencing the onset, course and outcome—of infectious diseases, such as Covid-19 itself.²⁷

10.3.1.4 Other Health Consequences of Covid-19

The association between Covid-19 and socio-economically determined health inequalities did not only manifest in terms of susceptibility of Covid-19 contamination and mortality itself, but also in terms of the health effects of certain policy responses to the pandemic. Certain countries, e.g., resorted to immediate health surveillance measures that have traditionally proven successful in combatting infectious diseases, such as contact tracing. Such measures were successfully applied especially by Asian countries, e.g., Taiwan and South Korea (cf. Sects. 2.4.2.4.1 and 2.4.2.4), to fight off the Covid-19 outbreak at early stages of the pandemic. To the extent that these measures successfully limited the breakthrough of Covid-19 on their territory, these countries also succeeded in avoiding the more detrimental effects on public health arising from, on one side, Covid-19 itself and, on the other side, harsher containment measures. However, most Western countries did not respond in such a manner. As a result, (neoliberal) governments around the world were eventually forced to implement far more severe mass quarantine and isolation measures, even in the form of lockdowns, of varying levels as the Covid-19 pandemic progressed. This inconsistent approach led to a variety of containment measures that, to a lesser or greater extent, put people in social isolation and confinement at home and/or in the immediate neighbourhood of their home setting.

These emergency lockdowns had many unequal health impacts amongst various groups of people. A first example concerned unequal experiences of lockdowns arising from a variety of (external) socio-economic factors, such as job and income loss, living in overcrowded accommodations, urbanization, (lack of) access to green space, being a keyworker... A second example related to how the lockdowns themselves attributed to the creation of new socioeconomic determinants of health, e.g., in cases when Covid-19 had led to an overall reduced access to healthcare services for non-Covid-19 diseases, due to the fact that the healthcare system was overwhelmed by the pandemic (having to provide hospitalizations for Covid-19 contaminated people, increased testing, etc.). A third example concerned inequalities related to the immediate health impacts of the lockdown measures themselves, e.g., in mental health and gender-based violence; or a lack of physical exercise and fresh air...²⁸

Arguably, the most impactful long-term consequences of the Covid-19 lockdown measures on health inequalities will be of a political and economic nature. Specifically, the global economy has been severely affected by Covid-19, with e.g., record

²⁷Bambra et al. (2020), p. 966.

²⁸Bambra et al. (2020), p. 966.

stock market drops on an almost daily basis, collapsing oil prices and record levels of unemployment. These economic consequences, moreover, appeared despite interventionist measures resorted to by a wide variety of national governments and central banks on a global scale (cf. Chaps. 3 and 4).²⁹ Economists have thus expressed their concern that the economic impact of the Covid-19 crisis will be far deeper than that of the financial crisis of 2007/2008, and perhaps even deeper than the Great Depression of the 1930s. Like the influenza pandemic of 1918 (which had a severe impact on economic performance and had led to increased poverty rates), the Covid-19 crisis is, therefore, believed to have a huge impact on the economy and, through this, on public health. As has been the case with previous economic crises, it is hereby likely that these consequences will impact the population in an inequal manner, thus further exacerbating health inequalities themselves.³⁰

10.3.2 Differences Between Countries

10.3.2.1 Inequalities Between Countries in the Treatment of Covid-19

In the assessment of Stiglitz, Covid-19 has been far from an "equal opportunity virus". In this renowned author's further opinion, the Covid-19 virus has on the contrary affected people in poor health and, among those, especially people whose daily lives expose them to more social and/or physical contact, to a much bigger extent than others. This basically comes down to the fact that Covid-19 has disproportionately attacked the poor, not only in poor countries, but also for poorer social groups living in advanced economies with no or no sufficient universal healthcare system, such as the United States.³¹

In the further opinion of Stiglitz, one of the main reasons why, in particular throughout 2020, the United States has been affected by such extreme numbers of Covid-19 contamination cases and Covid-19 related deaths (cf. Sect. 2.5), is that the United States has one of the lowest average levels of medical and healthcare access among the major developed economies.³²

Health(care) inequality was in the United States already extremely bad before the Covid-19 pandemic and has been worsening in capitalist economies the world over. (Cf. Chaps. 5 and 6) The Covid-19 crisis has revealed many more inequalities prevailing within capitalist societies, showing their huge impact on the life and

²⁹Bambra et al. (2020), p. 966.

³⁰Bambra et al. (2020), pp. 966–967.

³¹Stiglitz (2020).

³²Stiglitz (2020).

This can, amongst other factors, be illustrated by referring to the low life expectancy prevailing in the United States (which was in 2020 even lower than it had been 2013), in addition to high levels of health and healthcare-related disparities between various groups of the population. (Cf. Stiglitz (2020).)

health of communities on a global scale. The post Covid-19 pandemic world could, unfortunately, witness even greater effects of socio-economic inequality on health (care), unless governments finally start to do something about it. Furthermore, the fear of another pandemic, which may result in a repetition of all what has happened, keeps persisting.³³

These aspects will be examined below in relation to two of the countries where problems of inequality have been widely reported in the past³⁴ and where, moreover, a great deal of information is available on the subject, namely the United Kingdom and the United States.

10.3.2.2 Covid-19 and Inequality in the United Kingdom: Summary of the Findings of the 2020 Covid-19 Marmot Review

Research about the United Kingdom conducted by Marmot et al., has largely confirmed many of the assessments and assumptions made by Bambra, Riordan, Ford and Matthews, as referred to above. From this research undertaken by Marmot et al., it has, more in particular, appeared that, as far as the United Kingdom is concerned, many of the people who throughout 2020 and 2021 got contaminated with the Covid-19 virus, and/or died from severe Covid-19 illness, suffered from pre-existing health conditions determined by socio-economic inequalities, such as dementia, Alzheimer's disease, diabetes, cardiovascular diseases and other chronic diseases, such as chronic obstructive pulmonary disease and kidney disease.³⁵

According to Marmot et al., some of these pre-existing diseases, such as dementia, reflected the age groups amongst which Covid-19 deaths have mostly occurred. Other pre-existing diseases, such as diabetes, have in contrast been indicated as risk factors for adverse effects of Covid-19 infection among all age groups. The research by Marmot et al., also pointed to the fact that the underlying health risk factors associated with a more severe impact of Covid-19 were in most cases the result of poor health conditions determined by socio-economic inequalities.³⁶ Indeed, in England, as in most other countries throughout the world, Covid-19 related mortality rates appeared to have been higher in the more deprived areas, especially those where in the run-up to the Covid-19 pandemic itself, deprivation-related health inequalities were high and/or increasing. This implied that, within the United Kingdom, Covid-19 related death cases have followed a trajectory that is similar to mortality inequalities from other causes. Marmot et al. have summarized these findings by indicating that the more deprived an area of residence was or is, the higher Covid-19 mortality in that area has been.³⁷

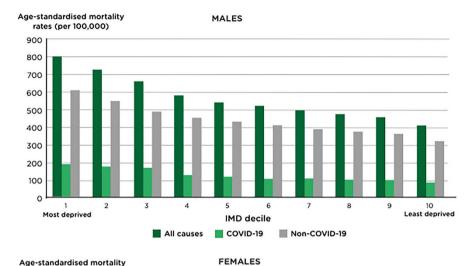
³³Stiglitz (2020).

³⁴Cf. Byttebier (2018), pp. 185–190 and Byttebier (2019), pp. 124–132.

³⁵Marmot et al. (2020), p. 13.

³⁶Marmot et al. (2020), p. 13.

³⁷Marmot et al. (2020), p. 13.



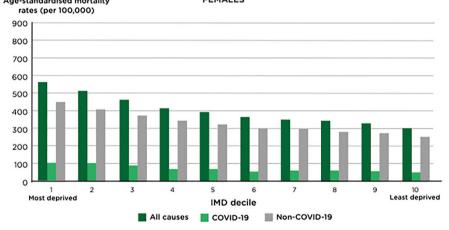


Fig. 10.1 Age-standardized mortality rates from all causes, Covid-19 and other causes (per 100,000), by sex, deprivation deciles in England, between March 2020 and July 2020

Figure 10.1³⁸ shows that Covid-19 related death rates in England between March 2020 and July 2020 have been twice as high in the most deprived areas than in the least deprived areas. From this figure, it moreover appears that there has been a clear gradient in deprivation-related Covid-19 death rates.³⁹

As predicted in the study by Bambra et al., there occurred in the United Kingdom significant regional differences in Covid-19 mortality rates. These were, e.g., related to poverty levels, occupational structure, ethnicity, age and housing conditions.

³⁸IMD Index of Multiple Deprivation; Source: ONS, Deaths involving Covid-19 by local area and socioeconomic deprivation, 2020 (10) [Source: Marmot et al. (2020), p. 15].

³⁹Marmot et al. (2020), p. 13.

From the research by Marmot et al., it e.g., appeared that during the first wave of the Covid-19 pandemic, London experienced the highest Covid-19 related mortality rate, while during the second wave of said pandemic, the Covid-19 mortality rate for the Northern regions were higher than the average for the whole of England. In contrast, the Southeast and Southwest regions of the country faced lower than average Covid-19 related mortality rates during both waves of the Covid-19 pandemic. With regard to the latter two regions, it however also appeared that their overall Covid-19 mortality rates in November 2020 were slightly higher than had been predicted in light of the low levels observed in the period from August until October 2020.⁴⁰

From the research of Marmot et al., it moreover appeared that overcrowded housing conditions and poor-quality housing were both associated with higher risks of mortality from Covid-19. Such dwellings were, in addition, more likely to prevail in generally deprived areas and in areas inhabited by people with low average incomes. The research by Marmot et al., also indicated that housing conditions had for many people significantly deteriorated over the decade starting in 2010, with overcrowding increasingly appearing in areas with a lot of rented houses. The research of said authors also pointed to a strong link between such situations of overcrowding and Covid-19 related mortality rates among children and young people under the age of 19.⁴¹

The research with regard to the relation between housing and the inequal impact of Covid-19 undertaken by Marmot et al., also confirmed that physical housing conditions had both a direct and an indirect impact on health. From this research, it, e.g., appeared that poor housing conditions, in general, increase the risk of contracting a wide variety of chronic diseases and infections, besides a wide variety of mental illnesses. However, overcrowding was not only associated with poor mental and physical health at a general level, but also appeared to be a high-risk factor for Covid-19 contraction and mortality. From the research undertaken by Marmot et al., it, moreover, appeared that housing costs are, generally speaking, also a key determinant of health. This was attributed to the fact that huge rental costs may push households living on low wages into poverty, which causes a poorer living quality and adds to both stress and a variety of mental health problems. From the research undertaken by said authors, it also appeared that due to the Covid-19 pandemic, housing became an even more important socio-economic determinant of health and general well-being than in normal circumstances. This was, e.g., due to the fact that during the lockdown periods, people had to spend much of their time in their homes, which for some exposed them to unsanitary and overcrowded living conditions, adding even more to the already existing stress of poor housing quality. Additionally, while all types of households-except for the very rich-experienced

⁴⁰Marmot et al. (2020), p. 15.

⁴¹Marmot et al. (2020), p. 16.

a general decline in welfare during lockdown periods, private renters appeared to have experienced the largest in such declines.⁴²

There also appeared significant regional differences regarding the quality of housing which had a meaningful impact on differences in experiences during the lockdown periods.⁴³

The lockdown measures appeared to have further exacerbated the abovementioned health inequalities associated with inequal housing conditions. E. g., it appeared that, during the lockdown periods, people living in houses with gardens—who, in addition, tended to be more affluent, and also "white" rather than "BAME"—were less likely to have missed out on the significant positive effects of spending time outdoors on health and general wellbeing. It thereby appeared that during the Covid-19 pandemic, inequalities in access to outdoor space were even more exacerbated than in normal circumstances.⁴⁴

With rising unemployment and falling wages resulting from the closure of the economy and/or specific business, housing costs, moreover, became an even greater burden than in normal times.⁴⁵

In general, throughout 2020, housing costs remained high throughout England. This was because real-estate prices had risen due to stamp duty. In order to be able to pay the high or even rising rent costs, almost 20% of both private and social tenants had to cut back on other essential spending. In addition, 16% of private tenants and 12% of social tenants, started to use their savings in order to pay their rent. Other people even had to start borrowing money in order to be able to pay their rent. Even people with existing mortgages had in some cases to reduce their expenditure and/or use their savings for paying rents, but to a lesser extent.⁴⁶

The economic impact of Covid-19 in general and the difficulties connected with paying rent also led to increased homelessness. Already between 2010 and 2017, the number of homeless people in England had risen by 165%. During the early Covid-19 period, albeit for a brief time only, the UK government resorted to unprecedented action for fighting homelessness. As a result of this policy approach, in March 2020, the UK government both ordered and funded local authorities across the country to accommodate homeless people during the Covid-19 panic. 15,000 homeless people in England were thus, albeit for a brief time only, accommodated in safe emergency housing, such as empty hotel rooms. In addition, homeless people were also given access to social benefits and medical treatment. Regretfully, this policy approach was soon abandoned, implying that homeless people were soon left on their own again. In part due to the loss of jobs and homes during the lockdowns, there has since

⁴²Marmot et al. (2020), p. 48.

⁴³E.g., in the West and East Midlands, in Yorkshire and in the Humber, more than one in five homes had failed to meet the decent home standards in 2017, while this percentage "only" amounted to 16% in the Southeast and to 11% in the Northeast. (Cf. Marmot et al. (2020), p. 49.)

⁴⁴Marmot et al. (2020), p. 49.

⁴⁵Marmot et al. (2020), p. 49.

⁴⁶Marmot et al. (2020), p. 49.

been an increase in the number of homeless people, including people who resorted to temporary accommodation, such as friends' or relatives' sofas. A factor adding to this problem was that many support services had to cease face-to-face work and/or move online, which reduced their access and usefulness for providing shelter to homeless people.⁴⁷

As it appears from Fig. 10.2,⁴⁸ some occupations had significantly higher Covid-19 mortality rates. These professions included: (1) jobs that could not be performed from at home, (2) jobs that required physical proximity to other people, (3) lowerlevel jobs, (4) jobs with a higher-than-average percentage of older laborers, and (5) jobs that were more likely than others to be occupied by BAME people.⁴⁹

From the research of Ali, Asaria and Stranges, quoted earlier, it similarly appeared that people belonging to marginalised groups were in the United Kingdom disproportionately represented in jobs for which home-based work was impossible. People performing such jobs were, hence, more than average exposed during the Covid-19 pandemic. Said authors thereby refer to a poll in which 2108 adults residing in the United Kingdom were surveyed in March 2020. From this survey, it appeared that people belonging to the lowest income households had been six times more likely not to be able to work from home during the Covid-19 pandemic. It, moreover, appeared that people belonging to these low-income households had been three times less likely of being capable of isolating themselves in their homes, which has in part been attributed to the prevalence of crowded housing conditions, whereby people from different generations had to live together. Many of the people belonging to such low-income households were, moreover, employed as low-skilled staff and without permanent contracts, which made them in times of Covid-19 even more vulnerable. The labour conditions to which these people were subjected raised serious questions. One of the main matters of concern was the uncompensated inequality of risk exposure to which these people were systematically subjected. These issues were however very rarely, if ever, dealt with in the policy measures resorted to for fighting the Covid-19 pandemic.⁵⁰ (Compare Sect. 7.11.1, dealing with the working and housing conditions of meat processing workers.)

