



Costs, Risks and Security of Voluntary Defined Benefit Pensions (Part Two)

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Last month we illustrated that the value for money proposition of defined benefit (DB) pension schemes is now extremely poor, with only weak incentives and very costly current regulation. This article analyses the Pension Protection Fund (PPF) and demonstrates its deficiencies of design. The article goes on to offer possible improvement to insolvency protection and remedy to the increasing cost of DB provision.

Any discussion of DB pensions will rapidly turn to the risks inherent, but there is one event which is paramount: sponsor failure. You do not need value-at-risk risk budget calculations to see that sponsor failure is the supreme pension risk. It is only upon sponsor insolvency that pensions can be reduced, in all other circumstances pensions are paid in full. Elementary risk theory continues the analysis. Pension risk is the product of the sponsor insolvency likelihood and the subsequent consequence, any scheme funding deficit. Only after sponsor insolvency does any deficit crystallise as the risk to members' pensions – the sequential order matters. The problem is primarily one of corporate finance, and not for example, scheme asset allocation.

To manage pension risk, we may influence the sponsor insolvency likelihood or scheme funding, or both. This is complicated as the contributions required to achieve some target scheme funding will directly influence the sponsor insolvency likelihood. Further an orphaned scheme whose sponsor has failed faces uncertainty and risks which would previously have been borne by the sponsor, which results in pressure for over-funding to provide against these risks. However, and this is the nub of the problem, over-funding strictly increases the likelihood of sponsor insolvency.

These elementary principles offer some immediate insight into the European debate over application of the insurance regime, Solvency II, to pensions. For an insurance company a capital adequacy regime is appropriate as it lowers the insolvency likelihood and current risk to policyholders. For an orphaned pension scheme it is also appropriate. But for schemes with recourse to an ongoing sponsor such over-funding is inappropriate. Here over-funding operates to mitigate the current and contingent consequences of insolvency, but perversely increases the likelihood¹ of its occurrence. Risk in aggregate usually increases; paradoxically trustees demanding cash today usually weaken the employer covenant.

For all schemes to over-fund as precautionary saving against the prospect of risks that only arise after sponsor insolvency is clearly inefficient; for some it will never arise, and for many it is a

¹ There is an exception to this generality - where the company earns sufficiently more on its pension scheme assets than on its operating assets. That though raises the question as to why the company exists at all.



very remote prospect. Risk pooling, through insurance, carries obvious benefits. Further the economically efficient approach is to focus upon the primary cause, i.e. insolvency, rather than on consequence mitigation, i.e. scheme funding rules or asset allocation.

As UK voluntary pension schemes overwhelmingly have private sector sponsors, government provision of this insurance is not natural. In fact, the usual solution for problems of this type is private sector insurance. There are many situations where private sector insurance serves a public policy good (protection of a class) and is compulsory in consequence – third party liability in motor insurance is a familiar example.

The alignment of interests of a sponsor company in distress and a private sector pension guaranty insurer is unique. Prior to insolvency the insurer may, with the agreement of the sponsor company, commit funds, for example as working capital, to the rescue of the company. As the objective is restoration of the sponsor company's competitive position, there would be clear issues of government aid involved. This form of precautionary intervention should not be confused with post default debt recovery².

The Pension Protection Fund is a compulsory mutual compensation scheme. Unfunded compensation schemes can be seen as reverse tontines; the last man standing loses. There is clearly an incentive not to be the last to die. The fundamental problem of sponsor insolvency is not resolved, merely deferred. Capitalisation, as has been suggested by the PPF on a number of occasions, alone will not, however, transform a compensation scheme into an insurance company³. To illuminate this point further we must consider elements of its specific institutional design.

In mitigation of moral hazard problems, insurance contracts often contain a deductible (or excess), a loss which is met by the insured beneficiary of the policy. When beneficiary specific, this is optimal risk sharing. The limitation of PPF compensation to a maximum of 90%⁴ of benefits cannot serve this purpose. They are general rather than specific rules and the insured beneficiary, the scheme member, cannot influence the moral hazard that is present, which originates in sponsor behaviour. There is no theoretical obstruction to full insurance of pension benefits. The PPF deductions simply limit their loss exposure; to just one-fifth of the sponsor covenant risk faced by a scheme⁵.

² Optimal recovery of debts may involve corporate financial restructuring but as the many costs of the insolvency process have already been incurred, this is merely making the best of a bad job.

³ Such capitalisation would presumably occur through increases to the PPF levy which then raises the question of ownership of this capital surplus. The usual justification for capitalisation is that this facilitates smoothing over time of levy charges, but this argument is greatly weakened by the fact that the PPF can and has operated with capital deficits.

