Towards a more resilient European Union after the COVID-19 crisis

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Abstract

The pandemic crisis constitutes an unprecedented challenge for the European Union and for the Euro Area. Indeed, the European institutional architecture can be viewed as being halfway between an association of sovereign states (like the United Nations) and a politically integrated federation (like the United States). In this original construction, competences on several matters (such as economic, political, social and health issues) are shared at the European level, but also at the national and local levels, in more complex ways than in fully integrated federations. To improve the European Union's resilience to violent external shocks, the main objective of this paper is to determine to what extent these competences should be transferred to the federal level. In this respect, we will consider whether a federal leap is necessary in several areas, namely (i) monetary and fiscal policy (rules), (ii) labor markets policy and social models, migratory flows and skill shortages, and cooperation policy and (iii) renewed industrial policy and exchange rates. Despite a highly uncertain context, we outline some perspectives for the future of the European Union.

Keywords European union · Pandemic crisis · Economic policy · Resilience

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1 Introduction¹

The COVID-19 crisis has thrown the inability of European institutions to face a violent exogenous shock into sharp relief. As the novel coronavirus arrived in Europe in late January 2020, a coordinated response would have been expected to contain the spread of the severe acute respiratory syndrome coronavirus 2 (hereafter SARS-CoV 2) within the European Union (hereafter EU). Instead, each country has pursued a national strategy, which included border closures: by mid-March, Poland, Austria and Slovenia had decided to close their borders to Italians. These decisions led to a de facto suspension of the Schengen Agreement. Even if these political decisions were motivated by the health context, this is not a minor outcome since we can reasonably consider that free circulation in the Schengen space is a fundamental pillar of the nascent European identity. Thus, the suspension of free circulation in Europe can be viewed as the symbol of the lack of efficient coordination between Member States (hereafter MS) in the fight against the SARS-CoV 2.

The European institutions were not able to provide a comprehensive framework to MS in order to exploit potential complementarities between European countries. For example, countries with higher capacities in equipment used to perform cardio-pulmonary resuscitation, like Germany, could have exported some of these medical devices to others, like Italy, that desperately needed them as the outbreak peaked. Likewise, countries with higher capacities in textile production, for instance in Eastern Europe, could have exported masks to the rest of the EU. Indeed, there is some empirical evidence indicating that lockdowns alone are not sufficient to rein in the spread of the virus at the beginning of an outbreak. Other measures, such as hand hygiene and mask wearing and, above all, by testing, tracking and isolation (Shim et al. 2020; Cheng et al. 2020), are necessary. In this respect, as shown in Fig. 1, it is not surprising to observe that case fatality ratios (i.e. the ratio between the number of confirmed deaths and confirmed cases)² differ so widely in the EU, since MS have pursued their own national strategies and faced outbreak at different times.

In early June 2020, several European countries gradually began easing lockdown restrictions and reopening their borders. Once again, these decisions were taken considering in light of national epidemic situations, without coordination at the European level. For example, Italy reopened its border with France on 3 June 2020, 12 days before France reopened its border with Italy. The European Commission (hereafter EC) recommended opening the border and de facto exiting lockdown measures on 15 June 2020. This recommendation was based on a one-size-fits-all approach which is very common in the European institutions. Indeed, as shown empirically by Markel et al. (2020) for the 1918–1919 influenza

¹ Interested readers can find more detailed analyses and discussions on monetary policy, debt mutualization, migratory flows, and cooperation policy in the working paper version of this work:

<http://www.beta-umr7522.fr/productions/publications/2020/2020-33.pdf>

² An important indicator in epidemiology, the case fatality ratio is surrounded by uncertainties during a pandemic outbreak. However, a comparison with the world average and the EU average could help to reduce these uncertainties.

Fig. 1 Case fatality ratios in percent for selected EU MS. Source: European CDC, OurWorldInData.org/Coronavirus

pandemic in the United States, cities that implemented non-pharmaceutical interventions sooner (social distancing, lockdown measures, etc.) reached their mortality peak later than others and exhibited lower peak mortality rates and lower mortality rates. A significant association was also found between an increased duration of non-pharmaceutical interventions and a reduced total mortality burden. In the present case, the EC's recommendation did not consider that some countries were hit by the novel coronavirus after the rest of the EU. For instance, Portugal, whose outbreak came after the rest of the EU, decided to reopen its borders in early July 2020. This simple example convincingly illustrates the inability of European institutions to face a pandemic and its public health consequences. Indeed, the crisis has revealed several fundamental weaknesses in the EU's institutional architecture. Additionally, some observers have used a logistic growth model to describe the dynamics of this disease. In this model, the number of cases seems to increase exponentially, reach a single peak and then decrease. Preliminary empirical evidence (Spencer and Golínski 2020) indicates that the accuracy of this logistical model is contradicted by data from several MS, like Italy or Spain. The epidemic is far from over as of the time of writing this (December 2020).

We think that the European institutions have an essential role to play in the design of new policies that aim at providing better health security for citizens in the EU. Indeed, as witnessed by the outbreaks of SARS-CoV between 2002 and 2004, MERS from 2012, swine flu (H1N1) between 2009 and 2011, and Ebola between 2013 and 2016, the prospect of a new pandemic in the coming years is far from unlikely for the EU and the world, as convincingly argued by Horton (2020). More generally, the European institutions and the MS need to design economic policies that increase the EU's resilience to violent exogenous shocks.

In the remainder of this paper, we examine several areas of EU economic policy to investigate the weaknesses revealed by the COVID-19 crisis. We analyze these economic policies in decreasing order of integration. In the second section, we analyze how monetary policy, the most integrated EU economic policy, could interact with fiscal policy and fiscal rules for greater efficacy. The third section explores the potential beneficial effects of a harmonization of labor market regulations and social models as well as the impact of the COVID-19 crisis on migratory flows and cooperation policies. In the fourth section, we present some perspectives on a less integrated EU policy: industrial policy. This is followed by a conclusion.

2 Interactions between monetary policy, fiscal rules and common public debt

The common monetary policy is an effective tool to deal with the COVID-19 pandemic, which affects all euro area countries simultaneously. However, its effectiveness differs across the MS due to variations in the severity of the crisis. National fiscal policy should take an active role in offsetting the economic effects of the crisis but is greatly limited by fiscal rules designed to control public deficits and debts and

to maintain the integrity of the euro area in the long run. The risk of default of over-indebted national governments could be reduced by making monetary policy more aggressive, reforming some fiscal rules and creating common public debt.

2.1 Monetary policy

Pessimistic expectations in the financial market could lead the economy of the Economic and Monetary Union (hereafter EMU) into a downward spiral that would seriously increase the risk of a eurozone breakup. The ECB has a great role to play in stabilizing the financial market. It has to take aggressive actions to avoid the worst-case scenario.

