Editorial Introduction: Pension Reform

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In the past three decades, almost all OECD countries and all members of the European Union have reformed their pension systems. See, for example, recent editions of the *OECD Pensions at a Glance* (e.g., OECD, 2017, 2019, 2021) or Hinrichs (2021) for an overview. In the 1990's, many countries faced the issue of an ageing population that would make their pension system very expensive or even unsustainable due to an increasing dependency ratio. The problem was particularly pressing for countries where a public pay-as-you-go pension was the main pillar of the system, since population ageing immediately would translate into a higher burden on the taxpayer if pension outlays would not be contained. Many countries implemented parametric reforms where public pensions became less generous or eligibility for a public pension was limited; in particular, raising the eligibility age proved to be a very effective. In countries where public pensions were the main source of retirement income, the reduction in public pensions was partially compensated by increasing the role of funded private pensions, either mandatory for employees in all or most sectors, or voluntary and stimulated by tax deductions and employer contributions or choice architecture tools such as opt-out arrangements.

Population aging and tightening of solvency requirements also pressed for reforms of funded pensions. As it became more difficult—and expensive—to meet fixed pension promises there was a general tendency to move away from DB pensions and shift a larger part of the risk to the pension plan participants in DC type contracts.

This tendency was spurred further by the financial crisis in 2008 and the consequential fall in interest rates that caused funding ratios of pension funds with DB

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schemes to collapse. Often, harsh measures were necessary for recovery, sometimes even requiring cuts in nominal terms to guarantee that pension funds could still meet their future commitments.

A third big challenge is the changing nature of the labor market in many countries, where the standard permanent job with pension entitlements is losing ground. Labor markets become more dynamic and more diverse, with increasing numbers of people who are in nonstandard jobs or who are in self-employment, where pension saving is not mandatory or automatic and typically lags far behind pension saving in standard jobs (see OECD, 2019). Many countries where, traditionally, groups such as the self-employed fall outside the system, are struggling with ways to include these groups to prevent pension inadequacy or even poverty among the elderly.

The major reform in the Netherlands that will be implemented in the coming years (before 2027) addresses the second concern and is focused on the second pillar of mandatory and fully funded private pensions. The Netherlands has a relatively small first pillar, with a flat rate public pension based upon minimum standard of living considerations for everyone older than the official eligibility age, irrespective of their work history. This first pillar pension guarantees low poverty among the elderly who have been Dutch residents throughout their lives. The eligibility age used to be 65 for a long time, but since 2015 it is rising gradually. It will reach age 67 in 2025 and will rise further in the longer run, depending on the development of life expectancy: a three-months increase in life expectancy will be followed by a two-months increase in the eligibility age. The current reform leaves the first pillar unaffected. It also does not directly address the challenge of including nonstandard workers. There is a general notion that the self-employed and other non-standard workers should be stimulated to save more for their retirement, but the reform does not translate this into concrete plans, other than by making second-pillar pensions more personal and thereby more accessible for the self-employed.

Second pillar pensions account for a large share of post-retirement income, in particular for the middle and higher incomes. More than 90% of employees and a small share of self-employed workers are obliged to participate and contribute annual premiums to a sector-wide pension funds or company funds. At retirement, accumulated pension wealth is translated into an annuity. Approximately 11% of occupational pensions are of a DC type but the large majority are DB pensions with an annuity that is indexed with inflation but fixed otherwise. In recent years, however, indexation has been the exception rather than the rule and several pension funds have been forced to even cut nominal amounts. As a consequence, DB pensions do not deliver the income guarantees that they supposedly provide.

The main feature of the new system is that DB pensions will be replaced by collective DC schemes with some additional features to allow for risk sharing with future generations: the so-called solidarity reserve. Another important aspect concerns the abolishment of the implicit subsidy going from younger workers to older workers that is present in the current DB system. With contribution rates as well as accrual rates uniform across all ages the current system is actuarially unfair since contributions made at a younger age have more time to increase in value. After the reform, contribution rates will still be uniform across all age groups but by going to DC contracts, the contributions become actuarially fair by nature. A third feature is more

flexibility for the individual participant. In the current system each occupational pension is fully transferred into an annuity, but after the reform participants can get a lump sum of at most 10% of their accumulated wealth at retirement, with an actuarially fair reduction of their annuity.

The Netherlands is often praised for its multi-pillar pension system and typically ends up at the top end of a ranking of pension systems in countries across the world. In the most recent Mercer pension index ranking of 2021 (see Mercer and CFA Institute, 2021), Netherlands ranks second overall, just after Iceland. It ranks second in pension adequacy and third in the subindexes on sustainability and integrity. Still, the recent challenges show that reforms are necessary to keep the pension system sustainable and future proof in view of the increasing dynamism in labor markets.

In the run-up to the current pension reform several studies have been done in the Netherlands on the different aspects of the pension system. This special issue of *De Economist* contains six studies on different topics concerning the reform. Since the Netherlands is often seen as a role model for countries with a multi-pillar pension system (certainly by Dutch pension experts...), we hope that the lessons to be learned from these studies are also relevant for other countries that consider implementing similar reforms now or in the future.

