Quick guide for journalists

Understanding the different ways of valuing a defined benefit (DB) scheme

Overview

The funding framework for defined benefit (DB) pensions is intended to strike a balance between the interests of pension scheme members, the Pension Protection Fund (PPF) and sponsoring employers.

Under the current framework, schemes are required to have sufficient assets to meet their obligations to pay benefits to members. Pension trustees must carry out a valuation at least every three years to assess whether they have sufficient funds to meet members' benefits. If the scheme is in deficit, they must put in place a plan to repair it, known as a recovery plan. Pension trustees have up to 15 months to agree their valuation and any recovery plan.

The best thing for a scheme is a solvent, ongoing employer, and in most situations, trustees are able to agree funding plans that balance the needs of the scheme and its employer. However, where trustees are unable to reach agreement with employers, or develop funding plans that aren't adequate, we have power to impose a funding solution. We also have powers to issue employers with a Contribution Notice, where they have avoided their liability to the scheme, or a Financial Support Direction, requiring them to provide ongoing support to the scheme.

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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).

Different ways of valuing a scheme

There’s no getting away from the fact that the reported deficits of DB schemes can seem large – particularly where figures are aggregated to represent the entire DB landscape – but it’s important to remember that a scheme’s liabilities (and therefore deficit) can be calculated using a variety of different methods. These methods can produce different results, and are used for different purposes so may be appropriate in a variety of different circumstances.

A helpful way to understand the differences between valuation methods is to consider the underlying balance between risk and return in each. A valuation method that incorporates a higher element of growth assets (for example, equities) will use a higher discount rate.

This will result in a correspondingly lower value for its liabilities than, for example, a method that incorporates lower yielding assets (for example, bonds). However, the risk from a potential failure of the investments to deliver the expected return is correspondingly higher in the former example.

The different methods commonly used to value scheme liabilities are outlined below. The narrative is hypothetical and for illustrative purposes only.

Buy-out valuation/section 75

How much it would cost to buy out the scheme with an insurance company

The buy-out valuation tells trustees how much money they would need to ‘buy out’ the scheme with an insurance company. A buy-out is where an insurer takes responsibility for paying out the promised benefits to members until the last member dies. The insurance company will choose to invest in the least risky assets, which makes it the most expensive option. There is also an added premium for its profit margin and solvency requirements.

The buy-out deficit is sometimes referred to as the ‘section 75 debt’. Section 75 of the Pensions Act 1995 requires employers to pay the cost of buying out the scheme when the scheme winds up (and in some other circumstances).

From the members’ and trustees’ perspective, a buy-out may be viewed as the safest approach for securing the scheme’s liabilities. But, as already mentioned, it is also the most expensive.
PPF/section 179
The valuation method used to calculate the deficit as recorded in the PPF 7800 index

A valuation under section 179 of the Pensions Act 2004 relates to the compensation offered by the PPF. A section 179 valuation applies the PPF compensation levels to the valuation and will show whether the scheme would need to call on the PPF if the employer was to enter insolvency.

PPF compensation is, broadly speaking, for members who have already reached retirement age to receive 100% of the pension promised by their scheme. For members who have not yet retired, it is to receive 90% of their promised pension up to a limit (£41,461 pa as at March 2021 for most members). There are also restrictions on annual pension increases.

As compensation offered by the PPF is lower than the full benefits promised by the scheme, this valuation is not directly comparable with others in this guide. But other aspects of the PPF valuation (such as investment strategy and risk) are not too different to the buy-out valuation.

Self-sufficiency and low dependency
How much it will cost for the scheme to not need the support of the employer anymore or to reduce it to a minimal level

The purpose behind a self-sufficiency valuation is to show the level of assets that the scheme would need if the ongoing reliance on the sponsoring employer were to be kept to a minimal level. This generally 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 target a slightly higher level of return than the buy-out approach adopted by an insurance company, but without the profit margin and solvency requirements of an insurer. Therefore, the liability value under a self-sufficiency valuation should be lower.
Technical provisions

The amount needed to pay members’ benefits in full as they retire, based on the scheme’s approach for financing these benefits, and prudent financial and demographic assumptions

This is sometimes referred to as the ‘statutory funding objective (SFO)’ or ‘scheme specific funding’ valuation. This valuation tells trustees how much money is expected to be needed now to pay the promised benefits of members as they come up for payment in the future.

The trustees should conduct the calculation prudently, taking into account factors such as the scheme’s actual or proposed investment strategy and the strength of the employer.

Because there are no guarantees about investment returns over long periods of time, legislation requires trustees to carefully consider how much of their expected future investment returns it would be prudent for them to account for in advance.

Calculating technical provisions usually depends on the investment strategy pursued by the scheme, which in turn may be based on the scheme’s specific circumstances. For example, a scheme that is open to new members may choose to invest more in equity-type investments as opposed to lower-risk bonds and gilts.

A scheme that has the support of a strong employer may also choose to do the same, while a scheme concerned with managing risk with minimal reliance on the employer may choose to invest more in bonds and gilts. Generally, except for well-funded mature schemes, calculating technical provisions may involve investment strategies with a higher proportion of return-seeking assets and correspondingly lower liabilities.

Under our proposed new funding framework, we want schemes to progressively reduce their reliance on the employer covenant over time and reach full funding on the low dependency basis by the time they are significantly mature. It will then be possible for them to pursue an investment strategy that is highly resilient to risk and under which there is little or no expectation of any further ongoing reliance on the employer.
Accounting valuation

The liability reported in the sponsoring employer's accounts

This is the method companies use to calculate their pension liabilities for the purposes of reporting in their annual report and accounts. The measurement details are prescribed in the relevant accounting standard (IAS19 for listed companies and local authorities, and FRS102 for other UK entities using the UK GAAP framework) and for ease of comparison between companies they apply across the board to all companies regardless of their individual circumstances.

More specifically, the liability must be measured using the current yield on high quality corporate bonds (usually AA-rated bonds) regardless of how the trustees have actually invested the scheme's assets. Other assumptions (such as longevity) are set by the employer and are usually at best estimate values.

This valuation usually produces liabilities that are lower than a self-sufficiency valuation, and often higher than a technical provisions valuation. The difference depends on relative differences in the market between the yield on high-quality corporate bonds and the expected returns from the actual investments of the scheme.

The main purpose of an accounting valuation is to provide a consistent measurement of accounting costs across different companies. Because it does not specifically take account of the scheme’s actual investment strategy, it is of less use for scheme funding purposes.
Chart 1: Different methods commonly used to value scheme liabilities

This chart illustrates the relative differences between the valuation methods. For example, if an insurance company had priced a given benefit at £1,000 (the buy-out liability) then valuations of the same benefit on the same day but using the different valuation methods would be as shown by the vertical bars. The relative differences depend on market conditions on the day concerned and do not remain constant over time.