The Future of Multi-Pillar Pension Systems

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Introduction

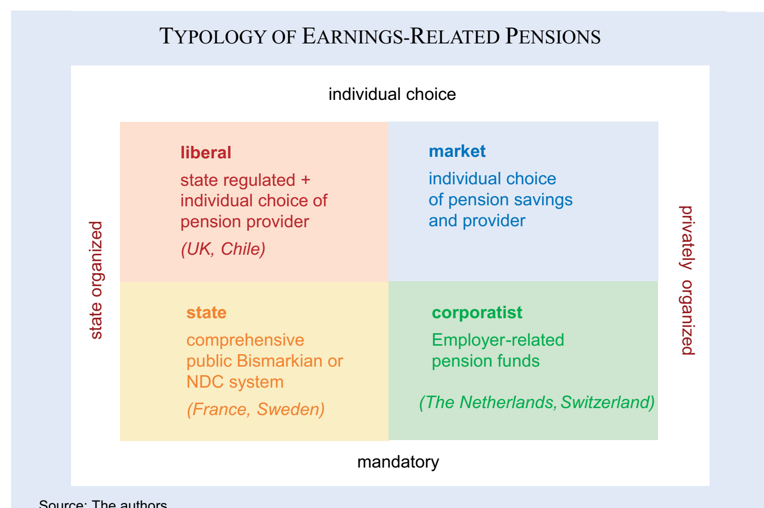
Pensions are organized in a wide variety of ways in Europe's different member states. This article discusses a typology of pension systems (see also Bovenberg, Van Ewijk and Westerhout 2012). We focus on earnings-related pensions because this is the part of the pension system that differs most across countries. After exploring this typology, the article discusses the challenges faced by pension systems as a result of aging and increased consumer heterogeneity. Despite featuring different pension systems, many countries have been forced to introduce similar reforms.

Alternative pension systems

We develop a typology of earnings-based pensions based on two dimensions (see Figure 1). The first dimension involves the governance of pensions. Does the state administer and control earnings-related pensions, or are these responsibilities left to the private sector via group insurance (occupational pension plans) or individual decisions (personal pension plans)? As purely public and private systems do not exist, this article refers to state-oriented and private-oriented systems. Indeed, there are various dimensions to government versus private control. For example, the government can mandate individuals to take out pension insurance from a specific insurance pool, which is administered privately (such as sectoral pension funds, for example). Alternatively, the state can provide longevity insurance, but contract out certain tasks (administration, investment) to private parties. This illustrates that the various tasks involved in earnings-related pension insurance (administration, investment, insurance, intergenerational and intra-generational risk sharing, marketing, and assisting individuals in complicated life-cycle financial planning) can be distributed in alternative ways across the government and the private sector.

The second dimension distinguished in our typology involves the scope for individual choice in pension insurance. We refer to choice-oriented and mandatory-oriented systems because the extent of choice is also multi-dimensional. Indeed, choice has more aspects than mandatory versus voluntary participation in pension insurance. Particularly during their working life, individuals may be able to select the level of contributions, the investment portfolio or the sensitivity of their accumulated pension rights to macroeconomic risks, the extent and type of survivor and other insurances (e.g., disability insurance), the insurance pool, the provider and their retirement age (i.e., the age at which pension income is received for the first time). On or during retirement, they may

Figure 1



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choose the type of annuity (unit-linked, linked to price or wage, or lump-sum payments), additional insurances (e.g., health or care insurance), and the insurance company or the insurance pool. Finally, in addition to choices made by individuals, choices made by employers are relevant. For example, are employers free to select their own insurance pool and insurance company or pension fund for their workers?

