NAPF

Securing the future of pensions

Exceptional times, exceptional measures?

Economic developments and the impact on pension schemes and members

March 2012

Exceptional times, exceptional measures?

Latest Economic Developments and the Impact on UK Pension Schemes and Members

Summary

This NAPF briefing paper updates the NAPF's analysis of the impacts of Quantitative Easing on pension schemes and members. It summarises the results of a survey with NAPF fund members on the impact of current market conditions and the responses they would like to see from the Pensions Regulator (TPR) and others. Key findings are that:

- The first £200bn of asset purchases pushed down gilt yields by around 100 basis points, which would have increased liabilities by around 20% compared to early 2009, or around £180bn.

- The second £125bn of QE has so far seen gilt yields fall back down to the levels they were at in the autumn of 2009, and around 70 basis points below where they were last summer, potentially increasing liabilities by another £125bn or so. Those gilt movements alone, along with some offsetting increases in the value of assets (around £30bn) will mean the aggregate deficit of private sector DB schemes will have increased by around £90bn since the summer of 2011.

- Around a third of respondents to an NAPF survey said they were likely to change their investment strategy as a result of low gilt yields. However, they were torn between whether to move away from gilts towards riskier investments (as might be anticipated by the Bank of England in response to rising prices and lower yields on gilts) or whether to continue to shift into gilts and pursue de-risking strategies. This highlights the conflicting pressures on DB pension schemes and the uncertain environment in which they are operating.

- Respondents were also asked what they wanted the Pensions Regulator to do in response to current market conditions. The most popular option was for TPR to say something explicit about the use of more stable, longer-term discount rates (57% put this first and 81% put this either first or second), followed by TPR extending recovery plans (16% put this first and 49% put this either first or second).

- Comparing the annuity rates from early 2008 to annuity rates in early 2012, a £100k pot that would have bought a level, single life annuity for a male at age 65 of around £7,810 a year back in 2008 would now but an annuity of only £6,112 a year. That reflects a fall of over 20% in income from the same size pension pot, largely driven by the falls in gilt yields.

Introduction

1. This NAPF briefing paper summarises:
   - The current economic context
   - The economic impact of phases 1 and 2 of Quantitative Easing (QE)
   - Impacts of low gilt yields on Defined Benefit (DB) pension scheme funding
   - The pension scheme perspective and the results of a survey with NAPF members
   - Impacts of low gilt yields on Defined Contribution (DC) pension pots.

The Economic Context

2. The NAPF has been closely monitoring economic developments since the events of last summer which saw the Bank of England resort to printing more money to try and get the UK economy moving again. Recent commentators have noted that the period of low growth and uncertainty our economy has faced since the start of the downturn in 2008 is now longer than the period from the beginning of World War I to Armistice Day. And there may still be some way to go. Forecasts for economic growth in the UK and across the Eurozone remain weak, whilst unemployment is at record high levels and credit conditions for households and businesses remain tight. Risks of deflation remain on the medium-term horizon and firmly in the Bank of England's line of sight.

3. Exceptional measures have been taken by the Bank of England in response. Interest rates have been kept at their effective lower bound of 0.5% for 36 consecutive months now. And with the Bank's room for manoeuvre exhausted on interest rates, and no sign of any appetite for any fiscal stimulus from the Government, the Bank recently extended the programme of Quantitative Easing (QE) first announced early 2009. The aims of QE are threefold – to restore confidence through a clear policy signal that the authorities are 'doing something', to encourage portfolio rebalancing away from gilts and to higher risk/return investments, and to stimulate credit easing and make it easier for banks to lend on to others, including small businesses.

4. The Bank's analysis on the first round of QE suggested positive effects on the economy in encouraging portfolio rebalancing and increasing real levels of GDP. It is perhaps not surprising, then, that it returned to using QE as a monetary stimulus when the economic recovery appeared more fragile after the summer of 2011. And whilst there are some signs of recovery in the FTSE 100 and in UK export markets, inflation is now starting to fall as expected and the MPC still thinks the downside risks to inflation outweigh the upside risks.

5. The next 6 months promise to deliver more of the same – some tentative signs of economic recovery against a backdrop of ongoing uncertainty from instability in the Eurozone and the

threat of Credit Rating Agencies shining their spotlight on the UK. In the meantime, as QE is relied upon as the policy intervention of last resort, pension schemes, and pension scheme members, are likely to suffer. How long will this period of uncertainty go on for, and how long can sponsor employers with Defined Benefit (DB) pension schemes take the pain? BAE systems have just announced they will be closing their UK-based DB schemes to new joiners and have attributed this decision to the growth in their deficit as a result of lower discount rates and higher liabilities. How many more employers might follow?

