

# Liability driven investment

*Striking a balance between self-sufficiency and the endgame*



*In conversation:*

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## Striking a balance between self-sufficiency and the endgame

The UK liability driven investment (LDI) market continued to grow last year, with hedged liabilities increasing 29% to £657bn, according to latest figures. Consultant KPMG's fifth annual LDI Survey found the overall number mandates increased by 25% in 2014, from 825 to 1,033. In particular, the market saw a boost in the number of pooled mandates, which increased by 41% (with 151 new mandates) over 2014. For the first time there are now more pooled LDI mandates than segregated.

Despite the historic low yields available, there remains a strong demand for even more LDI, as pension schemes progress, somewhat slowly, on the path to the endgame whether this is reaching self-sufficiency or full buyout.

But striking the right balance between return-seeking and liability-matching assets presents challenges and it is a difficult time for schemes looking to hedge inflation and interest rate risk because of the ongoing uncertainty around rates. Many thought rates would increase this year, but fresh bouts of global market volatility, driven by uncertainty in emerging markets, has made the picture even more hazy.

It is still not certain when or if rates will rise but the pricing of swaps and bonds already implies significant increases in the base rate over the next few years and schemes are caught between a rock and hard place deciding whether to hedge now or hold out.

The often overlooked risk of increasing longevity also looms large and to this end some sponsoring employers are seeking to take risk off the table by offering scheme members pension increase exchanges (PIEs) as well as looking at measures such as buy-ins and longevity swaps. But, as always, these strategies need very careful consideration before being entered into.

Elsewhere, schemes are looking to make their matching assets work harder by linking up LDI strategies with liquid credit as well as allocating to passive equity and synthesising part of it to exploit leverage. However, while some schemes are comfortable with this type of approach, others are yet to be convinced of the merits of synthetic exposure and its associated leverage. This roundtable sees an expert panel of asset managers, consultants and asset owners debate the key issues around LDI, including what the endgame looks like for schemes as well as how to implement de-risking in the current macro-economic environment. The panellists also tackle the governance requirements around LDI and the risks of inflation.

Sebastian Cheek

deputy editor, *portfolio institutional*







*“The long-dated part of the UK inflation curve is skewed because of the pension scheme demand. That’s going to stay with us for the foreseeable future. Hedging using the swap market or the gilt market is expensive.” Mark Versey*

**The LDI juggernaut has continued to grow in the last year. Hedged liabilities increased to 29% – £657bn of assets – and mandates increased by 25% in 2014 from £825bn to £1,033bn. So what does the endgame for pension schemes look like when it comes to matching liabilities?**

**Mark Versey:** Either the scheme will want to go to a buyout and focus on de-risking as much as possible to ensure the assets they own can be transferred to an insurance company or aim to be self-sufficient, focusing on matching liabilities to meet cashflow requirements as they fall due and reducing the risk of not meeting them as much as possible.

**Robert Davies:** Finance directors are fed-up with seeing funding levels fall, because the liability values have gone up, so we will see interest and inflation risk taken off the table at the first reasonable opportunity. They won’t wait for rates to be generous, but they won’t do it at any price. When it comes to longevity, my clients generally can’t access reasonable rates for insurance, but if they could, they would.

**Jonathan Crowther:** The asset allocation of most of those strategies is going to look something like 10-15% in growth assets of some form, probably diversified and it’s almost rainy day money. It protects against longevity risk, things that might happen that you’re not sure about and you can’t foresee from a long time out, but 85-90% of the assets are going to be matching assets of one form or another. So interest-free and inflation exposure will be de-risked. Then there will be an allocation to cash and government bonds, gilts predominately, to collateralise those overlay positions. The rest will invest in various forms of credit from relatively liquid investment grade credit up to less liquid and more alternative credit-type strategies, which might be infrastructure, it may be long-lease, it might be rents, structured loans.



Jonathan Crowther

*“One of the cheapest ways for pension schemes to buy inflation protection is to go back to the individual member and offer them pension increase exchanges. People don’t buy inflation annuities on the whole.” Jonathan Crowther*

**Marcus Mollan:** It may be better to build the end game portfolio over time. Ideally, everyone’s investment strategy plan should incorporate not just what today’s investment strategy is, but how that interacts with future investment strategies you expect, to ensure the path is as efficient as possible.

**Ashish Doshi:** Pension schemes need to have an endgame investment strategy, but also some flexibility throughout the journey plan, recognising that journey is going to be very volatile and they may need to react to different market conditions. Triggers are a useful way to formalise some sort of journey plan, but there needs to be some flexibility, because the market levels can change.

**Davies:** The 85%/15% (liability matching/return-seeking) split would be the ultimate endgame in terms of investment strategy. But there is going to be an intermediate stage where liabilities are covered off and we focus on managing the assets, to invest away the deficit to – hopefully – end up in that nirvana.

**Versey:** In these endgame scenarios, the only benchmark that is appropriate is a total return or cash benchmark. Trying to deliver the total return outcome is going to be critical in that endgame, with a ratio of 80% matching to 20% growth, I guess.

**Mollan:** Some well-funded clients can even afford to be 5% or 10% in growth assets during the end game. It all depends what their overall return requirement is and the employer’s covenant, confidence they have in the sponsor, how much they need to be genuinely self-sufficient under what circumstances, or how much they can afford to take a little bit of risk that will in general reduce the costs but which

occasionally will require a top-up from the sponsor. We are seeing often a total return target at that level at around 0.5% above gilts, and you can get that through a combination of credit type assets, some gilts, and a small splash of diversified growth assets.

