



## Defined Benefit Pension Schemes Deloitte Funding Tracker Q1 2017

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?**

### Q1 2017 at a glance

Over the first quarter of 2017, long-term interest rates fell by 0.2% p.a. and long-term inflation expectations fell by 0.1% p.a. On the asset side equities returned 3.0%, long-dated corporate bonds returned 4.7% and long dated government bonds returned 4.6%.

These changes in market conditions resulted in improvements in the funding levels of each of our three illustrative schemes.

The Hedging Strategy performed most strongly with a 4.7% increase in assets, followed by the Lower Risk strategy which increased by 4.3% and the Return Seeking strategy which increased by 3.4%.

These compare to a 3.1% increase in the liabilities of each scheme.

**Hedging Strategy**  
**+1.5%** Improvement in funding Level over the quarter  
 Change in assets **+4.7%** over the quarter

**Return Seeking**  
**+0.2%** Improvement in funding Level over the quarter  
 Change in assets **+3.4%** over the quarter

**Lower Risk**  
**+0.9%** Improvement in funding Level over the quarter  
 Change in assets **+4.3%** over the quarter

### 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 and 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.

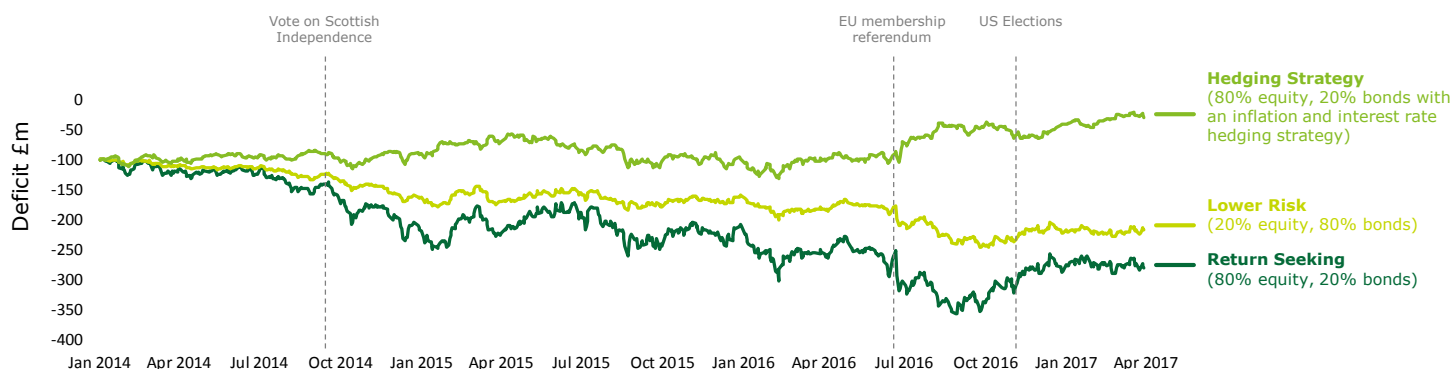
The "Return Seeking" scheme's investment strategy has a 80% exposure to equities and

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 a 80% exposure to return seeking assets and a 20% exposure to government and corporate bonds, but has a leveraged hedging strategy in place removing the majority of the interest rate and inflation risk.