The first phase of QE: 2009-2010

6. Following the establishment of an Asset Purchase Facility Fund in January 2009, and further reductions to the Bank's interest rate in February and March of that year, the Monetary Policy Committee (MPC) announced it would purchase £75bn of assets over a three month period. Purchases were to be predominantly in conventional bonds, with maturity of 5-25 years.

7. In May, the MPC subsequently announced an extension of the asset purchase programme to £125bn, and in August a further extension to £175bn, with purchases being extended to all gilts with maturity of more than 3 years, though generally excluding index-linkers. Finally, in November 2009, the MPC announced that QE asset purchases would be extended to £200bn, and stated in February 2010 that they would continue to monitor the appropriate scale of the asset purchase programme and make further purchases should the outlook warrant them. The total scale of the asset purchase programme, at that stage, amounted to some 14% of total UK GDP.

8. Gilt yields were observed to react both to the announcements on QE and the prior expectations of those announcements. The largest reaction was in March 2009 when the first £75bn was announced, though all the reactions were found to be statistically significant and the Bank estimates that, summing the reactions of gilt yields to each of the QE events, there was an average fall of 100 basis points[1]. This is largely attributed to portfolio rebalancing effects as the prices of corporate bonds and equities were seen to respond – corporate bond yields fell over the period and the value of UK equities fell less than their international counterparts.

9. The Banks overall assessment was that QE may have raised the level of real GDP by 1.5-2% and increased inflation by 0.75-1.5 percentage points and that, whilst highly uncertain, these effects were economically significant. To that extent, the first phase of QE is deemed by the Bank to have been a successful monetary intervention – with the economic effects equivalent to a 150 to 300 basis point cut in the Bank's interest rate.

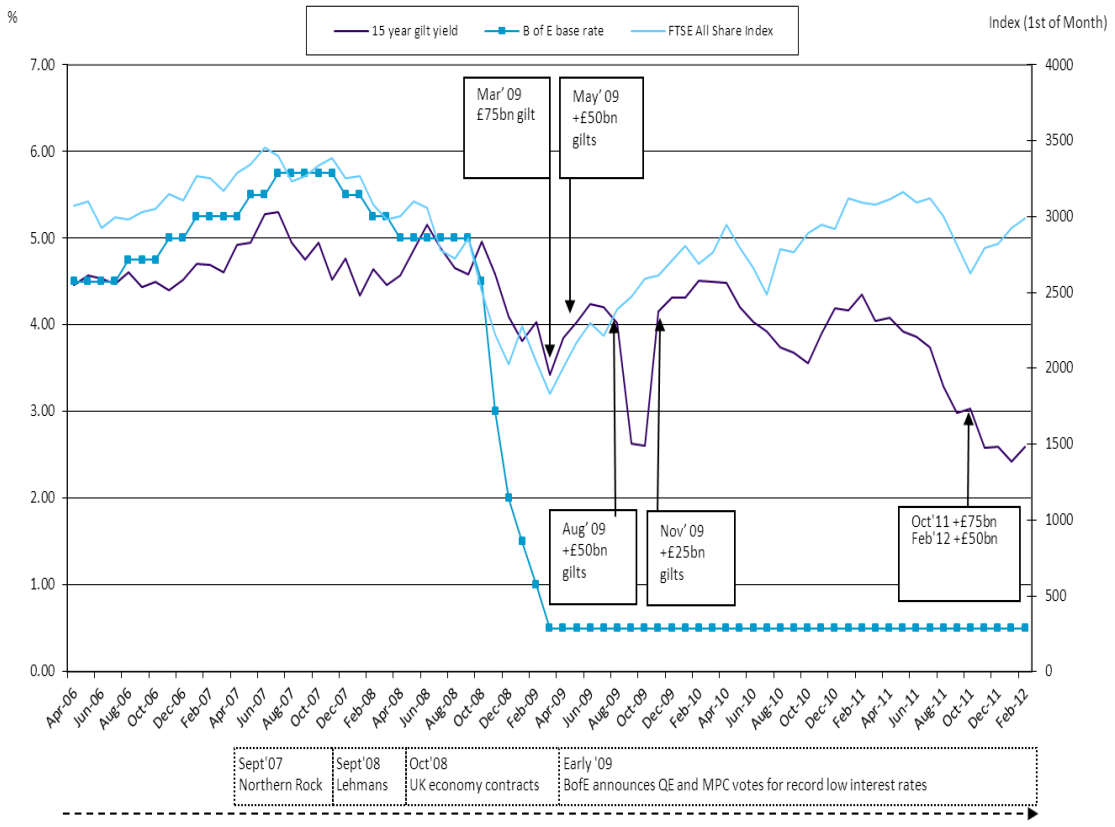
[1] The United Kingdom's quantitative easing policy: design, operation and impact, 2011.