**Crowther:** The LDI techniques used are risk transformers rather than necessarily complete risk reducers. These techniques effectively transform that risk from being long-dated real interest rate risks to being short-dated interest rate risks. People could live a year longer than you'd expect and those are the things you can't perfectly hedge for unless you buy out.

**And you need to have a bit of liquidity or be able to move into those matching assets.**

**Crowther:** You start one end with liquid investment grade-type assets, moving to more illiquid – property, long-lease, ground rent, structured loans, etc. But the ability for pension schemes to live with that level of illiquidity will reduce through time. The challenge with the buyout is there just isn't capacity which is probably not much more than £10bn per annum, maybe going up to £20bn over the next five years. On a 50-year view, there is plenty of capacity, because it refreshes and there is roll off, but if all pension schemes wanted to buy out in five years' time, there wouldn't be the capacity and the price of buyout may go up.

**Giles Craven:** One answer is the segmented approach of using buy-in, rather than going for a big bang. You close off some options and the sponsor view on this is important, because there are fewer members, its ownership of the plan will diminish and they'll see it less as an opportunity and more of a threat.

**Mollan:** The recent – or impending – tax changes will accelerate that effect where additional rate taxpayers will be discouraged from contributing to pensions at all.

**Crowther:** Governance is going to become more challenging as employers become less interested. At the moment, pension schemes are a big headache for sponsors because of the size of the deficits. As that diminishes, they'll be left with something more complicated to manage in many ways. We're probably going to see the number and size of trustee boards shrink.



Ashish Doshi

**Giles, what's been your experience as a trustee?**

**Craven:** The sponsor has got very strong views on this, which we've taken very serious note of because they don't involve paying the premium for buyout. So we are looking at an intermediate solution – 'self-sufficiency' – which we only have a sketchy view of. But the world is a slightly better place for those conversations having happened and with the comfort of a good covenant, everyone is reasonably happy. In anticipation of reaching the 'promised land', it's worth spending a bit of time on preparation, because it's going to happen quicker than you think it will.

**Crowther:** Agility is really important, because if things do change, it's the ability to respond, nimbly, to take advantage of opportuni-

ties and de-risk that is successful. Over the next 10 years at least, we're unlikely to see real yields above 50 basis points positive, so we may see some fluctuations and to be nimble, you must recognise the dynamics so when an opportunity presents itself, you have flexible enough governance to take advantage of it.

**Doshi:** Traditional pension schemes are long-term investors, but we're seeing the better schemes think more in the short term, more dynamically and making decisions based on opportunities. Pension schemes who have the governance structure framework in place and can take advantage of short-term movements, are probably going to be able to react better and perform better. So, it's important to have the long-term plan, but also be able to be nimble in the short term to take advantage of short-term movements.

**Mollan:** That can apply to the buyout or buy-in side as well. Having preliminary discussions with insurers,

that can take many months or even years, just to get in a position where you could transact even when you wanted to. Increasingly our clients are de-risking their investments. Because of this, we are seeing their longevity risk becoming a higher proportion of their overall risk and though they might not want to get rid of all of that, some schemes are looking at, for instance, selective buy-ins of particular members, particular individuals, where those individuals make up a high proportion of liabilities, or the fortunes of the scheme are dependent on the longevity of a small number of people.

**Davies:** I think we will see distortion in the yield curve for a while to come, but I suspect global forces may lift the whole curve in time. So there may be opportunities as and when confidence returns with the United States taking off. Is it a pipedream to think that, even though gilts may be constrained, schemes will be able to insure liabilities by, say, buying US Treasuries and hedging currency risk?

**Crowther:** That's traditionally how insurance companies have managed annuity books, so on the credit side, they've certainly bought dollar credit and taken out the currency risk and the wrong interest rate risk. I suspect the way regulation is changing for insurers, that's becoming more challenging. The way that banks are being restricted in terms of the amount of balance sheet that they have available to take on risk is going to make those types of trades increasingly expensive.

Pension schemes are fortunate they are much less heavily regulated than insurance businesses, so they've greater options, but transaction costs will probably remain quite high.

**Versey:** The solution really depends on what the endgame target is. It's about the attainable spread over gilts. There are lots of opportunities to get attractive spread from overseas assets, but there is no opportunity to replace the UK inflation embedded in the gilts. US Treasuries don't give you a hedge to UK inflation and therefore the swap market must be used. The long-dated part of the UK inflation curve is skewed because of the pension scheme demand and that's going to stay with us for the foreseeable future. This means hedging long-dated inflation using the swap market or the gilt market is expensive. If you have the risk budget and a sponsor who is happy with that risk, then in a long-term strategy you may not hedge long-dated inflation directly.

#### **Is now a good time to implement LDI strategies?**

**Davies:** My view is the curve is too low and you should be rewarded for keeping some interest rate risk on the table. But if you are going to capture these opportunities, you do need to be very close to the market. While I wouldn't give full responsibility to a fiduciary manager, they've something to bring to the party and I would give them responsibility for implementing a strategy, but not necessarily setting it.

**Doshi:** Many pension schemes still haven't gone down the fiduciary management route, but have agreed there needs to be, given the volatility in the market, a decision-making framework where they can take advantage of volatile market conditions. We've seen schemes hedge a little now, so they have the hedging framework available so when rates rise to a point where they want to hedge significant amounts, they can move quickly. That's quite important because it does take a lot of time to educate trustees on LDI.