**Figure 1. Movement in deficit since 2014**



### Key Commentary

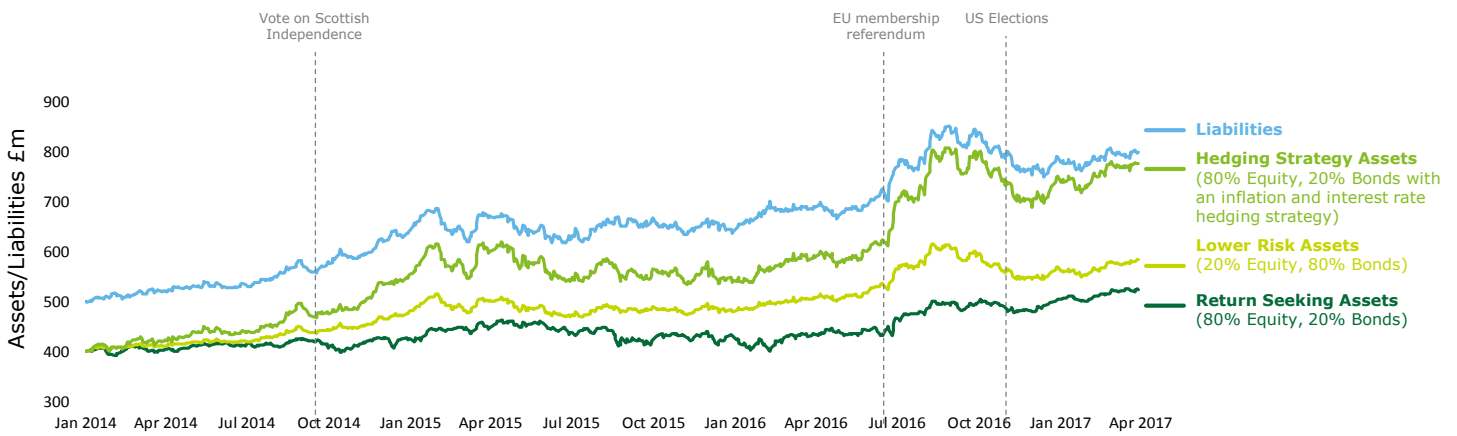
Since 2014, the Hedging Strategy has offered protection against the reductions in interest rates and increasing inflation expectations. At the same time, equities have performed well leaving the scheme with a deficit of about a third of that in 2014 (an improvement in funding level from 80% to 97%).

The deficit in the Lower Risk scheme has increased as the investment strategy's 20% exposure to equities has failed to keep pace with the changes in interest rates over the period (although equities have performed particularly well as a result of changes to

exchange rates since the vote for Brexit). In addition, increasing inflation expectations have added to this deficit. At 31 March 2017, the scheme was 73% funded.

The Return Seeking scheme's deficit has also increased as its exposure to equities has failed to keep pace with the changes in interest rates over the period and, increasing inflation expectations. As this asset liability mismatch is greater than the Lower Risk strategy this impact has been greater resulting in a greater deficit. At 31 March 2017, the scheme was 65% funded.

**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.

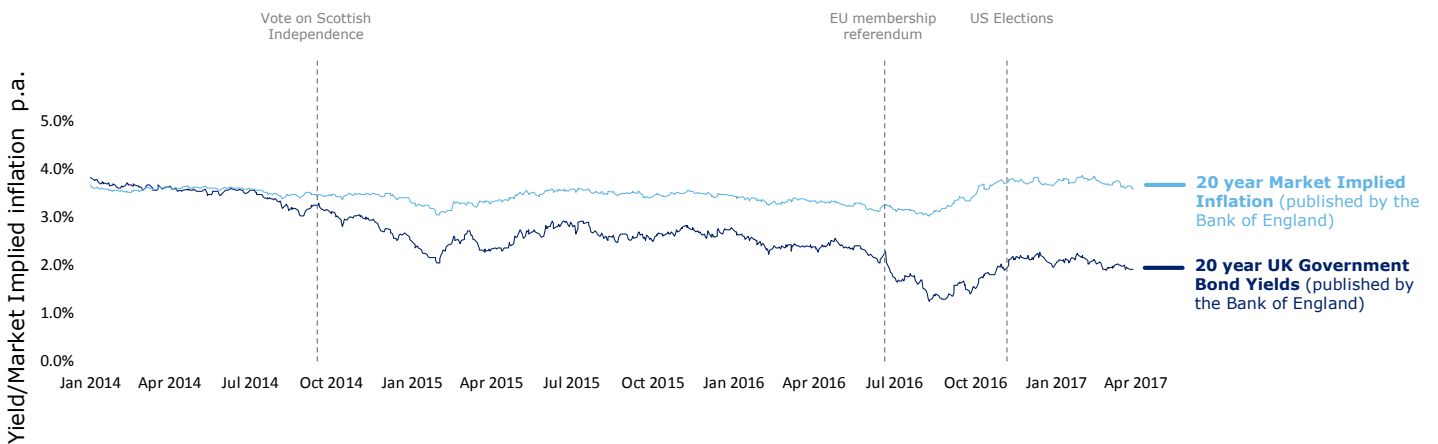
In the top chart below we show how average long-term interest rates have moved changed and similarly how long-term market implied