The second phase of QE: 2011-2012

10. True to its word, the MPC did return to QE when the economic outlook worsened. Tumbling equity markets over the summer of 2011, weakening demand for exports, and mounting uncertainty in the Eurozone led to widespread speculation in September that the Bank was about to re-launch its asset purchase programme. At its October meeting the MPC agreed to purchase a further £75bn of gilts with maturities over three years, taking the total amount of QE to £275bn (some 20-25% of total UK GDP). In February 2012 the MPC then announced it would extend this by a further £50bn to £325bn, as the near term economic growth outlook weakened and the risks of inflation undershooting the 2% target in the medium term increased.

11. Figure 1 shows the movements in the FTSE all share index, the Bank of England base rate, and the 15 year gilt yield, between 2006 and 2012. It shows that 15 year gilt yields were already very low when the second phase of QE was announced in October 2011 and have fallen even further since. In early 2012 the yield on 15 year gilts, at around 2.4%, slipped below their previous low in the autumn of 2009.

Figure 1 – Timeline of movements in gilt yields, interest rates, and the FTSE index



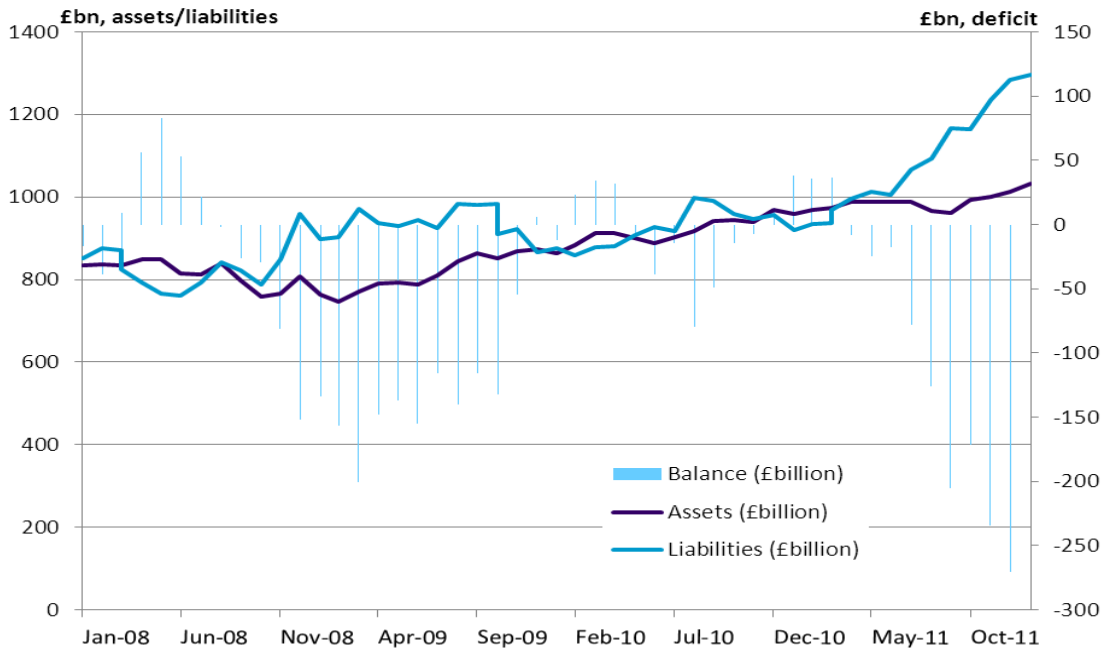
Source: Market Data page of the Companies and Markets section of the FT, Bank of England Website

DB pension scheme funding and deficits

12. For DB pension schemes, the consequences of QE are severe. Pension scheme liabilities for corporate accounting and regulatory purposes are typically measured off long-term interest rates, and as gilt prices rise and gilt yields correspondingly fall, DB pension schemes see a small increase in their assets as the value of any gilts they already hold goes up, and a larger increase in their liabilities as the discount rate they apply goes down. Put at its simplest, and to isolate the gilts effect, for every £1 increase in assets due to falling gilt yields, there is a corresponding £5 increase in liabilities[2]. The differential impacts on assets, liabilities, and deficits were explained in the NAPF's previous report 'Quantitative Easing: the pension scheme perspective'.

13. Figures from the PPF 7800 Index show the aggregate movements in assets and liabilities since 2008 across DB pension schemes and the volatility in the size of the aggregate deficit. Aggregate deficits hit a high of £201bn in March 2009 during the first bout of QE, followed by a record high of £271bn in January 2012. Whilst pension funds are long term investors, this degree of volatility in scheme deficits it likely to unsettle executive boards and shareholders and will bear real costs in the form of payments into recovery programmes for companies whose pension schemes are going through a triennial scheme valuation when the markets are against them.

Figure 2 – Movements in the PPF 7800 Index – assets, liabilities and deficits for DB schemes



Source: PPF7800 Index. New actuarial assumptions applied to the PPF 7800 Index from 31 March 2008, 31 March 2009, and 31 October 2009, and from 1 April 2011.