#### **So have some kind of framework in place, but not necessarily have risk on the table?**

**Crowther:** The reality is, UK pension schemes are probably going to hold a lot of UK credit and will definitely hold lots of UK government bonds and infrastructure projects/ground rent/long lease, which is also going to be sterling-based. So you can see a bid up in price, because that is where pension schemes are going. If we have the Goldilocks scenario of equities and return-seeking assets do really well and rates



Robert Davies





Marcus Mollan

*“Increasingly our clients are de-risking their investments. Because of this, we are seeing their longevity risk becoming a higher proportion of their overall risk and they might not want to get rid of all of that.”* **Marcus Mollan**

suddenly start rising rapidly, what are pension schemes going to do? They're all going to head for the doors and that will create a lot of problems. Those headwinds are always there, so anything that gives you an edge places you slightly away from the norm and will probably give you a greater opportunity set.

**Mollan:** It's certainly far from a given that interest rates will rise faster than the market currently expects. The pricing of swaps and bonds already implies quite significant increases in the base rate over the next few years and a pension scheme only gains from delaying hedging if base rates rise faster than is anticipated. So it's not guaranteed that delaying hedging will make extra returns, but it will increase their short-term risks. There are a lot of factors that are pushing the other way – high demand, limited or reducing supply of gilts and demographic factors is another. Most schemes probably should be doing something if they haven't done anything, but maybe not go the whole hog and hedging all their liabilities at once.

**Davies:** I'm not expecting those old sorts of high rates, but the five-year forward-fifteen year real rate is still negative, eight years after the crisis. I'm optimistic, but feel the risk of them falling is questionable.

**Versey:** You need to separate the nominal interest rate discussion, as the curve is quite steep and today is quite a fair predictor of likely base rates. There is a huge upside if rates do move faster than that, but only in February, the markets were predicting that rates would never rise much above 2% – and that's completely different now. Inflation curves are driven by different dynamics and our short-term view is there is pressure on short-dated inflation being lower than the market is predicting, while long-dated inflation is priced “fairly” simply because of the demand. Our long-term view is different, we are saying: hedge nominal rates, but don't hedge long-dated inflation, which is not a good predictor, if you've got the risk budget.



**Mollan:** I always take the UK real rate and add about 1% to get the globally comparable real rate – which puts you into positive territory at least – because UK RPI, which we reference in index-linked yields, is different from CPI, which is a more standard measure. The wedge, as it's called, is the gap between RPI and CPI and is around 1%. So in CPI terms, the yields are not quite so bad.

**Crowther:** One of the things we talk about glibly is inflation, but there are different measures of inflation pension schemes are subjected to. But you're right to mention the wedge. If you've got the ability to hedge inflation, perhaps it doesn't look that attractive, today. It's more a pound cost averaging approach and you ease into it, but over the last 12 months, there have been opportunities to buy it incredibly cheaply relative to recent history.

One of the cheapest ways for pension schemes to buy inflation protection is to go back to the individual member and offer them pension increase exchanges. They will take a lot lower price than is quoted in the market and it's not actually that bad a deal for a member to exchange, take a higher flat pension rather than a lower inflation-linked one. Individual annuity markets tell us that people don't buy inflation annuities on the whole. They go for the higher level income. It's just the way the world is.

#### **Are we going to see more pension increase exchanges?**

**Crowther:** Sponsors are definitely concerned about using more than one lever to try and manage the scheme and liability management exercises – whether buy-in, buyout, or pension increase exchange or enhanced transfer values – you'll see more of. It's inevitable, as it's not one-size-fits-all for members, not every member has exactly the same profile.

**Craven:** Trustees find some of these exercises rather uncomfortable – there is a mild smell of fish about them. There are certainly reputational issues in some of these liability management exercises.

**Davies:** Especially with increasing life expectancy and the escalating cost of long-term care; you must beware spending all your pension before you need someone to look after you.





*“Many schemes haven’t gone down the fiduciary management route, but have agreed there needs to be, given the volatility in the market, a decision-making framework to take advantage of volatile market conditions.” Ashish Doshi*

**Are we seeing more use of pooled mandates?**

**Davies:** I am, exclusively.

**Doshi:** Yes, but we tend to only use pooled mandates given the size of the clients, but they are becoming very flexible and doing things that segregated mandates used to do a few years back. There are still a lot of opportunities for managers providing pooled funds to tap into the smaller pension schemes who haven’t really thought about doing LDI.

**Versey:** Endgame schemes become very cashflow negative, whereas today many are not in that situation unless they are very mature, but it will be an increasing trend.

**Crowther:** The minute you’ve got a series of payments that you definitely have to pay and they are only going to increase going forward through time, suddenly your mandate is constraining quite a lot and you’ve not had to manage within those constraints. Insurers have been doing it for a long time, but pension schemes haven’t, so I think the nature of governance is going to change in that respect as well.

**Versey:** It’s going to be a move to a much more cashflow matched investment approach, which is where LDI has a role to play. But LDI is just the interest rate and inflation hedging part and you’ve got credit and alternative income providing most of the cashflow.

**Mollan:** It does change how you look at risk, because traditionally pension schemes have looked at their asset value and their liability value, and whether the two have moved in line. That’s almost an accounting way of looking at things, but success in that area is about having the cash to meet your cashflows. The risk measures or success measures and the frame of mind that people have when looking at risk versus



*“Trustees find some of these exercises rather uncomfortable – there is a mild smell of fish about them. There are certainly reputational issues in some of these liability management exercises.” Giles Craven*

return, we'll need to move from a value-based risk versus return calculation to a cashflow-based risk versus return calculation.

**Crowther:** As a result, we'll see more income products. Not just for the DB market, but the individual DC market as well, because we're moving away from annuities but people still need income in retirement. Choosing managers then is very different from picking one that is the best out of 10 for managing equities. It's a completely different skillset.

