Editorial

Teresa Ghilarducci and Anthony Webb The New School, New York, NY, USA.

E-mail: teresa.ghilarducci@gmail.com

The Geneva Papers (2017) 42, 371-375. doi:10.1057/s41288-017-0061-4

This issue of The Geneva Papers focuses on pension financing and insurance. Due to increases in longevity and reductions in fertility, the world faces a retirement savings crisis. Policymakers are concerned about financing the projected increases in pay-as-you-go pension costs as a share of GDP. Firms and governmental entities are concerned they have not adequately funded their defined benefit retirement plan promises to their employees. Workers fear their defined contribution plan balances will be insufficient to maintain their standard of living in retirement.

All of these institutional arrangements have one underlying goal, to claim the productive resources of society for those who are no longer working for pay. Experience shows that retirement systems in advanced economies are more stable when retirees are not overdependent on a single type of claim, whether social insurance, employer pensions, or private savings, but instead, depend on income in retirement from a diverse set of sources, that they hold a diversified portfolio of claims. The Four Pillars research programme, set up at The Geneva Association in 1987, reflects this viewpoint. The four pillars approach envisages retirees having claims in the form of (1) a compulsory pay-as-you-go state pension, (2) funded occupational pensions, (3) individual savings and (4) a flexible extension of work life.

In many countries, the first three pillars are either being eroded or are not fit for purpose. For example, in the United States, Social Security (the first pillar) will provide succeeding birth cohorts with substantially lower replacement rates (post-retirement income divided by pre-retirement labour market earnings)—even if current-law benefits continue to be paid—largely due to the full retirement age increasing from age 65 to 67. This seemingly innocuous reform is equivalent to a 13.3 per cent cut in benefits for workers who do not adjust their retirement age. Premiums for Medicare, the health insurance programme for the elderly, are deducted before checks are deposited in beneficiaries' bank accounts, so that projected increases in Medicare premiums will further erode benefits. Social Security benefit reductions place low-to-moderate lifetime earners who retire at the early retirement age of 62 at a high risk of old-age poverty. Most European countries have enacted similar reforms.¹

In the U.S., as in many other countries including notably Australia, Canada, and the United Kingdom, defined contribution (DC) retirement plans have largely displaced defined benefit (DB) plans as the dominant form of employer provided (second pillar)

¹ See Carone, G., Eckefeldt, P., Giambioni, L, Laine, V., Sumner, S.P. (2016) 'Pension Reforms in the EU since the Early 2000 s: Achievements and Challenges Ahead' European Commission Discussion Paper 042.

372

pensions. DB plans in the U.S. were far from perfect. Employers were not required to sponsor a plan, and DB plans covered less than two-thirds of the private sector workforce, while disproportionately rewarding career employees. DB plans are not coming backemployers are no longer willing to shoulder investment or longevity risk. But the displacement of DB by 401(k) plans has exacerbated the retirement savings crisis. First, in contrast to DB plans, both sponsorship of and participation in DC plans are voluntary, contributing to a substantial decline in participation rates. Second, although spreadsheet models project substantial wealth, plan balances fall far short of those of DB participants, and are usually insufficient to enable households to maintain their standard of living. In 2013, the median household-level DC account balance at age 55-64 was a mere US\$111,000, sufficient to provide a lifetime income of, at most, US\$400 a month.² Succeeding birth cohorts are little better placed, so we cannot attribute these low account balances to an immature system. Rather, they reflect design features that result in preretirement withdrawals, spotty contribution histories, high fees, and sub-par investment returns resulting from self-directed investing. Third, in the 401(k) system, annuitisation is also voluntary. The individual annuity market suffers from adverse selection, complex products, and a lack of pricing transparency, all of which likely contribute to low annuitisation rates. The lack of annuitisation further reduces post-retirement incomes, because wealth that could have been used to finance consumption, the goal of any retirement plan, passes instead as bequests.

A further concern with DC type plans is that succeeding birth cohorts may enjoy dramatically different replacement rates depending on the investment returns they experience during their working lives. The calculations are somewhat artificial in that they assume that the investment portfolio is liquidated at a single point in time and used to purchase a fixed annuity. With the notable exception of Switzerland, few households annuitise unless annuitisation is mandated, and most undertake phased withdrawals of unannuitised wealth. For those undertaking phased decumulation, the long-run impact on consumption of a stock market downturn at retirement depends on whether the decline in stock prices reflects a permanent dimming of the prospects for corporate profits or a temporary increase in the equity premium.³ Those contemplating annuitisation might be better advised to either purchase a mixture of fixed and variable annuities, or ladder their annuity purchases and match their pre-annuitisation asset allocation and bond durations to their intended mix of annuity types. But a substantial risk remains, and it is one that is difficult to hedge in the financial markets. Basic finance theory tells us that participants in financial markets will not guarantee more than the risk-free rate. Guarantees of rates of return substantially lower than the risk-free rate do little to reduce the risk of being a member of an unlucky cohort, while more generous guarantees are extremely expensive.⁴ One solution may be for governments to impose intergenerational risk sharing on funded

 $^{^{2}}$ Authors' calculations based on 2013 Survey of Consumer Finances data. We include both IRA and 401(k) balances of households participating in 401(k) plans.