inflation expectations have changed since 2014.

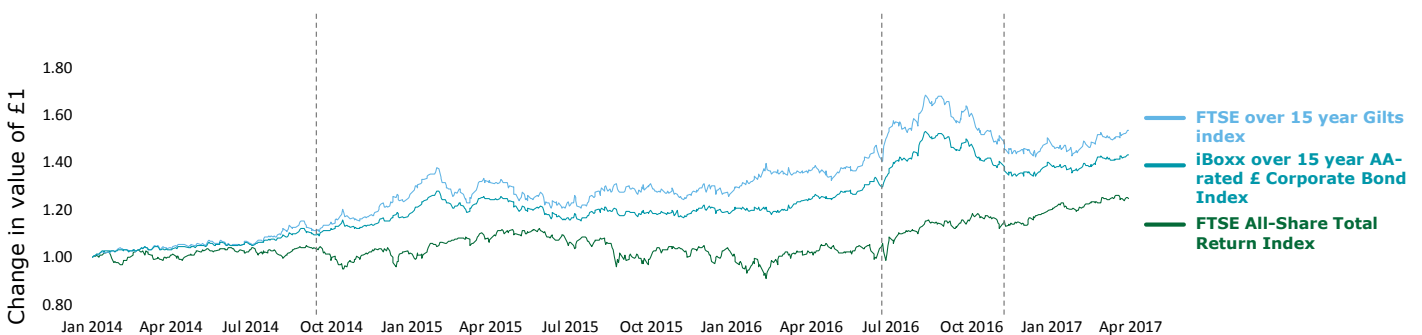
The key drivers of changes to the schemes assets are the return on the individual assets classes (as well as the impact of the hedging strategy).

In the bottom chart below we show how the key assets classes have performed since 2014.

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



**Figure 4. Movements major asset classes**



## Quarterly strategy performance

In the table opposite 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, a +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 2017	+0.2%	+1.0%	+1.3%
Q4 2016	+6.9%	+1.2%	-0.3%
Q3 2016	-1.4%	-2.7%	+3.8%
Q2 2016	-2.9%	-0.3%	+5.1%
Q1 2016	-2.9%	-1.0%	+1.9%
Q4 2015	+2.6%	+1.4%	-0.6%
Q3 2015	-7.8%	-2.2%	-2.1%
Q2 2015	+4.3%	+0.5%	-2.7%