#### **Is RPI is a better target than CPI?**

**Mollan:** Most, but not all pension liabilities are RPI-linked and virtually all inflation linked assets in the UK are RPI, so that's where the vast majority of the inflation hedging activity is. But government policy and the Bank of England focus on CPI, so there is a mismatch. The fact that there are two inflation measures does make managing inflation risk harder to do in a precise fashion and it introduces an extra layer of uncertainty often between what you actually want to achieve, in theory, versus what you can do in practice with the instruments that are available.

#### **What should schemes do, then?**

**Mollan:** Most inflation linked assets are RPI. And most pension scheme benefits historically were linked to RPI – but not pure RPI, they are actually typically RPI with cap and a floor, which is what is known as LPI.



So even before CPI became more widespread, pension schemes still found it hard to precisely hedge the inflation that was in their liabilities because there were these caps and floors. You could find instruments to match those, but they were typically quite illiquid and expensive. If you're not trying to fully de-risk your investment strategy, a lot of these nuances in inflation are less dramatic than many of the other risks you're running, but you have to be aware of them and be prepared to address them.

**Versey:** Which is why scheme assets need to have some return even in self-sufficiency because they've got to cope with these sorts of risks. If you earn enough money on your assets, then you can even cope with longevity risk. But the question is, how much do you need to earn?

**Crowther:** The only way a pension scheme can fully hedge all the risks is pass it to somebody else through a buyout, so residual risks are always going to be there.

**Davies:** I like this idea of CPI hedges, but an imperfect hedge is better than no hedge – especially if your hedge ratio is quite low anyway. So I'm quite happy to stick with RPI for the time being.

**Doshi:** There has been a development, particularly in commercial property, where rental agreements are linked to CPI and LPI capped levels. But there are very few of them and you usually pay a premium.

**Crowther:** There is potential in utilities. Their pricing formula is on RPI, but if that were to change to CPI, it might encourage greater issuance from the utilities of CPI-linked assets. The opportunity to introduce a CPI-linked gilt market may happen in the next 10 years, but the opportunity has probably passed – the net issuance of index linked gilts is going to be falling relative to the last seven or eight years.

#### How can schemes make their matching assets work harder?

**Crowther:** We've been linking LDI up with liquid credit strategies because credit is quite a good risk for pension schemes. As long as you buy a bond, it doesn't default, you pick up the credit. We've also seen pension schemes taking passive equity allocations and synthesising bits of it, because that allows them to exploit leverage and put more money to work in credit in increasing the hedging.

**Davies:** My clients haven't done that, i.e. sweated their matching assets, but they have been leveraging their gilts to keep the same level of protection and raise capital for growth assets.

**Versey:** An insurance company would invest entirely into matching assets – it's effectively a fully-funded scheme and would have up to 50% of their matching assets as illiquid, and then say, 30%-40% in buy-and-maintain credit and only 10% in effectively hedging or LDI assets. That's an endgame that pension schemes may move towards, but is significantly different than where pension schemes are today. It's very much a cashflow oriented approach. We may see more hedging of interest rate and inflation risks - effectively locking in today's deficit.

**Mollan:** We're seeing more development in terms of pooled solutions, which blend some of the characteristics of LDI with other asset types.

**Crowther:** Pension schemes traditionally have been really reticent about synthetic credit, which is surprising really, because it's one of those areas that is actually quite an efficient way to capture credit spread. But synthetic credit has always been seen as one of those areas that was just a 'bit risky'.

**Craven:** That's an understanding gap.



# An evolved approach to LDI: outcome-oriented approaches to investing

*By Mark Versey, chief investment officer – Global Investment Solutions, Aviva Investors*



As individuals, we're all working towards meeting different financial goals. In the same way, pension schemes have their own goals, namely meeting their liabilities. These represent the aggregation of the financial goals of thousands of individual scheme members. As such, we begin to see the development of an outcome oriented approach designed to meet these collective goals as the natural 'next step' for liability-driven investment.

Until recently, LDI has focused mainly on reducing the mismatch between interest rate and inflation exposure which exists between scheme assets and liabilities. Because liabilities are measured using a present value calculation of future liability cash flows, the substantial fall in nominal and real interest rates that has occurred over the last decade has significantly increased the size of scheme liabilities.

Although falling interest rates have boosted the value of scheme assets and especially LDI assets, the net effect has been a painful increase in deficits. As at March 2015, the aggregate deficit of the 6,057 schemes whose funding position is tracked by the PPF (Pension Protection Fund) 7800 Index was just under £293bn. This has forced many sponsors to dig deep and agree additional contributions.

## Tough choices

At last count, there were 825 LDI mandates in the UK with schemes of all sizes making use of segregated or pooled LDI solutions. Those that have done so have been well rewarded so far, thanks to a continuing decline in bond yields. However, we estimate that only around a third of UK scheme risks are currently hedged. Although many UK schemes may wish to increase their hedge ratio, they face a quandary in forming a supportive market view.

The Bank of England base rate has now been at a record low of 0.5% since March 2009; with scheme advisers and investment managers alike predicting that it would rise throughout this period. With inflation having touched a record low of 0.0% in the first quarter of 2015, interest rates look set to remain low.

With rates at historic lows, it seems difficult to contemplate them falling further. It could be argued that the current value of scheme liabilities already reflects rates staying low for the long term, which suggests that the 'pain' has already been taken to some degree through larger market-valued deficits and increased sponsor contributions. Unfortunately, the risk to schemes of meeting liabilities if rates stay even lower than predicted outweighs the sponsor's opportunity if rates go up. Trustees face the challenge of needing to balance the relative benefits of the remaining unhedged scheme assets verses taking on other market risks.