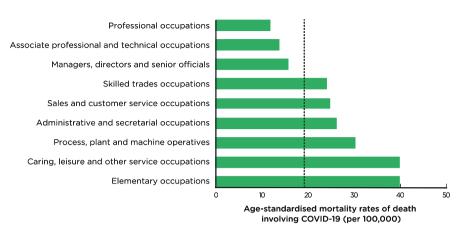
Figure 10.2 gives an overview of the age-standardised mortality rates at ages 20 to 64, by sex, and major occupational group (involving Covid-19 registered in England and Wales, between 9 March 2020 and 25 May 2020).

According to Marmot et al., the UK Office for National Statistics (ONS) identified 17 professions as extremely risk-prone during the Covid-19 pandemic. Among

⁴⁷Marmot et al. (2020), p. 50.

⁴⁸"Elementary occupations are those that require the knowledge and experience necessary to perform mostly routine tasks. Most occupations in this major group do not require formal educational qualifications but will usually have an associated short period of formal experience-related training. The vertical line represents the average death rate at ages 20 to 64 in England and Wales, for men and women with an occupation, respectively. Source: ONS, Coronavirus (Covid-19) related deaths by occupation, England and Wales 2020 (15)" [Source: Marmot et al. (2020), p. 32]. ⁴⁹Marmot et al. (2020), p. 17.

⁵⁰Ali et al. (2020).





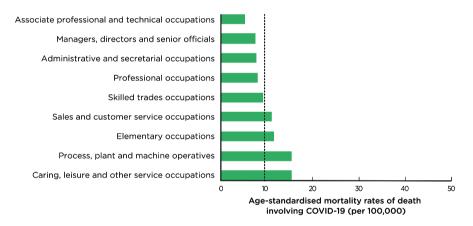


Fig. 10.2 Age-standardised mortality rates at ages 20 to 64, by sex, and major occupational group, deaths involving Covid-19 registered in England and Wales, between 9 March 2020 and 25 May 2020

the professions with the highest Covid-19 mortality rates were security guards and related professions, healthcare and home care workers, and taxi drivers and chauffeurs. Most of these professions were subjected to a high Covid-19 mortality risk, with mortality rates that were on average twice as high as during the previous 4 years. These high mortality rates have been attributed to the fact that all these occupations required much physical proximity to strangers. Again, it appeared that many of these occupations with higher-than-average Covid-19 mortality rates were largely represented among BAME people.⁵¹

⁵¹Marmot et al. (2020), p. 18.

People belonging to BAME groups were also more likely to be subjected to discriminatory practices regarding workplace safety during the Covid-19 pandemic. Specifically, people identifying as either Black African, Bangladeshi or Pakistani, had been less likely of being provided with effective PPE than their white colleagues. In addition, there was a higher number of people identifying as Pakistani (20%) or Indian (20%) and working in key professions who indicated that their safety complaints had been remained largely unaddressed during the first UK lockdown period. However, such workplace abuses were not only referred to as a major problem during the Covid-19 lockdowns, but moreover indicated as a long-standing problem prior to Covid-19. Many BAME people who responded to surveys on these matters indicated that they were reluctant to raise these issues because of bad past experiences and out of fear of negative consequences, such as job loss, when speaking out.⁵²

Research funded by the Medical Research Council and published in The Lancet confirmed these findings on the peculiar situation of BAME people in times of Covid-19. From this research, it appeared that people belonging to BAME groups in the United Kingdom had been at excess risk of Covid-19 contamination, besides more adverse Covid-19 disease outcomes, compared to white people.⁵³

Another professional group that had in the period between 9 March 2020 and 25 May 2020 been at higher-than-average risk of contracting and/or dying from Covid-19 in the United Kingdom, were social and healthcare workers. For both men and women occupying these professions, Covid-19 related death rates had, more-over, been higher for social workers than for healthcare workers.⁵⁴

While the research from Marmot et al., indicated that Covid-19 related mortality rates varied significantly across professions, it appeared from the same research that there were additional differences within the same occupational groups in accordance with factors such as age, health status and place of residence. It, e.g., appeared that people performing low-risk occupations, such as managers and people in free professions, were within their professional group still exposed to a higher than average risk of Covid-19 related mortality when living in a deprived area, whereas people belonging to a professional group at higher risk, such as frontline workers, where subjected to a much lower than average risk of Covid-19 related mortality when living in a wealthier area. This added to the importance of the level of deprivation of the place of residence for assessing the mortality risk related to Covid-19.⁵⁵

⁵²Marmot et al. (2020), p. 18.

⁵³Mathur et al. (2021).

According to said authors, this even appeared to be the case after accounting for differences in socio-demographic, clinical and household characteristics. The researchers, moreover, stressed that delineating the exact mechanisms underlying these causes was of vital importance. The researchers also stated that addressing ethnic inequalities requires action on many fronts, including reducing structural inequalities, removing barriers to equity of care, and improving uptake of screening and vaccination. (Cf. Mathur et al. (2021), p. 11.)

⁵⁴Marmot et al. (2020), p. 18.

⁵⁵Marmot et al. (2020), p. 19.

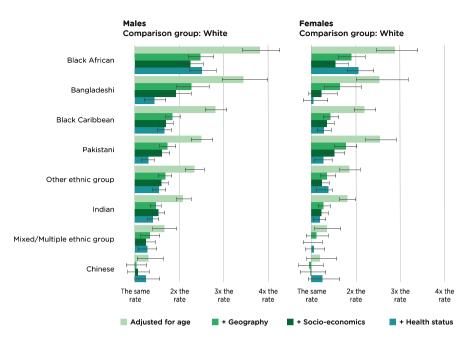


Fig. 10.3 Death rates at ages 9 and over involving Covid-19 by ethnic group and sex relative to the White population, taking account of demographic, socioeconomic and health-related factors, England, from 2 March 2020 to 28 July 2020

Regardless of occupation, it was found that people belonging to BAME groups throughout the United Kingdom were generally exposed to higher risks of mortality from Covid-19 than people belonging to the white population. This has in part been attributed to the fact that people belonging to these groups were more likely to (1) be employed in high-risk occupations, (2) live in deprived areas, and/or (3) suffer from underlying health conditions that increase the risks related to Covid-19 risk, such as diabetes and asthma. All of these conditions have, moreover, been indicated as being the result of socio-economic inequalities and long-standing structural racism. However, according to Marmot et al., even this large degree of inequal treatment in various domains of socio-economic life does not fully account for the higher mortality rates of people belonging to BAME groups. Figure 10.3⁵⁶ indicates that

⁵⁶"1. Cox proportional hazards models adjusting for age, geography (local authority and population density), socioeconomic factors (area deprivation, household composition, socioeconomic position, highest qualification held, household tenure, multigenerational household flags and occupation indicators—keyworkers and exposure to others), and health (self reported health and disability status in March 2011, and hospital-based co-morbidities since April 2017). 2. Figures relate to persons enumerated living in private households as indicated by the 2011 Census, for whom deaths that occurred between 2 March and 28 July could be linked to ethnic group data from the 2011 Census. 3. 'Other ethnic group' encompasses Asian other, Black other, Arab, and other ethnic group categories in the classification. 4. Error bars not crossing the x axis at value 1.0 denote a statistically significant difference in relative rates of death. Source: ONS, Covid-19 related deaths by ethnic group, England and Wales, 2020" [Marmot et al. (2020), p. 43].

even after controlling for age, geography, socio-economic factors and health, mortality rates still remained the highest for men and women of black African origin, while all the other BAME groups identified had higher Covid-19 mortality rates than white people.⁵⁷

The already-above cited research that was funded by the Medical Research Council, in addition, suggests that while some BAME groups were less likely to test positive for Covid-19 than others, all non-white groups were more likely to test positive for Covid-19, even when only taking people that have ever been effectively tested into consideration. According to these researchers, such a finding could suggest that people belonging to the white population were tested more frequently, e.g., also when only suffering from mild symptoms or when being completely asymptomatic, and/or that people belonging to minority ethnic groups were themselves only tested when showing more severe symptoms or at more severe stages of the Covid-19 disease. This could imply that, in general, people belonging to BAME groups were less frequently tested and that, in cases that they were tested due to severe symptoms, they were more likely of testing positive. It has, furthermore, been observed that disparities in testing may have been related to a wide variety of factors, such as lack of access to testing sites, lower health literacy, lack of appropriate and accessible—i.e., in a language that people from BAME groups could understand health communications, and/or differences in testing behaviour. Further evidence also suggests that people belonging to BAME groups may have avoided testing out of fear of losing income or employment when testing positive for Covid-19. Given that people belonging to BAME groups were also more likely to be employed in precarious jobs characterized by poor working conditions, as well as in critical or key positions (e.g., healthcare labour) associated with a higher risk of Covid-19 mortality, it has also been suggested that people belonging to BAME groups generally faced higher socio-economic barriers against testing. From the same research, it furthermore appeared that people belonging to BAME groups were exposed to a higher risk of hospitalization, ICU admission and/or death from Covid-19, even after controlling for clinical comorbidities.⁵⁸

Figure 10.3 gives an overview of the death rates in England, at ages 9 and over, involving Covid-19 by ethnic group and sex relative to the white population, taking account of demographic, socioeconomic and health-related factors, from 2 March 2020 until 28 July 2020.

According to Marmot et al., one of the most immediate impacts in the United Kingdom of the containment measures the UK government resorted to during the early stages of the Covid-19 pandemic, has been unemployment. This, moreover, appeared to be the case even despite the "Coronavirus Job Retention Scheme" that aimed to protect as many jobs as possible. Another effect of Covid-19 on employment concerned regional inequalities in unemployment. Such regional differences with regard to unemployment levels were already high before the Covid-19 pandemic, but Covid-19 made them increase even further up to September 2020. It was,

⁵⁷Marmot et al. (2020), p. 19.

⁵⁸Mathur et al. (2021).

moreover, expected that these regional differences would continue to increase after March 2021. The same applies to regional health inequalities which were also expected to increase in the long term.⁵⁹

Until September 2020, it was more likely for part-time laborers and the selfemployed to lose their jobs. It was also more likely for low-paid laborers than for high-paid laborers to become technically unemployed, in which case the already low income of the former group was reduced even more by an average of 20%. It was feared that many of the people belonging to the low-income groups would fall into poverty, given the fact that many of these people did not have sufficient savings or other means to withstand an economic shock.⁶⁰ In terms of ethnicity and age, it, furthermore, appeared that older workers identifying as Pakistani, or Bangladeshi were more likely to be working in the informal economy and to be, hence, particularly affected by wage cuts. For other ethnic groups, it was mainly the younger workers who were most affected by wage reductions.⁶¹

Furlough schemes and temporary measures of increased social benefits helped to alleviate the loss of earnings for many people, but they were, however, considered insufficient. Wages in the United Kingdom had already been low before the Covid-19 pandemic, as a result of which "in-work poverty" had risen significantly during the previous decade. By 2010, 221,000 people in England were earning less than the national minimum wage. By 2019, just before the Covid-19 outbreak, this figure amounted to 354,000 people who earned less than the "National Minimum Wage" (for those under 25) or the "National Living Wage" (for those aged 25 and over). However, by April 2020, the total number of people earning an income below these minimum wage and living rates had risen to an incredible 1.7 million. Of these, 649,000 had not been put on furlough due to Covid-19, and just over one million had been furloughed.⁶²

The negative impacts of low pay on health have been clear for a long time already. The large increases of low-paid jobs of the past decade have also been found to have widened health inequalities even more. But at the same time, the highest paid people saw their hourly pay increase faster in 2020 than it already had in 2019, further widening pay and health inequalities in England.⁶³

According to Marmot et al., the self-employed have been particularly affected by the measures for mitigating Covid-19, many of whom had to stop working while being ineligible for benefits under the furlough scheme.⁶⁴

⁵⁹Marmot et al. (2020), p. 35.

⁶⁰Marmot et al. (2020), p. 36.

⁶¹Marmot et al. (2020), p. 37.

⁶²Marmot et al. (2020), pp. 37–38.

⁶³Marmot et al. (2020), p. 38.

⁶⁴Marmot et al. (2020), p. 38.

This group included many people working in the entertainment economy, without permanent employment contracts and against low wages. These people were already at risk of poverty, with all its health consequences, in times preceding Covid-19. (Cf. Marmot et al. (2020), p. 38.)

In addition to the fact that the social care sector has been one of the sectors with the highest death rates from Covid-19 disease, the Covid-19 crisis also highlighted the difficult labour conditions and low wages that already characterised the sector before the Covid-19 outbreak.⁶⁵

The Covid-19 containment measures that the UK government resorted to for fighting the pandemic had in general a significant negative impact on the economy, as well as for a large proportion of the UK population. Still, the level of this negative impact varied considerably between households, depending on a variety of factors, such as prior socio-economic position, region of residence, profession, age, ethnicity and disability. It was expected that these inequal impacts would result into a further widening of income and wealth inequality in the United Kingdom.⁶⁶ One of the most immediate impacts of the mitigation measures resorted to for fighting Covid-19. including school closures, has been a rapid increase in food poverty and hunger. Already prior to the outbreak of Covid-19, food insecurity had been a major concern in the United Kingdom,⁶⁷ with the Trussell Trust having indicated that around 8-10% of households were moderately or severely food insecure between 2016 and 2018. These levels increased significantly during the Covid-19 pandemic, which has been attributed to a variety of factors, such as loss of jobs and income, as well as school closures (during which children were no longer served school meals) and the additional costs for households due to having to take care of their children at home.⁶⁸ (Cf., furthermore, Sect. 7.2.2).

⁶⁶Marmot et al. (2020), p. 41.

