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Investment Insights

LDI in 2016: Navigating your way through the hedging maze

Quarter One - 2016

The Liability Driven Investment (LDI) market has expanded significantly over the last five years and is a topic that features on the agenda for many of our clients.

Against this backdrop, 2015 saw some relatively significant shifts for LDI investors:

- Volatility in gilt yields increased, whilst the overall yield remained at significantly lower levels than in 2014. Despite these lower yields UK defined benefit schemes continued the recent trend of increasing the level of hedging;
- We saw the difference in swap and gilt yields increase significantly – raising questions as to the suitability of 'active' LDI strategies;
- We saw the ever increasing hand of regulators in the market, with the promise of more to come.

In this note, we discuss two key decisions around LDI on which the events of 2015 may have an impact – when should you hedge and what instrument should you use.

A note of two halves

In writing this note we recognise that not all our of clients have an LDI strategy in place and therefore may not be aware of some of the more technical aspects of the LDI market.

We have therefore split this note into two: the first half we believe is relevant for all schemes with any form of gilt or LDI investment; the second half will be most relevant for those schemes that have already embarked upon or started considering a leveraged LDI strategy.

For those readers that are not familiar with LDI, we'd recommend jumping straight from part 1 to the conclusion.

The first half - The 'When'

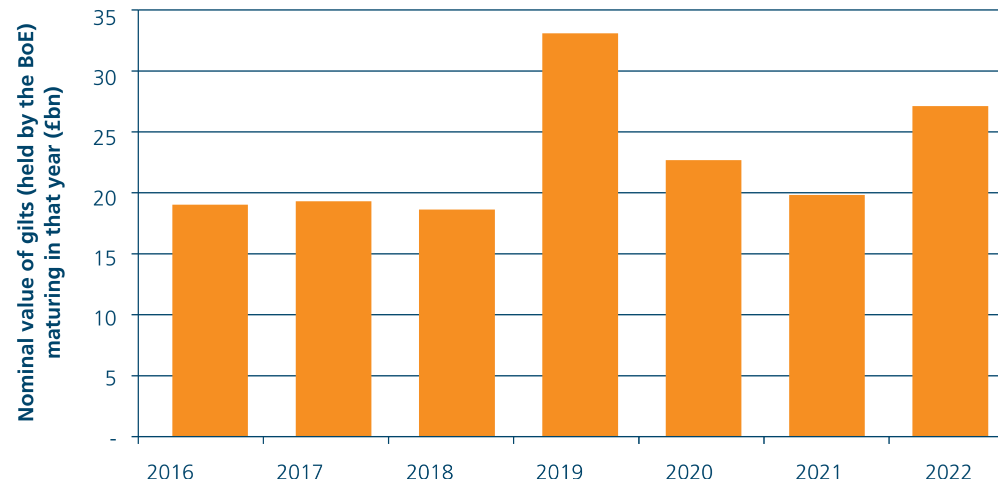
With yields at levels that many trustees consider to be 'too low', many schemes are deferring hedging until yields increase. However, 2015 showed us that there are many willing buyers at those 'low' yields. Will this continue and could trustees be forever waiting for yields to rise to the 'correct' level?

Demand for gilts

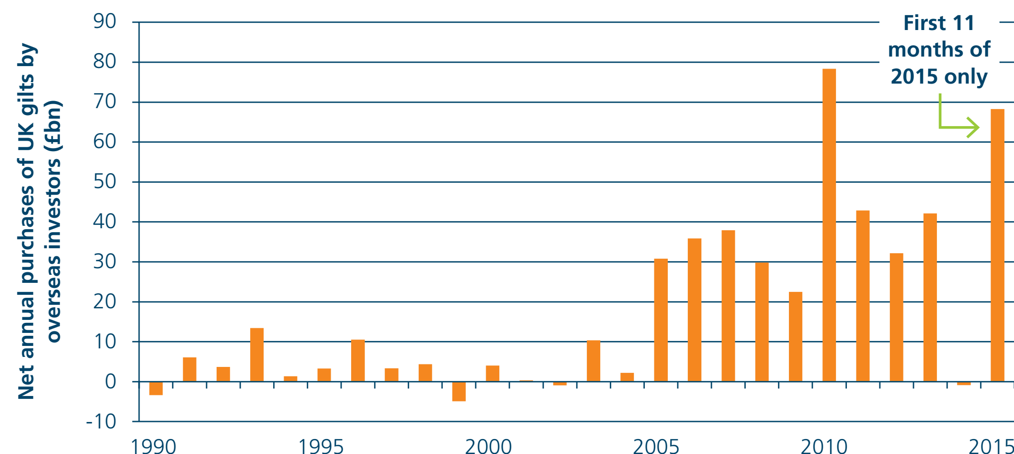
So who was buying gilts in 2015 and will they continue to do so?

