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Defined Benefit Pension Schemes

Deloitte Funding Tracker

Q1 2018

The Deloitte Scheme Funding Deficit Tracker shows how the deficit of three illustrative schemes with Return Seeking, Lower Risk and Hedging investment strategies have performed since 2014.

How does your scheme compare?

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Q1 2018 at a glance

Over the first quarter of 2018, long-term interest rates and long-term inflation expectations fell by 0.1%. As a result, the value of liabilities of the three illustrative schemes increased by 1.4%.

On the asset side, equities fell by 6.9%, long-dated corporate bond values fell by 1.1% and long-dated government bond values returned 1.5%. The impact was that the Lower Risk Strategy performed most strongly with a 0.9% decrease in assets, followed by the Hedging strategy which decreased by 3.1% and then the Return Seeking strategy which decreased by 5.4%

Change in Asset indicators

Return on UK Equities	↓ 6.9% p.a.
Return on long-dated gilts	↑ 1.5% p.a.
Return on long-dated corporate bonds	↓ 1.1% p.a.

Change in Liability indicators

Long-term interest rates	↓ 0.1% p.a.
Long-term inflation expectations	↓ 0.1% p.a.

Return Seeking Strategy

80% equities : 20% bonds

Scheme Assets	Scheme Liabilities	Funding Level
↓ 5.2%	↑ 1.4%	↓ 4.4%

Lower Risk Strategy

20% equities : 80% bonds

Scheme Assets	Scheme Liabilities	Funding Level
↓ 0.7%	↑ 1.4%	↓ 1.5%

Hedging Strategy

60% equities : 40% LDI
(Leveraged LDI portfolio removes 80% of the interest rate and inflation risk)

Scheme Assets	Scheme Liabilities	Funding Level
↓ 2.6%	↑ 1.8%	↓ 4.1%

Background

Since 2014 we have been following the progress of 3 similar, illustrative, UK Defined Benefits schemes with different investment strategies.

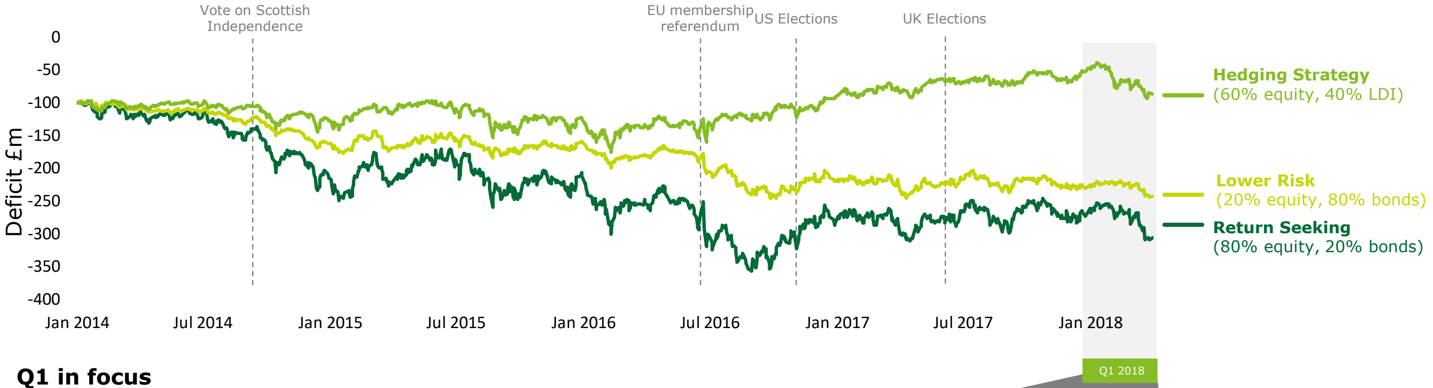
At the start, each scheme had liabilities of £500m, assets of £400m and profiles typical to that of the average UK scheme. To track just the impact of the investment strategies, we have removed impact of the accrual of benefits and the impact of deficit reduction contributions paid by the sponsors.