The contribution of **Metselaar, Zwaneveld and van Ewijk** explains the main features of the reform. It then uses a stochastic generational accounting framework to analyze how the transformation into the new system affects different generations, with special attention for the solidarity reserve that aims to strengthen risk sharing among generations. Abolishing the implicit subsidy present in the current system causes a serious transition problem as some generations – in particular those halfway their working career – suffer a loss as they contributed to the subsidy during the first half of their career while they miss the subsidy in the second half. Three outcome measures are considered: replacement rates, market valuation of pensions net of contributions ('net benefit'), and welfare measured as the certainty equivalent of pension income.

The paper finds that all current generations (current participants and pensioners) are better off in the new contract in terms of replacement rates and welfare. In terms of market value (net benefit) a mixed picture emerges, however: current generations half-way through their career are worse off. The paper thus finds diverging, and sometimes even contradictory results for the alternative measures. This seems troublesome from a policy perspective, but the paper then analyzes the relevance of the alternative measures for evaluating policy reforms, showing how the alternative indicators can be used by policy makers in a comprehensive assessment of the generational impact of the reform.

The paper of van Bilsen, Mehlkopf and van Stalborch measures intergenerational transfers through the proposed solidarity reserve. Their first conclusion is that the role of the solidarity reserve is larger than might appear at a first glance. The fraction of pension savings that can go directly into the solidarity reserve is limited to 10%, but in addition, around 30% of the pension savings of a young worker can subsequently be transferred to the solidarity reserve via a levy on future positive excess returns. The second main finding is that the solidarity reserve can introduce a substantial pay-as-you-go element within the scheme of fully funded pensions. This

element can, for example, arise if the solidarity reserve is primarily filled by working generations while it is primarily paid out to retired generations. This feature of the solidarity reserve can be overlooked easily and is not mentioned in the pension bill. The main policy recommendation to pension funds is to make explicit if there is a pay-as-you-go element via the solidarity reserve, and, if so, to assess whether this is desirable. If a pay-as-you-go element is considered undesirable, then a pension fund should re-evaluate the design of the solidarity reserve.

Ciurila, de Kok, ter Rele and Zwaneveld challenge the policy choice made in the reform to maintain constant contribution rates of the life cycle. It derives the optimal life-cycle path of pension contributions and pension benefits using a life-cycle model calibrated on Dutch data, taking account of the prospect of a lower interest rate in the future. The model accounts for rising earnings patterns and changing costs of children over the lifecycle, which both make optimal pension premium rates increasing over the participant's labor market career. Moreover, the presence of children lowers the level of the optimal pension benefit. Compared to the current system with flat contribution rates, the optimal pension system would increase welfare by 2.5% in the most realistic scenario with borrowing constraints. Differentiating according to the level of educational attainment only leads to small additional welfare gains.

The study of **Bosch, van Ewijk, Micevska Scharf and Muns** analyzes a key feature of the planned reform: abolishing the implicit subsidy from younger to older workers due to uniform, age independent contribution and accrual rates. The proposed reform maintains uniform contribution rates but ensures actuarial fairness by going to DC type contracts. Abolishing the implicit subsidy may affect labor supply and wages of all workers involved. The paper investigates the impact of changes in contribution rates on wages, labor costs and labor supply. It uses rich administrative panel data on employees in the Netherlands for the period 2006–2012, exploiting variation in contribution rates across time and pension providers. The main finding is that wages respond in such a way that 70% of a change in the average pension contribution rate is borne by employers (in the form of higher labor costs), while 30% is borne by the workers (lower wages). There are no significant effects on labor supply, which may be due to institutional constraints on hours worked. These results seem at odds with the standard demand supply model for the labor market but can be explained in the context of a bargaining model.

Muns and Werker analyze a refined allocation rule to share collective risks. This is a key element of the proposed pension reform, replacing the one-size-fits-all approach in the current Dutch pension system while keeping the feature of collective investments. The purpose of this paper is to show that, under stylized assumptions, the new allocation rule leads to a Pareto optimal allocation of risks among current participants. They consider a funded pension system where collective risks are allocated to the retirement savings of individual participants. In particular, the allocation is such that the relative effect on total retirement wealth (including future contributions), is the same for each participant. They show that this allocation is Pareto improving compared to the current contract that distributes risks in proportion to pension wealth accumulated so far. As a result, risk and return are reallocated from the pensioners to the younger workers to the benefit of both. This life-cycle feature is the key building block of the new pension contract in the Netherlands. They then extend

the allocation rule to a setting that includes annuity risk, which can be a traded risk (e.g., interest rate risk) as well as a non-traded risk (e.g., longevity risk). They show that the optimal allocation rule and the allocation rule in the new Dutch retirement system are very similar. Muns and Werker do not incorporate the solidarity reserve in the proposed new system that addresses intergenerational risk-sharing.

Finally, **van Hekken, Hoofs and Brügger** argue that the success of pension reforms depends on how participants react to and accept the changes. Their paper studies participants' attitudes, beliefs, and emotions toward the new pension system. In an experimental set-up, they informed participants in different ways about the new system and then asked about their beliefs and attitudes. They find that many participants' comments are based upon previous experiences, misconceptions and (sometimes false) interpretations of the information in the text. Moreover, young people are more optimistic, while many older participants feel victimized. Policy-makers and pension funds who should acknowledge and address these emotions, beliefs, and attitudes that influence the way that information that is meant to be neutral is perceived. A communication strategy taking these different beliefs, emotions and attitudes among participants will help to increase insight of the participants in their financial situation after retirement and to make better informed and more conscious pension and retirement related decisions.

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