- **The Bank of England (BoE)**: The BoE owns almost a quarter of the gilts in issue. Rather than worry about what happens when the BoE sells its gilts, the concern is now the volume of further gilt purchases. As gilts purchased under quantitative easing are maturing – around £24bn in 2015 – the money is being used to buy more gilts. As the chart on the right shows, this pace of purchase is expected to continue for many years to come, until interest rates are significantly higher than they are at present.
- **Overseas investors**: Overseas investors have been large purchasers of gilts over the last ten years. The anomaly, as per the chart to the right, is 2014 when investors were 'front running' the quantitative easing programme from the European Central Bank. As long as gilts offer a higher yield than other similar investments, we expect global investors will continue to be attracted to gilts. The one caveat to this may be if the UK votes to leave the EU.
- **Pension schemes and insurers**: Whilst insurance companies have been net sellers of around £12bn of gilts per annum since 2011, pension schemes have been buying. In fact this accelerated in 2015, with schemes buying nearly £30bn in the first three quarters compared to an average of £11bn per annum in the previous four years. And we see the strong demand of 2015 continuing – with potentially around £1trn of demand for 'safe' assets over the next twenty years as schemes mature and sponsoring companies wish to reduce the risk associated with their legacy liabilities, pension funds are undoubtedly the largest of the three buyers.

Increases in hedging: Just looking at gilt purchases understates the demand for hedging from UK schemes. If we expand this to look at the leveraged LDI market our discussions with managers suggest a similar level of liabilities was hedged over just the first three quarters of 2015 as over the whole of 2014.



Source: DMO



Source: Bank of England

» **Pension schemes have been continuing, if not accelerating, hedging. This is despite the low yields over 2015. Furthermore, they are competing for gilt issuance with not only other pension schemes but with huge demand from overseas investors and the Bank of England.**

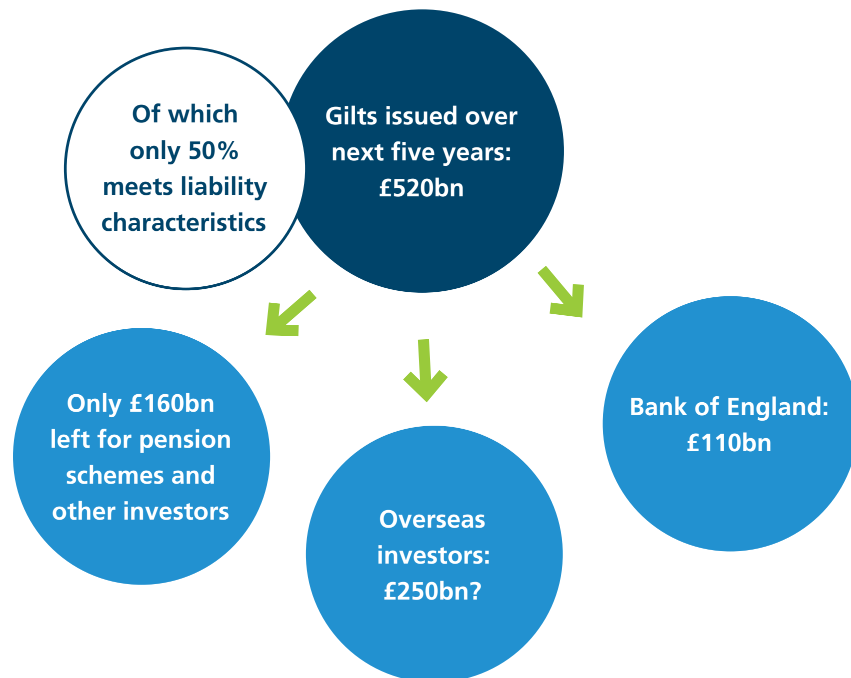
Supply of long dated interest rates and inflation

We wrote extensively in our Insight note in the first quarter of 2015 about the lack of alternative supply to that provided by the UK Government in regards to long dated interest rates or inflation protection. That has not changed over the past year – in fact, new regulation is impacting supply in the synthetic gilt markets too (see opposite).

Furthermore, so keen is the UK Chancellor to reduce the deficit – and therefore the issuance of gilts – that he has written an Act of Parliament forcing the creation of a surplus.