## Fresh thinking

Rather than looking at LDI independently from 'growth' portfolios, we think it's time for consultants and trustees consider an outcome-oriented approach to their investment needs.

At its core, this replaces a 'two portfolio' model (where one is a growth portfolio and the other an LDI portfolio) and the extensive use of individual indices to measure performance that this entails. It uses a holistic investment strategy with a single portfolio model utilising a much more meaningful benchmark: the scheme's actual liabilities. This enables trustees to consider risks taken on interest rates and inflation in the same context as risks taken on equities, real estate, alternatives and all other market risks in meeting future liabilities.



Key drivers when designing such a strategy include:

- Liability cash flows: How much a scheme needs to pay out in future will dictate both the maturity profile of a strategy and the inflation risks to manage, but it's just as important to ensure that a scheme's short-term cashflow and liability needs are met.
- Agreed contributions: Take account of future contributions when modelling portfolios.
- Level of funding: The current value of assets in a portfolio will naturally affect target returns and therefore the investment risk required.
- Risk budget: This is ultimately decided by trustees based on the existing level of funding, sponsor covenant and return required on assets.

### Creating better benchmarks

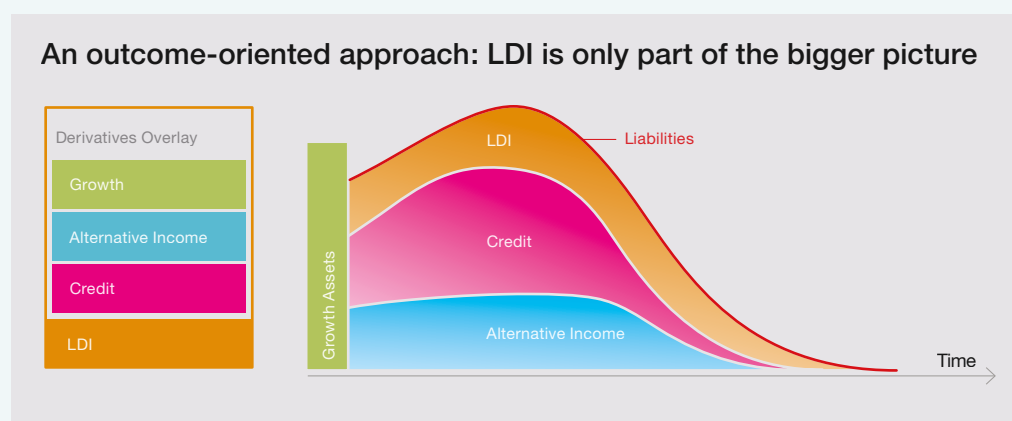
An outcome-oriented approach takes a holistic view of all risks that may impact a scheme's ability to meet its future liabilities; from interest rates and inflation to reinvestment, equity, real estate, credit and currency risk. Inherent in this is the opportunity to take a more meaningful approach to diversification. It allows schemes to move away from a model where the managers of individual asset class components diversify their parts of the portfolio relative to market benchmarks and towards managing the whole portfolio's aggregate exposure. This can greatly reduce the prevalence of unrewarded risks, helping schemes get more 'bang for their buck' from their risk budgets.

It subtly changes LDI from an exercise in interest rate and inflation hedging to an outcome-focused exercise, ensuring that all cashflows generated by a scheme's assets are appropriately risk managed relative to liabilities. Therefore, unrewarded risks are kept out.

It also allows decisions on hedging to be taken strategically across expected rates curves and enables such hedges to be implemented in an intelligent, cost effective way which is matched to cashflows generated by the scheme's existing assets and any new assets it might acquire. Because hedging can be implemented either where there are strong convictions or where liability and asset cashflows are most mismatched, any specific hedge ratio target can be delivered.

### New LDI – new labels

Another key strength of an outcome-oriented approach is that it enables schemes to consider a far wider range of assets than most LDI portfolios currently encompass. Although income-generating assets naturally tend to dominate the mix, because the cashflow from assets can be matched to liability cashflows, outcome-oriented strategies aren't constrained solely to income-producing assets.



It helps to discard labels such as 'income', 'growth' or 'matching'. After all, the ability to meet liabilities is based on total returns and the liquidity of assets when they need to be realised. Even traditional 'growth assets' can offer attractive levels of long-term income and varying degrees of inflation proofing as part of an outcome-orientated solution.

#### Outcome-focused asset classes and investment strategies

- Unconstrained equities: An unconstrained approach targeting companies with highly liquid and sustainable dividend streams can avoid the natural pitfalls of following a market-cap weighted benchmark and maximise the certainty of income.
- Long-lease real estate: Focusing on properties with leases that offer long-term and frequently pre-agreed inflation-linked rental income streams from a wide variety of tenants can help diversify risk, even if the 'growth' element of the return is often quite limited compared to the purchase price.
- Absolute-return funds: Funds that seek to maintain low volatility but can deliver a steady return above the rate of cash offer both a valuable source of future cash flows and high levels of liquidity.
- Alternative income assets: Real-estate finance, infrastructure and other structured finance assets can offer a significant yield enhancement over bonds thanks to the healthy illiquidity premiums on offer as well as good diversification of credit risk and valuable additional collateral when compared to traditional corporate debt.
- 'Buy and maintain' credit: This approach is especially useful for schemes with long-duration liabilities. It focuses on corporate credit but is unconstrained by market index benchmarks. The focus is on maintaining a defensive strategy which is invested in a diverse range of companies and avoids those businesses with significant unknowns in their long-term business plan.