[2] PPF, The Purple Book, 2012

14. Based on the 100 basis point reduction in gilt yields estimated by the Bank of England, and the ready reckoners on funding sensitivities published by the Pension Protection Fund and The Pensions Regulator in the Purple Book[3], we estimate that:

- The first £200bn of asset purchases pushed down gilt yields by around 100 basis points, which would have increased liabilities by around 20% compared to early 2009, or around £180bn. While care should be taken in applying ready reckoners, this estimate is in line with others available including the Pension Corporation's latest estimate of the impacts of the first phase of QE on liabilities of £190bn[4].

- The second £125bn of QE (so far) has seen gilt yields fall back down to the levels they were at in the autumn of 2009, and around 70 basis points below where they were last summer, potentially increasing liabilities by another £125bn or so. Those gilt movements alone, along with some offsetting increases in the value of assets (around £30bn) will mean the aggregate deficit will have increased by around £90bn since the summer of 2011.

The pension scheme perspective

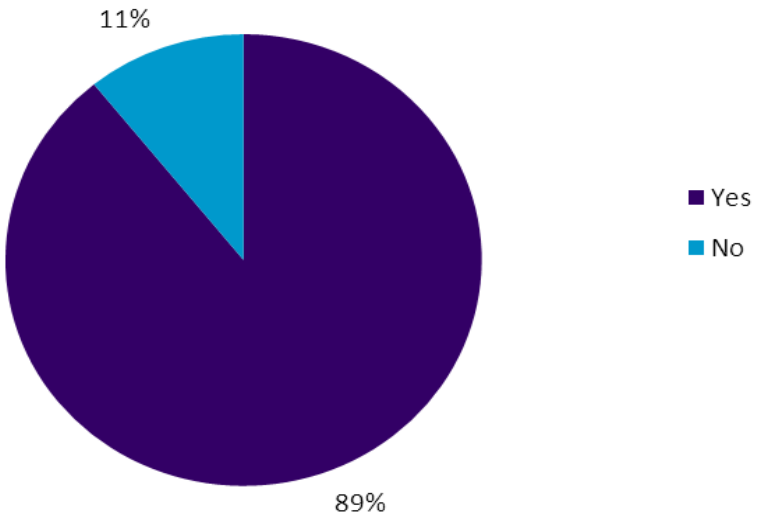
15. In February 2012 the NAPF launched a survey with fund members to track how they are responding to the current market conditions, in particular to the very low gilt yields which are partly, though not exclusively, the result of QE.

16. 37 schemes had responded to the survey ahead of our Investment Conference 2012, covering over £108bn of DB scheme assets and 1.1m members. Of the 37 schemes, nearly 1 in 3 were closed schemes, nearly 1 in 2 were schemes closed to new accrual, and around 1 in 4 were still open. Scheme valuation dates were split fairly evenly across Dec 2011-Nov 2012, Dec 2012-Nov 2013, and Dec 2013-Nov 2014.

17. Of the schemes who responded, around 90% had already discussed the implications of low gilt yields and current market conditions at their trustee board.

[3] PPF, The Purple Book, 2012
[4] Pensions Corporation Presentation, December 2011

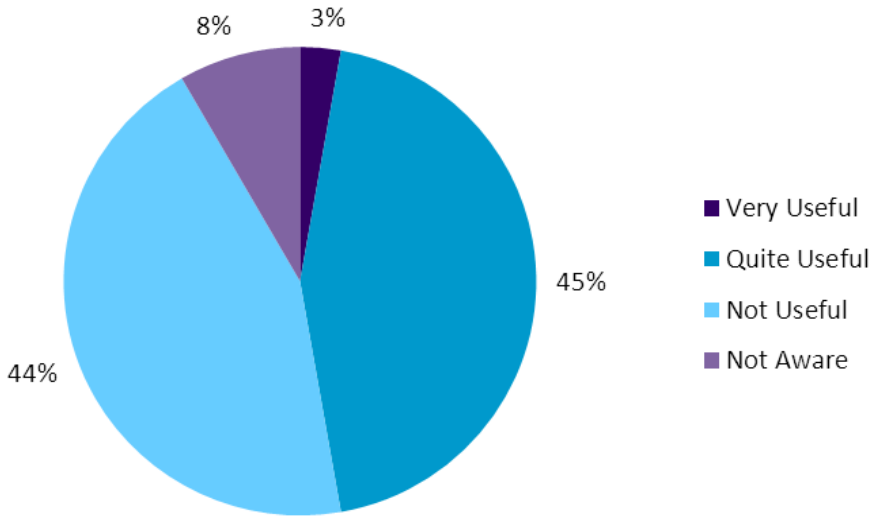
Figure 3 - Have low gilt yields and QE been discussed at the trustee board?



Source: NAPF member survey, February 2011, 37 respondents.