2.1.1 Theoretical foundation justifying an aggressive response by the ECB

The need for aggressive monetary policy to avoid the worst-case scenario is supported by a number of studies examining the implications of the robust control technique (Giannoni 2002; Leitemo and Söderström 2008; Dai and Spyromitros 2012; Qin et al. 2013). If private agents form expectations via adaptive learning when facing uncertainty, monetary policy should be even more aggressive to deal with the worst-case scenario (André and Dai 2018). The ECB can do this by implementing aggressive unconventional policy measures that bypass the liquidity trap to reduce the impacts of exceptionally large negative supply and demand shocks on the eurozone economy, thus avoiding self-fulfilling bad equilibrium feared by financial operators and policymakers. The ECB has been very reactive since March 2020 and remains in a position to do whatever is necessary to calm anxieties in the financial market. The initial measures include making available up to €3 trillion in liquidity through refinancing operations and lending to banks at the lowest interest rate the ECB has ever offered, -0.75% . The ECB has also targeted the public sector with the €750 billion Pandemic Emergency Purchase Program (PEPP), aimed at stabilizing the EMU's sovereign debt markets to avoid spikes in the spreads experienced by some MS compared to German bonds following the pandemic.³ On 4 June 2020, the ECB decided to increase the envelope for the PEPP to €1,350 billion. To affect the whole term structure and hence offer broader financial conditions, under the PEPP, public sector securities with a residual maturity ranging from 70 days up to a maximum of 30 years and 364 days are eligible for purchase. These measures have been accompanied by an easing of regulatory ratios by European banking supervisors, freeing up an estimated €120 billion of extra bank capital.

³ With the PEPP, the ECB buys a range of assets including not only government bonds, but also securities issued by European supranational institutions, corporate bonds, asset-backed securities and covered bonds.

2.1.2 Potential factors of aggravated macroeconomic risks

Several factors could aggravate the economic and financial risk following the COVID-19 pandemic and make the worst-case scenario even more difficult to deal with. The drastic reduction in economic activity increases business failures and households' defaults, causing banks to undergo substantial losses which could lead to them to struggle in the coming months. The resulting financial instability could make the current economic recession more severe.

This risk is particularly important considering that economic expansion was already showing signs of weakness before the pandemic. The expansion was supported by accommodative macroeconomic policies that raised the rate of GDP growth above its long-term potential in most industrialized countries. Just before the COVID-19 crisis began, central banks had barely begun exiting from the quantitative easing policies applied since the global financial crisis of 2008. The room of maneuver for monetary policy has not been restored by significant interest rate hikes as in previous cycles. Many governments have been pursuing highly accommodative fiscal policies, leading to large budget deficits and rising public debts over the past decade. They have given up on creating fiscal space for a counter-cyclical fiscal policy aimed at supporting the economy in the event of a major crisis. In the EMU, a few exceptions, such as Germany and the Netherlands, have been characterized by budget surpluses in recent years according to Eurostat.

Economic growth has been boosted by excessive positive wealth and balance-sheet effects due to the exceptional rise in asset prices since March 2009, driven by extremely accommodative macroeconomic policies. The collapse of stock prices in March 2020 is likely to seriously reduce households' demand and thus GDP growth. Lower asset prices also negatively impact the balance sheets of firms and banks, thereby tightening their financing constraints.

The fact that the previous expansion was excessively based on debt financing makes it very likely that some systemically important public and private borrowers will face major difficulties during the severe economic downturn. This could trigger a financial crisis that would in turn worsen the economic recession. In particular, the health crisis has heightened the budgetary difficulties of many national governments across the world and hence the risk of sovereign default. In the euro area, Italy, Spain and Portugal, among others, are most exposed to this type of risk, which could lead to highly contagious twin self-fulfilling sovereign debt and banking crises.

Finally, the high degree of global interdependence in the production process is also a major factor aggravating macroeconomic risks in the eurozone countries that are largely open to foreign trade. More than any other past pandemic, the COVID-19 crisis has caused major disruptions in production and supply chains worldwide. Barriers erected to slow the spread of this pandemic have reduced the interconnectedness between and within countries, thus preventing the global economy and hence the euro area from operating smoothly.

2.1.3 Limitations to the effectiveness of monetary policy

Central banks primarily aim to stabilize inflation and output. Since the global financial crisis of 2008, they have implicitly or explicitly taken greater responsibility for financial stability. This has led them to play a key role in macro-prudential supervision, to actively communicate with market operators, and even to implement measures designed to support asset prices when they are plummeting.

Prior to the current health crisis, interest rates set by central banks in developed countries were close to historically low levels. This policy has shown its limitations as a stimulus to economic growth. It redistributes wealth between borrowers and savers. Its effectiveness relies on increased spending by borrowers but can be reduced by a change in the behavior of savers. The latter, instead of reducing their savings in response to falling interest rates, could increase their savings effort to reach an initially set target, thus partially canceling out the stimulating effect. In addition, the COVID-19 pandemic could encourage households to save more and firms to reduce their debt in the future, in particular those who have been experiencing serious financial difficulties during this crisis.

Despite the limited room of maneuver for interest rate policy, central banks can still play an important role by implementing unconventional policy measures. In a context where massive budget deficits must be financed, such measures help, *inter alia*, reduce tensions in public and private debt markets. This avoids a sharp across-the-board rise in interest rates and makes it easier for governments and private firms to raise funds, thereby reducing the risk of banking and sovereign debt crises. This type of risk is particularly high in the euro area given its institutional constraints.

Monetary policy would be quite effective in mitigating the negative economic effects of the pandemic by preventing the vicious circles of economic and financial crises from occurring. However, it cannot compensate for the decline in GDP, which is real and very significant. An increase in the quantity of money via bank loans helps avoid the loss of revenues when households and firms are facing significant financing and liquidity constraints or when self-fulfilling pessimistic expectations are leading the economy towards a bad equilibrium with abnormally low economic activity.

To deal with the current financial difficulties of many firms, simply injecting liquidity into the financial system is not enough. Monetary policy actions should be taken to minimize the risk of this temporary health shock having a major adverse impact on the economy over the medium term by causing massive business failures and significant damage to the balance sheets of surviving firms. It is imperative to provide incentives for banks to grant additional loans and/or defer the repayment of existing loans in order to support firms that were financially healthy before the crisis. This helps preserve the production and distribution chains of goods and services so that firms can resume normal operations once the lockdown ends. However, this pandemic, through its major and complex economic and financial effects, increases information asymmetries between banks and borrowers. This leads banks to become more prudent in their lending activities, given regulatory constraints and risk management principles.

2.1.4 Institutional and economic constraints for the conduct of monetary policy in the EMU

According to its Statute, the ECB's primary objective is price stability in the EMU. It can support growth if average inflation in the eurozone is kept under control. Financial instability is now also a concern for the ECB.

The ECB is subject to specific economic and institutional constraints. The construction of the EMU has reduced the resilience of MS to adverse macroeconomic and financial shocks. The absence of banking and fiscal unions requires MS to use their own means to offset the effects of adverse shocks on national economies. Insufficient mobility of production factors and lack of flexibility in national labor markets hinder the adjustment of an economy suffering from asymmetric shocks. The Stability and Growth Pact (SGP 1997) was designed, by limiting budget deficits, to avoid moral hazards in the management of national fiscal policies which, if left unchecked, could oblige the ECB to monetize some MS public debt. The no-bailout clause in the Maastricht Treaty increases the risk of bankruptcy for a highly indebted MS. Meanwhile, the role of national fiscal policy is reinforced in the absence of monetary sovereignty. Moreover, MS are in charge of regulating and supervising national banking systems and resolving national banking crises. They are expected to fully bear the costs of a national banking crisis. They might be unable to face the undesirable budgetary consequences of a serious crisis.