The typology of earnings-related pensions in Figure 1 leads to four prototype models. The classical juxtaposition is that between a mandatory state system, on the one hand (in the lower left corner of Figure 1), and a market-based system with free choice of savings and insurance in private capital markets, on the other (in the upper right corner of Figure 1). The typology also distinguishes between two more hybrid systems: a corporatist system with mandatory participation in private pension funds (in the lower right corner of Figure 1) and a liberal system, which leaves scope for individual choice in publicly regulated systems (in the upper left corner of Figure 1). The Dutch and Swiss pension systems, where employer-provided earnings-related pensions play an important role, constitute examples of the corporatist system. The Chilean system, which features mandatory pension savings together with free individual choice between private pension funds and insurance companies, is an example of the liberal system. The pension reforms of the 'second state pension' in the UK, featuring automatic enrolment with the option of opting out, can also be viewed as another example of a liberal system.

These prototypes bear some resemblance to the classification of the welfare state by Esping-Anderson (1990), which distinguishes between the Scandinavian, Anglo-Saxon and Corporatist systems. The three prototypes of state, market and corporatist pensions correspond more or less to the Scandinavian, the Anglo-Saxon and the Corporatist models respectively. Our fourth prototype – the liberal system – relies on extensive government regulation, but leaves ample scope for individual choice and market competition.

The World Bank (Holzmann and Hinz 2005) distinguishes between three pillars in earnings-related contributory pensions. The first pillar is a publicly-managed and mandated pension plan. The second pillar involves mandatory, private pension plans. Voluntary private plans make up the third pillar. In addition, the World Bank identifies a basic pension (the so-called 'zero' pillar) aimed at poverty alleviation. The first dimension of our typology – state versus private systems – thus involves the distinction between the first public pillar, on the one hand, and the private second and third pillars, on the other hand. The second dimension – individual choice versus mandated systems – relates to the borderline between the mandatory first- and second pillars, on the one hand, and the voluntary third pillar, on the other hand. In our typology in Figure 1, the first pillar is the dominant form of pension provision in the state model, while the third pillar is dominant in the market model. With regard to the second pillar, our typology distinguishes between two alternatives. The first is the traditional corporatist model, whereby participation is mandatory and linked to the employer or industry through occupational pension plans controlled by corporations and possibly representatives of workers. The second is the liberal model, whereby the government determines the pension contract and enforces participation, but at the same time leaves the administration, investment and insurance to private-sector parties. The second model creates scope for individual choice and competition in the market for personal pension plans. These four prototypes are described in greater detail below.

State model

The classical state is associated with the traditional welfare state that provides social insurance for its citizens from cradle to grave. The pension system is controlled and administered by the state and is comprehensive and largely mandatory. The state organizes not only the basic pension aimed at poverty alleviation, but also earnings-related pensions for the middle class. Most households therefore do not need to save voluntarily for their retirement income. The functions of both life-cycle planning and intergenerational risk-sharing are conducted on their behalf by the government. Intergenerational risk-sharing sometimes relies on separate rules such as automatic balancing in non-financial defined contribution (NDC) systems (Holzmann, Palmer and Robalino 2012), but can also be integrated with the rest of public finances, including public-debt policy. Funding of future pension liabilities is taken care of through fiscal policy aimed at debt reduction or by building up some reserve funds within the government.

These state systems are typically mandatory, but may leave some scope for individual choice regarding retirement age, for instance. However, this scope is limited in order to avoid adverse selection in insurance and individual failures in life-cycle planning. This prototype encompasses both the classical Bismarckian systems (in Germany and France, for example) and the more modern NDC systems (in Sweden and Norway, for example).

Market model

Earnings-related pensions are in the market model the responsibility of the private sector through employer-provided plans or individual pension plans in the market model. Participation in pension savings is either voluntary, or may be part of the labor contract of individual employers. The state provides a basic flat social pension to avoid poverty in old age. The government also regulates the private sector. Solvency regulation ensures that the promises of pension funds and insurance companies are credible. Moreover, regulation helps to make financial markets more transparent for individual consumers. Individuals are not forced to participate in mandatory earnings-related plans; they can take their own portfolio decisions and are free to withdraw their retirement capital as a lump sum rather than an annuity. The government may encourage pension savings or annuitization by using subsidies and tax benefits.