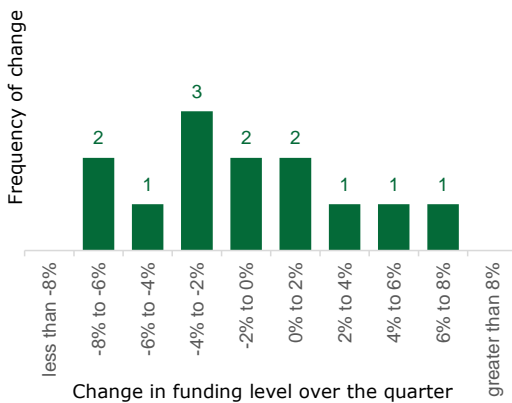
## Volatility of performance

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

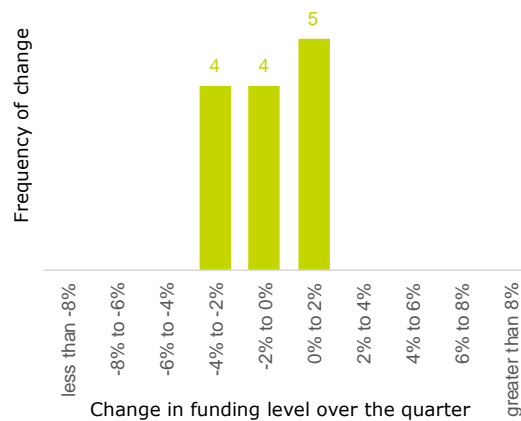
For example, Figure 6a. shows that for the Return Seeking strategy, in 2 quarters since 2014 the funding level per quarter has been 0% to +2%.

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.

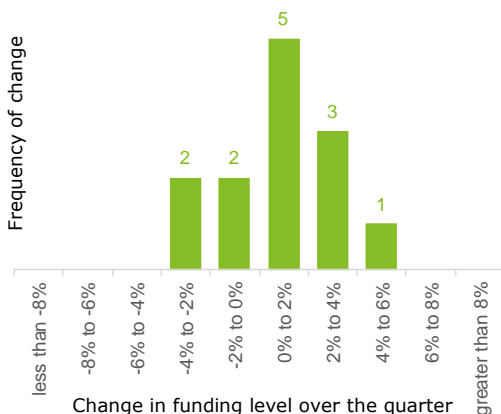
**Figure 6a. Frequency of performance for the Return Seeking strategy since January 2014**



**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 and the residual risk largely relates 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 schemes strategy, but are designed to show how your scheme has performed compared to others in the market.

We note that whilst both recent volatility relative to the liabilities and historic returns can be important factors to consider, we generally advocate a 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 differing level risk associated with these please let one of our team below or your usual Deloitte contact



**Paul Geeson (London)**  
Email: pgeeson@deloitte.co.uk  
Tel: 020 7303 0878



**Richard Slater (Edinburgh)**  
Email: riclater@deloitte.co.uk  
Tel: 0131 535 7602



**David Robbins (London)**  
Email: drobbins@deloitte.co.uk  
Tel: 020 7007 2810



**Tony Clare (Manchester)**  
Email: tclare@deloitte.co.uk  
Tel: 0161 455 8392



**Michael Ingram (London)**  
Email: michingram@deloitte.co.uk  
Tel: 020 7007 2458



**Mark McClintock (Belfast)**  
Email: mamclintock@deloitte.co.uk  
Tel: 028 9053 1429



**Andrew Mewis (Birmingham)**  
Email: amewis@deloitte.co.uk  
Tel: 0121 695 5071



Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see [www.deloitte.co.uk/about](http://www.deloitte.co.uk/about) for a detailed description of the legal structure of DTTL and its member firms.

Deloitte Total Reward and Benefits Limited is a subsidiary of Deloitte LLP, the United Kingdom member firm of DTTL.

Deloitte Total Reward and Benefits Limited is authorised and regulated by the Financial Conduct Authority.

This publication has been written in general terms and therefore cannot be relied on to cover specific situations; application of the principles set out will depend upon the particular circumstances involved and we recommend that you obtain professional advice before acting or refraining from acting on any of the contents of this publication. Deloitte Total Reward and Benefits Limited would be pleased to advise readers on how to apply the principles set out in this publication to their specific circumstances. Deloitte Total Reward and Benefits Limited accepts no duty of care or liability for any loss occasioned to any person acting or refraining from action as a result of any material in this publication.

© 2017 Deloitte Total Reward and Benefits Limited. All rights reserved.

Registered office: Hill House, 1 Little New Street, London EC4A 3TR, United Kingdom. Registered in England No 3981512.