

LIABILITY AWARE INVESTING

OBJECTIVE-DRIVEN INVESTING: EVOLVING THE DB MINDSET

Executive summary

Our purpose at LGIM is to carefully manage the risk that pension funds need to take in order to pay pensions. Over the past 15 years we have become the UK's largest LDI manager and currently help 32% of all DB schemes¹ manage their major risks (inflation and interest rates) with LDI strategies. We have also been helping many schemes use different strategies to bridge their funding gaps.

In recent years, LDI has focused schemes on hedging their interest rate and inflation sensitivity, and implementing diversified growth portfolios. However, many schemes are trying to juggle multiple managers, creating a governance strain for trustees and pension fund managers, and making holistic risk management at the scheme level a challenge. There is also a potential performance drag due to inefficiencies. To compound matters, this is happening amid a backdrop of changing regulation and schemes' increasingly challenging balancing act between meeting short-term cashflow needs and maintaining sufficient assets to pay pensions in the long term.

To help trustees of DB schemes find solutions to their evolving challenges, we have developed a simple framework of reference for their journey towards self-sufficiency or buy-out. We have focused our own approach on the objective of every scheme: what should we do now to pay pensions today, while still having sufficient assets to reach the desired endgame? Our framework is called the Liability Aware Investment framework (the 'LAI framework') because every decision trustees need to make is always with reference to their scheme's liabilities. We describe it as an evolution, not a revolution. It simply requires trustees to look across their whole scheme and seek marginal gains in every investment decision they make.

What is the LAI framework?

Figure 1 illustrates the simplest version of the LAI framework. We would encourage trustees to step back and consider their scheme as three simple component parts all managed with one eye on investment sustainability and a process of active engagement:

1. The hedging portfolio – usually referred to as the LDI portfolio
2. The portfolio of *contractual* cashflows – the portfolio designed predominantly to pay pensions as they fall due
3. The portfolio of return-seeking assets – this could include assets from the full return spectrum and will probably include some dynamic asset allocation

These component parts should always be referenced against scheme liabilities, with success defined as scheme assets outlasting the liability cashflows and investment management fees that are

Figure 1: The LAI framework: evolution not revolution

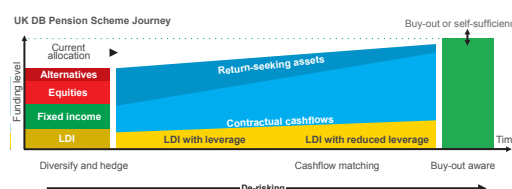


Figure 2: Progression of pension scheme investment strategy over time

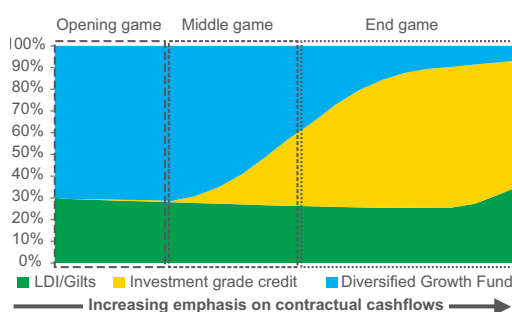
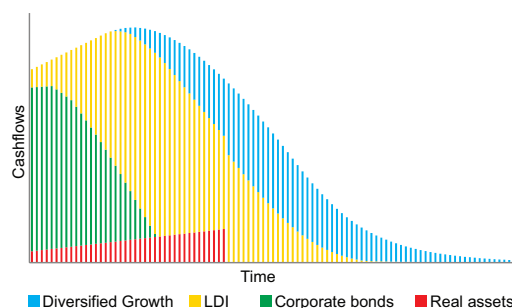


Figure 3: Illustrative cashflow structure for a self-sufficiency portfolio



aligned with this outcome-orientated approach. In addition, there are some key concepts underlining these three 'portfolios':

1. The greatest efficiencies can be gained when all three portfolios are viewed and risk managed as one portfolio
2. The LDI portfolio is there mainly to hedge interest rate risk and inflation risk and to generate some return through efficient portfolio management
3. Credit (particularly buy and maintain credit) and real assets form the core component of the contractual cashflows portfolio
4. Return-seeking assets should be well diversified and expected to generate sufficient growth to bridge a scheme's funding gap

Caught between two worlds

When pension schemes were first set up they had long prospective time horizons. In addition, new entrants and future accrual meant that trustees did not expect the duration of scheme liabilities

to reduce substantially over time. Generally, trustees were focused on growth rather than trying to target precisely benefits that would not be payable for many years. Schemes only invested in corporate bonds as a diversifying asset class and to provide a degree of hedging against interest rate movements. This period we have termed 'the opening game'.