The "Return Seeking" scheme's investment strategy has an 80% exposure to equities and other return seeking assets and a 20% exposure to government and corporate bonds.

The "Lower Risk" scheme's investment strategy has a 20% exposure to equities and other return seeking assets and an 80% exposure to government and corporate bonds.

The scheme with a "Hedging Strategy" has an 60% exposure to return seeking assets and a 40% exposure to an leveraged LDI portfolio removes 80% of the interest rate and inflation risk.[1]

Figure 1. Movement in deficit since 2014

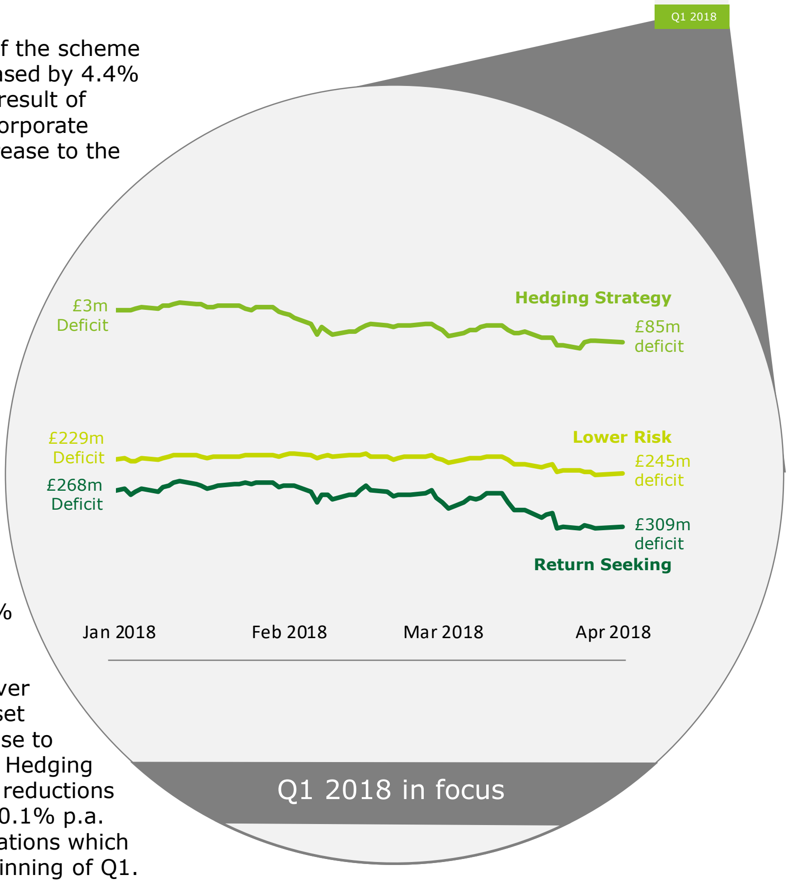


Q1 in focus

Over the Q1 2018, the funding level of the scheme with a Return Seeking strategy decreased by 4.4% (from 67.6% to 63.2%). This is as a result of negative asset returns (equities and corporate bonds decreased in value) and an increase to the value of the scheme's liabilities.

The funding level of the Lower Risk scheme decreased as a result of an increase in liabilities and a decrease in asset returns. At 30 March 2018, the scheme was 70.9% funded (down 1.5% from the start of the quarter). The main difference compared to the Return Seeking strategy was the lower relative investment losses as a result of the Lower Risk scheme's smaller exposure to equities, which performed particularly poorly over the quarter.

The funding level of the scheme with a Hedging Strategy decreased by 4.1% (from 94.6% to 90.5%). This is as a result of the scheme's exposure to equities which had negative returns over the period. The impact of negative asset returns was compounded by an increase to the value of the scheme's liabilities. A Hedging Strategy can protect schemes against reductions to interest rates (which decreased by 0.1% p.a. over the quarter) and inflation expectations which also decreased by 0.1% since the beginning of Q1.



