



# Life and Pensions Newsletter

## (The Four Pillars)

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## The Future of Retirement Systems

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by *Theo Bouts*<sup>+</sup>

### Drivers of reform

The last century brought a wave of pension reforms across the globe. In mature and large unfunded public pension systems such as in continental Europe, these reforms were necessary mainly due to major demographic developments, where the ageing populations put significant financial pressure particularly on pay-as-you-go (PAYG) pension systems. Thus, long-term sustainability of the public pension systems came under scrutiny.

Parametric reforms were then introduced to improve the sustainability of the state systems. These reforms combined changes in the retirement income calculation with revisions to the eligibility requirements, leading to a decrease in benefit levels. In addition, targeted adjustments to the legal retirement age were made so that the public systems were better prepared to meet anticipated demographic changes, in particular, increasing life expectancy. Some countries even introduced reserve funds in order to avoid being fully dependent on PAYG financing. This financial buffer is intended to provide additional funds in preparation for those years in which large numbers of people (the so-called “baby-boomers”) will retire.

To compensate for the declining benefit levels in social security systems resulting from these reforms, many countries accompanied their reform process in the first pillar with a complementary build-up of pre-funding elements and/or an improvement of existing second and third pillar plans. Governments in continental Europe created incentives for additional private pension savings, expanded existing occupational schemes and introduced new second and third pillar (occupational and private) pension plans and tax benefits. They even granted direct financial support payments to encourage people to save more for old age on their own. In contrast, the United States and the United Kingdom introduced auto-enrolment strategies or tax incentives to foster voluntary participation in second pillar plans. With all these measures, we register a shift from first pillar (pay-as-you-go) systems to second and third pillar (funded) systems, resulting in a more balanced multi-pillar system.

In other regions of the world, the problems countries were facing had a different scope. Moving from communism to capitalism, eastern European countries overhauled their state systems completely. These countries initiated reforms of their first pillar in the 1990s and, in the last decade, set up mandatory (funded) second pillar schemes in order to ensure asset-building for a wide range of people.

Meanwhile, as a response to the financial and debt crisis, austerity packages have been enacted in a number of these countries defining measures which have weakened the build-up of funded pension schemes: reductions in tax incentives (e.g. The Netherlands) or contributions rates (e.g. some eastern European countries). In Hungary, the second pillar funds have even been nationalised.

In emerging Asia, increased industrialisation, rapid economic growth and urbanisation are leading to erosion in traditional family-based structures. Therefore, the introduction of formalised systems for old-age provisioning has become a key political goal, and these countries have begun establishing formal pension systems to one degree or the other, as well as introducing new occupational pension schemes

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<sup>+</sup> Head of Global Life & Health, Allianz SE.

such as the Mandatory Provident Fund in Hong Kong, the New Labor Pension Fund in Taiwan and new corporate schemes in South Korea.

### **The World Bank model**

These developments follow the basic idea of the multi-pillar system introduced by the World Bank in the 1990s by allowing for a diversification of retirement income and risks. Public PAYG-financed, funded defined benefit (DB) and defined contribution (DC) pensions are all complementary parts of a country's pension system, thus sharing risk among governments, companies and individuals. However, the combination and weighting of the pillars vary across countries due to differing cultural and market specifics. Opposing approaches to the first pillar—poverty prevention versus retaining living standard determine the supplementary pillars. Thus, generous first pillar systems traditionally had only small amounts of pension assets accumulated in the funded pillars and vice versa. Therefore, as the more generous PAYG systems, e.g. continental Europe, lower their benefit levels, complementary schemes gain greater importance.

With this rebalancing within the system, different risk factors have to be taken into account, namely investment, inflation and longevity risk. Thus, retirement income planning has drastically increased in complexity. Even more so as over the last years and decades, there has been a substantial shift in funded pension designs: namely from DB to DC plans shifting much more responsibility and risk to the individual. Furthermore, the changing pension landscape occurs on the background of increasingly volatile financial markets. Investment decisions and market developments are having an increasing effect on retirement income.

Generating an adequate retirement income taking all pillars into account is the major challenge for the future, confirmed by placement on the agenda by the EU Commission in a white paper in 2012.<sup>1</sup> After addressing the sustainability of the state pension systems at the end of the last century, the focus has now extended to adequacy of retirement income. This is no longer a sole concern for the state pension system but requires a combined approach using all pillars of a country's retirement system.

### **Rethinking the model—a portfolio approach**

Thus, we have to rethink the multi-pillar model as an integrated system. A stable and reliable pension system needs several pillars in order to balance out the risks of all stakeholders involved—governments, companies and individuals—to arrive at an acceptable level of overall risk, while achieving adequate income levels.