The ECB conducts policy for all eurozone countries independently of any European authority or national government. The heterogeneity of the eurozone economies is detrimental to the effectiveness of the common monetary policy, which may benefit little to some MS. The ECB could find it difficult to respond to the COVID-19 pandemic, which is admittedly a symmetrical shock, but one that has heterogeneous consequences. Furthermore, the single monetary policy cannot be properly coordinated with national fiscal policies. MS are further constrained by the no-bailout clause, which stipulates that they must not financially rescue others, while the ECB refrains from monetizing their debts.

There is an incompatibility, evidenced by the eurozone crisis of 2010–12, between the independence of the ECB, fiscal sovereignty and the no-bailout clause. The no-bailout clause removes moral hazards and prevents a MS from excessively increasing its sovereign debt, thus avoiding the erosion of the EMU's foundations while allowing sovereignty over fiscal policy to be left to MS. However, fiscal policy tends to hold monetary policy hostage if national budget deficits are high and the SGP is ineffective in limiting national public deficits and debts. There is a conflict between high and disparate levels of public debt in MS and a single monetary policy with a relatively low inflation target that limits the possibility of reducing the real value of public debt. Moreover, as fiscal authorities are responsible for rescuing national banks under their supervision, there is a “diabolical loop” between the financial difficulties of a MS and the national banking crisis (Brunnermeier et al. 2016).

As the sovereign debt crisis of 2010–12 in the EMU has shown, the ECB could not refuse to play the role of last-resort lender to rescue over-indebted MS at the risk of breaking up the EMU. This leads the ECB to lose some independence. Although

both the SGP and the “no bail out” clause are aimed at making the EMU stable, keeping the latter while failing to comply with the SGP increases the risk of breaking up the EMU. The varying risks on sovereign debt across the euro area would result in different interest rates despite the single monetary policy. The effectiveness of monetary policy is low in countries whose governments face a risk of insolvency. Threatening to exit the EMU, these countries can put great pressures on the EMU for waiving the no-bailout clause and reducing the ECB’s independence, implying a risk for the ECB to lose credibility and face a lower effectiveness of its policies in the future.

Various reforms since 2008, e.g., the creation of the European Stability Mechanism (hereafter ESM) and of the European Banking Union and the introduction of the Euro Plus Pact, have allowed the EMU to be more resilient in the event of a crisis. However, if national fiscal sovereignty is not sufficiently constrained, these reforms will not eliminate the risk of a eurozone crisis. Institutional constraints still limit the scale and scope of the ECB’s responses to the pandemic. To cope with that, the ECB temporarily puts aside the allocation keys when engaging in massive purchases of national bonds.⁴ Its audacity should be accompanied by fiscal policies that ease the financial constraints of private agents.

2.1.5 Risk sharing, helicopter drop of money and monetization of public debt

It is tempting for policy makers to push the ECB to implement a “helicopter drop of money” or finance additional public spending through money creation in response to the COVID-19 pandemic. These policy measures are feasible to some extent according to the capacity of a central bank to create seigniorage revenue thanks to money creation, although their effectiveness in stimulating growth is limited (Dai 2011). However, they are at a great risk of being misused for political reasons. Economists agree that a credible central bank has some power to create seigniorage revenue without causing inflation to shoot up. However, the amount of seigniorage revenue that can be raised is not very high in many countries.⁵ Excessive recourse to money creation is a source of high inflation, likely to make inflation difficult to control in the future. A central bank may lose this power by repeatedly abusing it.

The ECB does not have a mandate to intervene in wealth redistribution between MS. A helicopter money drop or the monetization of public debt could involve such redistribution. The inflationary effects of these policies could adversely affect the wealth of people in the MS that receive less newly created money than is proportionate to their economic weight. This could lead these MS to oppose such policies.

⁴ Until the COVID-19 crisis, the ECB bought public debt issued by MS according to their share in the ECB’s capital. The current crisis has led the ECB to temporarily abandon this rule to ensure a better transmission of monetary policy.

⁵ For example, in 2016, the Fed paid \$92 billion of its net profits to the US federal government. The ECB’s net profits vary between €10 and 30 billion over the period 2002–2015 (Gros 2016). This difference in the level of seigniorage revenue between the US and the euro area is largely explained by the fact that US currency plays a central role in the world economy.

A helicopter drop of money has actually been implemented in the EMU by national governments that have provided large-scale financial support and guarantees to struggling firms and compensated for a large part of the lost income of workers who are under lockdown or in temporary partial unemployment schemes.

The extraordinary public spending by national governments in the euro area raises fears that the ECB could resort to a large-scale monetization. The ECB is doing quite a good job and the fears of monetization are not well founded. After all, the ECB does not need to implement such a monetization because the current stimulus measures are equivalent to a helicopter drop of money or a monetization of national governments' budget deficits, as long as the ECB does not exit these measures. Such measures have the advantage of being reversible and hence are not inflationary when economic conditions are substantially improved.

2.2 Sense and nonsense of fiscal rules in the eurozone

At the national level, fiscal policy is still the main economic policy tool that the MS use to deal with the short-run negative effects of the COVID-19 pandemic. However, national governments are constrained by a number of fiscal rules that could reduce the effectiveness of fiscal policies. Some reforms are needed to remedy the weaknesses of existing fiscal policy rules that have been revealed by the current crisis. A “smart” fiscal rule is needed to deal with the COVID-19 pandemic.

2.2.1 A brief overview of fiscal rules in the Euro Area

The origins of fiscal discipline in the euro area date back to the Maastricht Treaty (1992). One of the main aims of the Maastricht Treaty was to launch the EMU project. The Treaty established the steps to take and the conditions to be met for a country to be eligible for the single currency. Among these conditions, called “convergence criteria”, two criteria relate to public finance stability in the candidate country. Indeed, unsustainable national public finance could jeopardize the stability of the newly created monetary union. It was therefore necessary to monitor national public finance trends and ensure its sound management over the long term. Two rules were retained: the national public debt of the candidate country must not exceed 60% of GDP (this was the average public debt-to-GDP ratio in the EU-15 as of the late 90 s), and the national public deficit must not exceed 3% of GDP (a threshold set in reference to the debt dynamic equation which gives the level of public deficit allowing public debt to be stabilized around 60% for a real activity growth rate at 3% and an inflation rate at 2%).

If the candidate country meets all these convergence criteria, it is then allowed to join the eurozone. Any country belonging to the EMU is then subject to a fiscal rule introduced by the SGP, which entered into force on January 1, 1999, with the birth of the eurozone. This fiscal rule can be described as the supranational fiscal rule, in contrast to the national fiscal rules also in force in most Eurozone member countries. The Pact has two complementary objectives: the “stability” of public finance, requiring Eurozone countries to pursue sound management of public finance, and

the “economic growth” in the EMU, ensuring that national governments have enough leeway to intervene if necessary (particularly if a cyclical shock occurs).

To achieve these two complementary objectives, the Pact has two types of instruments: the “dissuasive” arm (a public deficit ceiling with sanctions imposed in case of non-compliance, and exceptions to the rule only in very specific economic circumstances) and the “preventive” arm (multilateral surveillance procedure with “stability programs”, multi-annual programs setting fiscal guidelines over three years for the purpose of achieving budget balance in the medium term).