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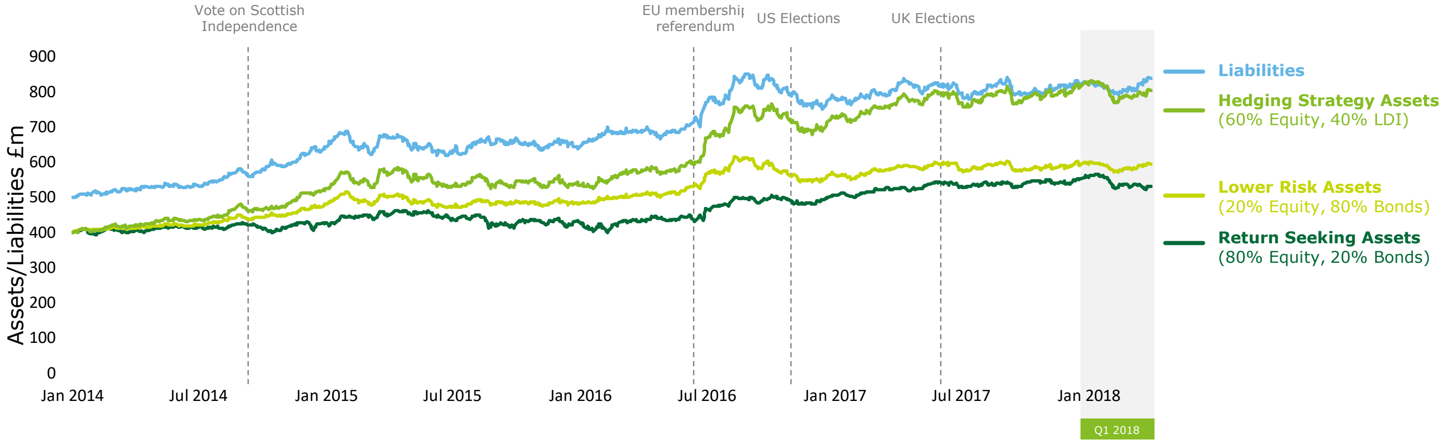
[1] This is an update from previous quarters to better reflect actual strategies adopted by schemes. Changes have been applied have assumed the illustrative scheme had invested in this Hedging Strategy (60% Equity: 40% Leveraged LDI) from January 2014.

