

funding their schemes.

As a result of the increased focus from chief executive officers (CEOs) and board members, corporate treasurers at the bequest of their already besieged chief financial officers (CFOs), are increasingly spending their time considering pension issues. David Norgrove, the Chairman of the Pensions Regulator, told a recent meeting of the Association of Corporate Treasurers that they were "absolutely at the centre of the issue" of pensions, "you look after the money". This is a logical state of affairs and corporate treasurers are in a unique position to be able to understand risk and take decisions based on all of the information and avoid the situation where uncontrolled pension risk begins to have an impact on the corporate credit ratings, in turn affecting their ability to manage their debt portfolio.

nothing is not an option. The Pensions Regulator has armed trustees with the powers and the obligation to improve the security of their members' benefits and companies will need to prepare now for the process of negotiation that will take place over the approach to

As with any major financial project that might be undertaken by a company, the pensions problem can be approached by following a risk management cycle (see *Chart 1*).

**IDENTIFYING AND UNDERSTANDING THE RISKS** The first stage of a pensions strategy involves understanding the impact that the pension scheme can have on the corporate balance sheet. The pension scheme deficit, as measured by FRS17 *Retirement Benefits* and IAS19 *Employee Benefits*, now appears directly on the company balance sheet as a debt and is treated as such by City analysts. The size of the deficit is, however, a very volatile beast; it is the difference between two large numbers both of which can move significantly in a short space of time and, for a typical scheme, will have little correlation with each other because the investments do not match the liabilities.

## **Executive summary**

- Companies need to prepare for the process of negotiation over the approach to scheme funding.
- Treasurers are in a unique position to avoid the situation where uncontrolled pension risk begins to have an impact on the corporate credit ratings.
- Controlling risk means more than just investing in bonds. Many companies have taken the logical step of stopping the problem from getting worse.
- Of the residual risks, mortality is the dominant one. The problem with mortality is that it cannot be hedged.

Chart 2 Pension deficit index shows the impact of recent market movements on pension fund deficits. The green line shows how the asset values have increased over the past year and the blue line shows how the liabilities have increased over the same period. The red line is the relative size of the deficit and shows the peak in January 2006 when real yields fell to their low point.

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The major factors that can impact on the size of the pension scheme's liabilities are interest rates, inflation and mortality. Other demographic risks such as real salary growth and the pattern of retirements can also play a role and should be managed as part of the strategy. In terms of the assets, the risk is that the investment return fails to keep pace with the change in liabilities. Last year saw a return on most equity markets of around 20% but the fall in long-dated bond yields meant the funding level of a typical scheme may not have improved at all – and that includes a significant level of cash being injected into schemes in the meantime.

The investment strategy is the key tool for expressing a view on risk but this is often looked at after the Scheme Actuary has prepared the triennial valuation and the contribution rate has been agreed. The investment decision rests with the trustees in most cases and before the setting up of the Pension Protection Fund (PPF), it was hard to imagine a situation where the trustees would want to take more investment risk than the company. With the PPF now providing a "floor" for the trustees it is plausible to imagine the reverse being true, with trustees seeking the potential upside from a risky investment strategy whilst being protected by the PPF against the downside. For the financially strong sponsor, this is a worrying situation as they are left to foot the bill if the investment risk is not rewarded.

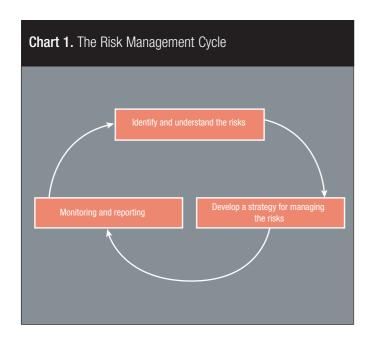
Traditionally, equities were held as a rough match to salary linked liabilities; the economic argument behind this seems logical, the return to the providers of capital and labour should be similar, but an analysis of historical data reveals almost no correlation. Other reasons for holding equities have also disappeared: in 1997 the Chancellor removed the tax advantage enjoyed by pension funds, and the argument of seeking a surplus in order to pay discretionary pension increases is largely a thing of the past. Another traditional argument is to invest in bonds to match the liability for pensions in payment. The logic behind this is that bonds are a low risk investment and the investment time horizon is much shorter. Therefore there is less scope for taking risk. While this may seem like a sensible approach, there are key points that also need to be considered. The first is that the longer you wait for an equity market crash, the more likely you are to experience one, and the second is that the interest rate risk increases with duration so a greater risk reduction can be achieved by matching the longer-dated payments with bonds. What this serves to highlight is that bonds are the lowest risk investment for all liabilities and that equity risk, although rewarded in terms of a higher expected return, gives rise to huge uncertainty over the actual future outcome and that this uncertainty increases the further in time you look.

