Understanding DB pension scheme funding

An overview

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The Pensions Regulator

Introduction

A defined benefit (DB) pension scheme aims to provide its members with a retirement income based on a proportion of their final or average salary when they were in work. These benefits can be valuable.

This factsheet is for those who already have some knowledge of DB pensions. It explains the main ways of measuring assets and liabilities of pension schemes, and aims to give an understanding of how differences in approach can often create significant differences in how funding levels appear.

How are pension scheme benefits calculated?

For a DB pension scheme, the cost of paying members' pensions depends on the benefits promised in the scheme rules and is influenced by future economic and demographic changes. The pension payments will stretch over many years in the future. Trustees will try to make these payments out of the assets already accumulated in the scheme. If required, they will also make them from additional contributions from the employer (and, where the scheme remains open to future accrual of benefits, from members as well if the scheme rules require). It has become common practice to calculate a cash amount equivalent to the present value of the future benefit payments (known as the 'liability'), which can then be compared with the market value of the assets.

The pensions industry uses something called a 'discount rate'[1] to calculate the present value of the scheme's liabilities. There is no single way of determining this rate because it will usually depend on how the trustees intend to invest the scheme's assets. This, in turn, depends on the level of risk they are willing to take, and that needs to take into account the support they can expect from the employer if the investments fail to deliver.

What is a scheme's funding position?

The funding position of a scheme is how its current market value of assets compares with its liabilities. It can be expressed as a ratio of the scheme's assets and liabilities (known as the funding level) or as the difference between the assets and liabilities (referred to as a surplus or deficit).

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'Discounting' is a process widely used in the financial markets to transform future liabilities into 'present values'. For example, if you have an obligation to pay someone £100 in one year's time and you expect your assets to earn 5% over the same period then you only need £95.24 today to settle that obligation. Your 'liability' today is therefore £95.24 and the 'discount rate' used to calculate it is 5%.

How do you calculate the funding position of a scheme?

There are five main funding approaches:

- Statutory funding objective (SFO)
- PPF buy-out/section 179 measure
- Self-sufficiency measure
- Insurance buy-out
- Accounting valuation

Each describes a valuation of pensions already in payment to retired members (including benefits to survivors of former members) plus the deferred pension entitlements of former employees who have not yet retired and the pensions which current employees can expect when they retire based on the service already completed.

Statutory funding objective (SFO)

This is the funding measure used for valuations under the Pensions Act 2004. Such valuations are sometimes referred to as 'technical provisions' (TP) valuations or 'scheme specific funding' (SSF) valuations. The SFO requires each DB scheme to have sufficient and appropriate assets to cover its technical provisions – the amount calculated on an actuarial basis to meet its liabilities.

This valuation tells you how much money the trustees consider they need now in order to provide for the promised benefits as they come up for payment in the future – this will be different for each scheme. Trustees are responsible for ensuring that the calculation is conducted prudently, taking into account factors including the scheme's investment strategy and the strength of the employer.

A key aspect of this valuation is the investment strategy trustees propose to follow as part of their policy for meeting the SFO. Because there are no guarantees about investment returns over long periods, legislation requires trustees to consider carefully how much of their expected future investment returns it would be prudent for them to account for in advance. This informs their choice of discount rate for calculating the TPs.

Typically, SFO valuations involve investment strategies with a higher proportion of return-seeking assets than in other valuations considered in this note. The discount rates are therefore generally higher, and liabilities correspondingly lower.

PPF buy-out/section 179 basis

Most schemes are not expected to need the support of the Pension Protection Fund (PPF) which was established to pay compensation to members of eligible DB pension schemes when an employer becomes insolvent or where there are insufficient assets in the pension scheme to cover PPF levels of compensation.

Section 179 of the Pensions Act 2004 requires schemes to estimate the funding needed to secure PPF compensation levels. The valuation is used to calculate the levy paid by all schemes eligible for PPF protection and to inform the PPF7800 index which sets out the latest estimated funding positions for DB schemes eligible to enter the PPF.

In contrast to the other measures, the PPF valuation relates to the compensation offered by the PPF which will usually be lower than the scheme's full benefits. Unlike the SFO, the assumptions to be used are prescribed by the PPF and are standard across all schemes. They are designed to be close to the cost of securing the value of PPF compensation level of benefits with an insurance company at the valuation date if the scheme goes into the PPF, but for most schemes this is unlikely.

Self-sufficiency

When a pension scheme reaches a certain level of assets (the self-sufficiency level), it expects to be able to sustain itself by investing those assets on a low risk basis and pay members' benefits as they arise without any additional support from the employer. Very large pension schemes may view this as a more cost-effective alternative to a buy-out with an insurance company.

Under a self-sufficiency approach, the ongoing reliance on the sponsoring employer is kept at a minimal level. This requires a low-risk investment strategy to minimise the chances of the employer having to make good any investment losses. Typically, the investment approach may be similar to that of an insurance company under the buy-out approach, but without the solvency requirements of an insurance company and the need to make a profit for shareholders. Consequently, the liabilities under a self-sufficiency valuation should be lower valuation.

Insurance buy-out

Unlike the SFO, which assumes the scheme will continue to be backed by the sponsoring employer and will continue to meet the benefits payments as and when they fall due, the buy-out valuation tells you how much money the scheme would need to buy all the accrued benefits from an insurance company. Some schemes may have a strategy of de-risking and moving towards buy-out over time, especially when the scheme has been closed to new members and or new accruals. Buy-out happens where an insurer takes responsibility for paying out all the promised benefits to members. Insurance companies typically buy 'safe' assets such as gilts and high quality corporate bonds to match their liability to pay the members. The discount rates are therefore lower than in SFO valuations, and the liabilities higher. Insurance companies also need to maintain additional assets on their balance sheet to satisfy minimum solvency requirements, plus they need to make a profit for their shareholders. Because of this, buying out benefits in full is expensive.

Few schemes are funded to a level where they can afford to discharge their liabilities immediately by buying out, and they are not legally required to be funded to this level.

Accounting valuation

This is often referred to as International Accounting Standard19 (IAS19) or Financial Reporting Standard 102 (FRS102) valuation, and is the method sponsoring employers are required to use to calculate their DB pension liabilities for the purposes of publication in their annual report and accounts. The measurement basis is prescribed by the relevant accounting standards and is the same for all companies. The liabilities must be measured using the current yield on high quality corporate bonds – usually AA rated bonds – regardless of how the how the trustees of the pension scheme invest their assets. The principal purpose of this valuation is to allow comparison of pension liabilities between companies.

The liabilities under an accounting valuation will generally be lower than those under a self-sufficiency valuation, but can be higher or lower than those under an SFO valuation.

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