Figure 2. Movements in assets and liabilities over the last three years

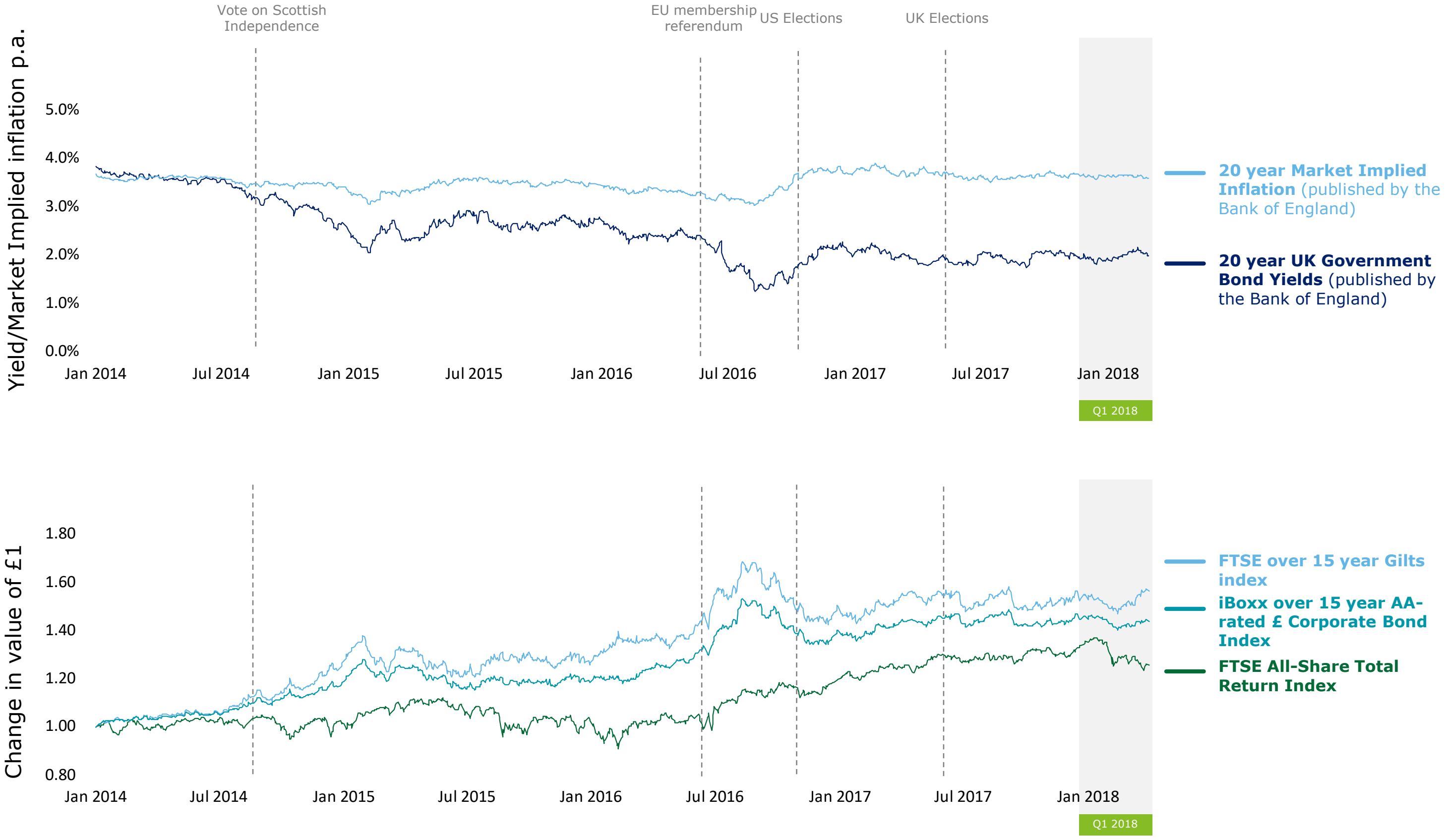


Market Movements

The key drivers of changes to the schemes' liabilities are changes to long-term interest rates (UK government bond yields) and changes in long-term inflation expectations.

A reduction in interest rates increases the schemes' liabilities and a reduction to inflation expectations reduces the schemes' liabilities.

Figure 3. Movement in long-term interest rate and inflation expectations



Quarterly strategy performance

Figure 5 shows how each strategy has performed in each of the last 8 quarters.

For the purpose of this we have rebased the schemes to be 80% funded at the start of each quarter (liabilities of £500m and assets of £400m) and compared how the funding levels have moved.

For example, +0.2% change would mean the funding level has increased from 80% at the start of the quarter to 80.2% at the end of the quarter.

Figure 5. Change in funding level over the last 8 quarters

Quarter	Return Seeking	Lower Risk	Hedging Strategy
Q1 2018	-5.2%	-1.7%	-3.5%
Q4 2017	+0.4%	-0.3%	+2.0%
Q3 2017	+1.4%	0.1%	+0.9%
Q2 2017	+1.4%	-0.1%	+0.7%
Q1 2017	+0.2%	+1.0%	+1.3%
Q4 2016	+6.9%	+1.2%	+1.8%
Q3 2016	-1.4%	-2.7%	+3.2%
Q2 2016	-2.9%	-0.3%	+2.9%

Volatility of performance

In the charts below we show the distribution of the quarterly changes in funding level.

