FRAB (119) 06
13 December 2013

Financial Reporting Advisory Board Paper

Update on discount rates set at 30 November 2013

Issue:	Discount rates for short and medium-term provisions and for post-employment benefits were set in accordance with agreed methodologies on 30 November 2013. This paper updates the Board on the rates set and recent market movements.
Impact on guidance:	None
IAS/IFRS adaptation?	Not applicable
Impact on WGA?	Not applicable
IPSAS compliant?	Not applicable
Interpretation for the public sector context?	Not applicable
Impact on budgetary regime?	Not applicable
Alignment with National Accounts	Not applicable
Impact on Estimates?	Not applicable
Recommendation:	The Board notes the discount rates set and is requested to note that HM Treasury continues to track the potential impact on rates of market movements, and will keep methodologies under review to ensure that they are compliant with standards whilst taking into account the public sector context in which they are used.
Timing:	Rates will next be set in early December 2014 using market data as at 30 November 2014.

DETAIL

Background

1. At previous FRAB meetings, the Board has agreed with Treasury recommendations on the methodologies used to set discount rates for provisions in accordance with IAS 37 and discount rates for post-employment benefits in accordance with IAS 19. Changes to the methodologies have been made to better reflect the requirements of the accounting standards (by using market data and updating on a more regular basis) and to ensure that the public sector context has been taken into consideration (setting at end November to ensure that entities are able to take changes into consideration through Supplementary Estimates) . At the same time as these methodological improvements have been made, unprecedented market volatility has also meant that there has been the potential for the rates to move significantly both within year and between years.

2. This paper provides the Board with confirmation of the rates set at 30 November 2013 and promulgated to entities via PES papers. It also provides a more comprehensive update on market movements.

General provision discount rate methodology

3. HM Treasury provides Departments with three discount rates in order to determine the present value of provisions:

(i) A real discount rate that is applied to the cash flows of general provisions in a time boundary of between 0 and 5 years. This rate is based on the real yield on UK index-linked Gilts as determined by examining Bank of England data for the spot yield curve at 2.5 years to maturity. This is the short-term discount rate and will be reviewed on an annual basis at 30 November, with the rate to be applied to balances the following 31 March.

(ii) A second real discount rate that is applied to the cash flows of general provisions in a time boundary of between 5 and 10 years. This rate is based on the real yield on UK-index linked Gilts as determined by examining Bank of England for the spot curve at 7.5 years to maturity. This is the medium-term discount rate and will be reviewed and updated on an annual basis at 30 November, with the rate to be applied to balances the following 31 March.

(iii) A final real discount rate to be applied to the cash flows of all long-term provisions in a time boundary exceeding 10 years. This will be reviewed ahead of each spending review period instead of on an annual basis. HM Treasury has based the long-term discount rate on the real yield on UK index-linked Gilts as determined by examining Bank of England data for the spot yield curve at 25 years to maturity, with a comparison to the average of the redemption yields of the three longest dated index-linked Gilts according to Debt Management Office data to ensure it remains appropriate for extreme length provisions.

4. As previously notified to the Board, the introduction of the new long-term rate has been delayed until the next Spending Review.

5. As at 30 November 2013, the following rates were set.

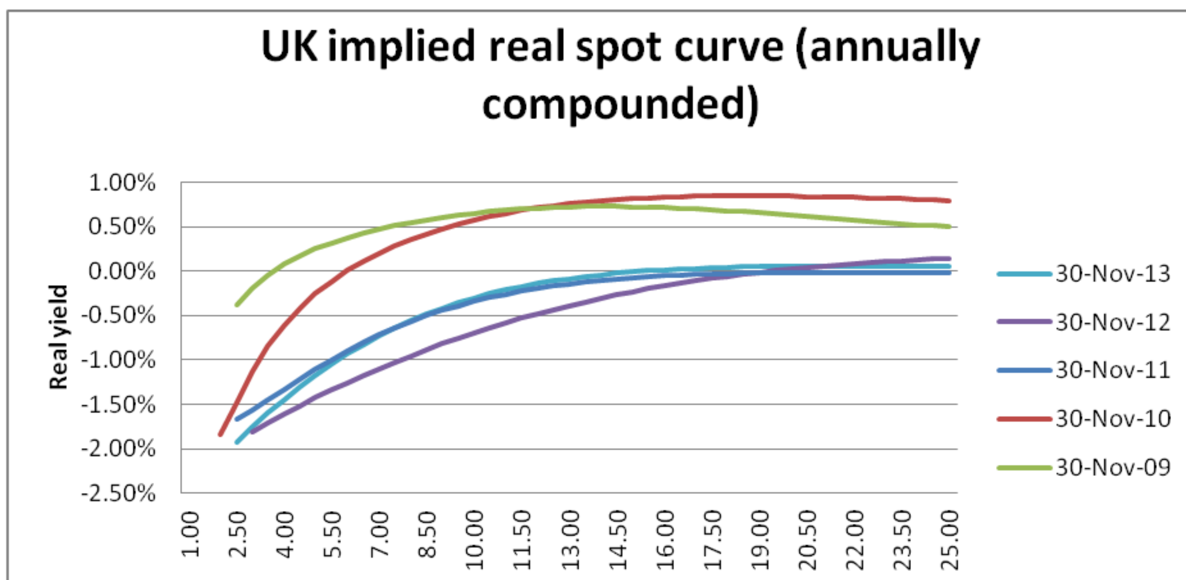
Rate	Real rate 30 Nov 2013	Real rate 30 Nov 2012
Short-term	-1.90%	-1.80%
Medium-term	-0.65%	-1.00%
Long-term	2.20%	2.20%

As HM Treasury currently does not have easy access to cash flow data related to all provisions across government we are unable to model the expected impact of the changes in rates. We would expect, however, for the reduction in the negative value of the medium-term rate to outweigh the impact of the increase in the short-term rate and lead to an overall reduction in provision balances across government.