Despite this fiscal rule, the eurozone has experienced several periods of turbulence (with a first crisis in 2004, the Great Recession from 2007 to 2009, and the COVID-19 crisis since late 2019) which have doubled as crises for fiscal discipline in the eurozone. On each occasion, the fiscal rule was reformed, under the assumption that the problem lay in the rule. These successive reforms have resulted in requirements of compliance with an ever-growing stack of indicators, but there has been no in-depth consideration of the real reasons for the failures of fiscal discipline in the euro area. Fiscal rule reforms have failed to ensure a real coercive disciplinary power over the MS and to provide effective monitoring of the efficient management of national public finance.

2.2.2 Lessons from past crises revealing fiscal discipline weaknesses

To better understand the strengths and weaknesses of fiscal discipline in the euro area, it is worth looking at the seminal paper by Kopits and Symansky (1998) on the characteristics of an ideal fiscal rule. They identify eight properties of a “good” fiscal rule:

1. Suitability for the intended objective: the rule must make it possible to control the discretionary orientation of fiscal policy;
2. Clear definition: the indicator, the sanctions and the exceptions to the rule must be clearly explained;
3. General consistency: the rule must be consistent with the objectives of economic policy;
4. Robust analytical foundations: the target and the reference value chosen must meet a precise economic justification;
5. Transparency: the rule must be understandable by public opinion;
6. Simplicity: the calculation of the target must be able to be done without requiring sophisticated calculation techniques;
7. Flexibility: governments must be able to continue to carry out their missions;
8. Credibility: control procedures and sanctions must be applied in an impartial and consistent manner.

Even if Kopits and Symansky (1998) do not explicitly use the term of “fiscal rule effectiveness”, their contribution has nevertheless been the cornerstone of the “good” fiscal rule debate. Barbier-Gauchard et al. (2021) have additionally discussed

the link between fiscal rule and government efficiency to foster a useful debate on fiscal rule performance.

Based on the conditions above, the current fiscal rule in the EMU suffers from three major weaknesses. First, the current rule now considers too many (and sometimes redundant) indicators simultaneously (total public balance, structural balance, public debt, growth of public expenditure, multi annual public finance program) to be able to make a clear and unequivocal diagnosis on the current state of public finance management in the country.

Secondly, the current fiscal rule indicators do not consider the fiscal functions identified by Musgrave (1959). More specifically, national public finance must be used for the allocation (production and supply of public goods and services), the redistribution of income (for social justice purposes) and the economic stabilization of activity when an economic shock occurs. In this context, in addition to measures which could be taken at the Community level for the EU as a whole, the fiscal rule must also allow countries to provide quality public services and ensure economic stabilization. The current rule already leaves sufficient room for maneuver to countries in the event of a cyclical shock. Nevertheless, in order to meet the Maastricht convergence criteria, some countries have had to implement drastic reduction measures in some areas of public spending, sometimes to the detriment of the quality of public services (education, health, security, etc.) and long-term public expenditure growth. The COVID-19 crisis highlights the extent of the heterogeneity of national health systems—some of which have been hit very hard.

Finally, the current rule suffers from insufficiently credible sanctions for several reasons. First, imposing a financial penalty on a country that is already struggling financially is nonsense. In addition, the procedure for imposing the sanction is too complex and not automatic, so that all countries are quite aware that they will never be sanctioned. Moreover, the most efficient fiscal rule is the one the country has imposed on itself. In the eurozone, national fiscal rules seem more effective than the supranational fiscal rule as underlined by Barbier-Gauchard et al. (2019). In other words, the current fiscal rule fails to meet at least three of the eight criteria proposed by Kopits and Symansky (1998): clear definition, general consistency and credibility.

2.2.3 For a “smart” fiscal rule in the eurozone

The COVID-19 crisis represents both an opportunity and a threat to the economic governance of the eurozone: an opportunity if public decision-makers rise up to the occasion and commit to adopting a smart supranational fiscal rule that is consistent with economic reality, and a threat if no lessons are learned from this new painful experience for monitoring national public finance.

Overall, the future “smart” fiscal rule for the eurozone must be designed considering the requirements of MS (supply of public goods and services, equity, economic stabilization, support for long-term growth) as well as the opportunities offered by

European integration (such as the joint financing of major long-term investment programs, the pooling of some public expenditure at the community level, etc.).

This is only feasible when heavily indebted countries have reduced the level of their public debt. Several non-mutually exclusive options for action are possible to remedy the weaknesses of the current fiscal rule in the EMU:

- to monitor only the structural public balance excluding public investment to free up financial leeway at the national level, thus ensuring economic stabilization and support for long-term growth;
- to centralize part of the national public expenditure for certain public goods and services in order to free up financial leeway at national level for the supply of public goods and services which must remain provided at the national level;
- to consider the “quality” of fundamental public goods and services as vital to the well-being of citizens (education, health, security) in the assessment of the management of national public finance;
- to support national public investment programs with European co-funding obtained thanks to the strike force of an organization for financing investment projects such as the European Investment Bank (hereafter EIB);
- to replace the financial fine to be paid in the event of non-compliance with a sanction designed to cut all or part of the Community funding for a country that has failed to comply with the fiscal rule, introducing an automatic sanctioning mechanism (requiring no political decision to be taken).

In a nutshell, the future “smart” fiscal rule for the eurozone could be a rule that only relates to the structural balance excluding public investment (with a cut of all or part of the Community funding) accompanied by an ambitious Community-level program to support public investment and monitor the quality of fundamental public goods and services for citizens. In addition, at the euro area level, a euro-zone budget considered as a European automatic fiscal stabilization mechanism could be a valuable complement to automatic fiscal stabilizers at the national level to cushion the effects of cyclical shocks on economic activity.

Nevertheless, much remains to be done on this topic from an academic point of view because it means decision makers should be able:

- to accurately measure net public investment and its long-term impact on growth and employment;
- to assess the “quality” of fundamental public goods and services and define minimum “quality” standards to be guaranteed;
- to identify public goods and services for which European added value is indisputable and which therefore deserve to be considered as European public goods and services and financed at the Community level;
- to take a courageous decision to sanction a country that does not respect the rule.

2.3 Challenges and prospects for a common European public debt

Despite the ECB's aggressive monetary response, some MS have been more affected by COVID-19, which has prevented them from implementing effective fiscal policies. It has become urgent to pool some public debts with the aim of improving the public finances of highly indebted MS or financing a European automatic fiscal stabilization mechanism.

2.3.1 The need for a new common debt instrument

The pandemic crisis requires governments' interventions to provide financial support to mitigate the negative impact on health systems and stimulate the economy. National governments must intervene on a massive scale. When the crisis is behind us, the public debt will have risen steeply.

European countries experiencing the largest increase in public debt, namely Italy, Spain, and France, are three of the four largest eurozone economies. To make matters worse, all of this must be done at a time of declining tax revenues as long as activity remains repressed. Such evolutions will question debt sustainability in these countries, leading to the risk of a new sovereign debt crisis as in 2010–12.

Under certain circumstances, with the existing institutional mechanisms, additional instruments could be introduced. Thus, regardless of how governments tackle this mountain of debt (i.e. partial debt cancelation or "hair-cut", the ECB's Outright Monetary Transactions (hereafter OMT) program, assistance from the ESM, issuance of a common debt instrument: corona bonds), it is likely to weigh on public policies for a long time. In any case, the fiscal potential of Eurobonds is more powerful than the hitherto untapped combination of assistance from the ESM and of the ECB's OMT program.

