A world of difference

Executive summary

- The difference between the assets and liabilities of the Boots pension scheme has been variously estimated as £20m in surplus (according to IAS 19) and £1bn in deficit (according to John Watson, chairman of the Boots scheme trustees).
- This article explains how such a large difference can arise and looks at the powers that trustees have to demand cash to make up any deficit from the sponsoring company with the support of the Pensions Regulator.

At its heart, the defined benefit promise made by a company to a scheme member is very simple: take less pay today, and we'll pay you a salary when you retire until you die. This binding promise covers an indeterminate future period based on a number of factors over which the company has no control and others that it has no way of knowing.

Over the years, legislation has shifted the risks inherent in this promise from the scheme members to the company, but the fact remains that the defined benefit promise is (and always has been) for life. Companies may choose, or be required, to cover this liability with investments, which may reduce or increase the overall risk. Since equities represent a poor hedge against the uncertainties inherent in future scheme cashflows, holding equities in the fund increases the risks for equity investors in the company.

However, equity risk should be compensated for by higher returns, and current actuarial and regulatory practice allows companies to contribute less cash to the fund on this basis. This is positive for cashflows, and so appears to add value for shareholders, but it ignores the increased risks that it exposes the company to (suggesting that the risk-adjusted result should be neutral).

Current accounting standards fail to reveal the full extent of these risks, potentially disguising the resulting volatility, and allowing assumed returns to inflate profits.

THE TREASURY PERSPECTIVE From a treasury perspective, the pension liability is a long-term commitment to pay cash, but unlike a normal unsecured loan, both the duration and principal amount depend on such unknowable factors as:

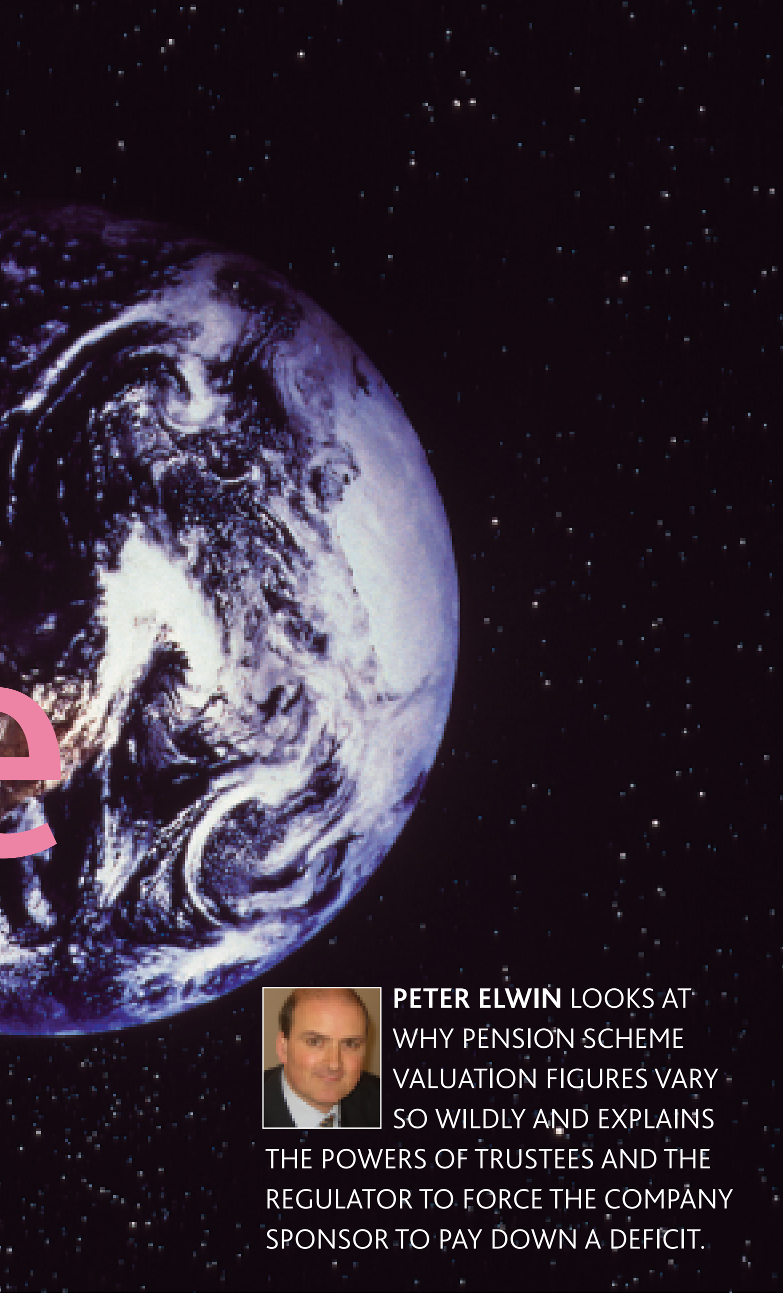
- The life expectancy of the scheme members;
- Inflation;
- Wage inflation during members' employment by the company; and
- Service life (time spent in employment with the company).