18. Respondents were also asked whether they were familiar with the guidance that tPR had issued in early 2009 on scheme valuations and the market conditions at the time. Over half of respondents were either not aware of the guidance or said they had not found it useful. The majority of respondents (90%) were evenly split between whether the guidance was quite useful or not useful.

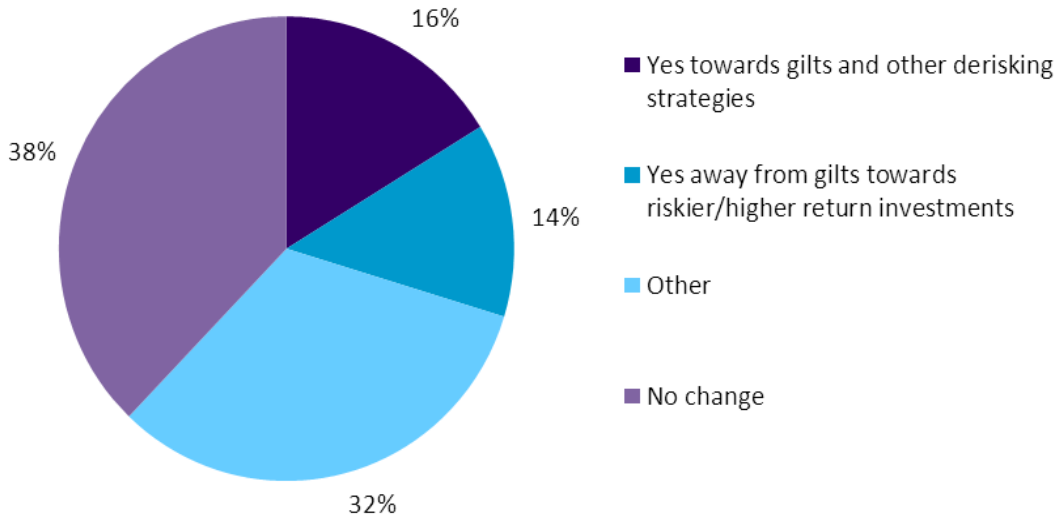
Figure 4 – Are you familiar with the tPR guidance issued in February 2009? How useful did you find it?



Source: NAPF member survey, February 2011, 36 respondents.

19. Given that one of the central aims of QE is to encourage portfolio rebalancing by lowering returns on gilts and making riskier assets more attractive to investors, the Bank of England will have an interest in understanding the behavioural response or 'micro-effects' resulting from low gilt yields. We asked pension funds how they thought their investment strategy was likely to change as a result of current market conditions.

Figure 5 – Is your scheme likely to change its investment strategy as a result of low gilt yields and current market conditions?



Source: NAPF member survey, February 2011, 37 respondents

20. The results were split, highlighting the conflicting pressures on DB pension schemes. Nearly 1 in 5 said that the current market conditions would actually push them further towards gilts and de-risking strategies, possibly in response to the ongoing volatility that DB liabilities place on corporate balance sheets. A smaller proportion said that this would encourage them to move away from gilts towards riskier and higher return investments. Around 2 in 5 said there would be no change, reflecting the long term nature of pension fund investment and asset allocation.

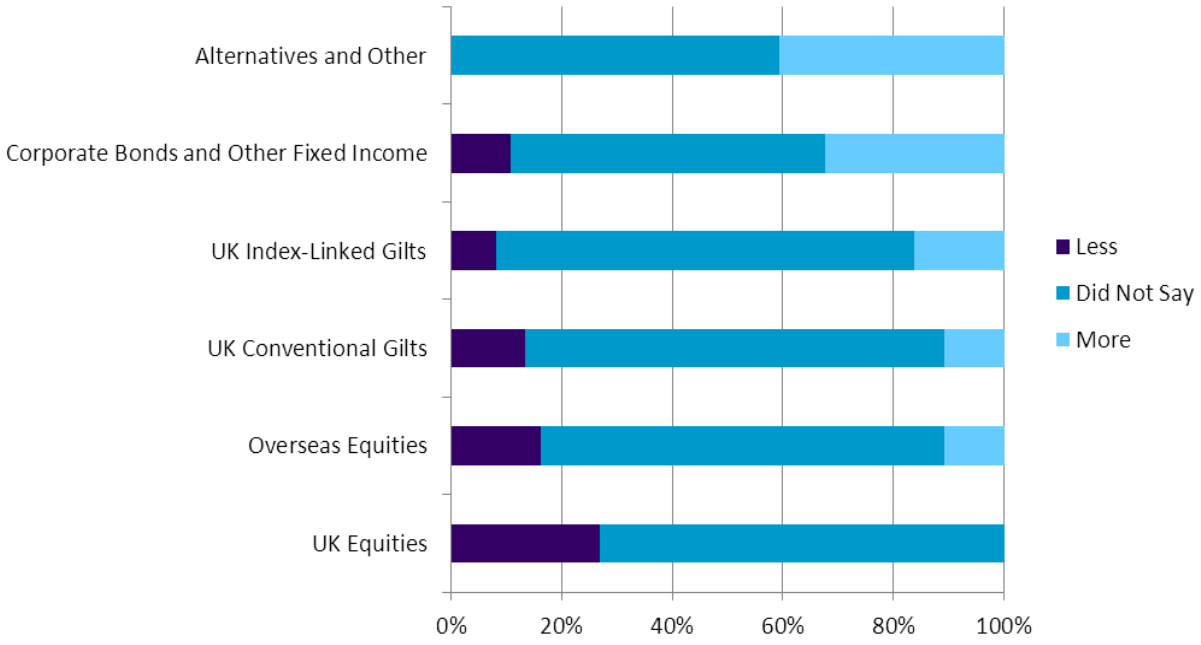
21. Around 1 in 3 answered 'other' – with responses including that schemes:

- had already moved out of gilts and into corporate bonds;
- are moving away from gilts and towards other inflation linked or higher return liability matching assets such as infrastructure, corporate credit, LDI and swaps; and

- are keeping derisking strategies under review – with some still keen for derisking to go ahead despite low gilt yields, and others holding off from increasing their gilt holdings while gilt prices are so unattractive and looking for other assets that can fulfil the same role.

22. Respondents were then asked specifically in which assets they are likely to invest more or less in as a result of current market conditions. Many did not explicitly answer, but the general trend for those that are changing their investment strategy, as shown in Figure 6, is that schemes are most likely to be moving out of equities (with some limited movements into overseas equities), are likely to be split on whether to invest more or less in UK conventional and index-linked gilts (due to uncertainties as to whether to de-risk in the current market), and are likely to be investing more into corporate bonds, other fixed income and alternative investments.

Figure 6 – Is your scheme likely to invest more or less in the following assets as a result of low gilt yields and current market conditions?



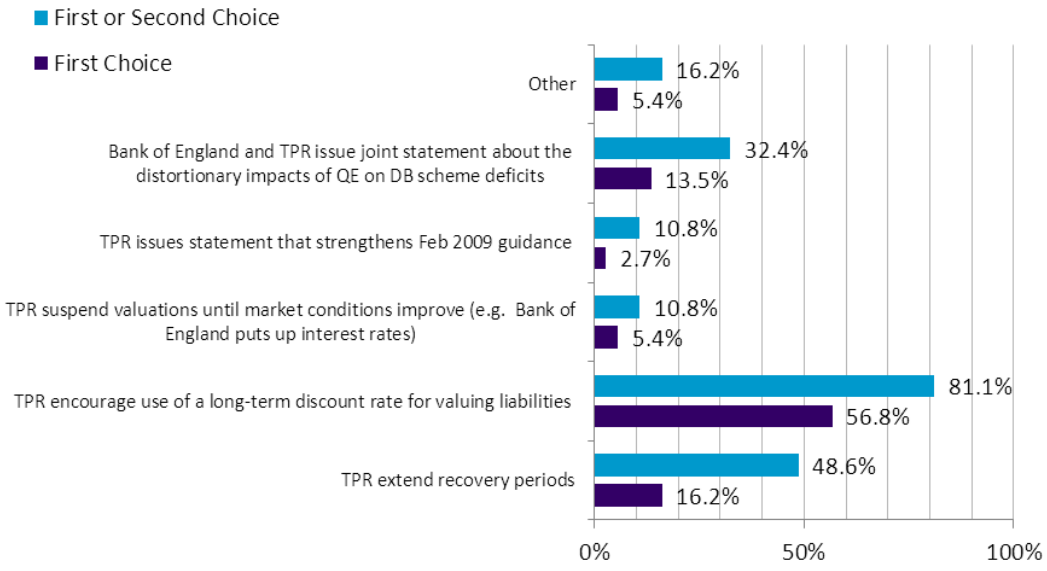
Source: NAPF member survey, February 2011, 20 respondents

23. Finally, respondents were asked to rank by preference the actions that they would like to see from the Pensions Regulator (TPR) to help those running DB pension schemes. The options presented were:

- TPR to extend recovery periods[5];
- TPR to encourage use of a long-term discount rate for valuing liabilities that removes the temporary impact of QE;
- TPR to suspend valuations until market conditions improve e.g. when Bank of England puts up interest rates or starts to sell back gilts;
- TPR to put out a statement that strengthens the February 2009 guidance[6] and encourages schemes to update their scheme valuations and recovery plans if/when economic conditions improve; and
- The Bank of England and TPR issue a joint statement about the distortionary impacts of QE on DB scheme deficits to offset negative impacts of higher deficits on corporate share values.