It is crucial to find the optimal forms of joint action quickly and without modifying the European Treaties. A low-cost and long-term funding instrument is needed to avert a new debt crisis. This will require more European solidarity, either by issuing corona bonds, or by having the ESM provide unconditional aid along with the ECB's sovereign bond buying program or OMT.

2.3.2 Corona bonds: the proponents

The mutual debt option or the principle of pooling national public debts (Eurobonds, or corona bonds) is a common debt instrument to jointly issue public debt across all MS (Blanchard et al. 2017). There is an ongoing heated debate between proponents and opponents of this ambitious possible budget option (Herzog 2020).

One advantage of this type of mutual debt would be the possibility of raising long-term funds at a low cost for the weak countries in the eurozone. The interest rate on common liability bonds would be low, possibly negative, as financial markets would not question the solvency of the eurozone as a whole.

For Dullien et al. (2010), the common liability bonds would offer a safe asset to eurozone banks, which are overexposed to their home countries' sovereign debt. As

corona bonds would be at least as safe as German sovereign bonds and have a significant volume, they would provide a safe European asset to the financial markets and could be used by the ECB for liquidity operations.

Moreover, Northern countries would avoid the risk of “financial contagion”. The mutual debt option offers a joint line of defense against common risks for everyone—not only vulnerable Southern countries. It also offers the opportunity for the eurozone to improve its resilience in the future.

Recently, six prominent German economists (Bofinger et al. 2020) have proposed issuing a €1,000 billion mutual bond (8 percent of the EMU’s GDP) to jointly raise funds to finance economic support packages during the pandemic.

2.3.3 Corona bonds: the opponents

Despite the growing support for corona bonds among economists across the political spectrum, there are some opponents to the introduction of common debt instruments.

A large body of academic literature suggests the existence of “moral hazard risks” in the eurozone.⁶ A huge collapse is expected as some MS have become more indebted and sought to externalize the cost of public debts. This literature recommends precautions, involving either the adoption of strict fiscal rules, or a complete transfer of sovereignty, i.e. a political union (Beetsma and Bovenberg 2000, 2003). Without a political union in place, the instrument of joint public borrowing via Eurobonds would be fully endorsed.

A second argument against the use of a common debt instrument is that the eurozone is not a state.⁷ There is no European fiscal sovereignty and hence no right to issue public debt (Herzog 2020).

Finally, centralized instruments will not solve the structural differences between Eurozone MS, as sovereignty and citizens’ preferences regarding public deficits remain informed by national rationales and corona bonds may be difficult to implement in the eurozone due to both national and European legal constraints.

2.3.4 Revived tensions between MS?

Some voices have sounded the alarm about the European project being in “mortal danger” should the member countries prove incapable of showing their solidarity. Disagreements in the Eurozone have mostly revived the fears of the 2010–12 sovereign debt crisis. At the time, there had already been talk of Eurobonds. Ten years later, the idea of corona bonds, as opposed to that of the ESM, has generated the same violence and the same hostility on both sides.

⁶ However, for a number of economists, corona bonds do not carry the risk of “moral hazard”, which has often been spotlighted in the debate on Eurobonds, especially in Germany. After all, corona bonds are proposed as a one-off joint issuance for costs already incurred by an external event, the spread of the pandemic (Dullien et al. 2020).

⁷ See the Treaty on the Functioning of the European Union (TFEU).

Peter Bofinger, a German economist, called for so-called corona bonds that would be fundamentally different from the Eurobonds discussed in the euro crisis in 2010. “At the time, it could be argued that Italy’s problems were its own fault, and helping them by using Eurobonds might send the wrong message. However, as far as the coronavirus crisis is concerned, no one is responsible, and clearly the corona bonds will not give Italy an incentive to make another epidemic happen”. In addition, unlike Eurobonds, the MS could determine in advance exactly where the money would be allocated. Macroeconomic policies can therefore partially respond to the new challenges introduced by the pandemic crisis.

3 Deepening structural policies in response to the crisis

Monetary and fiscal policies, mainly as countercyclical instruments even though they could also affect the structure of the economy, have an important role to play in tackling the effects of the COVID-19 crisis in the short run. But as mentioned earlier, their effectiveness may depend on structural characteristics of national labor markets. More generally, if the European economy is to become more resilient, structural policies need to be reassessed. This section looks more specifically at three of them, whose competences are shared: policies aimed at the labor market; those concerned with migratory flows; and policies of solidarity with the countries of the South through development cooperation. We then consider the respective interests of the common policies and the MS policies.

3.1 Are national labor market policies still relevant?

During the crisis, a number of disruptions—lockdowns, interruption of work for childcare, restrictions on the mobility of people and goods- impacted production systems and the labor market. Whereas the US unemployment rate skyrocketed to 14.7% in April (from 3.5% in February), the European unemployment increased only slightly between March and April (from 6.4% to 6.6%). But the situation is getting worse.

Faced with a large-scale supply and demand shock, companies have had to reduce their production volume. This could be achieved either by reducing the number of employees (extensive margin adjustment) or reducing the number of working hours (intensive margin adjustment) in a labor-hoarding perspective. Countries usually differ in the use of these forms of adjustment but the effect of the shock also differs according to the type of workforce. The contraction in employment is generally observed with a lag in relation to the economic crisis. Struggling companies start by not renewing temporary contracts and freezing their hiring plans. Young people, who are most likely to have temporary contracts or to be in search of a job, are the first to suffer from rising unemployment. If the difficulties persist or worsen, companies reduce the number of working hours, downsize or even close altogether. Unemployment then increases further and affects a larger fraction of the population.

Unemployment leaves a mark on people. It leads to a loss of income in the short run and increases the likelihood of experiencing a further period of unemployment or lower wages in the long run (see e.g., Arulampalam 2001). When a previously jobless person returns to work, they may have a lower income than someone whose career has not been interrupted. Economic theory offers a number of ways of explaining the wage penalty due to unemployment. The wage penalty may be explained by a loss of human capital (Becker 1964) or a negative signal on the unemployed person's abilities (Van Belle et al. 2018). The search and matching theory (Mortensen 1986) provides more nuanced conclusions whereby the impact of unemployment depends on the quality of the previous job match. A period of unemployment that destroys a "successful" match may lower the future earnings of the unemployed person if they find a job in which they are less efficient. Conversely, the break may be beneficial if it enables job seekers to find a better match and therefore be more productive. In particular, voluntary mobility may lead to better earnings. Some studies conclude that there is an unemployment penalty, particularly for young people. It appears that unemployment increases the probability of future unemployment and lowers future wages (Ghirelli 2015; Schmillen and Umkehrer 2018).

3.1.1 How to support workers and job seekers?

What can governments do to prevent unemployment-related damages? A first course of action would be to preserve employment with the help of government subsidies. This is the main policy currently being implemented in Europe. As of late April 2020, 26.8% of the workforce was covered by short-time work. Companies retain employees but reduce hours with the help of a government subsidy. Several positive effects are expected both for workers and firms. The system preserves human capital and avoids the stigma associated with unemployment. It also avoids firing and hiring costs for companies. One concern, however, is that this would slow down the reallocation process of workers from low- to high-productivity firms. Examining the effect of short-time work during the financial crisis, recent studies have found the measure to have an overall positive effect (Cahuc et al. 2018 for France; Kopp and Siegenthaler 2019 for Switzerland; Giupponi and Landais 2018 for Italy). For instance, in France, the extension of short-time work measures during the financial crisis has had a positive effect on employment and survival for firms which were affected by large negative revenue shocks and were highly indebted. The existence of a windfall effect was acknowledged but, it did not undermine the positive effect. Short-time work schemes exist in a number of European countries but are used differently. They are currently widely used in France, Italy and Luxembourg (Müller and Schulten 2020) and to a lesser extent (below 5%) in Poland, Bulgaria, Slovakia, Finland and Czechia.