⁶⁵Marmot et al. (2020), p. 38.

Throughout the United Kingdom, at the time of the Covid-19 outbreak, over 900,000 people were primarily employed in frontline social care. A high proportion of these were women (83%), with 18% stemming from BAME groups compared to 12% for all occupations. Only one in ten social workers in the United Kingdom had a permanent contract, and 70% earned less than £10 per hour. The North of England had the highest proportion of low-paid care laborers and were also the region whose nursing homes have been most affected by Covid-19. (Cf. Marmot et al. (2020), p. 38.)

Pre-Covid-19 pandemic levels of income and poverty were directly related to the difficulties experienced by a growing number of households during the Covid-19 pandemic. By the end of July 2020, almost one in three people indicated that they would no longer be able to save for the coming year, while there was evidence of increasing debt, poverty and risk of homelessness amongst the low-income households. Food poverty was indicated as one of the most visible and immediate effects of the Covid-19 pandemic, with the use of food charity increasing from already high levels. (Cf. Marmot et al. 2020, p. 41) While it appeared that a third of households in the top income quintile saved more than usual during the Covid-19 lockdown periods, lower income families had been more likely to have taken on additional debt, with about 50% of those with savings of less than £1000 having used them to cover their day-to-day expenses. (Cf. Marmot et al. (2020), p. 43.) ⁶⁷Cf. Byttebier (2018), pp. 186–188.

⁶⁸Marmot et al. (2020), p. 43.

In the period between March 2020 and August 2020, four million people in UK households with children were food insecure. This amounted to 14% of all UK households, compared to 12% before the outbreak of the Covid-19 pandemic. By September 2020, the prevalence of food insecurity in BAME households with children was almost 50% higher than in white households with children. Households with an adult or child experiencing a long-term health problem or disability appeared to

The findings from Marmot et al., were largely confirmed in an NAO report of 13 May 2021, which found that the Covid-19 pandemic had a disproportionate impact on certain groups of people. The report, e.g., stated that:⁶⁹

- (1) The Covid-19 virus had been disproportionately lethal to BAME groups, the elderly, men (compared to women), and groups of people suffering from certain pre-existing medical conditions.
- (2) The school closures had especially been affecting children from a disadvantaged background, while the measures for resorting to distant schooling did not provide a sufficient solution for these groups.

10.3.2.3 Covid-19 and Inequality in the United States

In the United States, a study that appeared in The Lancet on 20 April 2021, in a similar manner, largely confirmed many of the earlier referred to postulates of Bambra, Riordan, Ford and Matthews. Said study, moreover, aims to draw public policy conclusions from these observations (cf. Sect. 10.3.1), especially referring to the fact that under the Biden-Harris administration, a renewed attention is to be paid to the intrinsic qualities of the United States that exacerbate vulnerability to the Covid-19 pandemic and that manifest themselves in a wide variety of racial and class disparities with regard to Covid-19 related morbidity, mortality and vaccination.⁷⁰ To the extent that the Biden-Harris administration indicated that public health would be at the centre of national priorities,⁷¹ the time was deemed ripe for adapting the US social and healthcare systems by abandoning all racial and other inequalities.⁷²

According to researchers Reinhart, Dawes and Maybank, American physicians and scientists already know for a long time that working conditions and economic security rank among the most important socio-economic determinants of health. Unfortunately, according to these researchers, most healthcare systems around the world, particularly the ones of the United States, have been designed around reductive and monetary notions of value. To the extent that the latter notions of value have mainly been determined by the doctrine of economic neoliberalism, they, moreover, appear to be completely at odds with the aim of achieving prevention (with regard to matters related to health), intrinsic fairness, anti-racism, and a focus on equitable care. The maintenance of what said researchers refer to as "reductive biomedical and economic emphases" has in the United States, furthermore, resulted into extremely narrow views on healthcare and even to a political disempowerment

be at much higher risk, accounting for more than 40% of the households that experienced food deprivation and/of poverty. (Cf. Marmot et al. (2020), p. 43.)

⁶⁹National Audit Office (NAO) (2021), pp. 27–28.

⁷⁰Reinhart et al. (2021).

⁷¹On the Biden-Harris health plan, cf. Biden (2021).

⁷²Reinhart et al. (2021).

of physicians on all relevant health-related issues, such as disease prevention and patient protection.⁷³

Said authors also argue that the Covid-19 pandemic made clear that in the United States, healthcare as well as the socio-economic determinants of health have to a large extent become a matter of politics and individual choice, rather than as a collective good. For said authors, maintaining such an approach cannot be a viable option. Instead, among the most important policy domains in which the opinions of physicians and scientists should be listened to more, are those related to matters such as labour protection, employment, health insurance and housing. These are all matters revealed to have been of great relevance to the manner in which Covid-19 has affected the American society. E.g., policy decisions that determine laborers' rights, labour conditions, income security and/or healthcare insurance, are all likely to influence national infection control, but even global biosecurity. In the long run, this will prove to be vital for protecting a sound national and global economy. As the Covid-19 pandemic has indicated, continuing to neglect this fundamental reality could even have more serious implications for the more than 2 billion people living in poverty around the world than Covid-19 itself already had.⁷⁴

For these researchers, in the United States, despite abundant wealth, public policy has basically failed to provide for an adequate system of socio-economic protection and health care for the general population, and especially for those belonging to deprived groups. Said researchers thereby point to the irony that, during the Covid-19 pandemic itself, essential laborers such as healthcare workers were publicly praised, but that, to the extent that practically no consideration was given to their health protection or social status, they were simultaneously treated as disposable. Of particular relevance in this regard has been the fact that women from BAME groups were over-represented both among those who had to continue to show up at the physical working floors in high-risk environments, such as hospitals and nursing homes, as well as among those who were most likely of losing their jobs and experiencing the highest levels of unemployment.⁷⁵ In addition, it similarly appeared from the research of Reinhart, Dawes and Maybank, that almost all US states had overlooked the most at-risk essential laborers—which, according to the data gathered by said researchers are people working in the sectors of food distribution, agriculture, transportation and manufacturing-in the early distribution schemes for the Covid-19 vaccines, while, in contrast, high-level professions such as physicians had not been left out.⁷⁶

Reinhart, Dawes and Maybank in addition argue that the Covid-19 virus has in the United States largely benefited from long-standing synergies, generated by public policy (or, in other words, by a public policy largely based on the dictates of economic neo-liberalism), between structural misogyny, racism, inadequate

⁷³Reinhart et al. (2021).

⁷⁴Reinhart et al. (2021).

⁷⁵Reinhart et al. (2021).

⁷⁶Reinhart et al. (2021).

welfare and social benefits, and epidemiology.⁷⁷ This explains why, in the United States, millions of people, especially people belonging to the working classes, have been infected with Covid-19 and thousands have died from Covid-19. Said factors also explain why a disproportionate number of those being contaminated with or dying from Covid-19, were people belonging to BAME groups, particularly those employed in the healthcare sector, such as nursing assistants and health care aides of low occupational status. Of these, a disproportionate number were women, mirroring the fact that the minority female labour force, often stemming from immigrant populations, forms the basis of healthcare provision, not only in the United States, but also in the United Kingdom, besides many other countries.⁷⁸

10.4 Global Inequality Regarding Access to the Covid-19 Vaccines

In addition to the many inequalities that characterised the uneven impact of Covid-19 between groups of society within several countries around the world, there was perhaps an even greater problem of inequalities between countries. The latter category of inequalities proved to be the most acute in terms of access to the Covid-19 vaccines.⁷⁹ (Cf. already before, in Sect. 9.6.2.)

According to Duke University's Global Health Innovation Center, by the end of April 2021, high-income countries had purchased more than half of the Covid-19 vaccine stockpile, and low-income countries only 9%. This explains why, by the beginning of May 2021, a country like the United States was on the verge of having vaccinated half its population with a single dose of a Covid-19 vaccine, while the

⁷⁷Reinhart et al. (2021).

⁷⁸Reinhart et al. (2021).

According to Reinhart, Dawes and Maybank, in the American context that is far more attentive to the mantras of profit and economic growth than to those of care and social justice, and where at least half of the population lives in fear from bankruptcy due to a health event, the financial fallout from Covid-19 and the resulting long-term disability for many is expected to have a further huge impact in the near future. Because of existing disparities in wealth, pay and opportunity, these impacts will particularly affect women and people of colour. In the opinion of Reinhart, Dawes and Maybank, these circumstances are politically determined, not accidents or surprises. E.g., local, state and federal policies have never adequately supported the most marginalised populations in the United States. At the same time, over the decades, US medical institutions have gained wealth and political influence through income-driven health care systems that are said to have normalised inequalities and barriers to access, already in "normal times" having resulted in tens of thousands of preventable deaths each year. As the United States attempts to emerge from a pandemic that has exposed the inadequacy of its healthcare infrastructure, Reinhart, Dawes and Maybank argue that the medical community has a vital opportunity to mobilise its political influence for opposing the continued exploitation of laborers who, as a result of public economic policy, are easily passed over into the ranks of the unemployed, bankrupt, ill-housed, sick or dead. (Cf. Reinhart et al. (2021).)

⁷⁹Belluz (2021).

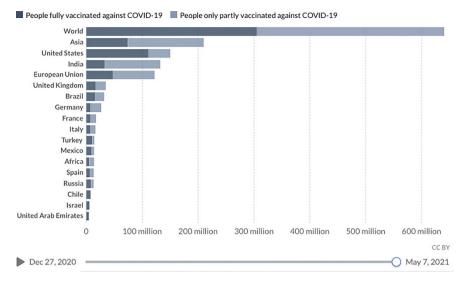


Fig. 10.4 Number of people vaccinated against Covid-19 by 7 May 2021. [Source: https://ourworldindata.org/covid-vaccinations. Accessed on 8 May 2021]. Source: Official data collated by Our World in Data

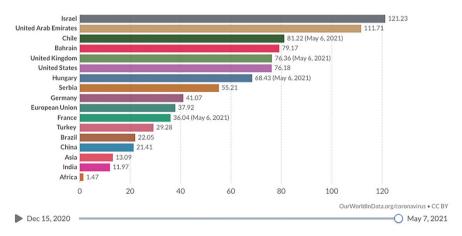


Fig. 10.5 Number of Covid-19 doses administered per 100 people, 7 May 2021. [Source: https://ourworldindata.org/covid-vaccinations. Accessed on 8 May 2021]

rate in a country like Guinea was less than 1% (and not moving at all).⁸⁰ Figure 10.4 gives an overview of the number of people vaccinated against Covid-19 by 7 May 2021 in some countries. By comparison, Fig. 10.5^{81} gives an overview of the number of Covid-19 doses administered per 100 people, on 7 May 2021

⁸⁰Belluz (2021).

⁸¹Source: Official data collated by Our World in Data—Last updated 8 May, 12.10 (London time).

At the beginning of May 2021, it was estimated that if the prevailing gross inequalities with regard to accessing the Covid-19 vaccines were to continue, it would take the large group of poor countries unable to pay the high prices for the Covid-19 vaccines at least 2 more years to vaccinate the majority of their population. This implied that at the beginning of May 2021, not accounting for possible, more resistant variants of the Covid-19 virus, the world was on the road to a long period during which people in high-income countries would enjoy the benefits and safety of a full vaccination against Covid-19, while the population of low-income countries would continue to suffer for some more years to come.⁸²

While such a situation is, obviously, intrinsically unjust and unacceptable, it is also against the interests of the high-income countries and their populations themselves: as long the Covid-19 virus continues to circulate, there is a risk that new variants will emerge, some of which could prove to be resilient against the existing Covid-19 vaccines. This insight led to an increasing awareness that the continuation of the Covid-19 pandemic in poor countries would continue to pose a threat to the entire world, including the countries that already had established a sufficient Covid-19 vaccination threshold.⁸³

From a socio-economic perspective, it has not been a coincidence that many of the world's first approved Covid-19 vaccines-notably the BioNTech-Pfizer, Oxford-AstraZeneca and Moderna Covid-19 vaccines-had been developed, produced and first implemented in the most prosperous high-income countries. When the Covid-19 pandemic first took hold as of January 2020, it was mainly the wealthier nations, like the United States, the United Kingdom and the EU bloc, where the pharmaceutical industry had their head offices, their research and development departments and their main production plants. The richer countries had, moreover, paved the way for the development of the Covid-19 vaccines, in part indirectly through supporting universities where high-level viral and vaccine research was taking place for decades already, but also directly through funding and other forms of support for developing the Covid-19 vaccines in particular. This explains why, already as of March 2020, some of the world's richest countries started making deals with the pharmaceutical enterprises for the development of Covid-19 vaccines. However, some of said rich countries had also been purchasing Covid-19 vaccine candidates, although these were not yet completely ready. (Cf. Sect. 9.3) Moreover, most of these agreements were negotiated on a bilateral basis, i.e., between a single country (or, in the case of the EU, a group of countries) and a single pharmaceutical enterprise (or, in the case of, e.g., BioNTech and Pfizer, two cooperating pharmaceutical enterprises). In accordance with some of these agreements, the governments of some rich countries were basically giving the pharmaceutical enterprises billions of dollars to accelerate research and development, in some cases in exchange for priority access to the Covid-19 vaccines (in case these would prove to be effective). However, these bilateral agreements also pushed

⁸²Belluz (2021).

⁸³Belluz (2021).

the poorest countries further down the Covid-19 vaccine access line. They had little choice, as they lacked the financial resources to subsidize the pharmaceutical industry and purchase millions of doses of the Covid-19 vaccines in advance at the risk that these would eventually prove to be ineffective or not get the necessary approval(s).⁸⁴

Through these early agreements, rich countries overflowed with a glut of vaccines, with some countries' stocks exceeding their population several times. E.g., by March 2021, Canada had purchased enough of the Covid-19 vaccine doses for inoculating five times its population, while the United States had purchased at least two times the amount of Covid-19 vaccine doses it actually needed. There, moreover, appeared to be huge differences between high- and low-income countries in terms of effective administration of the Covid-19 vaccine doses as well. While high-income countries were at the time home to 16% of the world's population, by the end of April 2021, they accounted for 46% of the one billion by then administered doses of Covid-19 vaccines. The poorest countries, at the time home to 10% of the world's population, had only been administering 0.4% of these doses. The lowermiddle-income countries, at the time accounting for 40% of the world's population, represented 19% of all doses of the Covid-19 vaccines administered.⁸⁵

In addition, many of the Covid-19 vaccine producing countries had resorted to export controls, or similar trade-obstructing measures, to relentlessly stockpile Covid-19 vaccines. In March 2021, the (de facto) US and UK export bans with regard to the Covid-19 vaccines even became a source of severe diplomatic tensions between both countries and the EU, which then started resorting to export restrictions of its own to address domestic supply shortages.⁸⁶ (Cf. Sect. 9.4.3.10.)