These uncertainties decrease for employees no longer employed by the company, particularly those who have retired, but hedging the risks (especially mortality) remains a challenge.

Until recently the principal method for dealing with mortality risk from a company's point of view was to transfer the pension scheme members into the hands of an insurance company by way of a pension buyout. But recent market developments create the possibility of alternatives, with products designed to assist with hedging mortality.

THE PENSION BUYOUT (DISCONTINUANCE) LIABILITY As the Boots scheme has dramatically revealed, the buyout value attributed to the liability by an insurance company is usually significantly higher than the liability according to IAS 19.

In the past the difference between valuations was often explained away as being due to the fact that there were only two main players in the market (the Prudential and Legal & General), but there are now at least five well-capitalised new entrants actively seeking



PETER ELWIN LOOKS AT WHY PENSION SCHEME VALUATION FIGURES VARY SO WILDLY AND EXPLAINS THE POWERS OF TRUSTEES AND THE REGULATOR TO FORCE THE COMPANY SPONSOR TO PAY DOWN A DEFICIT.

business. However, buyout prices remain 30%-50% higher than the accounting liability on average, suggesting an alternative explanation. The two main reasons why the liability figures (and thus deficits) differ so much is that they use different discount rates and different mortality assumptions.

As part of the triennial scheme valuation, the consulting actuary is required to produce an estimate of the cost of buying out the scheme (sometimes referred to as the solvency or discontinuance liability). It is this figure on which the pension trustees base their cash contribution negotiations. This figure is not published in the accounts but is available to company directors, trustees and scheme members.

The reporting statement issued recently by the UK Accounting Standards Board encourages companies to make the buyout cost figure public but it only took effect on 6 April and to date few have chosen to do so.

THE DISCOUNT RATE DEBATE The appropriate discount rate to use when calculating the present value pension liability has been the subject of much debate.

There is not sufficient space in this article to rehearse all the finer points of the arguments, but the different approaches in use at the moment can be summarised as follows:

- Under IAS 19 (and its US GAAP equivalent) the present value pension liability is calculated using a 'high quality' corporate bond yield (usually taken to mean an AA bond yield);
- Actuaries prefer to use the expected rate of return on the pension fund assets to discount the liabilities. (Strictly speaking, the actuarial approach is not a valuation method but the by-product of a budgeting exercise to determine how much cash the company should contribute to its pension fund to achieve sufficient funds to cover pension payments as they fall due.); and
- Insurance companies use government bond yields or lower – a risk-free rate.

Figure 1 illustrates the impact these choices can have on the size of the present value liability. From a risk perspective it makes most sense to use a discount rate which produces the clearest view of the risks inherent in the liability and thus facilitates a clear debate about how these risks should be hedged (if at all).

Both the actuarial funding and accounting approaches fail this test since the discount rates they use incorporate hedging assumptions and thus understate the liability.