If the unemployment rate increases, a second course of action is to compensate for income loss through the unemployment insurance system. An initial positive effect would be to cushion the effects of unemployment by supporting consumption and thus economic activity. A second one is related to the opportunity to seek quality employment. Even if an extensive literature documents the moral hazard effect of unemployment insurance (Lalive et al. 2006; Le Barbanchon 2016; Caliendo

et al. 2013), these negative effects appear to be lower in the case of a recession (Kroft et al. 2013). Beyond these expected effects, state support for the European unemployed is heterogeneous in practice. Before the enlargement of 2004, Esping-Andersen (1990) distinguished three models of social protection in Europe: The Nordic model with universal benefit coverage at high levels, a free-market model with less generous benefits, and a continental model in the Bismarckian tradition of social insurance, whereby coverage is linked to employment and contributions based on salary. This typology reveals a first broad division regarding the generosity of social insurance, opposing the Nordic and free-market models, but does not describe the complete range of systems observed in EU countries. In particular, there are significant differences in coverage rates and benefit generosity amongst countries where the continental model applies. In Southern Europe, for example, many of the unemployed are not covered by social insurance.

Hence, short-time work and unemployment insurance schemes appear to be crucial in times of economic crisis. They contribute to buffering the negative effects associated with unemployment but appear to be very heterogeneous across European countries. Faced with a major economic crisis, their costs escalate rapidly and put public finance under pressure.

3.1.2 How to deal with the increasing “unemployment burden” at the European level?

Labor market policies and social policies are the responsibility of the EU MS. In the complex architecture of the distribution of competences within the EU, these policies are still decided at the national level. Some form of coordination exists, but it remains essentially non-binding.

At the beginning of European construction, the then six MS had different labor and social policies but they were all based on a Bismarckian system. The logic of the founding treaty of European construction was that the heterogeneity could be dealt with and that the social systems would converge under the pressure of trade unions and governments aiming at expanding social protection. The treaty of Rome stated that the intention was “to promote improved living and working conditions for the workforce, enabling them to have equal access to progress”. But the enlargement of the EU and the Single Market put national labor markets and social policies under pressure. The cost of labor has been an issue in the context of the Single Market, especially since the enlargement to eastern European countries. The recent controversy on posted workers illustrates the complexity of the problem at the European level and the diversity of European social protection systems.

The COVID-19 crisis is now again putting a huge strain on national social protection systems. Should the response be dealt with at national or European level? On April 1, 2020, the European response consisted in announcing the setting up of the SURE system. European governments can borrow from the EU to finance the consequences of unemployment. On April 9, 2020, finance ministers approved the provision of €100 billion to help European countries. This is an undeniable step forward, but payments are still made to the national unemployment insurance systems. The advantage is that the SURE system remains compatible with the diversity

of national social protection systems. The crisis should be temporary and the system makes it possible to obtain financing to ensure the survival of businesses. One regret, however, is that harmonization between European social systems could have been more thorough. Faced with a common crisis, a common European response could have been envisioned. There are several arguments in favor of such a response.

Mobility between European countries has increased sharply since the 2000s. Nearly 4 million people moved from the new MS to the EU-15 between 2004 and 2014 (Flipo 2017). In the United Kingdom, for example, overall immigration rose by around 30 per cent between 2000 and 2010 and the number of Europeans there increased sevenfold. But migration does not occur exclusively between the east and west of the European continent. After the public finance crisis, rising unemployment in the Mediterranean countries forced young people from Spain, Italy and Greece to search for jobs in other EU countries. Unemployment and low wages are root causes of intra-European migration movements. They are causing damage in the countries of origin, resulting in human capital losses and jeopardizing future development prospects. These movements can accentuate disparities within Europe. They also raise the question of the social security coverage of these persons.

Besides, the cost of labor is an important factor to consider for firms that compete in a single market for goods and services. Social dumping can be a means to gain market shares. In order to avoid competition between European countries on social aspects, it is necessary to reduce their differences. This is very important in a context of economic crisis and growing unemployment. The current crisis must not lead to increased competition between European countries. A European course of action would be, for instance, to set up a European minimum wage.

Over the last few decades, disparities in labor market rules and social systems have raised the question of a form of social dumping between MS. The COVID-19 crisis may be a cause for concern as governments could be tempted to adopt non-cooperative behaviors to solve their national problems. In the past, European integration has been able to move forward in times of crisis. It is time to design common social protection mechanisms so that the “harmonization in progress” heralded in the Treaty of Rome becomes a reality.

3.2 Frictions on the EU labor market

The COVID-19 crisis may also reveal deeper structural imbalances in the labor market. Between 2013 and 2020, the working age population is expected to have grown by 2.2% in OECD countries while declining in the same proportion in the EU. This decline could reach up to 3.5% in a zero net migration scenario, especially in Germany, Italy and Poland. In addition, we observe a considerable amount of net occupational change.

Apart from demographics and changes in the skill composition of employment, European countries and more particularly EU companies have been struggling to find workers with suitable skillsets. The skills mismatch affects over 40% of EU companies (the 2013 European Company Survey).

Migration can significantly contribute to broadening the pool of available skills and should help to tackle skills mismatches, which have been reported to be the main source of job dissatisfaction (Ayadi and Trabelsi 2017) and unemployment. Our core argument is that immigrants who have arrived more recently in Europe are more highly educated and qualified and contribute to ensuring labor matching.

The European Agenda on Migration (May 2015) explicitly highlights the importance of attracting highly skilled foreign workers by reviewing the EU Blue Card scheme to make it more effective. The main objective of this European strategy is to improve job- and skill-matching through an efficient identification of skill gaps. In effect, one million additional researchers would be needed when increasing R&D investment to 3% of GDP.

For countries severely affected by COVID-19, organizing international labor migration to the EU will not be an easy task. While the importance of a functioning, secure EU external border will be clear in that sense, so will the need for a workable system of international labor migration into the single market.

3.3 Development cooperation policy in the face of the pandemic

Low-income countries are not only affected by health consequences of the COVID-19 but also by disruptions in the supply chains on which they depend for pharmaceutical products and most importantly, in many cases, for food. In April 2020, growth estimates ranged from -2.1 to -5.1% in Africa; mining and oil-producing countries are likely to be the most heavily hit (Calderon et al. 2020). There are many reasons for supporting the countries of the South, especially in Africa, in their fight against the fallout of the pandemic, and European institutions are well aware of them. A pandemic can only be combatted effectively on a global scale, without leaving any country behind; increases in poverty can only increase migratory pressures, both for South-South and North–South routes. even if China's weight in Africa has been increasing, the EU remains Africa's leading trading partner and Africa still is a major supplier of raw materials for the EU.