³ See Kopcke R.W., and Webb A. (2013) "How Has the Financial Crisis Affected the Consumption of Retirees?" Center for Retirement Research Issue Brief 13-12.

⁴ See Golub-Sass, A., Munnell, A. H., Webb, A., and Kopcke R. (2009) 'What Does It Cost to Guarantee returns' Center for Retirement Research Issue Brief 9-4.

plans. This would change the optimal asset allocation, and much of the benefit comes through higher expected returns rather than reductions in risk.⁵

Some propose delayed retirement as a solution to the retirement savings crisis.⁶ In the U.S., delaying retirement from 62 to 70 increases Social Security benefits by at least 76 per cent, sometimes more, and gives workers more time to contribute to their retirement plans.

Few would argue that workers should be denied the choice to continue to work at older ages. Recent research has confirmed that the lump of labour fallacy is, indeed, a fallacy, and that increased labour force participation at older ages has not increased unemployment among the young. In many countries, the abolition of mandatory retirement ages and the reduction of incentives to early retirement embedded in pay-as-you-go benefit formulas have given workers new opportunities to shape the manner and timing of their exit from the labour force.

But delayed retirement is not a panacea for the retirement savings crisis. Those who employers want most to hire and are most able and willing to work at older ages are often the best prepared for retirement. Work-related health limitations increase sharply with age and vary by socio-economic class. Importantly, the academic literature has paid almost no attention to the impact of increased labour force participation at older ages on the wages of both older workers and those with whom they compete in the labour market. The concern is not that the jobs will not be there, but that their wages will be insufficient to significantly enhance financial preparedness for retirement, the duration of which will reduce if increases in longevity fail to match increases in retirement ages.

Some of those who propose reducing the cost of pay-as-you-go benefits by raising the age at which full benefits can be collected argue that even substantial increases in retirement ages would preserve the share of adult life spent in retirement. They point to declining mortality rates as evidence of increased capacity to work at older ages. But gains in life expectancy at 50 in many nations, including the U.S., have mainly accrued to higher socio-economic status households. Increases in full retirement ages may have substantial regressive redistributive effects. Low socio-economic class workers may face a stark choice between reductions in already modest retirement incomes and substantial percentage reductions in retirement durations that are already shorter than those of higher socio-economic status workers.

Four of the papers in this issue focus on how to improve the second pillar of occupational pensions. Although country-specific, their findings apply to all countries whose occupational pension systems have similar flaws. The fifth paper investigates how increases in labour supply affect wages and contributes understanding of how the fourth pillar—work at older ages—can enhance retirement income security. The sixth and final paper, by Auerbach and co-authors, examines trends in socio-economic mortality differentials and assesses the distributive effects of proposed reforms to social insurance programmes.

The paper by Belbase and Sanzenbacher addresses perhaps the most significant flaw in the U.S. occupational pension system, that, at any point in time, less than half of full-time private sector workers participate. As a response, state initiatives would require employers

⁵ See Gollier, C. (2008) 'Intergenerational risk-sharing and risk-taking of a pension fund', *Journal of Public Economics* 92: 1463–1485.

⁶ Munnell, A. H., and Sass, S. A. (2008) *Working Longer: The Solution to the Retirement Income Challenge*. Washington, D.C.: The Brookings Institution.

374

to automatically enrol workers ineligible to participate in a workplace retirement plan in Individual Retirement Accounts, a type of DC plan. Workers could opt out, which raises the concern that, since many ineligible workers earn low wages, many will not participate. Forecasting the opt-out rates based on the behaviour of employees eligible for 401(k) plans may be biased because ineligible workers could be different than eligible workers even if they are paid the same. Employers not offering a plan may be accommodating their employees' preferences for higher cash wages and lower benefits. Belbase and Sanzenbacher attempt to solve the question by surveying ineligible workers. They found the share stating they would opt out of a state-sponsored IRA was as small as the share currently opting out of employer-sponsored plans. Fears that ineligible workers have a weaker taste for saving appear to be misplaced. But if the default savings rate was higher than 6 per cent of salary, opt-out rates would increase. In addition, these state IRA initiatives, while attempting to solve the coverage problem, beg a broader question. If policymakers believe that households are behaving myopically by opting out, should not the proposals require participation, as in Australia and elsewhere?