Most schemes have now closed to future members and many others have gone one step further by closing to future accrual. This has accelerated the rate that schemes are maturing. According to a report from Hyman Robertson, half of FTSE 350 DB pension schemes are cashflow negative (meaning they are paying out more in benefits than they are receiving in contributions), or soon will be.

As schemes mature towards the 'end game' (where they are either very mature or very well-funded), credit becomes increasingly important as a mechanism for both paying pensions and managing longevity risk. It is also the asset class that many insurers look to use in the event of a buy-out.

However, the majority of pension schemes are now in the 'middle game'. This means that most schemes are caught between two worlds. One world, the opening game, is primarily focused on growth with some LDI to hedge interest and inflation risks². The other world, the end game, is focused on meeting cashflows as they fall due (often termed self-sufficiency).

Trustees are therefore in a transition phase. During this transition, trustees need to focus on how much to hold in return-seeking assets, what proportion of the scheme to hedge in an LDI framework and the level of contractual cashflows they require to pay pensions in the short term. Every scheme is different. For example, the strength of the sponsor covenant and whether a scheme is still open could both suggest very different approaches. However, Figure 3 suggests a potential snapshot of what the cashflow profile could look like once a scheme is fairly mature.

So how can trustees ensure they have the right blend of components? A good first step is an evolutionary change in mindset. Investment strategy needs to move towards being objective-driven as early as possible in the middle game, and particularly as a scheme matures.

A mindset shift: paying pensions and meeting scheme objectives

The relatively predictable nature of DB scheme cashflows means that an element of cashflow matching is likely to be beneficial. It removes the potentially unrewarded risk of being 'unmatched' and having to find cash to pay pensions when they fall due³.

Precise cashflow matching may be spurious relative to the overall market risk faced by schemes. Cashflows in the very distant future are harder to predict (due to demographic risks, inflation risks or complex benefit structures). In practice, therefore, cashflow matching is of greatest benefit when a scheme has little in growth assets and is relatively well funded.

However, contractual cashflows at all stages of a scheme's evolution remain relevant from a liquidity standpoint: they help trustees pay pensions without having to resort to liquidating assets (costly) or plundering the LDI portfolio (increasingly costly due to changes in repo pricing and collateral costs). As such, using credit as a source of contractual cashflows and making that credit allocation as efficient as possible, as early as possible, makes sense for all schemes.

Buy and maintain credit focuses on capturing the credit risk premium available in fixed income markets efficiently and preserving that premium over time. It is a strategy that can be highly customised to match yield, spread and duration requirements and allows a liability aware approach to portfolio construction absent in 'traditional' active benchmarked credit portfolios. Given these characteristics, we believe buy and maintain credit is ideally suited to building the contractual cashflows essential in the middle game and beyond.

Real assets and gilts are also essential elements of a DB scheme's contractual cashflows. Real assets introduce an element of illiquidity into the portfolio and a detailed liquidity analysis at an overall scheme level could become relevant as they are introduced. A scheme may have many sources of liquidity, including sponsor contributions and equity dividends. While these may not be contractual (and therefore should not be relied on), they are relevant for paying pensions in the short term.

Looking beyond contractual cashflows: how to target growth

What is the best way for trustees to add return?

Most trustees and schemes are used to running benchmarked portfolios with guidelines that allow managers broad flexibility to add value from different return sources. We agree with this approach of adding value from different return sources over a benchmark, but we believe that the benchmark should change to reflect the true scheme objectives of achieving full funding and paying pensions as they fall due. This suggests the right benchmark for schemes will be gilts plus a return which will be sufficient to bridge any funding gap over a set period of time. For schemes including an LDI portfolio and some element of buy and maintain credit an appropriate benchmark for the portfolio of return-seeking assets might be one that includes dynamic sensitivity of the discount premium (over gilt yields) to credit spreads. This may allow a fairer reflection of long-term financial health, as credit spreads can widen without any material increase

in the risk of not meeting cashflows. Intuitively this is the familiar 'gilts plus x' benchmark but where x is sensitive to credit spreads rather than being static.⁴

This may be complemented by suitable ways of monitoring the credit portfolio such as analysing downgrades and defaults, and monitoring the impact of trades.

