WORKING PAPER 11: THE ROLE OF GUARANTEES IN DEFINED CONTRIBUTION PENSIONS

EXECUTIVE SUMMARY

This paper examines the role of guarantees in defined contribution (DC) pension plans, in particular minimum investment return guarantees during the accumulation phase. The main goal is to assess the cost and benefits of different return guarantees in DC pension plans. The rationale for such guarantees depends critically on the overall design of the pension system and, in particular, whether there are already strong benefit guarantees embedded in public pensions, old-age safety nets, occupational defined benefit (DB) pensions, and some insurance products that may be bought during the working life, such as deferred annuities. Such form of protection is more comprehensive and valuable than that offered by minimum return guarantees, as they guarantee a minimum level of income throughout retirement.

By contrast, minimum return guarantees only ensure that the amount of the accumulated savings at retirement does not fall below a certain value. The actual pension benefit received after retirement will vary depending on the type of pay-out product chosen and market conditions at that time. However, even if there are benefit guarantees in the public pension system, their level may be low or they may protect the bulk of retirement income only for a small segment of the population (usually the less well-off). Deferred annuities – which are not considered in detail in this report - present a different set of challenges, such as managing longevity risk and investor apathy to transferring the ownership of their savings to insurance companies.

DC return guarantees can strengthen and complement the risk-reducing properties of life-cycle investment strategies, protecting retirement income against major investment losses. By enhancing people's appreciation of and confidence in DC pension arrangements, return guarantees can also boost the coverage of and contributions to these arrangements. However, as guarantees have to be paid for, they reduce the expected value of retirement income from DC plans.

The report analyses the cost and benefits of different types of minimum return guarantees as calculated using a stochastic financial market model. The guarantee claims are calculated as a financial derivative in a financial market framework (like e.g. the valuation of a put option). This pricing model abstracts from administrative costs as well as solvency rules and related regulations. In real life, fees would therefore be higher than the ones calculated in this model.

In this context, the report highlights the value of capital guarantees that protect the nominal value of contributions in DC pension plans. They are in theory relatively cheap to provide (they may cost less than ten basis points of the net assets accumulated), and address one of the main concerns about DC plans among the general population; people are often deterred to save in DC plans because they feel they can lose even part of the money they put in. Implementing capital guarantees means that the money people contribute to DC pension plans is guaranteed and they will always receive at retirement at least the money they put in. This makes funded pensions at least as attractive as keeping retirement savings “under the mattress”.

However, such guarantees can only be introduced relatively easily in the very specific context considered in this report: a DC pension plan with a fixed contribution period (as often found in mandatory pension systems) with a pre-set investment strategy (as in the life-cycle funds considered in this report). Relaxing either of these features would raise major challenges for an effective and efficient
implementation of return guarantees in a DC context. If plan members can vary contribution periods or investment strategies the cost of the guarantee would also need to be recalculated. This would increase the complexity and cost of administering the guarantee as well as possibly creating confusion among members.

Another problem with return guarantees in DC systems is that they can hamper member’s mobility across providers or fund managers, a key feature of DC systems. If the DC provider also guarantees the minimum return, switching provider would normally be accompanied by the cancellation of the existing provider’s guarantee. Any shortfall in the market value of the accumulated savings relative to the existing plan’s guarantee value would then be materialised. This problem can be solved in three main ways: making the guarantee ongoing – which makes it very expensive –, having a guarantee underwriter that is independent from the DC plan provider, or introducing a compensation mechanism between providers.

The main recommendations distilled from the analysis contained in this report are as follows:

- From the member’s perspective, minimum return guarantees in DC pension plans are least valuable in countries where the PAYG-financed public pension already provides a high level of retirement income and where there are public, old-age safety nets that compensate workers – especially low income ones - from a low investment return on their funded pension contributions. Conversely, guarantees are most useful where the DC pension plan provides a large part of the overall retirement income and when membership of such plans is mandatory;

- The choice of guarantee depends on a trade-off between the desired level of downside protection and the target (expected) value of the pension. Capital guarantees on the value of savings accumulated at retirement offer an attractive cost-benefit trade-off for DC pension plan members. They are - at least in theory - relatively cheap to provide and are valued highly by plan members. Guarantees offering higher minimum returns and ongoing guarantees are generally much more expensive to meet and would therefore reduce substantially the expected value of savings at retirement. For instance, an annual minimum return guarantee of 0 percent (annual capital guarantee) would cost six times more than the capital guarantee applied only at retirement.

- The cost of the guarantee is also higher the shorter is the contribution period and the riskier is the investment strategy. Halving the contribution period to 20 years would quadruple the cost of the capital guarantee applied at retirement. Similarly, reducing the allocation to equities from 80 percent to 50 percent would halve the cost.

- In practice, the cost of the guarantee will also depend on a variety of factors, including the evolution of capital markets, the type of competition in the provision of guarantees and the regulation applied to the guarantee providers. To the extent that there are different commercial guarantee providers (e.g. insurers, banks, investment managers), it is important to create an equivalent solvency or capital adequacy framework to ensure that providers are setting aside adequate reserves to meet the guarantee. In particular, there is a need for adequate capital requirements for asset management companies that provide guarantees, ensuring a similar level of protection as the solvency regime in place for other providers of capital guarantees, such as life insurers.

- There are different ways of charging for the guarantee. For plan members, the most appealing may be to have the guarantee cost deducted from the value of assets at retirement, rather than on annual basis from the contributions or assets accumulated. However, the guarantee provider needs to set aside capital to meet the guarantee and would therefore require some up-front payments. A balance between these two objectives may be struck by having part of the guarantee cost covered by up-front fees and part from a “haircut” on the potential surplus above the
guaranteed value at retirement. However, for the sake of transparency if there are competing providers, it would be important to regulate the fee structure to ensure that members can compare them easily.

- Policymakers should also consider various challenges relating to the introduction of guarantees. One of the basic features of DC plans is the possibility for individuals to choose provider. If one allows switching between providers, it may be necessary to introduce a compensation mechanism, which needs to be carefully designed to ensure transparency and fairness.