#### Ready to implement?

Adopting an outcome-oriented approach requires a new mind set and the ability to size and manage market risks relative both to a scheme's future liability stream and to one another, all in a single portfolio. The ability to do this means changes can be implemented across portfolios far more quickly and meaningfully than in a portfolio where assets are invested across a range of different alpha-chasing strategies, each of which might be managing against a different market index.

A number of pension consultants and schemes have already expressed support for this approach, and, like us, they see the benefit of making a scheme's liabilities the most appropriate benchmark. They understand the need to provide pension schemes with support and advice when deciding on the most appropriate split between hedged and unhedged assets and implementing the oversight that must go hand in hand with this sort of outcome-orientated approach.




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## Putting the destination in sight

*By Jonathan Crowther, head of UK LDI, AXA Investment Managers*



Where does the journey take us?

The majority of private sector defined benefit (DB) UK pension schemes are on a long-term de-risking journey towards self-sufficiency and/or buyout. Whilst each scheme will have its own specific journey plan, the destination will have similar characteristics: a fully funded position with asset allocation likely to resemble that of a typical insurance company annuity fund. At this point, control of funding-level volatility and organising cashflows to meet benefit payments, with minimal reliance on employer contributions, will dictate investment strategy. Typically, this will involve hedging out the majority of the interest rate and inflation risk, allocating around 90% in matching assets and retaining up to 10% in diversified return-seeking assets, which can be used as 'rainy day' funds to offset those risks that are difficult to hedge accurately.

Whilst a lot of schemes have embarked on this de-risking journey, many still have quite a distance to travel. In the near term, one of the biggest challenges DB pension schemes have is dealing with the significant exposure to adverse movements in interest rates and inflation, which has had a devastating effect on funding positions in recent years. To address this issue, many schemes will adopt a Liability Driven Investment (LDI) approach, utilising gilt sale and repurchase agreements (repos) together with interest rate and inflation swaps to hedge the risk. To support the hedge, gilts and cash are required as collateral, but the overlay nature of LDI allows schemes to retain exposure to other asset classes with the intention of reducing the deficit and a return to full funding.

Currently, investment strategies include a wide range of return-seeking assets as well as credit assets but over time, as schemes return to full funding, the latter element will become increasingly important. This is because, the Sterling credit allocation is expected to provide additional interest rate risk mitigation, excess return over gilts and crucially generates cashflows to meet benefit payments.

### Supply & Demand: The Gilt Market

Closer examination of the hedging aspects of the journey highlights that the majority of DB pension schemes possess a large element of inflation linked liabilities. Consequently, as the de-risking journey progresses, there is significant focus on the levels of real yields. At present, these are negative at almost all maturities and so schemes have been reticent to hedge their real rate risk and thereby lock in to historically low rates, believing real yields will rise in future. Therefore, many strategies involve setting strategic real yield triggers above current levels. However, the current supply/demand dynamics for the index linked gilt market imply that real yields may not rise significantly in the near future.

Considering the demand dynamic, evidence from recent surveys suggest that, although schemes have already hedged around £650bn of liabilities, there is potential to hedge a further £700bn of real liabilities over the next 20 years. Against this, the Chancellor's ambition to 'balance the books' by the end of this parliament, suggest that the supply of long-dated index linked gilts is only expected to grow moderately, by less than £20bn p.a. over the next four of years. Therefore, the imbalance is likely to persist for many years, which will continue to exert strong downward pressure on real yields.

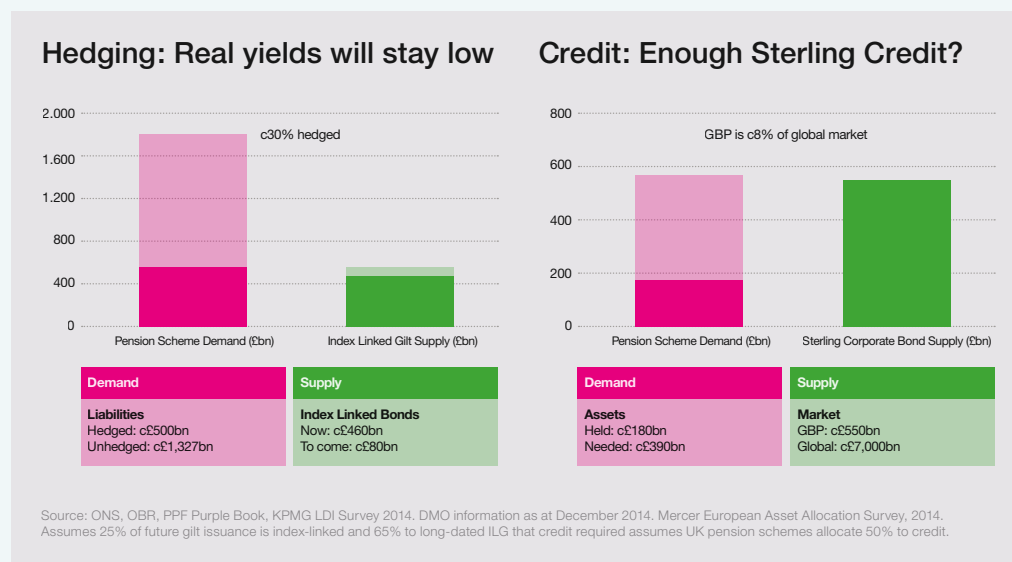
So what does this mean? Well, the implication is that market level triggers can be useful, but perhaps they should not be used in isolation. Indeed, schemes may find it more beneficial to take into account their present funding level and the extent of the risk, looking to de-risk incrementally through time, accelerating as and when the funding level improves.