This means our only supply is reducing: In the autumn statement, the forecast was for gilt issuance to fall to around £100bn per annum over the next five years, from (£150bn per annum over the previous five years) only half of which is of interest to pension schemes – the long-dated and index-linked issuance.

» **We are therefore structurally in a position of significant demand for gilts with reducing supply. Usually such a situation forces up prices; we can't see why it would be any different here.**



Regulators moving markets

Demand and supply in gilt markets – both physical and synthetic – is being skewed by new regulation. Basel III, Solvency II, central clearing and central banks are all impacting significantly upon the LDI market.

- **Basel III**: Bank regulation is reducing the supply of gilt repos to the market and thereby the level of liquidity. This is increasing the cost of gilt repos and crucially making hedging more expensive for pension schemes.
- **Solvency II**: By stating that swap yields are the risk free asset, the European regulator has affected the attractiveness of swaps or gilts as the hedging tool for insurance companies. This is potentially leading to insurers preferring swaps over gilts and therefore also pension schemes who are planning to buy out.
- **Central clearing** is affecting the way in which new swap contracts are being written. Cash is king in the collateralisation process; something pension funds typically have in very short supply.
- **Central bank policy** continues to affect the demand and supply dynamics of the markets considerably, whether through quantitative easing or more simply with their interest rate policy.

We often see the good intentions of regulators in reducing the level of risk within the financial system having unintended consequences. In this case it is increasing the cost of hedging. This doesn't appear to be a short-term phenomenon and is likely here to stay.

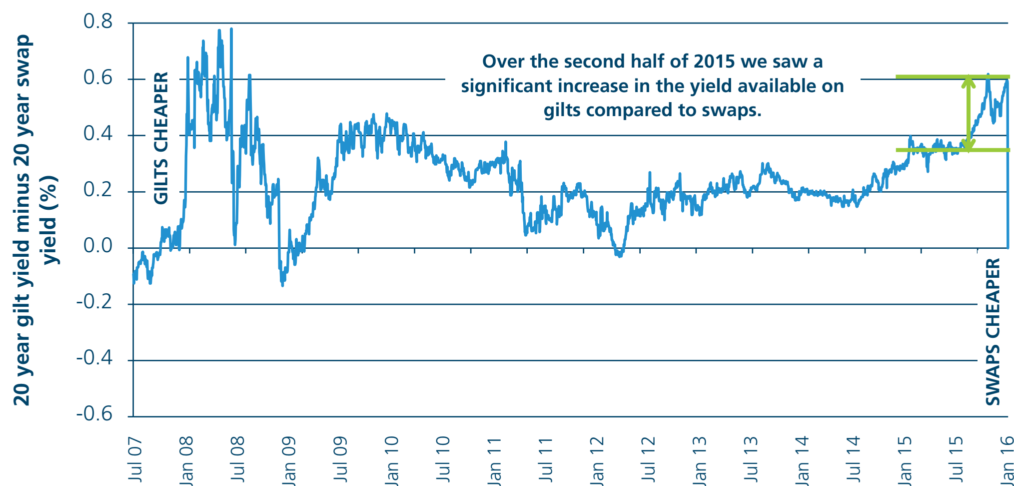
The Second half - the 'How'

Once trustees have decided to implement leveraged LDI, they need to make a number of decisions to make around how to implement LDI. The two key decisions are whether to use swaps or gilts and how much freedom to give your manager. At this point non-LDI readers, please feel free to jump to the conclusion.

Swaps or gilts?

Returns

Pension schemes have, quite rightly, tended to focus on the hedging instrument that's provided the highest potential return. This meant using swaps before the financial crises and using gilts from 2010 onwards. In more recent years schemes have given their manager the freedom to switch between the two instruments to benefit from changes in the relative prices of the two instruments.



Source: Merrill Lynch

Over the second half of 2015, the difference between the yield available on gilts and that available on swaps (the 'spread') increased significantly; this was largely the result of banks passing on the increased costs imposed by Basel III.

The majority of market participants we spoke to felt banks had passed on as much of the increased cost of regulation as they were going to and therefore spreads would remain around these levels, perhaps falling a little. If they are right, gilts will continue to be the cheaper of the two hedging instruments going forward but no one knows where the next round of regulations may take us.

Risks

As well as the return aspect it is key for trustees to understand the different risks of gilts and swaps. Whilst economically obtaining leverage through repos or swaps is more or less equivalent, the risks around holding these instruments is very different.

A **swap contract** is a long-term contract, up to 50 years in length, that can only be exited at the agreement of both parties. Crucially, swaps give the scheme considerable certainty that the interest rate protection will be in place over the lifetime of the scheme. The risk is that, if you wish to exit the contract early, for example to execute a buyout, there is a chance the bank will set costly terms to do so – ideally the swap would be novated to the insurer but this is not always possible.