Curiously, this shameless hoarding of Covid-19 vaccines in rich countries to the detriment of poor countries, occurred in parallel with a large-scale and unprecedented multilateral effort to support the development and equitable distribution of 2 billion doses of the Covid-19 vaccines to the world's poorest countries by the end of 2021, called "COVAX". The COVAX initiative, an initiative of the WHO and the EU, (initially) had two main components: (1) establishing a buying group at the level of high-income countries, and (2) a fundraising effort to the benefit of the poorest countries. The idea was that by pledging to buy a certain number of Covid-19 vaccine doses from the vaccine manufacturers, participating countries would gain

⁸⁶Belluz (2021).

⁸⁴Belluz (2021).

By May 2020, e.g., the US government had given AstraZeneca USD 1.2 billion for 300 million doses of the Oxford-AstraZeneca Covid-19 vaccine that a year later—namely in May 2021—had not even received an EUA in the United States. By January 2021, rich countries had already pre-purchased 96% of the entire production of the BioNTech-Pfizer Covid-19 vaccine for the year 2021, while 100% of Moderna's supply had already been sold. By April 2021, after the US market had been supplied with enough of the mRNA Covid-19 vaccine doses, the EU reached an agreement with Pfizer-BioNTech for acquiring 1.8 billion doses of their Covid-19 vaccine. (Cf. Belluz (2021).)

 $^{^{85}}$ Belluz (2021).

access to all of the Covid-19 vaccines approved in the COVAX portfolio. The further aim of this imitative was the creation of a global market for vaccines and to lower prices. But, in reality, the bilateral agreements mentioned above (even between the EU and most of the Covid-19 vaccine producing enterprises) took a lot of bargaining power away from COVAX, with some rich countries even wanting to have it both ways: becoming a member of COVAX so they could proclaim that they were good global citizens, while depriving COVAX of its lifeblood, namely Covid-19 vaccine doses that said countries (including the EU) first bought for themselves.⁸⁷

As of early May 2021, it was increasingly suggested that the Covid-19 vaccine manufacturers should have their patents lifted, which would allow other medicine manufacturers to enter the field of Covid-19 vaccine production.⁸⁸

For more considerations on the underlying policy questions, we additionally refer to the conclusions of Chap. 9. (Cf Sect. 9.6.)

10.5 Conclusions

10.5.1 General Assessment

According to Bambra et al., pandemics—besides a variety of other health-related problems—have historically always been experienced unevenly. There have always been higher rates of contamination and mortality among the most disadvantaged communities, even more so as socio-economic inequalities deepen. Recent evidence from a range of countries shows that this has also been the case with the Covid-19 pandemic.⁸⁹

Then as now, these inequalities show the so-called "syndemic nature of communicable diseases", such as Covid-19. This term means that a contagious disease interacts with and further exacerbates existing socio-economic inequalities, amongst which the so-called "socio-economic determinants of health". In this way, Covid-19

⁸⁷Belluz (2021).

⁸⁸Belluz (2021).

However, specialists pointed to many practical hinderances. E.g., vaccine producers cannot turn to just anyone or any other company to meet certain standards with regard to the production, storage and shipment of their vaccines. Instead, they can only resort to qualified suppliers that comply with high standards set by regulatory agencies such as the US FDA or the EU EMA. Such suppliers sell products that have been sufficiently tested and that meet a high burden of prove that, e.g., their plastic bags or containers do not leak toxins into the vaccines or cause allergic reactions. Specialists also pointed to another, even more important problem that intellectual property exemptions, as such, cannot solve. A transfer of technology from one vaccine manufacturer to another involves sharing trade secrets, know-how and even skilled personnel. The enterprises that successfully developed the Covid-19 vaccines may simply not have a surplus of 20–40 people to send elsewhere in order to help set up a new production line. (Cf. Belluz (2021).)

⁸⁹Bambra et al. (2020), p. 966.

has exposed long-standing socio-economic and political inequalities in Western capitalist societies. 90

It has similarly been feared that there will be a global socio-economic collapse after Covid-19. This could worsen the health equity situation in the West even more, especially to the extent that health-damaging austerity policies will again be resorted to after Covid-19 (as has been the case in the aftermath of the financial crisis of 2008; cf. Chap. 5). It is, according to Bambra et al., therefore vital that, this time, the right public policy responses are made to deal with the post-Covid-19 world. These responses should at the very least include expanding social protection and public services, as well as pursuing green growth strategies, with as specific aim to ensure that the Covid-19 pandemic will not increase health and other inequalities for future generations.⁹¹ Given the inequalities in mortality risks that have appeared from Covid-19, it is essential that all efforts to rebuild societies should focus on the overall goal of greater equity and equality.⁹² This implies an approach of "proportionate universalism", which calls for policy measures aimed at making communities all over the world safer, starting where it is needed most. Special attention should be given to high-risk areas, such as urban areas characterized by overcrowded and multiple-occupancy accommodation. Without these proportionate responses, with each new or additional health or similar crisis, high-risk groups and areas will continue to experience high mortality rates.⁹³

According to Stiglitz, a first and probably effortless way out may involve the acceleration of labour-market skills, through upgrading and training. However, Stiglitz himself is the first to acknowledge that there are good reasons to believe that such a policy will not suffice.⁹⁴ It may, hence, become necessary to also resort to a more comprehensive policy approach aimed at reducing wealth and income inequality.⁹⁵

⁹⁰Bambra et al. (2020), p. 966.

E.g., even before the Covid-19 pandemic, life expectancy for the poorest groups of the population was already declining in countries such as the United Kingdom and the United States, while health inequalities were also on the rise in many European countries during the past decade. (Cf. Bambra et al. (2020), p. 966.)

⁹¹Bambra et al. (2020), p. 966.

⁹²Cf. already on this subject Byttebier (2017), pp. 303–337.

⁹³Marmot et al. (2020), p. 21.

⁹⁴Stiglitz (2020).

⁹⁵Stiglitz (2020).

According to Stiglitz, such a policy approach will first have to acknowledge that the so-called "competitive equilibrium model" (in which producers of goods and services maximize profits, consumers maximize utility (or think they do), and prices are determined within competitive markets that equalize supply and demand) that has dominated the thinking of economists for—at least - more than a century, does not present a sound approach to economics, particularly when it comes to understanding the growth of inequality. Clearly, the rules of the game matter, and should, moreover, be changed. Neo-liberal measures which were aimed to weaken constraints on corporate power, to minimize the bargaining power of laborers, to erode the rules governing the exploitation of consumers, borrowers, students and laborers, as well as to minimize the protection of the

These findings are completely in line with the conclusions of some of our own previous work.⁹⁶

In the further opinion of Stiglitz, a complete rewriting of the rules of economics is therefore necessary. Stiglitz mentions as examples: (1) a need for monetary policies that focus on ensuring full employment of all population groups, rather than on (just) containing inflation, (2) better balanced bankruptcy laws that look after the interests of all those involved with the whereabouts of any given enterprise, rather than solely on the interest of creditors and (predatory) bankers, and (3) an approach to company law that acknowledges the importance of all stakeholders, not just shareholders. Similarly, the rules dealing with internationalization and globalization must go beyond serving the interests of the big corporate sectors: the interest of laborers and the environment should be ensured on at least an equal footing. E.g., labour and social law should provide better protection to all workers and should provide much more scope for collective action.⁹⁷ Again, the findings of our own previous work are entirely in line with these considerations.⁹⁸

However, while these measures are all vitally important, they will not suffice to create a more just and equal socio-economic system in and of themselves. Our own previous work has underlined the necessity of new systems for redistributing the overall wealth created through the economy. Paradoxically, in accordance with the dictates of economic neoliberalism, countries characterized by the highest degree of income inequality in the world, amongst which the United States, have at the same time regressive tax systems in which high earners suffer from taxation to a much smaller extent than low earners, thus enhancing income and wealth inequality even more.⁹⁹

It has, moreover, precisely been this neoliberal policy approach of favouring the rich (and their enterprises) to the detriment of everyone else that has determined many aspects of Western countries' policy responses for fighting the Covid-19 pandemic. Because of this, policy responses in the Western world were deeply myopic and entrenched inequality, obstructing any effective management of the pandemic. (Cf. especially Chap. 3) As has been made clear throughout the previous chapters of this book, neoliberal countries were in such a manner insufficiently prepared for the outbreak of a pandemic, with, e.g., their economies largely relying on extremely vulnerable global supply chains. When Covid-19 struck, both American and European economies alike could not even supply enough of the simplest PPE materials, such as face masks and gloves, let alone more complex equipment that was needed for fighting Covid-19, such as viral test equipment and respiratory

environment, have all contributed to a less efficient economy marked characterized by greater and unproductive rent-seeking and inequality and have, in this manner, basically turned the whole world in one huge socio-economic mess. (Cf. Stiglitz (2020).)

⁹⁶Cf. Byttebier (2015a, b, 2017, 2018, 2019, 2021).

⁹⁷Stiglitz (2020).

⁹⁸Cf. Byttebier (2015a, b, 2017, 2018, 2019, 2021).

⁹⁹Cf. Stiglitz (2020). Similar: Byttebier (2017), p. 249.

ventilators.¹⁰⁰ All of this attributed to the catastrophic events that occurred in hospitals and long-term nursing homes throughout the (neoliberalized) Western world upon the outbreak of the Covid-19 pandemic. (Cf. Chaps. 5 and 6). Furthermore, because of the inequalities between countries that have been created under the yoke of capitalism during the past three centuries, less developed economies suffered from general poorer sanitary conditions. The healthcare systems of this group of countries were, in addition, less developed for dealing with the Covid-19 pandemic. Some of these countries had, moreover, a large and poor population, with many people living in conditions that made them more vulnerable to contagion. Such less-developed countries, finally, lacked the financial and other resources available to advanced economies to deal with both the health crisis caused by Covid-19 itself, as well as with its long-term economic consequences.¹⁰¹

Covid-19 has thus, briefly put, exposed and exacerbated inequalities both between and within countries. 102

Although it was announced that the G20 countries would use all available instruments for dealing with the Covid-19 pandemic, this has not yet happened, or at least only to a very small extent. In particular, according to Stiglitz, a powerful instrument that has lain dormant within the IMF for decades already has not even been considered—let alone resorted to. It concerns the possibility for the IMF to immediately issue USD 500 billion in Special Drawing Rights (SDR).¹⁰³

In the meantime, the Covid-19 pandemic might very well lead to a series of debt crises (cf. already in Chaps. 3 and 4). This is in particular due to the fact that the Covid-19 crisis has left several countries, as well as their enterprises, with more debt than they will ever be able to repay.¹⁰⁴ We shall readdress the question how the world could deal with this in Sect. 10.5.2 and, furthermore, in Chap. 11.

10.5.2 Re-addressing the Plea for a New Care State Model

As has already been indicated above, most of the concerns which have been raised by Stiglitz, as quoted throughout Sect. 10.5.1., have been addressed in our own previous work as well. Moreover, we have not limited ourselves to merely

¹⁰⁰Stiglitz (2020).

¹⁰¹ Stiglitz (2020).

¹⁰²Stiglitz (2020).

¹⁰³Stiglitz (2020).

According to Stiglitz, it has especially not been possible to overcome the lack of enthusiasm of the United States. Nevertheless, such a SDR issue would be of considerable help to developing economies and emerging markets, while it would cost taxpayers in developed economies little to nothing. According to Stiglitz, it would even be better if the strong economies themselves would simply contribute their existing SDR reserves to a trust fund that could be used by developing economies to meet the demands of the Covid-19 pandemic. (Cf. Stiglitz (2020).) ¹⁰⁴Stiglitz (2020).

identifying said various problems, but we have also put forward a ground-breaking model to solve them.¹⁰⁵

As already explained before (cf. Sects. 5.5.2 and 6.3), under the new international monetary order that has been proposed in Chaps. 4 and 5 of our 2017 book "Towards a New International Monetary Order", ¹⁰⁶ it would become feasible to finance a care state model which would allow to install a much more fair and just socio-economic order than ever has been possible under the rule of unbridled capitalism—or even under the classical welfare state model.¹⁰⁷

More precisely, under this newly to be established monetary order, state financing could occur in a totally different manner than is presently the case, namely out of the periodical allocations from a New Monetary World Institute (NMWI) would attribute to the countries participating to this new international monetary order.¹⁰⁸

Such a system could, to some extent, already be organized within the prevailing international monetary order. However, as also pointed out by Stiglitz (cf. Sect. 10.5.1), this would require the IMF to start using its power to attribute SDR's to its member states in a far more systematic manner than is presently the case.¹⁰⁹ However, the proposal that is formulated in Chaps. 5 and 6 of our previous book "Towards a New International Monetary Order" would be much more far-reaching and imply the instalment of a system in which all the member states participating to this new international monetary order, would obtain the entirety of their financial means out of such (periodical) allocations.¹¹⁰

In the treaties establishing this proposed new international monetary order, the contours of a new welfare/care state model could then be worked out in more detail, amongst others, by providing lists of the public services and social security systems that should be made universally attainable based on the financial means each state will obtain out of said allocations.¹¹¹

In one of our other, previous books "The tools of law that shape capitalism. And how altering their use could give form a more just society", we have already explored in more detail how the outlook of such a "care state" model could be. The lists of public services and social care systems that together could form the care state model referred to in said book, could, amongst others, contain the following elements:¹¹²

- (1) General access to food, housing and adjunct necessities.
- (2) A universal public education system (at all levels of education).

¹⁰⁵Cf. Byttebier (2015a, b, 2017, 2018, 2019, 2021).

¹⁰⁶Byttebier (2017). Cf., furthermore, Byttebier (2018).

¹⁰⁷Byttebier (2019), p. 186.

¹⁰⁸Byttebier (2019), p. 186.

¹⁰⁹Cf. https://www.imf.org/en/About/Factsheets/Sheets/2016/08/01/14/51/Special-Drawing-Right-SDR (last accessed on 15 May 2021).

¹¹⁰Byttebier (2019), p. 186.

¹¹¹Byttebier (2019), pp. 186–187.

¹¹²Byttebier (2019), p. 187. Compare Galbraith (1995), p. 264.

