

London Borough of Harrow Pension Fund ('Pension Fund')

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Prepared for: Pension Fund Committee ('Committee')
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Triggers to re-consider a LDI solution

Background

At the last Pension Fund Committee meeting in September, the Committee discussed our paper entitled 'Options for LDI strategy' which presented three liability driven investment ('LDI') options for the Fund's consideration.

The Committee agreed...

... "That the status quo, a 13% Bond allocation invested in a combination of corporate bonds and index-linked gilts, be retained in relation to the Fund's Bond portfolio and that Aon Hewitt be requested to provide guidance on the catalysts that would trigger a move to an LDI Strategy with Option 2 being the preferred Option."

For context, option 2 involves a 13% allocation to a 3x levered LDI solution which matches the Fund's liabilities, providing a hedge of 39% of total assets.

Aon Hewitt has been asked to provide further guidance on this. The purpose of this report is to establish the metrics that will identify the conditions that could prompt the Committee to re-consider a LDI strategy.

Introduction

In order to determine the right time to implement the LDI solution, there are four metrics that the Committee could monitor and it is recommended that these are considered in conjunction with each other. These metrics are triggers based on:

1. **Simple triggers** related to long term bond yields (i.e. the cost of purchasing bonds)
2. **Affordability** related to the Pension Fund's funding level;
3. **Price / Value** related to medium term asset allocation ('MTAA') views on long term yields
4. **Harrow specific events**

This paper considers each of these metrics in turn.

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Simple triggers (yield based)

It is more attractive to implement a hedge (i.e. buy liability matching investments such as bonds) when yields are high (and prices are low). The yield on the 20 year gilt spot yield is commonly used as a monitoring metric. This is currently around 2.6% (as at 9 October 2015) and, given this relatively low level in a historical context, the Committee may wish to wait until this yield rises to around 3.0% (in line with the market's three year expectation) before implementing an increased hedge.

Although pricing has deteriorated recently, our recommendation is that this should not be a deterrent to pension schemes with low hedge ratios (as is the case with the Pension Fund) from increasing their hedge ratios today.

The Committee may wish to establish a yield based trigger framework which would lead to re-consideration of a LDI strategy.

The advantage of this approach is its simplicity and ease of monitoring. On the other hand, although some market views are incorporated in setting the initial triggers, they are essentially based on static, independent interest rate metrics that do not take the Pension Fund's specific requirements into consideration (e.g. affordability and fair value) and may need to be refined in light of changing market conditions.

Implementation considerations

Should the Committee wish to adopt a yield based trigger strategy to determine when to re-consider a LDI mandate, it would need to monitor the 20 year gilt spot yield on a regular basis. This information is readily available via the Bank of England website.

Affordability triggers (based on funding level)

The Pension Fund is currently around 70% funded. The idea behind a funding level based trigger is that the Pension Fund's hedge ratio (proportion of assets or liabilities hedged) is increased as the Fund's funding level improves. This essentially serves to lock-in the improved funding position and reduce future volatility.

Normally, the decision to increase the hedge comes at the expense of a reduction in growth assets to fund this. In this case, the Committee is simply looking to switch its existing 13% allocation from bonds into a LDI solution and therefore there is less of a need to wait for an improvement in funding position before re-considering LDI.

While this approach takes the Pension Fund's affordability factors into consideration, there is no guarantee that the triggers will be met and the Pension Fund may end up remaining relatively underhedged for some time, for example if the funding level remained stagnant.

Implementation considerations

In order to re-visit the LDI strategy based on funding level conditions, the Committee would need to monitor its funding level on a regular basis so that the relevant actions can be undertaken once a funding level trigger is met. Aon Hewitt offers the ability to monitor the funding level for a fee via its Risk Analyzer tool which brings investment and actuarial expertise together to create a fully integrated real-time financial and risk management tool. If the Committee is interested in this service we can provide further information on this.

Triggers based on MTAA views

This trigger based mechanism is linked to views related to the fair value of nominal rates in relation to that priced by the market.

The table below sets out Aon Hewitt's views versus the market in terms of spot and forward rates as at 9 October 2015.

Summary of market spot and forward rates versus Aon Hewitt's views

| | 9 October 2015 | In 3 years | | | In 5 years | | |
|-------------------|-------------------|----------------|---------|-------|----------------|---------|-------|
| | 20 year Spot Rate | Market Pricing | AH View | Diff | Market Pricing | AH View | Diff |
| Real | -0.8% | -0.7% | -0.05% | +0.7% | -0.8% | +0.1% | +0.9% |
| Nominal | 2.6% | 3.0% | 3.45% | +0.5% | 3.1% | 3.7% | +0.6% |
| Breakeven* | 3.5% | 3.8% | 3.5% | -0.3% | 3.9% | 3.6% | -0.3% |

* AH view on Breakeven inflation includes an allowance for an inflation risk premium above expected inflation
Totals may not sum exactly due to rounding

As shown by these figures, we believe that rates will rise faster than what the market is indicating. This means that, for an underhedged pension scheme (like the Pension Fund), there will be significant upside in the event that these rate increases materialise as the value of the unhedged liabilities should decrease, thus improving the funding level. Therefore, based on our beliefs of where we expect the market to go, there is merit in waiting until Aon Hewitt's views are aligned with that of the market before consideration of an increased hedge.

This monitoring approach relies on expert views which could be misaligned with those of the market for a significant period of time, during which the Pension Fund would remain underhedged. It is also not straightforward to phase in the hedge with this approach. However, it should be noted that this method does provide the best indication of

value.

Implementation considerations

Aon Hewitt's Asset Allocation specialists form these views on a monthly basis following a rigorous process. These can be made available to the Committee for a fee in assisting with the decision as to when the LDI implementation should take place.

Harrow specific events The final trigger that could be used to monitor when a LDI strategy should be re-visited is one that is driven by events which are specific to the Fund. For example, the Fund's next actuarial valuation is in 2016 which could result in a different approach to funding with revised investment risks.

Another example would be if, for whatever reason, the Fund were to move its fixed income holdings away from BlackRock to another manager which could prompt the Committee to consider the offerings of the new manager.

Summary and recommendation

- The Committee may wish to monitor one or all four metrics to arrive at a view as to whether it is appropriate to re-visit a LDI strategy.
 - In reality, the Committee may likely want to consider monitoring at least two of the proposed triggers in conjunction.
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Next steps

The next steps are as follows:

- The Committee to decide which of the trigger monitoring systems it would like to adopt.
 - Implement the monitoring system.
 - Monitor the relevant metrics.
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