For example, Figure 6a. shows that for the Return Seeking strategy, in 4 quarters since 2014 the change in funding level per quarter has been 0% to +2%.

The wider the distribution on the charts the more volatile the strategy is on funding level. The narrower the distribution on the charts the lower the volatility of the strategy is on funding level.

Figure 6a. Frequency of performance for the Return Seeking strategy since January 2014

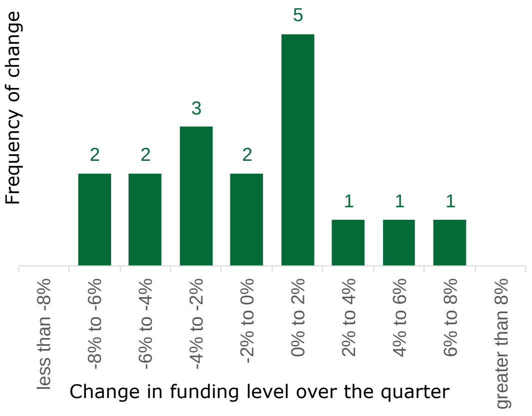


Figure 6b. Frequency of performance for the Lower Risk strategy since January 2014

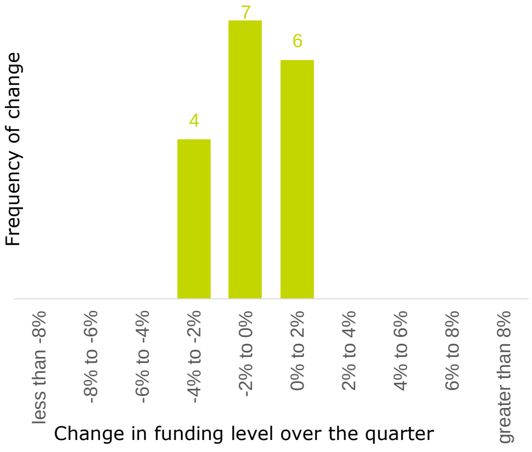
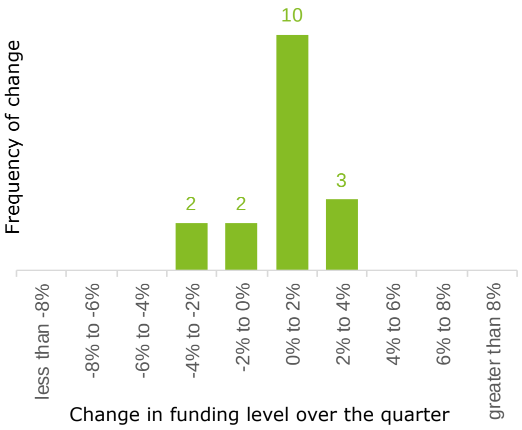


Figure 6c. Frequency of performance for the Hedging Strategy since January 2014



Movements in the funding level have been significantly wider (-7.8% to 6.9%) for the Return Seeking strategy than they have for the Lower Risk strategy (-2.7% to +1.4%).

The Hedging Strategy removes the majority of the interest rate and inflation risk. The residual risk largely relates to equity performance.

Since 2014 the Hedging Strategy has been less volatile than the Return Seeking strategy (measured on a quarterly basis), but more volatile than the Lower Risk strategy.

Finding out more

Our three illustrative schemes and funding strategies are unlikely to replicate your scheme's strategy, investment profile (e.g. mix between asset classes, split of active and passive investments, annual management charges or levels of risk in your bond portfolio) and liability profile or your risk appetite, but are designed to show how different strategies have performed over time.

Whilst both recent volatility relative to the liabilities and historic returns can be important factors to consider, we generally advocate a bespoke funding strategy that balances the expected returns, the downside risk of a deficit developing and the ability of the company to fund a deficit.

If you would like to speak to us about how different strategies can impact the funding position of a scheme and the differing level of risk associated with these please contact one of our team below or your usual Deloitte contact.

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