The buyout liability provides a view independent of any hedging decisions, and avoids double-counting the uncertainties which have been captured in the pension payment forecasts. It has the added benefit of being closest to the market price for settling the liability, which is clearly relevant when considering any approach to hedging. It also provides a clear view of the extent to which the company is hedging the liability with its own operating assets and cashflows as opposed to assets held separately in a fund (in other words, the value of what the pension trustees will view as the corporate covenant). *Figure 2* illustrates this point.

Figure 1. Impact of different discount rate assumptions

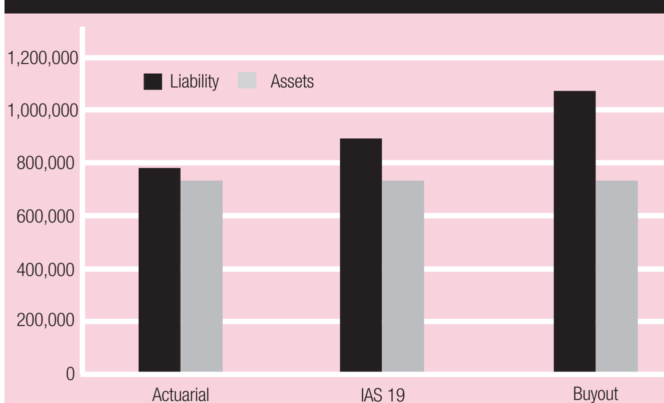
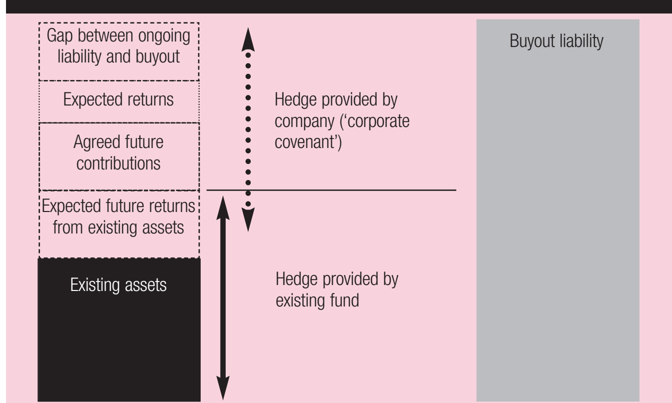
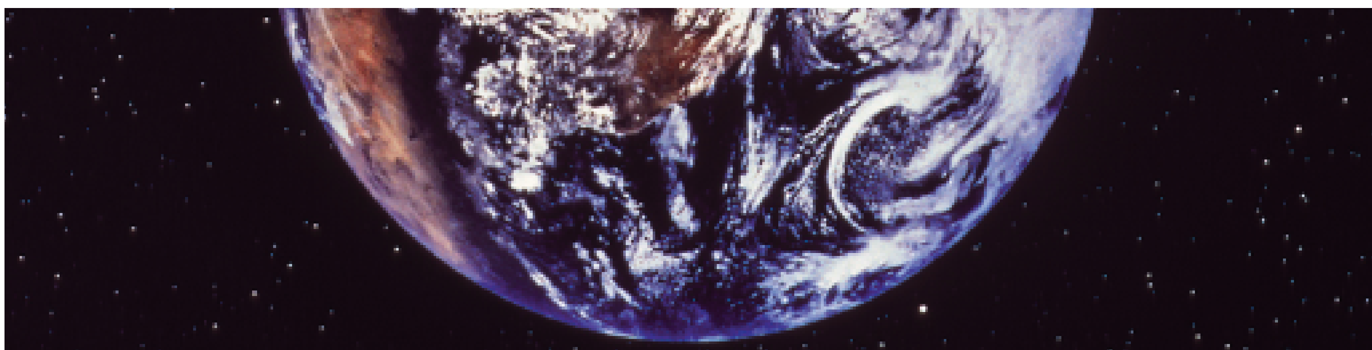


Figure 2. Extent to which the corporate covenant hedges buyout liability





LONGEVITY ASSUMPTIONS The difficulty of hedging mortality risk has already been mentioned, but more fundamental than that is the suspicion that some company estimates for mortality rates among their pension scheme members are woefully inadequate, potentially understating the liability by as much as 10%-15%.