- (3) Universal health (and medical) care.¹¹³
- (4) Universal elderly care.
- (5) Universal child and youth care (amongst others providing means for taking care of orphans; for leisure and group activities of children and youth...).
- (6) Universal public transport (ensuring all levels of transport in an economic attainable manner; this allocation post should, obviously, also take infrastructure works into consideration).
- (7) Guaranteeing universal access to culture.
- (8) Financing a universal basic income for all human beings.
- (9) A further budget post for general state functioning (including the functioning of the national, central banks of the participating countries).
- (10) ...

Needless to say that these are but some (evident) examples of what issues could be dealt with, on a global level, in order to establish a more fair and just socioeconomic (world) order.¹¹⁴

To effectively reduce the gap between rich and poor, besides removing all other inequalities established under public policies based on the doctrine(s) of economic neoliberalism, the mentioned public and social care services will, moreover, need to be "universal", "free", "public", "accountable" and to "work for both men and women"—besides people who consider themselves neither as men or women.¹¹⁵ With regard to the further outlook of such a new care state model, further reference is here made to our previous book "The tools of law that shape capitalism. And how altering their use could give form a more just society".¹¹⁶

We shall readdress these policy proposals in some more detail in the next and final Chap. 11 of this book.

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¹¹³Cf., furthermore, Galbraith (1995), p. 264.

¹¹⁴Byttebier (2019), p. 187.

¹¹⁵Oxfam (2019), p. 19.

Otherwise put, the power of public services and social protection to reduce inequality largely depends on how well they are funded, how they are delivered and their level of quality. (Compare Oxfam (2019), p. 44.)

¹¹⁶Byttebier (2019), pp. 188–215.

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Chapter 11 Final Conclusions



11.1 Impact of Two Crises on the Monetary and Fiscal Policy Levels

11.1.1 General

After the two severe crises of the past decade and a half—particularly (1) the severe financial crisis of 2008, and its aftermath, and (2) the Covid-19 crisis of 2020–2021—the monetary and fiscal policy systems of many Western countries may very well have been stretched beyond their limits.

11.1.2 Quantitative Easing, and Some of Its Consequences

During said two crises, the ECB reacted by means of a policy that was framed in a variety of special, monetary support mechanisms. In the United States, the Federal Reserve (also "FED") responded to both crises through similar monetary mechanisms (as explained extensively in Chap. 3).

Especially during and in the aftermath of the financial crisis of 2008, a notable and still ongoing—trend in this regard has been captured under the term "quantitative easing" (QE), essentially indicating a willingness of the ECB—besides foreign central banks, such as the US Federal Reserve—to buy up (already existing) debt instruments issued by a wide range of issuers, with an emphasis on states, (other) public authorities and companies/corporations. Basically, such QE policy shows a willingness of refinancing debt states, besides debt-burdened private firms, by central banks.¹

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¹Streeck (2017), p. 126.

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In a traditional approach, it is perceived that to execute quantitative easing, central banks, at least potentially, increase the supply of money in order to buy, e.g., government bonds and other securities. Increasing the supply of money happens with the intent to lowers interest rates (as money supply increases), or with the intent to help keeping interests rates that are already low, to remain low (i.e., helps making, or keeping, money cheap(er)). Private banks themselves can then lend under easier terms, which helps the economy to survive (in) times of trouble. Moreover, to the extent that private banks are the ones selling debt instruments to the central bank, they also enlarge their own cash reserves, which again allows them to lend out more.² As new lending by private banks may, in turn, again lead to new purchase operations by the central bank, a relaxation of the conditions under which such operations can take place, obviously, has as effect making it easier for new money to be created as a function of debt instruments previously issued. Hence, what quantitative easing basically does is simply multiplying—or, even better, allowing to multiply—debt ...

In a further past—notably under the gold standard (i.e., during the nineteenth century and until WWI) and the gold exchange standard (i.e., as of 1944 until 1971)—such a system of "new money/debt", based on "old money/debt" would have been unthinkable.

But even within the framework of the prevailing, neoliberal monetary order, characterized by a huge love for debt (cf. Sect. 3.2), such a QE policy may give rise to certain concerns. According to some, the system entails the danger that the money base will keep expanding, whereby the link with the underlying economy could become increasingly tenuous.³ For a variety of economic players, a situation may, moreover, arise of (too) easily obtained credit. However, like all credit, it will still, ultimately, must be paid back at some point in time. Furthermore, such a QE purchase operation by a central bank does not alter the conditions which apply to the underlying debt instruments.

²Brock (2021).

Without the ECB willing to step into financing the state and enterprise sector directly—which would be tantamount to entering the taboo of monetary financing as laid down in Article 123 of the Treaty on the Functioning of the European Union, containing a prohibition of monetary financing—such a policy has the effect of making large injections of money into the economy possible (hence the term "quantitative easing"). (Cf., furthermore, Sect. 11.4).

According to Brock, quantitative easing is particularly implemented when interest rates are already near zero, because, at this point, central banks have still fewer other monetary tools available to influence economic growth, to the extent that most of the other arsenal of central banks is based upon interest rates. (Cf. Brock (2021).)

 $^{^{3}}$ Brock has pointed out that if central banks increase the money supply, this may cause inflation. In the opinion of this author, the worst possible scenario for a central bank is that its quantitative easing policy would indeed start causing such inflation without at the same time accomplishing the intended economic growth. Such an economic situation where there is inflation, without economic growth, is called "stagflation". (Cf. Brock (2021).)

In an opinion piece that appeared in The New York Times on May 13, 2021, Krugman has countered some of these concerns. (Cf. Krugman (2021a).)

However, according to Krugman, while, based upon such QE, in the United States the FED has indeed bought a lot of government debt, this does not imply that the FED started financing the budget deficit in a direct manner. According to this author, at a fundamental level, households are the ones who finance the deficit in an indirect manner. According to Krugman, this is based upon the huge savings undertaken by families who started saving much of their income in an environment where their usual consumption no longer felt safe. However, under QE, such household financing of the government deficit happens not in a direct manner. Instead, it has taken the form of a sort of what Krugman refers to as a "financial daisy chain". Families are stashing their savings in banks. Banks, in turn, have been accumulating reserves—that is, based upon deposit facilities, lending to the FED which these days pays interest on bank reserves. And, with this money, the FED has been buying government (and other) bonds. Krugman gives the following rough picture (with regard to situation in the USA by May 2021): More or less, US households held on to USD 2 trillion in deposits; banks acquired USD 2 trillion in reserves; and the FED has acquired USD 2.5 trillion in government securities (implying that USD 0.5 trillion in this "daisy chain" may come from abroad).

Exactly why the process has been so indirect (and why US households are unwilling to invest directly in government or corporate bonds themselves) is to Krugman an interesting question. A guess is that private players are worried about liquidity, or, phrased differently, about having quick access to their funds if necessary. So, both families and banks want deposits they can draw down in a pinch, not Treasury (or other) securities that might be slightly harder to liquidate.⁴

As a result, it is the central bank who is turned into an investor, based upon liquidity initially provided by savers and with banks acting as a further intermediary. This is, obviously, not in line with the basic premises of capitalism on the role of government institutions, such as central banks, and on the intent of "capital" investments that are usually explained as the emanation of private, entrepreneurial initiative.

This immediately also implies that low interest rates are not the result of artificial manipulation, but simply of demand and supply: there simply are a lot of household savings with nowhere to go, which—in an indirect manner—are cheaply being made available to the government through two intermediary levels, namely that of private banks and that of the central bank. Second, because the "daisy chain of lending" runs through bank deposits, it shows up in the measured money supply (M2). But it is not really a monetary expansion of M1. The FED is, hence, not printing new dollars all the time; it is basically acting as a financial intermediary for investors who want to park their money somewhere safe. And, for Krugman, while there are plenty of reasons to worry about what was/is going on in the US economy, FED purchases of bonds and rising M2 are not on the list.⁵

⁴Krugman (2021b).

⁵Krugman (2021b).

So, what Krugman is implying is that quantitative easing (and similar programs) is not financed out of new (chartal) money creation (hence: out of increasing M1), but out of bank reserves parked with the central banks by private banks who themselves have these reserves because of huge savings by private householdings.

This however raises two sets of questions, namely: (1) Why—based upon their huge reserves –private banks do not hold on to the (government or other) bonds themselves, or, phrased differently, why the central bank has to get involved as a further intermediary. And (2) what else get the private banks in return for transferring their government (or other) bonds to the central bank than (an) (additional) claim(s) on the latter (which may, potentially, called for in cash). Unless if what Krugman implies is that, with regard to the latter question, the cash reserves that private banks hold onto because of the general public's deposits and which they then park with the central bank on the basis of the latter's deposit facilities, are more than sufficient to meet possible future claims of the private banks (because of QE) when the latter would have a need for cash (in which case there will be no need to print new money). Even then, the question remains what is to happen when the deposit holders would start to withdraw their deposits in exchange for cash at the same time.

This seems to imply that QE speculates on the continuance of huge savings by private householding through means of bank deposits without these been drawing back. Phrased differently: QA is basically possible because central banks are sitting on huge reserves (of money created in the past) due to huge savings from the part of the general public (or, otherwise put, because deposit holders stop(ped) consuming and/or are not interested in taking up investments themselves, and neither in cash withdrawals of their deposits).

Be this at is may, under the logic of the prevailing monetary and financial system, it cannot be the intent that a state would be financed indefinitely-even if only indirectly-through emergency plans of the monetary authorities. On the contrary, a state is expected to pay off its debts, or refinance them on the private financial markets, whereby in all cases, an increase in the debt burden of a state is never good news for the citizens of such a state, nor for their economy. This is because, ultimately, a state's debt burden is borne through taxes. The latter at the same time explains why, under neoliberal monetary (and fiscal) policy, efforts must be made to optimize employment, whereby the more public debt increases, the more a sufficiently large proportion of the general population has to be put at work, for as long in life as possible, so that everyone belonging to the working (or self-employed) classes, remains able to contribute to paying taxes (besides, in some jurisdictions, social security contributions) in order to keep the increasing public debt-and, by extension, government finances in general-sustainable, for as long in his/her/their life as possible. Not by surprise does the mandate of the US Federal reserve explicitly comprise two basic policy objectives, namely: (1) to aim for maximum employment and (2) price stability.

This is, obviously, at the same time, very interesting for employers (hence for the entrepreneurial sector), who are thus ensured that most of the world's population remains employable as cheap labour forces. The concern that the pressure on people and the planet's resources resulting from such a neoliberal, economic policy, will

become too high, hereby remains largely unaddressed under neoliberal economic policy itself, while with each additional growth of public debt, the situation becomes less rosy for both the working class in the broad sense of the word, as for states themselves. Neoliberal economic (and monetary) policy—which, in its historical roots, was once based on the idea of freedom-, has in such a manner (besides a variety of other neoliberal policy instruments) helped reducing most of humanity to a slave population that must work longer and longer to—inter alia—keep (public) debt in check. Hence, one of the effects of the Covid-19 crisis could very well be that in neoliberal run states, as part of a renewed, post Covid-19 austerity on a monetary (and fiscal) level, the retirement age will, once again, have to be heightened, in order to ensure that people contribute longer and longer in life to paying taxes, in order to keep this system of ever-increasing debt, sufficiently sustainable.

11.1.3 Similar Consequences of Neoliberal, Fiscal Policy

As explained in Chap. 4, during the Covid-19 crisis, western states (such as EU member states, the USA and even the EU itself) each in their own way, made massive amounts of financial support available to their respective economies, most notably to the corporate sector, thus protecting the latter from a deluge of bankruptcies.

In order to finance this support, such states (again) took out (new) massive loans on the financial markets. And through this, during the Covid-19 crisis, neoliberal fiscal policy itself also quickly arrived at a classical, neoliberal prescription for dealing with a crisis: states—certainly in crisis situations—make massive amounts of money available to ailing companies, to a large extent by means of non-repayable financial support measures, while taking up huge debt themselves. And a part of the latter debt may even end up being purchased by a central bank under future QE operations, however, still to be paid back eventually.

11.1.4 Increasing Debt Levels

Such a public policy through which the cost of a crisis is socialized by states taking up (ever) more debt is, both in its monetary dimension, as in its fiscal policy dimension, based upon the assumption that the majority of the population also benefits from it, to the extent that enterprises receiving states aid, continue to survive thanks to the government support, and can, hence, also continue to pay wages to the members of the working class—in essence implying a classic "trickle-down economics" argument for justifying this kind of financial support.⁶

And now the peculiar thing is that said wages form the bases for states to impose taxes (on income of the working class), thus causing that money/debt basically runs in circles.⁷

The flip side of the coin, however, remains that by applying such a policy in times of a crisis, such as the Covid-19 crisis (and recently before the financial crisis of 2008), states—e.g., EU member states, and to some extent even the EU itself, besides the United States⁸—all had to borrow large sums, both in order to have sufficient financial means to combat the Covid-19 pandemic, as to be able to finance the support measures to the entrepreneurial sector. Although these loans could boast of the—during times of Covid-19 still maintained—historically low interest rates, they still are loans, which the borrowing states, eventually, will have to pay back at some point in time, or at the very least be able to refinance.

In other words, because of the Covid-19 support measures, there has been a significant increase in public debt which, ultimately, weighs on (future) taxpayers—adding to the classic intergenerational injustice that characterizes such a system of state financing for decades already. In this way, everyone who (by getting born) joins a neoliberal society, at the same time inherits a world which is basically ever more heavily burdened with government debt and is, as a result, condemned to have to work ever longer, and ever more, in order to help paying off this government debt (of the past), or at least to help keeping it sustainable—either through taxes or similar contributions.

Moreover, there is a suspicion that (several of) the EU countries, being burdened with larger debt mass (cf. Sect. 3.5), will, in post-Covid-19 times, be bound to (again) become subjected to a classic EU austerity policy, of which no one else but the average citizen will (again) be the victim.

In other words, as has also been the case after the severe financial crisis of 2008 (with regard to the bailouts of private banks), "a socialization of losses and privatization of gains" logic has been resorted to—shifting the burden of the crisis to the global population (via taxes), while the benefits of this policy, esp. once the economy will again revive, continue to benefit only the corporate sector, and its shareholders.

As long as neoliberal monetary and fiscal models will remain unchanged, it is hard to see how this will ever change. And thus, the average citizen of a neoliberal country is pedalling, ever more, on a treadmill the rhythm of which is constantly

⁶With regard to, e.g., the EU SURE program (cf. Council Regulation (EU) 2020/672), this is even explicitly indicated in the preambles of the SURE regulation itself.

⁷This could, schematically, be simplified (in an extreme manner) as follows: Banks => Loans to states => Loans bought by ECB => Cash/claims on the central bank as basis for new loans to enterprises who pay wages => wages being taxed in order to repay the (state) debt.