The short-term response to the pandemic vis-à-vis partners, particularly in the South, is intended to be coordinated between all European aid stakeholders in the spirit of the Paris Agreement on Aid Effectiveness. Cancelling the bilateral public debt of African countries would not be a good solution as it would above all facilitate the repayment of private creditors whose risk-taking is already remunerated by the high-interest rates at which they lend to African countries (Ferry et al. 2020). But at the international level, Europe has initiated a moratorium on debt interest payments to free up resources to meet the additional costs associated with COVID-19. In addition, on April 8, 2020, the COVID-19 crisis was the subject of a response by "Team Europe", composed of all the European institutions, MS and financial institutions (EIB, EBRD) (EC 2020), in coordination with the United Nations. A sum of €15.6 billion from existing European external action resources has been redirected to the fight against COVID-19 in partner countries. Complements from other sources (EBRD, MS) will make it possible to achieve a €20 billion response to the short-term humanitarian emergency but also to finance research, health and sanitary

systems and the economic and social consequences of the pandemic (€12 billion) (EC 2020).

However, trade policies often impact much larger sums than those of aid policies, and the EU's policy towards ACP countries is frequently contested.⁸ The various deadlines for EU-Africa cooperation in 2020 could be opportunities to shift some of the cooperation policies in a direction that is more conducive to 'structural transformation' (Aiginger and Rodrik 2020), to reduce the economic vulnerability in the long term.

4 New perspectives on industrial policy

Cyclical policies can have an impact on the structure of the European economy as economic crises can have long-lasting effects (Fatás and Summers 2018). An artificial delineation between cyclical and structural policies must not be drawn. In this light, assessing whether an enhanced integration of some structural policies like labor market policy and cooperation policy could be mutually beneficial for the MS is a worthwhile endeavor. However, the aforementioned policies have a common feature, in that they share at least some competences with the European level. This is not the case for industrial policy, an area in which each country has followed its own national (non-)strategy. In the following, we discuss the renewed interest for a European industrial policy and its crucial implications for building a more resilient EU.

4.1 Industrial dynamics in the EU before the pandemic

Before the COVID-19 pandemic, as shown by Aiginger and Rodrik (2020), all European countries experienced the effects of deindustrialization on employment, amid increasing competition due to the emergence of China. This phenomenon has been especially acute in Italy and France, where the share of industrial activities in added value had fallen below 10% in 2018, from 15% in the mid-1990s. However, Germany, Austria and Ireland have managed to maintain their industrial shares thanks to a non-cooperative export-led growth strategy for Germany, to a new investment position after the EU enlargement for Austria and to tax competition for Ireland, as shown in Table 1.

Thus, industrial policy in the EU was a core concern in economic policy discussions even before this crisis. Fatás and Summers (2018) argue that the Great Recession has left permanent scars on European economies, adding that some countries have been less affected than others as witnessed by the evolution of added value in industry. Besides, they question the current logic of the European institution in terms of competition rules (as it effectively hinders the emergence of European

⁸ In the context of the Cotonou agreement, the ACP countries had to sign EPAs with the EU in order to maintain their preferential access to European markets, thereby committing themselves to gradually opening their markets to European products.

Table 1 Shares of manufacturing in GDP

	Nominal value added in manufacturing		Real value added in manufacturing	
	1995	2018	1995	2018
Austria	17.9	16.6	15.8	18.7
Finland	22.2	15.3	13.9	15.8
France	14.9	9.9	10.6	10.3
Germany	20.6	20.8	19.3	21.5
Netherlands	15.3	10.8	11.3	10.9
Sweden	19.9	13.8	12.5	13.6
UK	15.7	8.9	12.6	8.1
EU28	17.7	14.5	14.7	14.6
Euro Area	18.0	15.4	15.2	15.7
CEEC	19.7	18.9	14.1	19.5
Sub-Saharan Africa	15.5	9.7	12.8	9.8
USA	16.3	1.5	12.0	11.3
China	32.6	29.4	23.4	26.2
World	19.4	16.3	12.8	15.3

Source: Aiginger and Rodrik (2020). Percentage shares of GDP

champions like Airbus) in a world where China and more recently the US, do not hesitate to generously support strategic companies when they are struggling to cope with international competition.

The latter two factors—the heterogeneous consequences of the Great Recession on industrial sectors and the lack of EU-wide industries—are crucial to any understanding of the lack of coordination between EU MS in responding to the SARS-CoV 2 outbreak. Indeed, the EU institutions were ill-prepared to face this peculiar crisis since their current institutional architecture is rigid and reacts to events instead of acting before events occur. The ‘muddling through’ approach adopted after the 2010–2012 Euro crisis will be insufficient to face future crises. Indeed, the consequences of the Euro crisis have been, again, heterogeneous in terms of unemployment, indebtedness and other macroeconomic indicators, and are still visible in several MS.

4.2 Industrial policies in the EU

As explained by Wigger (2019), in 2014, the EC proposed to increase the share of manufacturing in the EU’s GDP from 15 to 20% by 2020. This target, as shown above, has not been reached, as the long-term trends of deindustrialization have not been reversed for the EU as a whole, because of misconceptions and dogmas about industrial policy in the European institutions. The main objectives of this new European industrial strategy were to improve cost competitiveness (i.e. unit labor costs, hereafter ULC) as well as to channel private funds into industrial sectors through the creation of multiple funds (a financial leverage effect was expected).

As the ULC is the ratio between total labor compensation and productivity, a decrease in ULC means that labor productivity is growing faster than total labor compensation. Thus, the productivity gains which are not used to compensate the workforce could be used to finance future investment projects and to pay dividends to the shareholders. These reductions in ULC could have a positive signaling effect in the private sector. As rightfully noted by Wigger (2019), productivity gains have slowed since the 1970s in the EU. This slowdown in productivity gains could be seen as a byproduct of deindustrialization. Consequently, and if we follow the rationale of the European institutions (EC 2014), improving cost competitiveness amounts to constraining the growth of wage costs. Ultimately, the rationale behind these measures aimed at improving cost competitiveness is equivalent to that of internal devaluation.

Whether the European institutions made a good choice in promoting this is debatable. The strategy relied on the income-switching expenditure effects expected from an internal devaluation (or an external devaluation, which is impossible for euro area members). As noted by Doulos et al. (2020), the expected positive effects of internal devaluations can only occur when a country does not suffer from structural weaknesses (other than a non-flexible labor market). Indeed, countries like Greece have been unable to retain international market shares, meaning that they have not only failed to reap the benefits of internal devaluations but also suffered badly from its drawbacks. In other countries which are more open to trade and less dependent on oil imports, internal devaluations have had some income-switching expenditure effects.

According to Pianta et al. (2020), the question in current policy debates is not whether we have to conduct an industrial policy in the EU, but which industrial policy we need in order to ensure a good quality of life for European citizens. Firstly, we need to replace the old rationale based on cost competition with a new one in which ULC is improved thanks to new productivity gains (an increase in the denominator, not a decrease in the numerator as in internal devaluations). Secondly, we need to think of the European system of innovation as a whole. Indeed, European projects like smart grids for photovoltaic parks in Europe could be interesting examples (Zsyman et al. 2012).

Stimulating growth in innovative and sustainable sectors could increase ULC, but this increase could still have a positive signaling effect for the private sector without inducing high negative social costs in terms of unemployment, healthcare, living standards and overall well-being. These significant changes in industrial policy in Europe will not be achieved under current fiscal and competition rules, as noted by Pianta et al. (2020).