We could approach this problem by looking at the retirement system as a portfolio of different assets with differing risk profiles that should deliver a certain income stream. This kind of investment problem can be approached as a liability-driven investment strategy (LDI) where the cash flows needed in the future (retirement income) is the focus and the investment strategy (the retirement system) and the mix of "assets" just follow this target. The sum of cash flows needed during the retirement phase form the liabilities and the build-up of potential income streams from a multi-pillar system should match these liabilities.

Transferred to the set-up of the retirement system—if a country's public pension system provides a minimum income stream, the funded schemes must generate a higher additional income flow than would be necessary within a more generous system. Individuals might also need additional guarantee features in the funded schemes to arrive at an income level which is considered adequate. Individuals covered by such a system have to deal with more factors of uncertainty such as investment risk, inflation risk and longevity risk. To mitigate those risks, the additional DC arrangements have to be designed with respect to these features and the role such plans need to have in the overall system. This also needs to be assessed for different income groups.

In contrast, in countries where PAYG-financed public pension systems and DB funded schemes already provide a large income flow, DC pension plans will only need to target a low supplementary income and would not need a high level of guarantees. Even the type of pay-out option can be modelled more freely.

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<sup>1</sup> European Commission (2012) *An Agenda for Adequate, Safe and Sustainable Pensions*; White Paper COM(2012) 55, Brussels.

In both situations, individuals are increasingly being forced to assume more responsibility for their long-term retirement planning. An analysis from the Organisation for Economic Co-operation and Development (OECD)<sup>2</sup> has shown that the impact of the reforms in public pension systems in nine of the OECD countries<sup>3</sup> amount to a decline of gross replacement rates of more than 10 percentage points compared to the pre-reform situation. For example, Portugal has declined 35 percentage points and Italy roughly 20 percentage points. If these cuts are to be compensated, people will either have to work longer or to save more.

Deciding how much to save is not easy, nor is designing an investment strategy that has to span decades and reach a considerable financial asset level. There are a number of parameters which have an impact on the savings result, namely the contribution level and period, as well as the investment returns. To compensate for a 20 per cent replacement rate loss, people have to save 3 per cent of their final wage over a 40-year period; this rate triples to 9 per cent if they only save for 20 years.<sup>4</sup> In addition, individuals are confronted with the question of how much money they will need after they retire, and how they should transform their retirement savings into an income stream when they retire. Should they buy an annuity from an insurance company, and, if so, should these payments be fixed or variable? Or if they decide on a drawn down plan, how much can be spent each year and how can the rest be invested? This is a daunting challenge—a challenge where pension providers could provide valuable advice and support.

### The Allianz approach

On the background of this changing and challenging pension landscape, a wide variety of savings solutions in DC arrangements have been developed. In view of the capital-market risks and the high volatility of the markets, innovative investment solutions continue to rely on diversification—but with a stronger focus on risk strategies. Product solutions such as so-called life cycle or target date funds have become more widespread as well as structured DC plans, which enable people to choose their own retirement age and retirement income, or combinations of insurance and capital market products. The different options of pay-out and annuity solutions have to be judged according to the role within the total retirement system.

Another factor to consider when designing a DC scheme is the trade-off between the benefit of guarantees and the cost of guarantees. Due to the variety of options in product design, the heterogeneity of pension systems across countries and the various risks which need to be considered, the elements necessary to arrive at an adequate income level should be combined in a modular way.

Global providers who can create a combination of both insurance and financial options are well positioned to offer such a modular solution. On one hand, wealth management products can deliver income and growth potential through investment trusts and funds, private pensions and saving plans, on the other, products such as individual life, protection and health care insurance, in addition to corporate provision can cover both personal and employer-provided commitments. Combining these various solutions would enable both corporations and individuals to address the basic two types of uncertainty which have to be taken into account to arrive at an adequate income level: how much savings the individual can build up pre-retirement and how long the individual will live post-retirement.



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<sup>2</sup> OECD (2009) *Pensions at a Glance: Retirement-Income Systems in OECD Countries*.

<sup>3</sup> Austria, Finland, France, Italy, Mexico, Portugal, South Korea, Sweden and Turkey.

<sup>4</sup> Under the assumption that the investments are put into a portfolio of 60 per cent equities and 40 per cent fixed income with a nominal rate of return of 7 per cent, a nominal discount rate of 4.5 per cent and a life expectancy of 20 years at age 65. See *OECD Pensions Outlook 2012*.