Review of market data relevant to general provisions methodology

6. When the Board was last updated on discount rates in April 2013, the impact of the ONS decision on the RPI consultation had led to a significant fall in yields, as market participants had priced in an expected change in the methodology used to determine RPI which would have reduced the returns on index-linked Gilts. Bank of England data showed that across the curve the decision to leave the methodology used to determine RPI unchanged led to an approximately 50bps fall in real yields overnight. UK Sovereign debt had also been downgraded by Moodys, although there appeared to be little market impact of this decision.

7. Since April a second rating agency, Fitch, has also downgraded UK Sovereign debt, although again there appears to have been little market impact to this decision. What we have seen is a shift upwards of the yield curve back to the levels that were seen in November 2011 and a slight steepening of the yield curve which has led to a reduction in the medium term rate.



8. Since the start of the financial crisis, yields have been suppressed by a flight to safety, low interest rates, and low expectations of economic growth. Quantitative easing and regulations requiring financial institutions to hold less risky assets are also believed to have had some impact although it is impossible to quantify these. With expectations of future growth prospects for the UK economy increasing and alternative investments in areas such as infrastructure and property being sought out by long-term investors it is expected that yields will rise in the medium-term. At present however there remains considerable demand for the greater certainty in returns and

protection from inflation offered by index-linked Gilts, even if that certainty and security leads to a negative real return.

Post employment benefit discount rate methodology

9. IAS 19 requires the use of a discount rate that reflects the estimated timing of benefit payments and which is based on the rate of return on high quality corporate bonds. HM Treasury sets the discount rate for all the unfunded public service pension schemes in central government. Funded schemes are required to determine their own rates.

10. HM Treasury's methodology for determining the post employment benefit discount rate utilises a 15 years spot rate as an appropriate discount rate for a reasonable range of different profiles of the timing of benefit payments. The Bank of America Merrill Lynch Sterling Corporate Securities AA Rated 15+year index is used to determine the rate of return on high quality corporate bonds. As the duration of the index of AA-rated corporate bonds used is below 15 years, we extrapolate by reference to the yield curve for UK Government bonds published by the Bank of England. HM Treasury is satisfied that this is appropriate due to the term structure for AA corporate bond spreads.

11. As public service pensions are uprated in accordance with CPI it is also necessary for us to determine a real discount rate. As there is at present no deep market in securities linked to CPI inflation, to derive a market consistent CPI inflation we first determine market expectations of RPI inflation and then adjust with a reduction of 1.00% which we believe is an appropriate reflection of the long-term difference between CPI and RPI. Market expectations of RPI inflation are based on yield curves for UK Government bonds published by the Bank of England.

12. As at 30 November, the following rates were set

Date	**AA rated corporate bond nominal rate**	**Real rate net of CPI**	**CPI**	**RPI**
30 November 2013	4.35	1.80	2.50	3.50
30 November 2012	4.10	2.35	1.70	2.70

Review of market data

13. The two market data indices that impact most on the post employment benefit discount rate are the AA rate corporate bond rate and market expectations of RPI. The figures for these two indices are noted in the table below.

Date	**BoAML AA rate non-extrapolated %**	**Market expectations of RPI %**
30 November 2010	5.36	3.40
30 November 2011	4.72	3.00

30 November 2012	3.92	2.70
30 November 2013	4.35	3.50

AA rated corporate bond rate

14. The table highlights that AA rated corporate bond rates in the UK have seen a recent rise after falling over the past three years. This mirrors increases in AA rated corporate bonds in other similar markets including the US and the Eurozone. Rising yields may be a sign that markets are expecting a reduction in the use of non-standard monetary policy measures in these economies. In that case of the UK rising inflation expectations may also be leading to demands for higher yields to compensate for inflation risk.

Market expectations of RPI

15. Market expectations of RPI are derived using Bank of England data and the Fisher relationship between the real and nominal Gilt curves, with no adjustment being made for any inflation risk premium. As shown in the table above market expectations of RPI fell between November 2010 and November 2012, from 3.40% to 2.70% before increasing over the last year. This is primarily due to a sharp increase in RPI expectations in the first quarter of 2013 as a result of the ONS RPI consultation decision which led to a 50bps increase in inflation expectations overnight.

16. Without the anomaly created by expectations of a change in RPI formulation market expectations of long-term RPI have been relatively consistent over the period, reflecting an expectation that (assuming a 1% difference between RPI and CPI) inflation will be slightly higher than the target rate.

Impact on rates

17. What impact would this have on defined benefit pension liabilities? Analysis of past movements in liability figures for the main unfunded public service pensions schemes shows that a 1% fall in the discount rate will lead to an increase in the liabilities of unfunded pension schemes of around 10 to 15% and vice versa. With total unfunded pension scheme liabilities of approximately £1 trillion within central government, HM Treasury expects, therefore, the liability to be about £50-£75 billion greater as a result of the change in rate.

Recommendation

18. HM Treasury requests that the Board notes the discount rates set as at 30 November in accordance with agreed methodologies and to further note that HM Treasury will keep methodologies under review to ensure that they are compliant with standards whilst taking into account the public sector context in which they are used. In particular HM Treasury is mindful that key users of the accounts have indicated that they find the current methodologies make it difficult to track the underlying cash flows related to both provisions and pension liabilities. As part of the simplifying and streamlining accounts project, HM Treasury is going to examine how these balances can be made more understandable to users in order to improve their use for accountability and decision-making purposes.

HM Treasury

13 December 2013