4.3 Industrial policy and exchange rates

The combination of this absence of exchange-rate policy and of growing divergences among countries has had severe consequences on industrial dynamics in the euro area, and more broadly in the EU. Despite a nominal convergence in the run-up to the EMU, significant divergences have been observed between the MS of the

euro area since the mid-2000s. While it is arguable that these divergences pertaining to real variables like GDP per capita or unemployment have structural roots, the exchange rate and, by extension, the exchange rate policy have also been factors. The euro exchange rate has played a role in European industrial dynamics.

In terms of international trade, it is not enough to consider only ULC for a specific country. To fully grasp the potential impact of exchange rate policy on industrial policy, we need to introduce the notion of relative ULC: here, ULC of different trade partners are compared to assess the external competitiveness of a country. For clarity purposes, we use the notations of Golub et al. (2018), so that the relative ULC can be written as follows:

$$RULC = \frac{(L/Q)(W/L)}{(L^f/Q^f)(W^f/L^f)e} = \frac{(L/Q)}{(L^f/Q^f)} \frac{(W/L)}{(W^f/L^f)e} = \frac{q}{q^f} \frac{w}{w^f e}. \quad (1)$$

where L stands for labor employment, Q is added value, W represents total labor compensation, the exchange rate e is expressed in domestic currency per unit of foreign currency, and we add a superscript (f) to the variables of foreign trade partners. It can be easily understood that a country with a $RULC$ below 1 will have a competitive advantage in manufacturing. As aforementioned, the dominant logic in European industrial policy before the COVID-19 crisis was to reduce W as much as possible in order to attract private investors to industry.

An analysis of the role of cost competitiveness in industrial dynamics provides only partial answers. There are other essential dimensions in industrial dynamics such as innovation dynamics, institutional dynamics and so forth. However, it seems interesting to explore whether exchange rate developments can have an impact on cost competitiveness and consequently on industrial dynamics. In Eq. (1), we introduce the equilibrium exchange rate e^s (i.e. an exchange rate consistent with macroeconomic fundamentals in the long-run) which now becomes:

$$RULC = \frac{q}{q^f} \frac{w}{w^f} \frac{e^s}{e}. \quad (2)$$

From Eq. (2), we can see that a country's competitiveness will depend on three elements: (a) relative labor productivity, (b) relative nominal labor compensation times the inverse of the equilibrium exchange rate and (c) the exchange rate misalignment.

When the currency of the country depreciates (i.e. an increase in e), we can clearly see that the partial derivative of $RULC$ with respect to e is negative. Besides, a growing undervaluation of the currency (i.e. a depreciation above the equilibrium rate) will induce an advantage in terms of cost-competitiveness. For this country, this cost advantage will have positive consequences for manufacturing exports and consequently for added value and employment in the manufacturing sector. *In fine*, these exchange-rate misalignments will impact economic growth and inflation.

During the 2000s, the exchange rate misalignments of each MS became increasingly heterogeneous according to El-Shagi et al. (2016). Some peripheral countries like Greece, Portugal and Spain have experienced a growing

overvaluation of their real effective exchange rates, whereas several core countries like Germany, the Netherlands and Austria have known a series of undervaluations for their real effective exchange rates. This growing heterogeneity will have important consequences on industrial dynamics in the euro area and in the EU. In some MS, economic growth and employment in the manufacturing sector has slowed because overvaluation means that the exchange rate e is inferior to the equilibrium exchange rate e^s in Eq. (2). Conversely, economic growth and employment in the manufacturing sector have been bolstered by cumulative undervaluations since the exchange rate e is above the equilibrium exchange rate e^s in Eq. (2). In this case, the *RULC* variable is inferior to 1 and the country has a competitive advantage against its trade partner as shown by Golub et al. (2018).

This problem was discussed and analyzed after the 2010–2012 Euro crisis. There is no doubt that stabilization measures will help to reduce the negative consequences of this growing heterogeneity between core and peripheral countries in the EMU. However, there is an underlying problem of cost competitiveness and non-cost competitiveness which can be only tackled by structural measures. These reforms should not be restricted to the labor market: they should also pertain to the education, banking and innovation systems and to a renewed European industrial policy. They should be coordinated at the European level to face a violent exogenous shock like the COVID-19 pandemic.

The COVID-19 crisis has shown how a global exogenous shock could affect the functioning of the European institutions. In addition, coordination between MS has been slow and to some extent inefficient. The most salient feature of the crisis in Europe has been the absence of coordination for the production of medical masks. Building production capacities as part of plan for future pandemics (Feng et al. 2020) is bound to be a wise move. The lack of masks and tests along with the rapid implementation of measures of social distancing and hand washing in several European countries have been the most essential factors explaining the poor performance of European economies in the struggle against this novel coronavirus (Shim et al. 2020; Cheng et al. 2020) in comparison with the performance of South-East Asian countries.

5 Conclusion

The current health crisis will morph into a severe economic crisis for the EU. According to the June update of the IMF's World economic outlook, the recession in 2020 will be above 10% in the euro area, and above 12% for France, Italy and Spain. The IMF forecasts a slow economic recovery in 2022, but uncertainties remain high. In this general context, this paper has outlined some perspectives to build a more resilient EU after the COVID-19 pandemic. It has also argued that the consequences of severe economic crises can have long-lasting effects and that, therefore, an artificial line in the sand between short-term and long-run objectives should not be drawn.

Concerning stabilizing policies, the ECB has taken an aggressive stance in dealing with the considerable negative economic consequences of the COVID-19

pandemic. The scales of its programs are very impressive even though they are dwarfed by those implemented by the FED. The ECB stands ready to add supplementary measures as soon as it finds that the existing programs and measures are insufficient. However, existing economic and institutional constraints have hindered ECB's freedom to act and its efforts. On the other hand, these limitations may make the ECB more credible and serve as a safety net, preventing it from embarking on the path of high and uncontrollable inflation, which would be detrimental to long-term economic growth and the stability of the euro area. It appears that a federal leap is desperately needed to increase the efficiency of the monetary policy by using common debt instruments to fight future catastrophic events, but this debt mutualization necessarily requires designing democratically 'smart' fiscal rules and transferring some taxation powers to the EU level.

The coming economic depression will also have tremendous consequences in terms of unemployment and require changes in some structural policies. We reiterate our argument that the federal level could be the appropriate level to answer to this challenge. Indeed, addressing the long-term negative effects of unemployment is essential, and doing so at the federal level would provide a common response to increased intra-zone mobility and the development of a form of social dumping. These negative evolutions could be heightened by demographic factors in Europe. Accordingly, organizing international labor migration to the EU after the reopening of the borders could be a way to improve the efficiency of labor migrations. Moreover, as public finances will be under high pressure in the EU, the cooperation policy with African countries should be designed at the EU level to avoid contradictions between its different iterations (official development assistance and trade agreements with the South), with the objective of enhancing its efficacy.

Lastly, to cope with future pandemics, which are not altogether unlikely, the EU and its MS need to rebuild industrial capacities in several areas (such as textile products and medical equipment) to increase the resilience of the European economy. The extreme fragmentation of global value chains admittedly has its advantages, but it has also enormous drawbacks when the world economy faces pandemics. The EU and the MS need to reorganize global value chains in order to increase the resilience of the European economies. The diversification of the supply source for medical equipment and pharmaceutical products should be a priority for European leaders. This means that industrial capacities must be renewed in Europe by ensuring coordination between MS even in crisis periods.

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Compliance with ethical standards

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

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