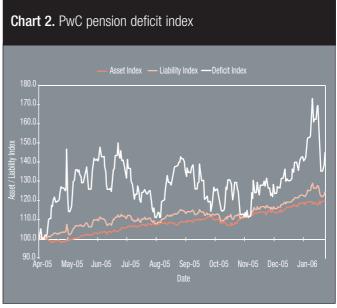
## **DEVELOPING A STRATEGY FOR MANAGING THE RISKS**

Controlling risk means more than just investing in bonds. Many companies have taken the logical step of stopping the problem from getting worse by closing their final salary schemes to new entrants and in some cases stopping future accrual and removing the salary link for current employees. These steps will obviously go a long way to controlling the size of the problem but it is possible to reduce risk further by transferring some risk to members or by offering members the option to exchange benefits for cash. Such deficit solutions can have a dramatic impact on the size of the liability and should be considered by pension scheme sponsors as part of their strategy for managing their pension deficit.

A great deal has been said about Liability Driven Investment (LDI) and it will mean different things to different people. Most practitioners would agree that LDI is essentially about reducing the pension scheme's sensitivity to interest rates and inflation. The traditional approach to liability matching would be to invest in a portfolio of bonds that has a similar duration to the liabilities (but noting that corporate bonds carry a default risk whereas pension liabilities cannot be defaulted). In practice many schemes have a relatively small allocation to bonds and the bonds they do hold are too short to match the liabilities. The FTSE Over 15 year Gilt index has a duration of only 12-13 years, far shorter than the liabilities which might have a duration of over 20 years. Investing half the scheme's assets in a long-dated bond portfolio leaves a large amount of unhedged interest rate risk. Furthermore, the market does not reward such risk taking, so running a large interest rate call is not a sensible use of the risk budget. It is far more sensible for the scheme's risk budget to be spent on risk that is expected to be rewarded, such as the equity risk premium or the illiquidity premium from investing in corporate bonds.

Using LDI products can enable the trustees to reduce the interest rate risk without reducing their ability to take investment risk in other areas and is an important tool in the risk management armoury. It is important to note that the interest rate sensitivity that is being hedged is based on the expectation of future benefit payments and not a known series of cashflows; there are often





several options open to members, such as early retirement or taxfree cash, that can significantly alter the pattern of cashflows. It is therefore of little use matching expected cashflows to the nth degree when other residual risks can completely swamp the benefits of precise hedging.

Of these residual risks, mortality is the dominant one. The problem with mortality is that it cannot be hedged. There is no real market in mortality products; insurance companies will take on this risk but to do so would require a large amount of their capital and this is reflected in their premiums. It might be possible to create a very rough hedge by seeking to invest in companies that might be expected to benefit from increased longevity, such as healthcare or cruise ships, but this is unlikely to be an appealing solution. The best approach to mortality risk is to understand the potential impact it can have and to seek to mitigate it, but at the same time implementing some of the ideas discussed above. One of the more innovative solutions has recently been announced by BAE Systems. It has reached an agreement with its members to clear a £1.4bn deficit in its main pension scheme. The deal involved the company paying £800m into the fund and in return, members have agreed that they will "pay" for 40% of any future increase in the liability caused by adverse mortality experience of the scheme. Members will pay for the increase either by retiring later or taking reduced benefits. This case highlights exactly the form of approach that is required in order to tackle the problem faced by pension funds.

THE ROLE OF THE TREASURER The treasurer is in a unique position to take a holistic approach to risk management. The treasurer is at the centre of the company's financial planning and can best understand where to spend the risk budget. A simple example is currency hedging – the treasurer can only make an informed decision about whether to hedge foreign currency exposure by understanding the exposure in the pension scheme – there really seems little point in hedging a \$5m exposure and then finding that the pension fund has a \$50m exposure from a holding in US equity.

The treasurer should be party to all the major strategic decisions taken by the pension fund trustees. Where the trustees have an

investment sub-committee, it is logical for the treasurer to play a role – not least because the treasurer will often have a great deal of expertise to share with the trustees on issues such as investing in swaps. If the treasurer is to play a role in shaping the investment strategy of the pension scheme, care will need to be taken to ensure that any potential conflicts of interest are identified and managed.

## REPORTING THE TREASURY ISSUES GOING FORWARD

Reporting is all about information. The treasurer needs to have regular funding level updates in order to monitor the progression of the funding level. The treasurer should also monitor the market's expectations of future risk metrics such as long-term bond yields and even the Institute of Actuaries' proclamations on future mortality improvements.

A balance needs to be struck between the frequency of valuations and the costs involved. It is usually impractical to carry out a full valuation on a quarterly basis but an approximate roll forward can be looked at. Full valuations are usually carried out on a triennial basis but there may be circumstances where an annual check would be useful.

ACTION NOW It is unlikely that the pension fund deficits will disappear on their own (although many are praying for the FTSE to reach 7,000 and bond yields to increase to, say, 7%). A better approach is to take action now in order to manage and monitor the risks. The treasurer is at the centre of the issue and uniquely placed to take a holistic view of risk. The role of the treasurer needs to be carefully defined in order to avoid conflicts of interests. But by taking control of the situation now and using some of the tools discussed in this article, the treasurer can help avoid surprises in the future and thus add significant value for the company and earn the gratitude of the CFO.

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