### Supply & Demand: Sterling Credit Market

As schemes get closer to full funding the credit allocation, as highlighted above, is also expected to increase (an average of 17% is currently allocated to Sterling credit<sup>1</sup>) and Sterling investment grade corporate bonds are an obvious choice. However, much like the index linked gilt market, there is a limited supply, with current market issuance of c.£550bn (over £100bn of this is supranational which doesn't offer much 'pick up') and annual growth of the market is only expected to be c.£50bn<sup>2</sup>. Potential demand from DB pension schemes alone is expected to reach c.£600bn by 2020 not to mention demand from other sources (UK and global insurers, DC pension funds etc.).

Therefore, we may see increased appetite for global credit mandates. The global market is much larger with more than six times as many issuers than in the UK - and more diversified across regions and sectors. There are also differences in the shapes of the credit curves, which can facilitate a better risk return pick up from a global portfolio relative to a Sterling only mandate.

There may also be more of a shift towards a core buy and maintain approach within investment grade credit mandates. Liquidity has become more scarce following the global financial crisis, with banks increasingly constrained by regulations, and this has led to higher trading costs and spread compression, making it even more necessary to employ a skilful manager to extract value. By comparison, the low turnover nature of buy and maintain credit strategies, used by insurance companies for a number of years, looks relatively attractive. Schemes may consider this type of approach to help provide predictable cashflows over the long term and to avoid unwanted return erosion caused by credit-related losses, transaction costs and higher management fees.



In navigating the journey to full funding and reduced reliance on sponsor contributions, pension schemes are going to become increasingly focussed on two aspects: reducing interest rate and inflation risk; combined with achieving a long-term, and relatively predictable, return pick up from investing in credit over time.

As this journey progresses, it is inevitable that schemes will search for efficiencies that can be gained by running the hedging and credit portfolios more holistically.

Firstly, a relatively straight forward increase in expected returns may be achieved by managing LDI and credit mandates in close proximity; basically, this means less collateral needs to be held enabling an increased allocation to credit.

A more subtle aspect relates to the current shape of the credit curves, where utilising duration management techniques via LDI allows the credit manager flexibility to concentrate on the parts of the curve that offer the most value and thus potentially achieve a higher spread over gilts. This is even more important for global mandates, where LDI can be used to manage the associated currency and non-Sterling interest rate risks thereby facilitating the improved credit spread pick up.

As the liabilities mature and cashflow management grows in importance, a combined portfolio can be constructed to help generate the necessary cashflows, with ongoing communication between the credit and LDI managers ensuring that cash holdings together with reinvestment into, and sales of, corporate bonds can be managed more efficiently to reduce overall cost.


Finally, it is also worth noting that the benefits of closer working relationships across LDI and credit will become even more apparent with the advent of central clearing. The move towards central clearing of derivatives will introduce some constraints on schemes that were hitherto not applicable. The most notable of these will be the necessity for schemes to hold considerably more cash than in the past. Therefore, seeking out opportunities to increase portfolio efficiency, which will have a positive effect on the overall cost of satisfying the schemes obligations, will become increasingly important.



1 Mercer European Asset Allocation Survey 2014

2 Assumption: market grows in line with the average of last five years





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# What does the endgame for pension schemes look like when it comes to matching liabilities?

*By Marcus Mollan, head of investment strategy, Legal and General Investment Management*



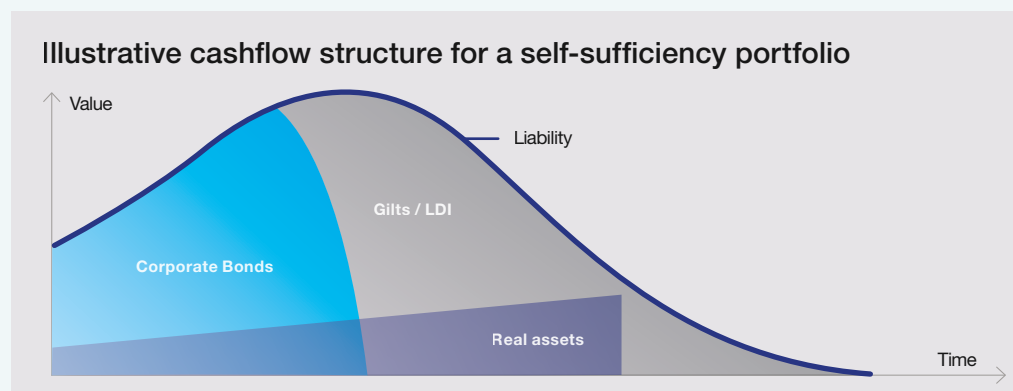
The ultimate objective of all pension funds is to pay members' pensions as they fall due. Whilst this sounds simple things can quickly become more complicated. Scheme maturity, covenant strength and governance constraints make different approaches appropriate for different schemes. Many schemes will currently be focussing efforts on generating investment returns in order to improve their funding position, with longer-term plans to reduce risk over time that have been agreed in principle but are not yet fully defined.

There is a clear choice for more mature schemes: securing members' pensions through buy-out, or run the scheme in a low-risk manner over a longer time horizon, ideally with less need to rely on the sponsor (self-sufficiency).

## Targeting buy-out or self-sufficiency

Schemes targeting buy-out will typically look at a variety of factors when selecting investments, notably at improving their buy-out funding level, matching changes in buy-out pricing and minimising transition costs. When looking at self-sufficiency and potentially long-term run-off, a scheme is more likely to be looking at its cashflow matching requirement, but should have lower sensitivity to market pricing of assets and have some tolerance for more illiquid assets.