The second significant flaw of U.S. DC plans is that annuitisation of account balances is voluntary. The effects of adverse selection on annuity prices are well known, but two other drawbacks of voluntary, individual-level annuitisation are less widely discussed. First, households likely are unable to comparison shop for the most competitive deal. The experience of the United Kingdom suggests that they do not. Until recently, annuitisation of DC type accounts was mandatory in the U.K. Households could purchase an annuity from their plan provider or could exercise an open market option. Relatively few exercised the open market option, even when it was to their financial advantage. Second, insurance companies bear aggregate mortality risk, the risk that their annuitants live longer than expected. They must hold reserves against this eventuality, on which their shareholders expect a return. But, it is unclear to what extent annuity providers charge an aggregate mortality risk premium. If this premium is significant, one solution might be for annuitants to bear aggregate mortality risk, so that annuity payouts are adjusted if the members of the annuity pool live longer than anticipated. The fluctuations in annuity payouts would be small, and annuitants would remain insured against what is, for them, the much greater risk of failing to die on time. Even if the aggregate mortality risk premium is small, policymakers may nonetheless be concerned about the financial capacity of insurers to bear this risk, should the individual annuity market expand dramatically.

The paper by Morales finds that average annuity payments increased by 15 per cent when an electronic quotation system was introduced in the Chilean annuity market. We are unaware of research on price dispersion in other annuity markets—it is well documented that prices vary, but it is unclear how many transactions take place at each price point. We conjecture that the effects in other markets might be smaller, but not negligible.

We draw a broader lesson from the Morales paper. Financial regulators have levers at their disposal that can increase competition and reduce the cost of financial services, and thereby reduce the retirement income shortfall. The same levers Chileans used to increase competition in their annuity market could be used to increase competitive pressure on investment management fees. But we doubt whether an electronic pricing system alone would have much effect on annuitisation rates in countries such as the U.S., where few currently annuitise. To increase annuitisation rates, an electronic pricing system would likely need to be accompanied by an annuitisation default. The paper by Brautigen, Guillan, and Nielsen analyses pooled annuity overlay funds and income tontines, which are tools for sharing mortality risk among annuity purchasers. Arrangements to share investment and mortality risk between insurers and policyholders should be both transparent and understandable. "With profits" type arrangements fail both these tests. The arrangements described by the authors pass the transparency test, but the authors leave open the question about whether sellers of these products can explain them to potential purchasers in ways they can understand.

The paper by Muller and Wagner examines contribution and payout smoothing mechanisms of Swiss occupational pension plans. In contrast to U.S. 401(k) plans, Swiss plans distribute surpluses and trigger additional contributions based on variations in the plan's funding ratio. The paper does not describe how risk might be shared between the household and the financial institution or across succeeding cohorts of households, but it provides a framework for analysing risk-sharing options within the Swiss second-tier pension system.

The Papadopoulos, Patria, and Triest paper examines the impact on earnings of being a member of a crowded birth cohort; in this case, the U.S. Baby Boomer cohort born between 1948 and 1964. Labour market crowding has a quantitatively significant effect on the wages of both Boomers and of groups with whom they compete in the labour market. This finding has important implications for policy assessments of the consequences of delayed retirement as a solution to the pressure to finance retirement benefits. To quote from the paper, "If the wages of older workers fall as their ranks become crowded with the baby boomers, then continued work may seem like a less desirable option to those contemplating retirement, and the earnings of those who do continue working will not go as far in financing their consumption". Lower wages will make saving for retirement more difficult.

The final paper, by Auerbach and co-authors, examines trends in U.S. life expectancy by income quintile. They project a dramatic increase in socio-economic mortality differentials, estimating that the life-expectancy gap between men in the top and bottom lifetime income quintiles will increase from five years for the 1930 birth cohort to thirteen years for the 1960 birth cohort. They calculate that the divergence in life expectancy will increase the gap between average lifetime Social Security retirement benefits received by men in the highest and lowest quintiles by US\$69,000, substantially reducing the progressivity of the programme. The authors then investigate whether plausible Social Security reforms would mitigate or enhance this reduction in progressivity. But their preferred metric—the impact of reforms on net benefits as a share of wealth—needs to be interpreted with care. Compelling low-wage workers to delay retirement may increase the expected present value of their benefits, but may decrease lifetime utility if they rationally prefer to claim early. Revealed preference suggests that early claimers may have exactly such preferences, perhaps because of the nature of their work and their higher levels of morbidity.