24. The most popular option was for TPR to say something explicit about the use of long term discount rates (57% put this first, 81% put this either first or second), followed by TPR extending recovery plans (16% out this first, 49% put this either first or second). There was some support for the Bank of England to make a statement (14% put this first, 32% put this first or second).

Figure 7 – What would you like to see the Regulator and others do to help those running DB pension schemes at the current time?



Source: NAPF member survey, February 2011, 36 respondents.

[5] The average length of plans is currently between 7.8 and 9.4 years and could be extended further.

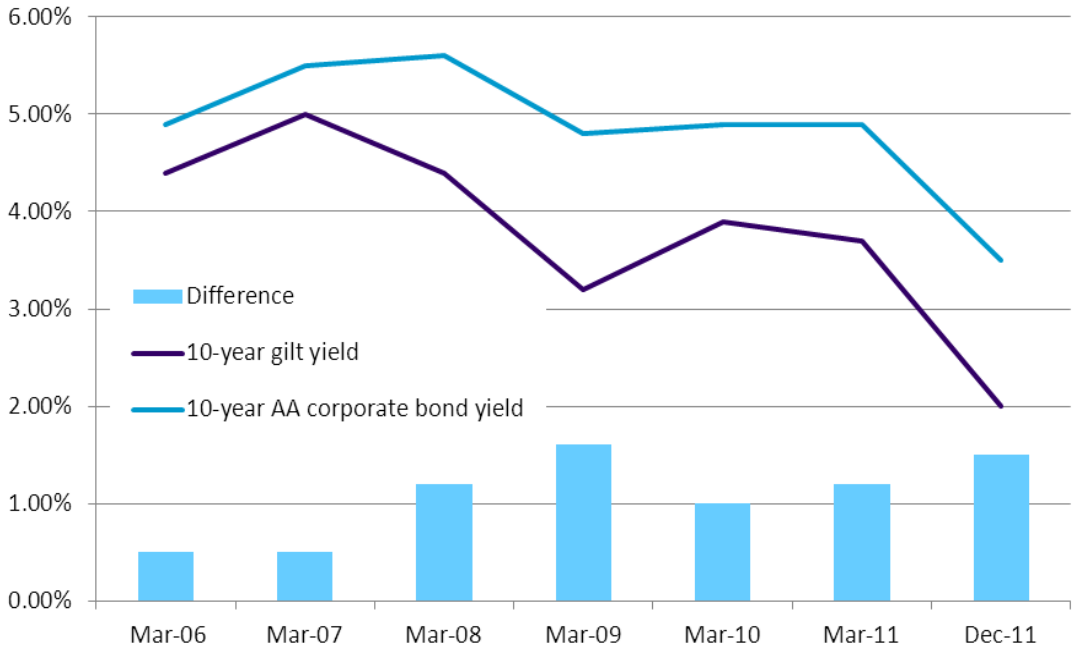
[6] The early 2009 statement and supporting Q&A made sponsors aware that scheme valuations could be updated over the certification period (up to 15 months from the scheme valuation date) to reflect improving market conditions. However given the economic uncertainty, 15 months may not be long enough, and the Regulator could consider whether it has flexibility to give schemes a longer grace period before their scheme valuation and any resulting recovery plan becomes binding.

25. Respondents were also given the option to vote for 'other' and to make specific suggestions of their own. Suggestions included:

- TPR could confirm that trustees should consider whether there is a distortionary effect and take this into account when negotiating actuarial assumptions used in setting technical provisions and the recovery period;
- TPR could provide some explicit encouragement to the use of assets other than gilts with cash flows that are a good if not perfect match for liabilities (eg corporate bonds, infrastructure, property leases);
- TPR to encourage use of high-quality corporate bonds as a basis for valuations;
- TPR to encourage scheme valuations to be based on an average funding figure over the last 6 years to even out any adverse affects of QE on real gilt yields; and
- TPR to encourage out of cycle valuations, either early or late.

26. On the use of an alternative discount rate to value liabilities, one suggestion made was that actuaries, trustees and sponsors are encouraged to agree to use a discount rate that is linked to corporate bond yields (as is typically used for corporate accounting), rather than gilt yields, as is more commonly used scheme funding valuations.

Figure 8 – Movements in Gilt Yields and Corporate Bond Yields



Source: PPF and TPR, Purple Book 2011

27. Historically these yields tended to be more closely aligned but have diverged in recent years, even as both yields have been falling with the flight to safer assets. As an illustration, on the basis of the yields above at the end of December 2011, a corporate bond yield minus 0.5% would mean a discount rate of 3.0%, and a gilt yield plus 0.5% would mean a discount rate of 2.5%. Switching to a discount rate linked to corporate bond yields instead of gilt yields would reduce the value of liabilities by around 9%.