In contrast **gilt repo contracts** only last 6 to 12 months and then have to be renegotiated. The key risk is that at this point the market will be fundamentally shut and it will not be possible to re-enter a similar contract. Is this risk 'real'? Yes, although we would still see it as unlikely. In such a scenario schemes would be forced to use the swap market (or perhaps equities) to provide their hedging, potentially at a lower yield.

The 'smaller' version of this risk is that the contracts can be re-purchased but at a higher cost; thereby eroding the expected gain over swaps. We saw this higher cost arise in 2015, due to the impact of bank regulators, and as a result gilt hedging strategies performed worse than swap strategies.

How much freedom to give your manager?

We mentioned above that recent trends have seen schemes giving their managers discretion to move between swaps and gilts. This has led to the development of various active funds that look to move between the forms of hedging with a view to outperforming and adding value to pension schemes. 'Active' LDI can take on many forms:

- Efficient management – mechanistically holding the cheapest hedging instrument.
- Active positioning – asking your manager to take views on the level of yields and/or curve positions.
- Active credit – giving your manager discretion to use credit in achieving the hedge.

These funds are becoming increasingly popular – while only launched a few years ago they have become the largest form of pooled fund hedging for a number of managers.

As with any sort of active management, there is a risk that the manager will underperform. Take for example the second half of 2015: the large jump up in the yield on gilts versus swaps was unforeseen by most managers and led to a significant underperformance versus a swap benchmark. Trustees should consider the implications of this when designing their LDI mandate (see overleaf).

With regulators continuing to intervene and with volatility returning to markets we feel active approaches, perhaps with more discretion rather than mechanistic rules can add value over the longer timeframe.

What's right for your scheme?

Swaps or gilts. Active, dynamic or passive. The answer depends on your objectives. It depends upon your funding level and appetite to take risk. But more than anything, it depends on your timescales:

- **Wind up in next five years:** Here the key will be to match the pricing of insurers. We would expect the benchmark to be a mixture of gilts and swaps; albeit pricing in the Solvency II environment post 1 January 2016 may suggest a greater focus on swaps.

  We would expect the scheme to have limited appetite to deviate from this benchmark and therefore limited use of active management; the timeframe may be too short for those active positions to have value and such positions will be needed to be closed at short notice when buy-out occurs. The key focus will therefore be on controlling risks and a very scheme specific, investible, benchmark will need to be in place.

- **Long-term self-sufficiency:** We believe that these schemes should be benchmarking against gilts as an easy-to-value, physical asset. Such a scheme is also likely to be more comfortable in taking active positions in its hedging as their timeframe is longer. If a scheme is in deficit then active may be even more fitting as making assets work hard and taking controlled, diversified risks may be key in helping to return the scheme to full funding.

  As long as schemes are aware of the different risks and have an appropriate time horizon, we see volatility providing opportunities for active managers to add value.

» **The key is to set your benchmark very clearly and decide how willing you are to accept deviations in performance from that benchmark. It is crucial for trustees to retain control over the choice of benchmark and then give the manager a level of appropriate discretion to deviate.**

Key conclusions

Many schemes have a plan to reduce their investment risk by buying protection over the next 10-20 years. With £1tn of unhedged liabilities outstanding and diminishing supply, on the face of it this demand seems unquenchable. Since its initial use by schemes in the early 2000s, LDI has developed significantly through a number of the largest shocks the financial system has faced.

Going forward, the impact of disparity in supply and demand will be that yields will stay lower for longer. In addition the increasing interest of the regulators is likely to lead to increases in the cost of implementing LDI. Many schemes are recognizing this and increasing their hedging over time irrespective of yields, rather than sitting tight and waiting for yields to rise. We generally believe such an approach is sensible in the face of the risk that yields can go down as well as up.

We also think that volatility in the relative pricing of swaps and gilt repos, as well as volatility in gilt yields themselves, means that there will be opportunities to pick up extra returns through active mandates providing you have a sufficiently long time-frame and are comfortable with the risks.

The key take-away from activity in LDI markets over 2015 is that for investors thinking about de-risking or who have already put an LDI plan in place it is worth taking a step back and thinking about what you are trying to achieve and what your timeframe is. In particular, should you continue to defer increasing your hedging given the comments on gilt buying and does the management of your LDI portfolio reflect where you are trying to get to?

Please contact your Barnett Waddingham consultant if you would like to discuss any of the above topics in more detail. Alternatively contact us via the following:

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