⁴ The PPF estimates (March 2007) that it covers just 83% of the FRS17/IAS19 liabilities when schemes were funded on average at 96%.

⁵ Stated by Martin Clarke, Executive Director of Financial Risk at the PPF, at a Faculty of Actuaries Sessional Meeting, 18 February 2008, Glasgow.



To manage its risks, the PPF may reduce the compensation payable, raise the amount of the levy, or encourage over-funding. This PPF risk management toolkit is limited and inappropriate for the primary problem, sponsor insolvency, and conditions the levy setting process. This year it raised the funding level necessary to eliminate the risk based levy to 140%, which may be taken as an indicator of the ultimate cost of the compensation scheme. With interest rates at 5 percent p.a., this represents an annual levy charge in excess of 2 percent p.a. This indicated levy cost is more than five times the £300 million estimate offered to Parliament during the debates on the Pensions Act 2004 and also far higher than any population historic loss by value rate. As the PPF levy is capped for the weakest of schemes there is an explicit subsidy which extends to their sponsor companies. Government policy resulting in subsidy is usually suspect in the European context.

Insurance is an asset of a pension scheme, but it is not at all obvious that participation in a compensation scheme qualifies in similar vein. The accounting perspective can illuminate: a single year, annually renewable policy, at variable rates, has value only to the extent that the sponsor may fail in that year and the current premium is expensed through profit and loss. But more generally a term policy (n years) with fixed annual premiums will generate both an asset in the scheme and a liability for future premiums in the sponsor accounts. The term policy can directly be seen as a form of financing to the sponsor company; security to trustees and members is provided by insurance premiums rather than cash contributions from sponsor.

This financing aspect does not fit naturally with government sponsored enterprises. It raises questions around the desirability, as a question of social policy, of the PPF's stated wish to set stable long term rates⁶, desirable though this may be from the perspective of sponsor companies. Such long term fixings will carry with them complex concerns as to private sector financing and subsidy.

Fixed term insurance brings with it a time inconsistency. With such an asset enhancing the credit standing for some fixed period, lower levies are charged than might otherwise have been the case, but, for those companies whose credit standing has deteriorated, there is no assurance that the policy can be renewed, or that rates will be acceptable. In consequence with fixed term mitigation the compensation scheme is exposed to "cherry-picking".

However, a "whole of corporate life" policy, providing irrevocable cover for as long as the scheme has liabilities and triggering upon the insolvency of the sponsor, fully resolves these difficulties. **The effect of this policy form is to permanently break the linkage between scheme funding level (however measured) and benefits secured.** That is not a trivial statement; it has profound implications for scheme financial strategy, particularly

⁶ By setting levy rates annually based upon scheme deficits it is impossible for the PPF to achieve stability of the levy cost, unless this is some arbitrary large amount. With scheme deficits being determined as the difference between two large variables, scheme assets and liabilities, the instability is endemic.



asset allocation. The entire history of DB provision in the UK has been one of DB means DB except in certain circumstances when it means something less. First it was share-of-fund, then MFR and most recently PPF. It can be made so that DB means 100% DB in all circumstances. And most importantly schemes can remain open, preserving all of the clearly beneficial risk-sharing characteristics of the corporate voluntary defined benefit pension model.

This guaranty insurance represents explicit financing of the scheme relative to the cost of alternately securing the pension payments with an insurance company, without any need for harmful over-funding. Premium setting involves joint consideration of scheme and sponsor finances and prospects; it is a problem of corporate finance more than insurance risk management.

Perhaps unusually in risk management, it is the long term nature of the policy which delivers both its value and affordability. Repeated premium payments over time obviate the myopia of point-in-time evaluation and result in some further interesting properties. The scheme asset's fair value varies inversely with scheme and sponsor health and offsets some of the volatility introduced to balance sheets by recent mark-to-market accounting standards. Special contributions become entirely moot and contribution costs can decline to the normal cost of benefits. Investment policy and asset allocation can be evaluated in the joint context of scheme and sponsor finances and long term prospects and preferences; the tyranny of current funding security has been removed.

The April 2008 edition of *The Actuary* carried an article titled "PPF monopoly in operation". Private sector pension guaranty insurance is demonstrably superior in many regards to that afforded by government sponsored compensation schemes and excludes the need for any role for them. It is inequitable that privately insured schemes should bear any part of their costs. Restricting competition for the PPF, a compensation fund, by delaying the removal of redundant costs for schemes is clearly not sustainable, or even consistent with this government's ambition of maintaining good defined benefit provision⁷.

⁷ "I want to send a clear message to employers with good DB schemes – we want you to continue.", Mike O'Brien, Minister of State for Pension Reform, in an interview with Global Pensions, 21 January 2008 http://globalpensions.com/showPage.html?page=gp_display_feature&tempPageId=686617