DC pension pots

28. The effects on DB schemes are due to their valuation approaches and the need to report to the Regulator on their assets and liabilities every three years. The assumptions that feed into those valuations whilst gilt yields are being deliberately depressed may not reflect the longer-term position - liabilities and deficits that are calculated on assumptions tied into gilt yields will appear inflated. This can bite in the short-medium term when sponsor employers have to record those deficits and put in place recovery plan agreements with trustees, and may also affect corporate share values if the markets become nervous about any reported deficit in the scheme.

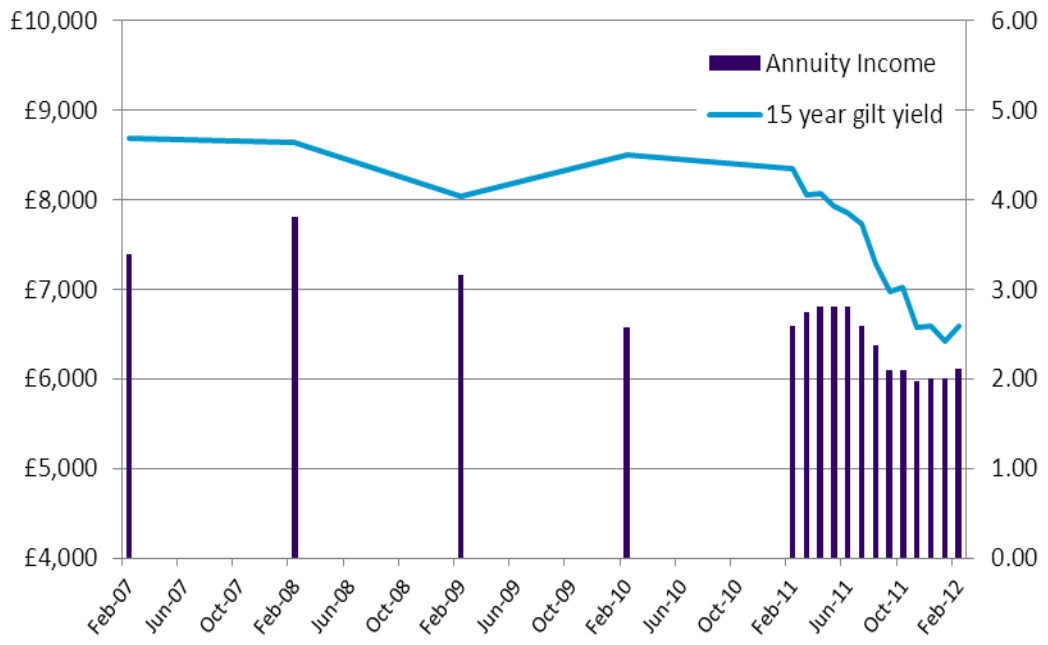
29. For those saving in a Defined Contribution (DC) pension the effects can be just as profound but the impacts of QE on gilt yields and annuity rates are only locked in where the DC member reaches retirement and needs to buy an annuity. For those who are in life-style funds as they approach retirement the gradual shift out of equities and into bonds and gilts should remove some of the annuity rate risk.

30. Whilst annuity rates do not exactly mirror movements in gilt yields they do tend to move in line with them – one ready reckoner suggests that as a rough guide a 40 basis point change in gilt yields translates to a 4.0% change in rates[7]. However, annuity providers do not always change their rates immediately in response to falling gilt yields.

31. Figure 9 shows the movements in annuity rates (the annual income that can be bought with a £100k pension pot after a tax free lump sum is taken) set against gilt yields over the last few years.

[7] www.sharingpensions.co.uk

Figure 9 – Income from £100k pot (single life, level for a male at 65) and 15 year gilt yields (%)

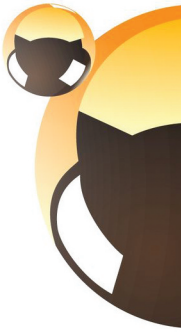


Source: Annuity Rates from www.sharingpensions.co.uk, Gilt Yields from Market Data page of the Companies and Markets section of the FT

32. For those members of DC schemes who have no choice but to buy an annuity now, for example because they are no longer in work and require the income, the short term impacts of a flagging economy and QE become permanent. Comparing the annuity rates in standard tables from early 2008 to annuity rates in early 2012, a £100k pot would have bought a level, single life annuity at age 65 of around £7,810 a year back in 2008, whilst today that same individual could get an annuity of only £6,112 a year. That equates to a fall of over 20% in income from the same size pension pot, largely driven by the falls in gilt yields. Analysis of expected falls suggests that annuity rates may have further to go to fully factor in the falling yields.

Conclusion

33. Only time will tell whether the some of the positive economic news in recent weeks, and the latest round of QE from the Bank, will see the UK return to a path of stronger growth and higher interest rates and investment growth. In the meantime there are steps the Pensions Regulator and the Bank of England could take to take some of the short term pressure off pension schemes and their sponsors by recognising that exceptional times require exceptional measures for pension scheme funding too.



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