Whatever the objective, we believe there are compelling but different reasons why corporate bonds are attractive. We believe this is consistent across all types of scheme and governance levels.



First, the pricing of buy-out policies is heavily influenced by the value of the assets insurers would need to hold to back those policies. Partially driven by regulation, but also by a fundamental need to match liability cashflows with high-quality investments, insurers typically hold significant amounts of corporate bonds and other forms of credit, in addition to hedging interest rate and inflation risks.

Second, schemes targeting self-sufficiency will typically have significant regular pension payments to make and need to ensure that the future cashflows are received as required to make these payments. As long as schemes in long-term run-off are confident of the cashflows they will ultimately receive, the market price of the assets held need not necessarily be a cause for concern. Although there may be

short-term regulatory pressure and a desire to benchmark against other schemes' performance, such schemes are well-positioned to act as truly long-term investors, accepting higher short-term or cyclical asset price volatility, as well as illiquidity.

**How can schemes implement effective liability hedging in the current volatile macroeconomic conditions?**

We believe that a key part of effective implementation comes from understanding the scheme's governance budget. This will guide the complexity of any liability strategy, how it is implemented and what degree of delegation is used.

#### **Complexity**

A complex strategy is only likely to work if all parties have sufficient time and expertise to make it work. We believe that simple liability hedging can still be effective liability hedging.

#### **Delegation**

More complex strategies can of course be followed by delegating elements of the strategy to other parties who do have the time and expertise.

Active LDI is one key way in which dislocations in market conditions can be taken advantage of in a timely fashion. This approach will also typically take advantage of a richer opportunity set of trades, using more complex trading strategies.

#### **Execution and monitoring**

Once a plan has been made then execution must achieve the right price at the right level by choosing the appropriate counterparties, minimising information leakage and not moving the market. Ongoing monitoring will then enable schemes to be ready and prepared for future implementation exercises.

### **What are the governance requirements around implementing an LDI strategy?**

We believe that implementing an LDI strategy can be done at a range of governance levels. The threshold for a simple but effective LDI strategy is actually very low: schemes are increasingly familiar with derivatives and using multi-investor pooled funds means that a scheme has access to tools previously available only to larger schemes.

Crucially, a pooled approach enables all complexities to be delegated to an investment manager. This can be non-investment related matters such as documentation and counterparty risk management but also many of the investment decisions.

We believe that the main governance requirement for schemes is to understand their objectives. They should then be comfortable delegating responsibility for the detailed implementation of those objectives to an appropriate combination of working group, investment consultant and investment manager.

### **How big a risk is inflation, how can schemes hedge it and should they target RPI or CPI?**

**How big is the risk?**

Inflation presents a risk to funding levels (inflation expectations) and cashflows (realised inflation). A further secondary risk is the 'basis risk' inherent in most liabilities, which arises from the fact that deferred



pensioner revaluation and pension increases are rarely RPI-only but instead subject to caps and floors or even a different price index altogether such as CPI.

We therefore view inflation as a major risk where it is unhedged, and a complex risk to manage even where it is hedged. Due to this complexity, pension schemes rarely hedge all their inflation basis risks unless a full insurance transaction occurs.

#### How to hedge it?

Funding level risk: index-linked gilts and inflation swaps are likely to be the best instruments to hedge inflation on most liability bases.

Cashflow risk: Index-linked gilts and inflation swaps also hedge cashflow risk but other assets are also likely to provide a good hedge. For example, illiquid real asset cashflow streams with varying degrees of credit quality should ultimately pay inflation-linked cashflows even if their present value does not move in the same way to the liability basis.

#### **How can schemes make their matching assets work harder – ie blending LDI with other asset classes/strategies?**

As pension schemes hold more matching assets and move towards the endgame there is a need to make these assets work harder. Indeed with yields at historic lows this is something that all schemes are considering irrespective of where they are on their journey plan.

Many possibilities exist depending on precise objectives and constraints. Corporate bond mandates are increasingly managed in unity with LDI portfolios, but actually the wider theme of good quality fixed income assets has a key part to play.

Early in a pension fund lifecycle we believe that credit derivatives provide a way of adding a credit spread on risk-free assets such as gilts and swaps. They provide diversification, yield pick-up and liquidity, and can often be executed using existing pooled or segregated derivative structures.

For creating cashflows and harnessing an illiquidity premium, we view real assets as a useful tool. For example, infrastructure loans provide inflation linkage and long duration whilst property income strips (amortising leases backed by a diversified portfolio of UK property) are a source of efficient cashflow hedging.

Finally the way that traditional LDI is managed is changing. Active LDI is a strategy which provides the opportunity to add incremental value in a risk controlled fashion. We believe that active LDI should incorporate credit as well as gilts and swaps. Having the flexibility to adjust credit exposure gives another potential source of returns whilst also enabling the matching assets to be managed more holistically.



ON THIS DAY: 31.01.15

OIL PRICE FALLS BY A RECORD 50% YEAR-ON-YEAR

The speed and scale of the collapse in oil prices took many by surprise - and the fall affected more than just petrol prices. Inflation fell from already low levels, and expectations for interest rate increases in the UK and US were pushed further out.

Integrating in-house macro research into our investment process helps our clients, whether adding inflation protection or increasing exposure to currencies that benefit from lower oil prices.

We believe solutions should evolve over time, helping pension schemes use their assets as efficiently as possible. So we partner with them to help achieve their objective-driven investment goals, adjusting their positioning to benefit from opportunities while guarding against downside impacts.

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