⁸In the USA, a variety of the Covid-19 programmes of the Federal Reserve were based upon financial means provided by the US Treasury, hence on money the United States borrowed on the financial markets (cf. Sect. 3.3).

being increased—especially after each situation of crisis–, with as question whether this can be the purpose of a socio-economic order, a question we already have addressed in our various previous work and there answered negatively.⁹

For the alternatives that we want to substitute for these neoliberal models, reference is made to this earlier work, which we shall briefly readdress hereafter in Sect. 11.3, but first, let us have a final look at some numbers of rising debt in 2020 because of (neoliberal) monetary and fiscal policy. (Cf., furthermore, Sect. 3.5)

11.2 What Will Be Further at Stake in the World Post Covid-19

According to the World Bank, the Covid-19 pandemic has basically triggered a steep increase in—both public and private—debt, particularly in the Emerging Markets and Developing Economies (EMDEs), which has come on top of a rapid debt increase since 2010—the period in the aftermath of the previous huge crisis, i.e., the financial crisis of 2008.¹⁰

This can be shown in a simple chart (cf. Fig. 11.1^{11}).

Moreover, reference can also be made to our findings in Sect. 3.5.

These data are confirmed by findings of Bloomberg, who has pointed out that in the battle against Covid-19, governments around the globe were on the cusp of becoming more indebted than at any point in modern history, surpassing even the public debt load of World War II. The borrowing binge, hence, came with a hefty price tag—USD 19.5 trillion in 2020 alone, according to Institute of International Finance estimates (cf. Sects. 3.5.2.1 and 3.5.3.1). But, so far, the alternative—a deep and lasting depression—seems to have been avoided. Basically, rock-bottom interest rates in the EMU were still in place before the outbreak of Covid-19 (cf. Sect. 3.2.2), and have been remained so during the Covid-19 crisis, while the FED also positioned its key interest rates on similar low percentages. (Cf. Sect. 3.3) This helped keeping debt costs manageable and, therefore, still affordable. But, as has been pointed out by McCormick, Torres, Benhamou and Pogkas, if interest rates would at the same time mark the start of a period of unprecedented reckoning ...¹²

The foregoing is shown in Fig. 11.2,¹³ pointing to the "Great Debt Spike" that happened in 2020 and, in addition, showing the evolution that occurred between 1946 and 2020.

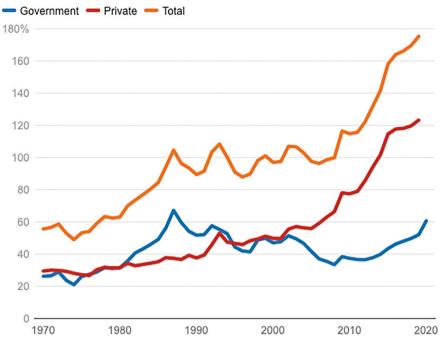
⁹On the matter what the overall purpose of a socioeconomic system should be, cf. Byttebier (2019), pp. 1–4.

¹⁰Nagle and Sugawara (2021).

¹¹"Aggregates are calculated using current GDP is U.S. dollars as a weight, based on data for up to 182 countries, including up to 145 EMDEs. Data for 2020 are estimates" [Nagle and Sugawara (2021)].

¹²McCormick et al. (2021).

¹³"Advanced economies and emerging markets are a sample of 25 and 27 countries respectively" [McCormick et al. (2021)].



Percent of GDP

Fig. 11.1 Debt in emerging market and developing economies

On the upside, and as explained in Chaps. 3 and 4, huge borrowing by governments and corporations during the Covid-19 pandemic, served as a "bridge" across the economic chasm of lockdowns. During time of closures, it allowed enterprises to pay the employees they, hence, did not have to fire, while maintaining assets in working condition. It also funded jobless benefits for those who go fired, so they could keep financing life's necessities, such as paying for rent and buying food.¹⁴ It, moreover, avoided a huge wave of bankruptcies, which could have brought Western economies into ruins.

While in this manner government borrowing acted as a bridge to both emergency support and recovery, central banks were the main support systems of this borrowing. By on the one side slashing interest rates (cf. Sects. 3.2.2 and 3.3), and through QE and other monetary programs, buying more than USD 5 trillion of assets, central banks allowed countries to borrow huge sums. It is estimated that, in 2020, the FED alone added about USD 3 trillion to its balance sheet, an amount which was deemed similar in magnitude to the FED's total monetary expansion during the entire decade as of the financial crisis of 2007–2008.¹⁵

¹⁴McCormick et al. (2021).

¹⁵McCormick et al. (2021).

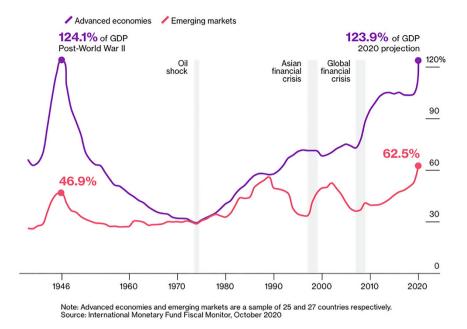


Fig. 11.2 The Great Debt Spike. Source: International Monetary Fund Fiscal Monitor, October 2020

Ultimately, this unprecedented borrowing by enterprises and governments dramatically reduced the economic toll of the Covid-19 pandemic. Yet, according to McCormick et al., when the world will eventually come out the other side of the Covid-19 pandemic, it will be bound to face larger debt burdens which even could impede economic growth over a longer term.¹⁶

In other words, as countries and their economies are starting to struggle to bounce back from the Covid-19 pandemic, the question will be how this immense increase of debt will be handled with—this time ...

Bearing in mind the experiences in the aftermath of the financial crisis of 2008, the (neoliberal) methods of addressing this situation could consist of a combination of debt release measures—in as far as these are tolerated under capitalist monetary and fiscal policy –, besides austerity measures.

However, as argued in our previous work, there may still be another way, namely to really start thinking of alternatives for the prevailing monetary (and fiscal) system (s), which could imply handing over money creation power entirely to the public domain again.

It may even be a symbolic indication that the debt levels post Covid-19 are now at least as high as after World War II, which at the time had led to the instalment of the (then new) Bretton Woods monetary order (in 1944), which itself was part of the international, legal construct used in order to lead the world out of the ruins caused

¹⁶McCormick et al. (2021).

by World War II (but which was, in part, abandoned in 1971, while what was left of it was since then, to an increasing extent, submitted to the logic of economic neoliberalism). (Cf. Sect. 3.4.1)

Perhaps now, with in some territories Covid-19 coming to some kind of ending, the time will be deemed similarly ripe for governments all over the world to start taking the call for developing another monetary system more seriously.

11.3 Revisiting the Outlook of a New International Monetary Order

In some of our previous books, it has been argued that an alternative to the prevailing, neoliberal monetary order could be worked out in order to establish a fairer and more sustainable economic system.

Such an alternative monetary order could be based upon an approach in which not private initiative, but public authority itself would be vested with the power to create new money, and thus to decide upon how the wealth generated by the economic system should be (re)distributed among the members of society.

Such a newly perceived monetary system could, moreover, have as an underlying goal that of ensuring that all people, regardless of their circumstances at birth, would stand a similar fair, just and equal chance of having access to the wealth created by the combined efforts of nature and humanity (or, phrased differently, by "the economy") in order to fulfil their life's (basic) needs and, in general, be able to lead a happy and dignified life.¹⁷

Under the model for a "new international monetary system" that has been worked out in our previous books, especially in 'Towards a new, international monetary order",¹⁸ it would, more precisely, become possible to finance "care state models" which would allow to install a much more fair and just socio-economic order than ever has been possible under the rule of unbridled capitalism, or even under the classical welfare state model, to the extent that, even in the latter socioeconomic model, states are/were still dependent on capitalist financing methods (especially raising taxes and semi-taxes, next to taking up—expensive—loans from, amongst others, private market players, implying that in the neoliberal world order, states basically balance between being "tax states" and "debt states", in the former capacity suppressing their general population (except for the rich), and in the latter capacity being at the constant mercy of the private banking and financial system).

By contrast, under the new monetary system proposed in our previous work, state financing would no longer occur through "taxes" (and/or "social security contributions"), but out of a newly proposed system of money creation, more precisely out of

¹⁷Cf. Byttebier (2019), pp. 1-4.

¹⁸Cf. Byttebier (2017), Chaps. 4 and 5 (pp. 353–487). Cf., furthermore, Byttebier (2019), Chap. 5. (pp. 137–180).

periodical allocations that a newly to be created Monetary World Institute ((N)MWI)—this could obviously be the IMF, after having altered its working rules, as established in its Articles of Association—would attribute to the countries participating to this new international monetary order.

Although such a system could, to some extent, already start happening within the presently prevailing international monetary order—which however would imply that the IMF would actually start using its power to attribute SDR's to its member states in a far more systematic manner than is presently the case¹⁹ (cf. the remarks of Stiglitz in this regard, quoted at Sect. 10.5.1), the proposal that was formulated in our previous work would take Keynesian thinking (cf. Sect. 11.4) a (big) step further, by installing a system in which all the member-states participating to such a new international monetary order would obtain the entirety of their financial means out of such (periodical) allocations.²⁰

As then further elaborated upon in our book "The tools of law that shape capitalism",²¹ such a system of financing states could imply that, each (working) year, every one of the participating states would obtain a working budget out of the hands of the—in Chap. 5 of this book²²—proposed (N)MWI, that should enable such state to turn away from the prevailing neoliberal "repressive state model" towards a "care state model", based upon a view on society that all people should be willing to take care of each other.

Such a new system of financing states would, essentially, imply that the public domain could be withdrawn from the power of private money creation and, therefore, from the collectivity of the private, financial institutions and markets that, under the presently prevailing monetary order, dictate the whereabouts of everyone, including states.

In this vein, it may be worth to briefly revisit what the further, main characteristics of such a new monetary order could be:

(1) For reasons explained in our previous work,²³ the new monetary order that would be based upon the power to create new money lying with public authorities, rather than private market players, would best be of an international nature. This would imply that there would be a single global currency, to be issued by a global monetary institution.²⁴

¹⁹Cf. https://www.imf.org/en/About/Factsheets/Sheets/2016/08/01/14/51/Special-Drawing-Right-SDR.

²⁰Compare Ocampo (2017), p. 211.

²¹Byttebier (2019), pp. 164–169.

²²As in Chaps. 4 and 5 of Byttebier (2017).

²³Cf. especially Byttebier (2021), pp. 363–380.

 $^{^{24}}$ This idea is, as such, not new, and has in the past already a couple of times been defended. (For an overview, cf. Bonpasse (2006), p. 150–159).

Bonpasse, who already in 2006 devoted a profound study on the subject, pointed to a variety of further benefits of such a single global currency, the overall benefit being the promotion of international financial stability which is the essential basis of (international) commerce and

(2) The new monetary and economic order should, moreover, be based upon the values of altruism, solidarity and a willingness to care for one another.

A second underlying main principle of the new monetary system should be a willingness to make use of the natural resources of the planet Earth in a far more prudent and rational manner than the ideologies of economic liberalism and economic neoliberalism have ever been willing to do.

- (3) While working out the underlying goals of the to-be-established monetary order in one or multiple basic treaties, the international community will, obviously, have to consider what the institutional framework of this new, international monetary order will be. One idea could be to agree upon the formation of a central, supranational organization. In our book "Towards a New International Monetary Order", this new supra-national institution has provisionally been referred to by the name "(New) Monetary World Institute" ("(N)MWI"), and has, moreover, already been described in some more detail.²⁵
- (4) The (N)MWI could be vested with the basic power to organize the creation of new money on behalf of all participating countries, as well as their inhabitants.
- (5) One of the basic tasks of the (N)MWI could be the creation and attribution of (entirely "for free") new money to the participating countries (and/or regions or communities of such countries) themselves.

The (revolutionary) aim of the new international monetary order could be that money creation on behalf of public authorities in the broadest sense of the word—i.e., including supra-national public organizations, alongside participating countries themselves—would happen in a totally "for free" manner, implying that public authorities would be entirely freed from the ties—notably "debt"—of the private financial sector, besides from taxation. Under this

economic growth. Further advantages of such a single global currency would be: (1) the elimination of the costs of foreign exchange transactions; (2) an increase in asset values caused by the reduction of currency risk through the formation of a global, monetary union; (3) the elimination of the need for central banks to maintain foreign exchange reserves; (4) the elimination of the risks of excessive capital flows among currencies and countries; (5) economies of scale (by reducing the costs for countries connected to operating an entirely separate monetary system); (6) the elimination of the balance of payments/current account problem for single countries or regional monetary unions; (7) separating the value of money from the value of a particular country; (8) the elimination of national currency crises for single countries or regional monetary unions; (9) the elimination of the possibility of currency exchange rate manipulation and intervention by countries (or even multinationals); (10) the elimination of the fluctuations of currency values; (11) the elimination of currency speculation; (12) the reduction of worldwide inflation; (13) the increase of trade; (14) guaranteeing the human right to property by ensuring a stable currency; (15) the creation of an international financial system that is more fair among nations and people; (16) ensuring a fully accurate, global private busines and public economy measure unit; (17) establishing a permanent solution for all monetary problems; (18) having a system in which the value of money is set in accordance with international standards, instead of being determined by the supply and demand of the marketplace; and (19) ensuring an elegant an understandable simple monetary system. (Cf. Bonpasse (2006), pp. 161-185.)

This author also points to some possible disadvantages. (Cf. Bonpasse (2006), pp. 186–188.) ²⁵ Cf. Byttebier (2017), pp. 443–453.

new-to-be-established international monetary order, the idea could simply be to replace the currently prevailing methods of state financing (based upon taxing the lower and middle classes and alleviating budget deficits through market loans) with (non-refundable) allocations to be handed out by the (to-be-established) (N)MWI.

Hence, instead of leaving the power to create new money, mainly, in the hands of private (commercial) banks, the new-to-be-established international monetary order could, as regards money creation on behalf of public authorities (both national, and inter- or supra-national in nature), be based on empowering the (N)MWI with the power to periodically grant (non-refundable) allocations to the participating states. These allocations would come down to the granting of money "out of nothing"—as is at present the case with the money created by private (commercial) banks when they enter into a credit agreement with a credit taker—that, moreover, would not have to be repaid by the receiver of such allocations (contrary to the case when taking credit).

The result of this would be that the member states of such a new monetary order would neither have to remain tax states, nor debt states anymore.