The evidence for this is twofold:

- The pension buyout companies universally say that a significant portion of the difference between the IAS 19 figures and their buyout quotes can be explained by the fact that they use up-to-date mortality assumptions (which are far more conservative than those used by many actuaries in the past).
- Surveys by Lane Clark & Peacock and PricewaterhouseCoopers among others have all suggested that the assumptions used by some companies lag behind the 'medium cohort' assumption used by the Pension Protection Fund (but which is still less conservative than those used by the insurance companies).

By contrast, the discontinuance liability calculated by the actuary is more likely to be based on up-to-date assumptions.

Given these points, and those outlined previously, it should be no surprise to find that pension trustees use the actuary-calculated discontinuance liability as their benchmark when determining the funding target for the scheme (the 'technical provisions') and when negotiating for higher levels of funding as a result of corporate transactions, including leveraged buyouts (LBOs).

Box 1. What trustees and regulator can and cannot do

There are a number of misconceptions worth clearing up.

Misconception 1: the regulator can block M&A deals
The Pensions Regulator does not have the power to block deals (unlike, for example, the Competition Commission).

Misconception 2: the trustees can block M&A deals
Pension scheme trustees have no power to control the sponsor company's actions, but can demand cash under the scheme-specific funding rules.

Misconception 3: the regulator cannot act if there is an accounting surplus
The regulator uses the IAS 19 figures as triggers when deciding which pension schemes to examine in more detail, but this has nothing to do with his capacity to act.

Misconception 4: regulator clearance is mandatory
Clearance is a voluntary process designed to provide comfort to the parties to a transaction. If clearance is given, the parties can be certain that the regulator will not subsequently impose contribution notices or financial support directions in relation to that transaction.

Misconception 5: avoiding clearance will avoid increased demands for cash
Decisions by the trustees regarding funding have nothing to do with clearance or the lack of it.

THE NEW RULES GIVE TRUSTEES MORE POWER Under the Pensions Act 2004, if the pension fund assets are not sufficient to meet the pension obligations as they fall due, then the trustees must decide a recovery plan and agree a contribution schedule with the employer to achieve this.

The company has no control over the trustees' decisions in respect of the liability estimate, the funding target, nor the asset allocation of the fund. If trustees estimate the liability using very conservative assumptions (as the 2004 Act encourages them to do) and set a high funding target while investing in low-risk assets, the cash required from the company will be significantly greater than might be the case if the trustees took a more relaxed approach.

The law requires the trustees to seek agreement with the company but if this cannot be achieved within 15 months of the actuarial valuation date, the trustees can ask the Pensions Regulator to arbitrate. To date, this has never happened.

The regulator can direct how technical provisions are to be calculated (set the funding target), set the period within which any failure to meet the statutory funding objective is to be remedied (and specify how), and impose a schedule of contributions. These powers are in addition to the regulator's better-known anti-avoidance powers (contribution notices, financial support directions and restoration orders). Unlike the anti-avoidance powers, they do not require a breach of the law to have taken place.

COMPOUNDED RISKS A defined benefit scheme represents a significant risk to the company making the pension promise, and one which has the potential to last for many years after the last scheme member has ceased to be employed by the company. These risks are compounded by the risk of future legislative change.

The simplest way to assess these risks is to quantify the liability on a buyout basis using prudent assumptions for key risks such as mortality – this represents the best estimate of what the company has ultimately agreed to pay, and is the figure used by trustees when assessing transactions. Only once that figure is known can treasurers assess how best to hedge the company's exposure to the various risks that the liability entails.

Peter Elwin is Head of Accounting and Valuation Research at Cazenove Equities, JP Morgan Cazenove.
peter.elwin@cazenove.com
www.cazenove.com