In Esping-Anderson terminology, the Anglo Saxon welfare state conforms to the market model. With respect to pensions, however, the state in the main Anglo-Saxon countries – the UK and the US – plays an important role in providing earnings-related pensions. Moreover, beyond such public systems, these countries are starting to employ defaults to guide individual decisions and stimulate privately provided pensions to supplement their public systems. The planned reforms in the UK, for example, are moving the country further towards the liberal model.

Corporatist model

In the corporatist prototype, pension funds organize earnings-related pension insurance for workers in specific firms or sectors. Earnings-related pensions are considered part of the labor contract. Pensions are thus employment-related and provided by the employer. Pension funds are organized on an occupational or sectoral basis, for example, as collective defined contribution (DC) or as defined benefit (DB) systems, or as mutual insurance companies. As cooperatives, pension funds are typically governed by representatives of the employers and the unions, which play an important role in corporatist countries. Together with the basic pension provided by the state, the system is comprehensive and mandatory, leaving little scope for individual choice in terms of levels of saving or portfolio choices. Typical examples are the Dutch and Swiss pension systems. The government may support private pension funds by providing tax advantages and enforcing the mandatory pooling of individual firms and their workers in industry-wide pension funds.

Liberal model

Just like the corporatist solution, this prototype aims to synthesize the state model and the market model. However, rather than relying on employer-provided pensions negotiated between social partners, it combines state regulation with individual responsibility. The state both organizes the basic pension and controls earnings-related pensions, but also leaves room for private administration and insurance as well as individual choices. More specifically, the government can mandate earnings-related pensions by forcing workers to enroll in personal pension plans, while leaving them free to select their own investment and insurance companies. Individuals are thus not constrained by agreements between unions and employers. The Chilean system is an example of this model.

A more liberal version of this prototype model is to automatically enroll workers while giving them the discretion to opt out of earnings-related pension insurance. This model thus takes to heart the lessons of behavioral economics and can be characterized as 'libertarian paternalism' – as distinct from 'old paternalism' and the associated mandatory systems. An example is New Zealand's Kiwi Saver plan, which combines automatic enrolment with some degree of individual choice of contribution rate (within some range) including the option to take contribution holidays and withdraw capital before the retirement age under special circumstances. People can opt to save through mortgage repayment rather than a pension plan. Another interesting case is the UK, where the State Second Pension (S2P) allows for contracting out with an employer-based occupational pension.

From 2012 onwards, a new system of centrally administered personal accounts is being introduced, namely the so-called National Employment Savings Trust (NEST). Enrolment will be automatic for all employees who are not enrolled in a suitable occupational pension plan – but opting out or making additional contributions are both possible.

Common challenges to all models

Each of these pension systems face common challenges stemming from falling birth rates, rising life-expectancies and growing demand for pension systems tailored to meet individual needs. Rising life expectancy challenges both funded and PAYG systems; and at a given retirement age, it also increases the length of the retirement period that needs to be financed. A growing number of pension systems are explicitly shifting the costs of higher longevity to pension plan participants. Many European pension systems have reduced or completely eliminated the generous early retirement incentives introduced in the 1970s and the 1980s. Most pension systems now allow for a flexible choice of the retirement age with more or less actuarially fair adjustments. This applies to public, occupational and individual schemes alike. Moreover, several countries have tightened eligibility criteria for unemployment and disability schemes in order to prevent these schemes from being abused as early retirement programs. At the same time, pension schemes have improved labor-market incentives during an individual's working life by linking benefits more tightly to contributions over the period of his/her entire working life.

