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Pooling resources

Resolution Asset Management's EDDIE MIDDLETON suggests a pooled approach to liability-driven investment

THE pensions market has undergone rapid and dramatic change over the last few years. The funding position of many schemes had deteriorated rapidly, with the surpluses of the late 1980s and early 1990s largely wiped out and replaced by significant deficits within the space of a decade.

In addition, the regulatory burden has changed and evolved rapidly over the same period.

A number of approaches to managing pension funding have been proposed, many of them under the banner of liability-driven investment (LDI).

Our approach is to use LDI as a framework for risk budgeting in asset allocation and an approach that can accommodate both pooled and segregated schemes.

Eddie Middleton
Director of liability-driven investment
Resolution Asset Management

Middleton joined Resolution Asset Management – then Britannic Asset Management – in March 1996 after 10 years at the Co-operative Insurance Society where he managed corporate bond portfolios.

IDENTIFYING PENSION SCHEME RISK FACTORS

There are a number of risks that any schemes run regardless of size, which we would broadly classify as interest rate and inflation risk, equity risk, mortality risk and sponsor risk. The asset allocation can do little to address the last two: the best protection against mortality or sponsor risk is a well-funded scheme that looks to add value over time.

INTEREST RATE AND INFLATION RISK

Both sides of the balance sheet are sensitive to changes in interest rates and inflation. Liabilities can be thought of as being similar to index-linked bonds – the size of the final payment depends to a greater or lesser extent on inflation while the cost of matching that liability now is a function of interest rates. The longer-dated the liability the more sensitive it is to changes in these rates. The risk stems from how different the sensitivities are between assets and liabilities.

This risk is also largely unrewarded. A scheme gains no credit in terms of an increase in expected returns if it invests in five-year bonds rather than 30-year bonds but, if the liabilities suggest that the scheme should be invested in 30-year bonds, it does pick up significant risk.

EQUITY RISK

The correlations between moves in rates and moves in equities are low, opening a scheme up to the risk that equities are falling at the same time that yields fall. The effect of these moves is to increase liabilities while reducing assets.

To illustrate how this risk manifests itself we have compared two strategies for a £50m fund with no deficit.

One invests solely in equities and the other invested entirely in bonds that match the interest rate sensitivities of the assets. The equity portfolio shows that the scheme can expect to see a significant surplus, but there is also a significant risk of deficit. The bond portfolio shows a much lower level of surplus, but also much lower risk

In reality neither strategy is likely to be acceptable for a scheme in deficit. The risk of the deficit widening even further with the first strategy is too large to be comfortable, while the contributions needed under the second strategy are uncomfortably large.

THE NEED TO USE DERIVATIVES

A further complication is that even if a scheme did want to pursue the second strategy bond assets of the required terms, both gilts and corporate bonds, are very scarce.

The duration, or interest rate sensitivity, of the liability streams we typically see is typically around the 20-year area.

Only 2pc of the entire sterling fixed income market has duration of 20 years or longer. For this reason the LDI strategies rely heavily on the use of interest rate swaps and inflation swaps to match the rate and inflation sensitivity.

MEETING THE LDI CHALLENGES FOR POOLED PRODUCTS

The early adopters in the LDI market were, predictably, the larger schemes. Inevitably the technology has trickled down to smaller schemes, whose problems are no less severe, and we have started to see the emergence of pooled products.

There are, however, features of LDI strategies that make them much harder to transfer to pooled products.

THE DESIGN CHALLENGES

Simplicity

The use of derivatives, particularly over-the-counter derivatives, presents problems for smaller schemes. These derivatives carry counterparty risk for both the scheme and the bank.

While this can be almost 100pc mitigated by collateralisation both the scheme and the bank have a small level of residual risk that can make access to the market difficult or expensive for smaller schemes, particularly those where the level of publicly available information on the sponsor may be small.

Our pooled product, Reliability, removes this constraint. Resolution act as counterparty to the swaps and we present the funds as insured, pooled vehicles in exactly the same fashion that we offer other pooled products.

Effectiveness

The main challenge for matching liability exposures is that each scheme will have a different set of liabilities and, hence, different interest rate and inflation exposures. A single pooled vehicle would not be able to meet the needs of a number of clients.

We offer, therefore, a range of funds rather than a single fund that matches the exposure to changing rates between a narrow range of dates.

By combining these funds it is possible to create a close match to a scheme's liabilities from a relatively small range of funds.

All the funds invest in a single, common, corporate bond fund but contain individually tailored swap contracts to match the inflation and/or interest rate risk between specific dates.

Flexibility

Simply matching the rate and inflation exposures is not enough to meet the needs of most schemes. Moving into a bond-only fund, how-

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ever well matched, would simply crystallise the deficit, forcing up sponsor contributions. Most sponsors are unwilling or unable to bear this cost and schemes must rely on investment returns to at least partially close the funding gap.

The hedging strategy we use allows a portion of the assets to be released for investment in other higher risk, higher expected return asset classes while still matching the full interest rate exposure of the scheme. This allows the trustees to remove the unrewarded, and often poorly understood, rate risk while accepting the investment risks they feel will be rewarded.

The Challenges for Trustees

LDI strategies are undoubtedly more complicated than traditional strategies and this presents challenges for trustees as well as the asset managers. However, market behaviour and changing pension regulation have forced a higher level of complexity on the market and all parties need to rise to this challenge.

Education

The key challenge is one of education. The reliance on derivative-based products does add a level of complexity, but the derivatives used are relatively simple and quite intuitive in application.

However, all parties must first clear the hurdle of regarding all derivatives as the financial equivalent of WMD.

While headlines are made by those taking on an inappropriate level of risk, the vast majority of derivatives are used for risk reduction rather than risk taking. LDI strategies use some of the simplest derivatives, swaps, to reduce exposure to unrewarded risks.

Clear Objectives

For any strategy to be effective the objectives need to be clear. LDI changes the focus of the debate by defining all the investment objectives relative to the liabilities. This allows the key risks of the strategy to be identified, quantified, understood and accepted.

A well constructed LDI strategy should also allow the trustees to estimate how the funding level of the scheme is moving on a monthly or quarterly basis instead of just at valuation points.

Management and Measurement

For an LDI implementation to be effective careful thought must be given to the measurement and monitoring of the portfolio. There are two levels of measurement that are required – the performance of the manager and the effectiveness of the solution. Standard market indices are not appropriate for capturing these two targets given that each scheme will have different exposures.

Newer benchmarks are emerging, but again care must be taken in applying these indices. Whichever route is chosen all parties – manager, trustees and advisors – must be comfortable with the measurement methodology.

Implementation

The final area that will need consideration is the strategy implementation. While some may wish to implement a full LDI strategy in a single move others may prefer a more gradual implementation based on trigger levels or periodic rebalancing. The flexibility around implementation will depend on a number of factors – asset size, the number of managers, the risk tolerance of the trustees and sponsor as well as the views of the trustees.

Conclusion

The financial technology required to implement LDI strategies is starting to become increasingly available for smaller and medium-sized schemes in pooled form.

Intelligently structured products can deliver most, if not all, of the benefits of segregated solutions. We are of the view that the LDI framework will increasingly become the standard approach and that schemes will increasingly need to justify stepping away from this norm.

As this trend grows then trustees will need to rise to the educational challenge as well as embrace the more sophisticated methods of risk budgeting that are increasingly being adopted.

Eddie Middleton is director of LDI at Resolution Asset Management

If you have been affected by any of the issues raised in the report please contact your Resolution counsellor, Ken Harvie, on 0141 222 8021