In order to achieve these goals, there will obviously be a need for a clear insight into the set of tasks of general interest to be attributed to the governments of the participating countries for which the said periodical allocations will be given. This set of tasks of general interest will, moreover, have to be more-orless uniform across participating countries, thus ensuring that the notion of "general interest" (or "public good") will be approached in a similar manner universally, which in its own turn will help create a world socioeconomic order in which all human beings, wherever they are born or live, will be assured (more) equal life chances.

(6) Under the new-to-be-established international monetary order, the methods of making new money available to the private sector could also be organized in a totally different manner than under the prevailing, capitalist monetary systems.

Within the new-to-be-established international monetary order that would serve the underlying aim of creating a world economy based upon solidarity, altruism and all people learning to take care of one another, rather than on selfishness, egoism and greed, the manner of granting new money to private persons could (or should) be approached from a completely different perspective.

First, the notion of implementing a universal fixed basic income could be considered. (Cf. Sect. 7.12) For this to happen, each country would have to be committed (as part of entering into the treaty establishing the new monetary order) to grant a basic fixed income to all of its inhabitants out of the periodical allocations that they would receive from the (N)MWI, thus ensuring access to a basic amount of income in order to facilitate a humane and dignified life for all people.

Second, in order to finance other than the most basic life needs, private persons could obtain access to credit granted by the national central bank of the country in which they reside. The idea here would be that the new international monetary order would, as regards the creation of new money on behalf of the private sector, be based upon a network of national central banks in each of the participating countries. The further idea would be that all private persons residing in a given participating country would have access to its national central bank through a network of offices distributed across the territory. These national central banks themselves could, furthermore, be empowered with the possibility of providing these private persons with new money through a variety of credits, which could additionally be based upon the principle that the more a private person is in need of credit in order to finance a more basic need, the cheaper the price of such a credit would be, varying from credits against a low-interest percentage, to credits bearing no interest charge whatsoever, to even credits against a negative interest rating (basically coming down to subsidies to private persons).

With regard to human beings themselves, "cheap" credits could, e.g., be those that finance (access to) decent housing or basic transport (such as a personal or shared car), certain essential goods (such as household items) and education (only applicable to specialist or further education forms that could not be accessed in cost-free public education systems).

With regard to legal persons (such as enterprises, non-profit associations or foundations, and similar private institutions), the national central banks could, furthermore, work out a more diversified credit policy. Here, access to new money based upon such credits could be made conditional upon criteria of proper moral conduct, whereby the price of such a credit could be made higher or lower dependent on a variety of to-be-further-worked-out specific criteria, such as: the nature of the goods or services the enterprise provides (taking into consideration whether or not these are essential in meeting basic life needs); the impact of the enterprise or other private entity on society; the profit or non-profit character of such an enterprise or other entity; the (non-)harmful nature of the products it makes; the question of whether or not it pollutes the environment (and, if yes, to what extent); the question of how it treats its labour force(s); alongside numerous other similar issues.

Obviously, many other (practical) matters would have to be considered before the establishment of the here-proposed new international monetary order is to become feasible. On these other matters, we here suffice to refer to the blueprint for such a new international monetary order that has been previously laid out in some of our earlier work.²⁶

²⁶Cf. especially Byttebier (2017), pp. 353–487; Byttebier (2019), pp. 137–180.

11.4 Addressing the Monetary Financing Prohibition Argument

Especially with regard to the EU, implementing the in Sect. 11.3 (re-)proposed new monetary system will, imply that, first, the objections against monetary financing would be abandoned.

This should not be all that difficult, to the extent that the origins of the monetary financing prohibition seem to be mainly of an emotional nature, and—more precisely—to go back to, a.o., experiences Germany endured during the first half of the twentieth century.²⁷

The circumstances of the 1920s leading to a worldwide depression, as well as these of World War II, which literally set a huge part of the world in ruins, were of course of an exceptional nature. Nevertheless, and without much further arguments, these experiences have since been mentioned as the main reason for introducing a severe prohibition of monetary financing in the architecture of the EMU. The prohibition of central bank financing of public entities, as this has been laid down into the ECB statutes, was in this way driven to prevent what were perceived as abuses of the central banks' ability to print money (which would be directly to the benefit of the EU/eurozone member states).²⁸ Because of these developments, and especially due to the approach laid down in the TFAU, for decades, both economics academia and policymakers functioned under a virtually complete consensus that

²⁷Tober (2015).

In that period, according to Tober, Germany twice underwent a complete collapse of its monetary system. According to Tober, in 1923, monetary financing had been dwarfed by a loss of confidence in the German currency that resulted into a sharp increase in the velocity of money. E.g., a wave of hyperinflation wiped out as good as all savings, which even made monetary authorities resort to the desperate measure of introducing a new currency at a ratio of 1 trillion (of the old currency) to one (which indicated the extreme loss of value the German currency had suffered). While some two decades later, during and shortly after WWII, severe price controls and rationing prevented the reoccurrence of such an extreme degree of open inflation, it also created a shortage of goods, as well as a thriving black market activity. In order to restore monetary order, in 1948, a new monetary reform was carried out that simply cancelled out 90 per cent of all credits and savings. However, these experiences also embedded an extreme aversion for what, since then, has gotten referred to as "monetary finance" in the minds of many economists. (Cf. Tober (2015).)

²⁸As a result, article 123 of the Treaty on the Functioning of the European Monetary Union (TFEU) states that the Europystem may not grant public entities any type of credit or credit facility, or purchase debt instruments directly from such public entities.

Cf. Article 123(1) TFEU: "Overdraft facilities or any other type of credit facility with the European Central Bank or with the central banks of the Member States (hereinafter referred to as 'national central banks') in favour of Union institutions, bodies, offices or agencies, central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of Member States shall be prohibited, as shall the purchase directly from them by the European Central Bank or national central banks of debt instruments."

In addition, Article 282 TFEU states "that the ECB has to be independent in the exercise of its powers and in the management of its finances, while being given the primary objective of maintaining price stability". (Cf., furthermore, Tober (2015).)

monetary financing "is akin to an extremely dangerous drug that should forever be locked away". Both its use and just thinking of using it, got the status a "taboo".²⁹

According to Tober, this knowledge at the same time leads to the insight that the prohibition of monetary financing is—as such—neither necessary, nor sufficient, to ensure price stability³⁰—or, put differently, that the prohibition of monetary finance does neither contribute to, or is necessary for, its main purported reason of existence. Its real purpose hence, seems to be protecting the central bank's independence³¹ in creating money, which could purportedly be undermined in case governments would have a direct access to central bank financing (e.g., credit and/or the possibility to issue debt instruments subscribed by the central bank).³²

This, however, immediately raises the question if this latter purpose could not be better served through other means than by implementing a fundamental rule of law that, basically, favours the interests of (especially the rich and powerful) private market players above these of states and, through this, puts the pursuit of profits by private market players above the general good that states are supposed to serve.

It was, thus, not surprising that several proposals for overcoming the euro crisis which occurred in the aftermath of the financial crisis of 2008, in a still modest manner, started making the case for monetary financing of the public sector (or, phrased differently, for abandoning the classical prohibition of monetary financing). E.g., Watt³³ proposed that the ECB would directly finance government investments, while Pâris and Wyplosz argued that public debt might be effectively restructured by transferring parts of this debt to the balance sheets of the Eurosystem (i.e., those of the ECB itself and of the euro area national central banks).³⁴ Both proposals

The same is true of their American equivalent, The Federal Reserve, the Securities & Exchange Commission (SEC), the Financial Industry Regulatory Authority, etc.

³²Tober (2015).

³³Watt (2015).

²⁹Watt (2015), p. 13.

³⁰Tober (2015).

³¹This is, obviously, not only a concern within the framework of the EMU.

Taking the example of the United Kingdom, the Bank of England (along with the PRA) have prudential oversight over the Financial System, whereas the FCA retains the role of a regulator of conduct. Both the Bank and the FCA are independent from the Government. Their roles, although different, essentially converge in developing protective measures to check and enforce compliance thereto, by applying sanctions. Their work is, furthermore, complemented by a wider ecosystem of regulators with other functions.

³⁴Pâris and Wyplosz (2014).

The proposal by these authors involves an agency—e.g., the ECB—that would acquire, at face value, a proportion of existing public debts and that would swap them into zero-interest (or even negative-interest) perpetuities. In practice, therefore, the corresponding debts are wiped out. To that effect, the agency itself would have to borrow on the financial markets the amounts needed to acquire the public debts. As it would, per hypothesis, itself pay interest on its obligations without receiving interest on the perpetuities, the agency would be bound to make losses. To the extent that it would keep rolling over its obligations, its losses would also be forever. The authors, furthermore, argued that their proposal is not inflationary, to the extent that it is, strictly speaking, not a monetization of public debts, because it does not involve any money creation. The ECB would

involved putting the ECB at the centre of matters which are generally deemed to be of a fiscal nature, "in order to circumvent existing fiscal and political restrictions". Watt, furthermore, suggested that monetary financing would imply that there does not need to be a cost to such financing.³⁵ However, according to Tober, a flaw in the arguments of these authors was that (government) debt does not disappear when shifted to the central bank.³⁶

While such proposals, obviously, had great merit, and at least testify to a willingness to pierce the artificial nature of the monetary financing prohibition, they lack some of the imagination shown by, e.g., Keynes in a more distant past. After all, the aforementioned proposals maintain an approach to money creation within the outlines drawn by capitalism, namely the idea that (scriptural) money may be created through the granting of credits by private banks to all possible other persons, including states, under the auspices of a central banking system that guards this money creation on the basis of its monopoly over the creation of "chartal money" (or: "printed – besides coined – money"), in other words, that states themselves also depend on this, in essence, "private money creation system", implying that, when in need of (new) money, they come indebted towards the private banking system, just like anyone else.

And this is exactly where, from a historical point of view, the main flaw in the prevailing, capitalist money creation system has occurred, as elaborated upon profoundly in our previous work.³⁷ Moreover, it appears time and again that this capitalist model of money creation is no match for crises, to the extent that each new crisis impoverishes the states even further (because of new debts that states must take on to absorb the shock of the crisis) and thus makes them less resilient to a next crisis, while the benefits of state intervention, time and again, unilaterally benefit enterprises and their stakeholders.

Wray, furthermore, has argued that monetary systems, themselves, were invented to mobilize resources to serve what governments perceived to be "the public purpose". According to Wray, this makes it hard to separate the economic from the political—and any attempt to separate money from politics, as economic neoliberal monetary thinking wants to do, itself, political.³⁸ From inception, then, it is

only borrow on the financial markets to acquire public debts. However, still according to the same authors, in practice, the ECB could as well use its money creation capacity to buy the public debts, and then fully sterilize the money created in the first place, the order of actions remaining immaterial. (Cf. Pâris and Wyplosz (2014).)

³⁵Tober (2015).

³⁶Tober (2015).

³⁷Byttebier (2021), pp. 75–76.

³⁸E.g., adopting a "gold standard" (i.e., the monetary system prevailing in the nineteenth century until World War I.; cf. Byttebier (2001), pp. 76–77, nr. 88; Ocampo (2017), p. 4), or a "foreign currency standard" ("dollarization") (i.e., the Bretton Woods system in the period 1944–1971, cf. Byttebier (2001), pp. 92–94, n°s. 105–106; Ocampo (2017), p. 95), or a "Friedmanian money growth rule", or setting an "inflation target", all are political acts—based on ideological choices—that serve(d) the interests of some privileged group. There can, hence, in this (correct) viewpoint, be

clear that money basically gives command over socioeconomically created resources, and to decide how these get distributed among the general population.³⁹ From this, if also follows that, since government is the only true issuer of currency, any monopoly government can itself (re)define the terms on which it is willing to supply it.⁴⁰

And here, by basically continuing the private money creation system that started developing in the late Middle Ages,⁴¹ (neoliberal) governments all over the world express a deliberate choice of giving private banks the power to issue what is, after all, still government money (to the extent that such private banks are the only ones to get access to the central bank system to get new (chartal) money to cover their own (scriptural) money creation), and by doing so, to be able to fuel speculative bubbles at their own convenience. Basically, private banks have thus been given a (n exclusive) license to access the (public) monetary systems, including the power to make states indebted, in order to pursue private interests to the detriment of the general or public good.⁴²

However (and thank God), there is still Keynes, to whom we owe the insight that, throughout history, it is the state who is the one who has (claimed) the right to determine exactly what "thing" corresponds to the name "money", and to be able to alter this declaration from time to time—i.e., "the right to edit, and hence also re-edit, the dictionary" of what money is.⁴³

In the words of Keynes himself:44

The State, therefore, comes in first of all as the authority of law which enforces the payment of the thing which corresponds to the name or description in the contract. But it comes in doubly when, in addition, it claims the right to determine and declare *what thing* corresponds to the name, and to vary its declaration from time to time – when, that is to say, it claims the right to re-edit the dictionary. This right is claimed by all modern States and has been so

no "natural" separation of a government and its fiscus from its money. By way of further examples (with regard to the US monetary system), Wray has rightly pointed out that: "[t]he gold standard was legislated, just as the Federal Reserve Act of 1913 legislated the separation of Treasury and central bank functions, and the Balanced Budget Act of 1987 legislated the ex ante matching of federal government spending and revenue over a period determined by the heavenly movement of a celestial object. Ditto the myth of the supposed independence of the modern central bank—this is a smokescreen to hide the fact that monetary policy is run for the benefit of particular interest groups (usually, the monied ones)." (Wray (2011), p. 6.)

³⁹Wray (2011), p. 7.

⁴⁰Keynes (1930), p. 4.

⁴¹Byttebier (2021), pp. 26–57.

⁴²Wray (2011), pp. 8–10.

⁴³In our earlier work, we referred to this as to the per definition "changeable nature" of money. (Cf. Byttebier (2021), p. 15. Compare Harari (2014), p. 197.)

As Harari has phrased this: "Money was created many times in many places. Its development required no technological breakthroughs – it was a purely mental revolution. It involved the creation of a new inter-subjective reality that exists solely in people's shared imagination." (Harari (2014), p. 197.)

⁴⁴Keynes (1930), pp. 4–5.

claimed for some four thousand years at least. It is when this stage in the evolution of Money has been reached that Knapp's Chartalism – the doctrine that money is peculiarly a creation of the State – is fully realized.

(...)

And the Age of Chartalist or State Money was reached when the State claimed the right to declare what thing should answer as money to the current money-of-account – when it claimed the right not only to enforce the dictionary but also to write the dictionary. To-day all civilized money is, beyond the possibility of dispute, chartalist.