As regards fertility risk, PAYG schemes in particular seem to be vulnerable to lower fertility rates because they rely on the human capital of young people to finance the pensions of older generations. Indeed, in the face of lower fertility, funded pensions may replace part of the PAYG pensions as cohorts that raise less children rely more on financial capital than on investments in the human capital of children to safeguard their retirement incomes (Sinn 2000). However, just as global aging may reduce rates of returns on capital markets, funded schemes may also come under pressure as a result of lower fertility. Indeed, aging is likely to increase the return on human capital and reduce the return on financial savings. In response to the growing burden of aging, many countries have cut back the cost of pensions in an attempt to put a ceiling on pension contributions. In line with DC schemes, most of the burden of adjustment is thus placed on the benefit side by raising the retirement age, restricting eligibility for benefits in other ways, or reducing replacement rates. Some countries with large PAYG systems have limited the indexation of benefits in payment. This may facilitate a move towards a multi-pillar scheme, which includes not only a public PAYG scheme, but also occupational pension plans and personal pension schemes.

Pension systems do not just provide an income for the elderly, they also play an increasing role in the broader problem of financial life-cycle planning. Both during the contribution phase and during the payment phase pensions should contribute to the desired life-cycle profile of consumption. This concerns the level of savings, as well as their risk profile. As the capacity of corporate sponsors and taxpayers has become more limited in absorbing pension risks in the face of aging and increasing competition in commodity and labor markets, those who have accumulated pension claims become risk-bearing stakeholders and are thus confronted with greater risks. Accordingly, defined-benefit systems which suggest that pension benefits can be shielded from macroeconomic risks are being replaced by pension systems that let participants suffer the impact of such shocks. Pension schemes must therefore find optimal ways to allocate risk among their participants, to communicate this risk, and to help participants absorb it.

All pension systems face growing heterogeneity and greater demands from consumers. There is no easy way to get around the trade-off between choice and compulsion. Yet there may be scope for improvement. Firstly, mandatory pensions could become increasingly tailored to individual heterogeneity. This requires governments and pension funds to gather information on individual circumstances like household composition, career and housing status. Secondly, one could allow for more elements of choice within mandatory systems, for example, by adjusting contributions, the investment portfolio, the point of retirement and the type of annuity paid. Thirdly, literature on behavioral finance (Thaler and Sunstein 2008) suggests that there is scope for substantial improvement by guiding individual choice using defaults. In order to contain individual failures, experiments with defaults are increasingly popular in countries that traditionally treasure individual discretion. Defaults maintain the freedom of individu-

als to opt out and simultaneously address individual failures by assisting those who are not able or willing to choose themselves. To illustrate this point, the US introduced a pension law in 2006 that facilitates default enrolment in pension plans, automatic default escalation of pension contributions and default portfolios. Structured choice through defaults may result in some convergence of various pension systems. Defaults, in turn, may guide individual choice in individual schemes (which are dominant in the market and liberal models) while also allowing some degree of choice in collective schemes that previously did not allow any individual choice (these systems are dominant in the state and corporatist model).

Conclusions

This paper has documented the substantial international diversity in earnings-related pension systems. It has also discussed the challenges faced by pension systems. Despite featuring different pension systems, various countries have introduced similar reforms. In particular, pension systems accommodate more individual choice and structure the choice architecture more carefully through defaults, for example. More macroeconomic risks are transferred to pension rights and pension benefits instead of pension contributions in view of the limited ability of the sponsors of the pension schemes to absorb these shocks. Moreover, retirement ages have been raised and made more flexible, early retirement benefits have become more actuarially fair, and pension benefits are linked more closely to lifetime contributions.

Although different retirement systems respond similarly to common trends, they cannot be expected to evolve towards one unique 'optimal' system due to two reasons. First of all, there are fundamental trade-offs underlying the design of the pension system. Secondly, the institutional design of a particular position on the trade-off has no unique solution. The same functions can be performed by alternative institutions and deciding which institutions best fit a particular country depends on that country's specific circumstances and history.

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