The key idea is that success is about ultimately paying 100% of pensions as they fall due, rather than short-term movements in market values, and therefore any focus in the return-seeking portfolio on 'beating a benchmark' over short time periods could induce poor portfolio decisions.

The return-seeking part of the LAI framework accesses returns from a wide range of sources. Asset class exposure should be diversified, including equities, fixed income and alternatives. Dynamic management at an asset class level can provide a further diversified source of additional return, as can active management or factor-based investment at a stock level. This could be a portfolio of a manager's best ideas managed in a risk-adjusted framework, which is likely to provide the most efficient use of collateral across the scheme and the optimal ability to manage risk holistically. However, for some schemes, depending on governance structures, a fund of funds may prove optimal. Most importantly, this is a portfolio designed to meet the return needs of the scheme and designed to do that by taking as little risk as possible, using the most efficient blend of assets to achieve that return.

Promoting scheme efficiency: changing regulation will drive scheme simplification

The LAI framework in its purest form would see just one manager running LDI, contractual cashflows and return-seeking assets. This would create the greatest portfolio efficiencies. Indeed, any potential cost savings could be seen as 'pure alpha', since they enhance returns with no impact on risk.

The regulatory changes regarding the management of collateral and what counts as collateral mean there will be a high cost to having multiple portfolios seeking similar returns from beta and alpha because each manager will need to hold cash against any derivative positions. Across a scheme, assuming most managers owning overseas bonds will need to increase their collateral, there may be as much as 10% or more sitting in cash in return-seeking portfolios at any time. Not only will the scheme be paying fees on that cash, but it is also not generating any return and could usefully be redeployed elsewhere.

One benefit of having an LDI manager also take charge of the return-seeking assets and any overseas contractual cashflows is that gilts in the LDI portfolio will be able to be used as collateral against any currency or derivative positions. This lowers any cash drag, reduces fees and means the scheme can be fully and efficiently invested in assets that are focused on generating return

and therefore reducing the funding gap or paying pensions by producing cashflows.

This is not to say that a single manager is necessarily the best idea. Care is needed to ensure a single manager has the expertise and ability to manage multiple sources of risk across the scheme, but our view is that having a manager with holistic oversight of all the risks in the scheme, and the ability to manage those risks proactively, will promote the best outcome in the longer term.

Evolution not revolution

The LAI framework promotes evolution not revolution. It is inevitable that as schemes mature and become cashflow negative, the focus on only hedging interest rate and inflation risk and having some diversified growth will shift towards a focus on liquidity management to pay pensions. This will lead to an increased focus on collateral management and efficiently sourcing cashflow from employer contributions, equity dividends and contractual cashflows and a reduced reliance on using LDI assets as a source of easy liquidity.

Once portfolios are constructed to include contractual cashflows where the intention is to hold those assets to maturity to pay pensions, it would be a natural conclusion that scheme performance should be measured against a liability benchmark including those assets, inferring a liability discount rate that reflects the return on the strategic liability benchmark.

By managing assets within a Liability Aware Investment framework, schemes can target a 'gilts-plus' return target and benefit from a more efficient portfolio (lower risk for a given return) as assets are managed:

1. Holistically, eliminating doubling up or down on ideas across portfolios
2. Against a liability benchmark that reflects the scheme's objectives, rather than individual market benchmarks that have nothing to do with the scheme's objectives
3. Cost efficiently, by sharing collateral across the portfolio and proving efficient liquidity from across multiple investment types

We believe the LAI framework will be effective for helping trustees achieve their ultimate aim of meeting benefits as they fall due.

Source:

¹ Willis Towers Watson Global Pensions Assets Study 2016 and LGIM calculations.

² See 'Setting the liability hedge level' for a discussion of how trustees may choose to set their hedge level.

³ Risks of not cashflow-matching include depressed market value on early sale, reinvestment risk, higher transaction costs and liquidity problems.

⁴ This also links in with using measure of success such as CUE introduced here. If the liabilities are defined as the value of the assets such that CUE is a fixed number (say 95%) then as they approach the endgame the liabilities will behave like gilts + x where x is sensitive to credit spreads.

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