Therefore, according to Wray, a true understanding how a monopoly money works, would at the same time advance the formation of public policy a great deal. And to the extent that what Wray is saying, is fully in line with the ideas expressed in our own, previous work,⁴⁵ we can, obviously, but concur. In this approach, it is not "affordability" that is the issue; instead, the real debate should be over the proper role of government, with as main question how the government should use the monetary system (including money creation power) to achieve the public purpose or, phrased differently, to serve the general interest⁴⁶—this also being exactly what we pleaded for in our own previous work.⁴⁷

The next step in this reasoning, hence, becomes that the monetary financing prohibition may be abandoned, provided that there are other safeguards installed to ensure the policy purposes usually upheld in defence of the monetary financing prohibition, which basically come down to protecting the stability of the monetary system by:

- (1) Ensuring price stability.
- (2) Ensuring that money creation can happen in a sufficiently independent manner (i.e., not to be directly dictated by the government of a given country who, otherwise, could just start the printing machines for printing money at its leisure, until such money would lose its value as, due to an excess of it, it would no longer be accepted as money—i.e., the classical inflation risk).

In our book "Towards a new international monetary order", we have addressed both these concerns, based upon the insight that nothing in the dictionary Keynes refers to, implies that private banks should remain involved in the money creation process.

The question then becomes how the two mentioned safeguards would be ensured in our newly proposed monetary system.

Ensuring price stability, basically, happens through guarding the amounts of money brought into circulation in comparison to the underlying economic

⁴⁵Byttebier (2017), p. 75. And before, Byttebier (2015a), pp. 87-88.

⁴⁶Wray (2011), p. 17.

What Wray is basically implying, is that even the monetary financing prohibition is but an artificial construct, that but serves the interest of the participants in the private money creation processes, namely private banks and their shareholders.

⁴⁷Cf. especially Byttebier (2017), pp. 358–363.

production and trade. This can as well happen by entrusting money creation power to a public institution—provided that the principle of price stability remains embedded in the basic working rules of such a new monetary system, and provided that the (N)MWI which would be entrusted with all money creation power, would have sufficient skills (e.g., qualified staff in sufficient numbers) in house to fulfil this task.⁴⁸

With regard to the second concern, namely the independence of the entity that is entrusted with the power to create money, it may be pointed out that in our previous work, we made the suggestion that the power to create new money to the benefit of states (besides other public, international institutions), would be entrusted to a newly to be established international institution, the (New) Monetary World Institute [(N) MWI, which would function in accordance with rules established in an international treaty, and in which decision-making power—i.e., with regard to the creation of new money-would be based upon a system of checks and balances among the participating countries. Such a checks and balances-system would prevent that any state would be directly involved itself in the decision-making processes with regard to its own situation (both with regard the allocations to be made to such a state, as with regard to the amounts of new money made available to its economy), but that such decision(s) would be entrusted to panels manned by representatives from other countries, which would, moreover, be composed differently from year to year. Such a system would, put differently, ensure that all decisions with regard to the monetary situation of a given country would be made completely independent from its own government.49

Moreover, because of QE, there may even been both a further economic and a legal argument for putting money creation (back) in public hands.

According to Stiglitz, the purported compliance of the ECB with the monetary financing prohibition during the past years has, basically, but been a charade⁵⁰ to start with:

While, as in Europe, there is a charade that the central bank does not lend money directly to the government, it is clear that that is precisely what has been happening.

⁴⁸Anyhow, there is no real proof that the prevailing monetary system based on private banks creating scriptural money backed by central banks' authority to create chartal money, is per definition better equipped to guarding price stability than a system in which money would be solely created by an international, independent public institution.

It suffices here to point to the fact that during 2020, under the prevailing private money creation system, trillions of USD of new debt were brought into circulation, with—although some pointed to a possible inflation risk—no one in charge of private or central banks expressing real worries about this fact. Another factor of interest is that public trust in the money creation system is in present times far bigger than roughly a century ago. Even the severe financial crisis of 2008—with its risk that there would have been a multitude of bankruptcies in the banking sector—did no longer lead to a run on the private banks, a fact that a century ago would have been unthinkable. Moreover, the growing preference of the general public for scriptural (and even electronic) payment systems (hence, money), is even so likely to provide an additional protection of the money creation system, even when this would be entrusted to a public institution.

⁴⁹Cf., furthermore, Byttebier (2017), pp. 396–398.

⁵⁰Stiglitz (2020), p. 17.

From a more legal point of view, what QE has brought about is that states have become debtors of central banks. Now, in law, the highest public authority is that of the state, under which even monetary sovereignty resorts.⁵¹ Central banks are hereby merely institutions to which the states have delegated (part of) their monetary sovereignty. On top of that, in matters of public affairs, no delegation can be considered irreversible. The latter implies that the state may at any time revoke the delegation given to its central bank or change the terms and modalities of such delegation. In essence, the latter is but the legal translation of the reality that Keynes himself alluded to, namely that any monetary system is essentially changeable (if state authority so desires).

No delegation to a supranational central bank, such as the ECB, may change this reality. Even the design of the ECB itself just goes back to the national, monetary sovereignty of the participating countries (as expressed in the EMU treaties). And even here, there is no impediment that such a delegation would be reversed, if necessary, by an exit from, or alteration of, these treaties.

What now happens because of a QE operation with sovereign debt as its object, is that the highest level of authority (i.e., the state) relegates itself to being the debtor of a delegate (i.e., the central bank), which immediately illustrates that there cannot be any need to do so. As soon as a state would simply change the terms of its delegation to the central bank, such a debt no longer has to exist, if it were only by enacting a legal rule that stipulates that as soon as the central bank becomes a creditor of the state itself, such a debt automatically expires.

In addition, there is a crucial problem of legitimacy. The authority of the state, at least in democracies, is based on democracy, which is not the case for the central banking system, which derives its legitimacy mainly from its technical expertise. Now, a democracy requires that technocrats serve the people, whereby the reverse, i.e., that the people are reduced to (semi-)slaves of the technocrats, should, obviously, be completely out of the question. However, exactly the latter is occurring during the current, authoritarian phase of neoliberalism, whereby, by way of further example, reference can be made to the far-reaching austerity policy of the EU institutions of which the completely undemocratic character has been adequately demonstrated. (Cf., e.g., Sect. 5.2.1.2.)

These insights lead to an important legal argument to give the power to create money back to the public domain, so that a monetary system can again be set up which is not dictated by soulless technocrats who only have an eye for the interests of a select part of the population (in particular the rich entrepreneurs and bankers), but one that, worthy of a democracy, is again put at the service of everyone—and in the framework of which the caste of technocrats themselves become servants of the people again, instead of illegitimate rulers.

And, in the end, all that is required for such a new monetary system to work, is universal trust⁵²—trust in democracy and in man's skills and abilities to work out a

⁵¹Ingham (2004), p. 76.

⁵²Trust is basically what money all is about. (Cf. Harari (2014), p. 207; Ingham (2004), p. 74.)

better monetary system, by learning from past mistakes and by combining (new) insights from the heart with (old) knowledge of the mind.

And, in the very end, all what money is about, is trust that it works.

11.5 Re-establishing a Clear Public Good or General Interest Domain vs a Free Market Domain

Now, let us, to conclude, (re)address what the main advantage would be of such a new, monetary system.

One of the main consequences of neoliberal monetary and fiscal public policy and of neoliberal public policy in general—has been a diminishment of the domain of "the public good" (or "the general interest") to the benefit of the domain of the free market.

In practical all countries which applied neoliberal economics, choosing the latter as the main ideology for determining the content of public policy, has implied that a wide variety of public services (which under the welfare state model of the 1960s and early 1970s had been delivered by states), have to an increasing extent been transferred to private market players. This, obviously, has led to a diminishment of the domain of the public good, and an increase of the domain of the free market itself.

This process is, moreover, still ongoing on a global scale.

From Chaps. 5 and 6 of this book, it has become poignantly clear what the consequences of such a(n) (on-going) transfer of what in the past was largely public service provision to the free market, have been with regard to care for the sick and the elderly. E.g., numerous examples (dealt with in the Chaps. 5 and 6) show that private hospitals, for a variety of reasons (such as too little qualified staff; less emphasis on ICU beds because these are much less profitable in "normal" times; no stocks of preventive material because in "normal" times this is a non- profitable cost is . . .) were less suitable in the fight against Covid-19. And this appears to have been even more nefarious with regard to privatized/private retirement homes.

What, hence, has in general been shown during recent years is that, in many countries, a far-reaching neoliberal austerity and erosion policy had significantly eroded and/or shifted the domain of public services to the advantage of free market players. In addition to the sectors of care for the sick and elderly, this also appears, in e.g., sectors such as public education (at all levels), the organization of the labour market, in addition to many other domains of societal life, but even in the domain of certain core state activities such as justice and security.

The application of the proposals from our previous research (as—briefly—summarized in Sect. 11.3) would allow humanity to conceive a full restoration of the domain of public service, and this even at a minimum level on a global scale. Via the allocations to be allocated annually by the (N)MWI, each state would receive a sufficient operating budget to properly fill in this field of public services (with as underlying overall purpose establishing a "universal care state model"). (Cf. Sect. 11.3.)⁵³

In other words, our newly proposed monetary system would, in contrast to the prevailing neoliberal monetary (and fiscal policy) models, come down to the fact that there would be a public system of money creation in favour of the public domain, which would at the same time ensure a much more logical approach conceptually. This would also allow states to be taken from under the yoke of the financial markets, so that they would also be provided with sufficient oxygen again to play their role of ensuring the general interest properly (instead of, as has been shown in recent years, mainly to focus on phasing out their role in meeting austerity's monetary and fiscal policy objectives, besides shifting policy domains to the free market).

In addition, the economic domain itself would still be left in the hands of the free market, for which—as also elaborated in our earlier work—the existing systems of money creation (based on lending) could continue to play their role.

11.6 The Covid-19 Crisis Fortifying the Case for a New International Monetary Order Even More

With further regard to the illustration most relevant in times of Covid-19, it can, e.g., be pointed out that in neoliberal states, funding of, healthcare comes from a range of mechanisms, such as through a combination of taxes, semi-taxes, health insurance funds and private sources,⁵⁴ all these sources so far having been unable to gather sufficient financial means for establishing a global, universal healthcare system at an acceptable minimum level.

It, regretfully, even suffices to point to the disastrous events in India during April and May 2021, to fully grasp what it means to live in a wrong place of a world that does not have universal healthcare.

By contrast, under the in our previous work proposed new monetary order, it would become possible to provide states (all over the world) with the necessary funding for establishing a universal healthcare—that would be in line with the WHO's commitment to "the fundamental right of every human being to the enjoyment of the highest attainable standard of health, without distinction of any kind"⁵⁵—within their respective jurisdictions.

Such an approach would, moreover, substantially contribute to reducing, or even completely ending, the health inequalities prevailing under the present neoliberal,

⁵³For further reading, cf. Byttebier (2021), pp. 353–500; Byttebier (2018), pp. 213–228; Byttebier (2019), pp. 137–217.

⁵⁴For an overview, cf. World Health Organization (2014), p. 23.

⁵⁵Global Conference on Primary Healthcare (2018) Declaration of Astana. From Alma-Ata towards universal health coverage and the Sustainable Development Goals. https://www.who.int/docs/ default-source/primary-health/declaration/gcphc-declaration.pdf, under point I.

socio-economic order, as has also, regretfully and in a dramatic manner, been shown by Covid-19.⁵⁶

And what applies to healthcare, obviously—and as readdressed in Sect. 11.5 also applies to several other matters belonging to the public domain, such as elderly care, education, scientific research, (social) housing ...

To phrase it differently: like the previous (financial) crisis of 2008, the current (Covid-19) crisis of 2020–2021 confronts humanity with the question whether it still wants to stick to the capitalist organizational models (especially on a monetary and fiscal policy level), or whether there will, this time, be a sufficient willingness to establish an alternative, fairer socioeconomic system.

It may hereby be clear from the foregoing, but also from our previous work,⁵⁷ that we firmly believe that a sufficiently serious reform should begin with a fundamental reorientation of the money creation system(s).

After almost half a century of implementing economic neoliberalism, besides, more or less three centuries of capitalism, the world and its humanity are exhausted, and it should be clear that things cannot continue like this.

When, in the words of neoliberal rulers themselves, a so-called "innocent" virus can wreak such havoc in but a year time, with the world economy almost ending up in a just as bad state as after the Second World War, the time seems more than ripe to start taking this matter more seriously.

Moreover, the devastating impact of capitalism is hardly limited to having caused the Covid-19 crisis itself—with some countries, at the time this book went to press, still suffering from the devastation of the Covid-19 pandemic, and others, due to a sufficiently advanced state of vaccinations, gradually rippling to their feet (cf. Sect. 9.6.2)–, but similarly extends to numerous other societal problems which have been insufficiently clarified in times before Covid-19.

Among these largely unaddressed problems rank, most certainly, climate change, the growing global debt burden, an extreme degree of polarization between rich and poor, among many others.⁵⁸ Looking for solutions for these problems was, more or less, put on hold because of Covid-19, but will soon, once again, start to demand increasing attention.

As at the end of one of our previous books, "Towards a New International Monetary Order", the question still—and even more than ever—remains how long

⁵⁶Cf. Byttebier (2019), pp. 192–194 (as regards healthcare) and pp. 196–197 (as regards elderly care). Cf., furthermore, World Health Organization (2014), p. 23. By granting states the means to focus on prevention, the costs for such a universal healthcare could even be kept within very reasonable boundaries. (Cf. World Health Organization (2014), p. 23). According to the WHO, the per capita cost for a preventive universal healthcare would be representing only an annual investment of under USD 1 in low-income countries, USD 1.50 in lower middle-income countries and USD 3 in upper middle-income countries. Also according to the WHO, these figures represented just 1–4% of the at the time prevailing health spending.

⁵⁷Cf. Byttebier (2015a, b, 2017, 2018, 2019, 2021).

⁵⁸For an overview, cf. Byttebier (2018), pp. 133–212; Byttebier (2019), pp. 79–136. Cf. before, Byttebier (2015b), pp. 115–168.

humanity will continue to suffer the scourge of the capitalist, socioeconomic order, and when—at last—democratic forces will begin to show enough political interest to push for a more just socioeconomic ordering model.⁵⁹

To paraphrase Keynes: man can rewrite the dictionary on what money is, and on how it comes to existence. So, considering the huge advantages of such a new monetary system, why should he not? Or to paraphrase Harari: let us just imagine another kind of money!

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