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briefing note

POLICE AND FIRE IAS19 April 2013

Police and Fire Pension Schemes: Accounting Assumptions for 31 March 2013

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In producing our IAS19 reports and schedules, our aim is not only to satisfy the strict requirements of the accounting standard but also to make the information as transparent as possible for readers.

The purpose of this briefing note is to provide some background to the assumptions underlying this year's IAS19 results and to provide some explanation for the change in the IAS19 position over the last year.

Background to FRS17/IAS19 assumptions

As for any actuarial calculation, the value of the liabilities for IAS19 purposes is heavily dependent on the assumptions underpinning the calculations. If they are not already, authorities should be aware that, ultimately, they are responsible for the assumptions used.

IAS19 states:

The assumptions underlying the valuation should be mutually compatible and lead to the best estimate of the future cash flows that will arise under the scheme liabilities. The assumptions are ultimately the responsibility of the directors (or equivalent) but should be set upon advice given by an actuary.

Any assumptions that are affected by economic conditions (financial assumptions) should reflect market expectations at the balance sheet date.

To assist authorities and auditors in assessing our recommended assumptions for the Police and Fire Pension Schemes, we have set out below the rationale for our recommendations for each of the principal assumptions.

We have used the abbreviations PPS and NPPS for the Police Pension Scheme and New Police Pension Scheme and FPS and NFPS for the Fire Pension Scheme and New Fire Pension Scheme throughout.

Discount Rate

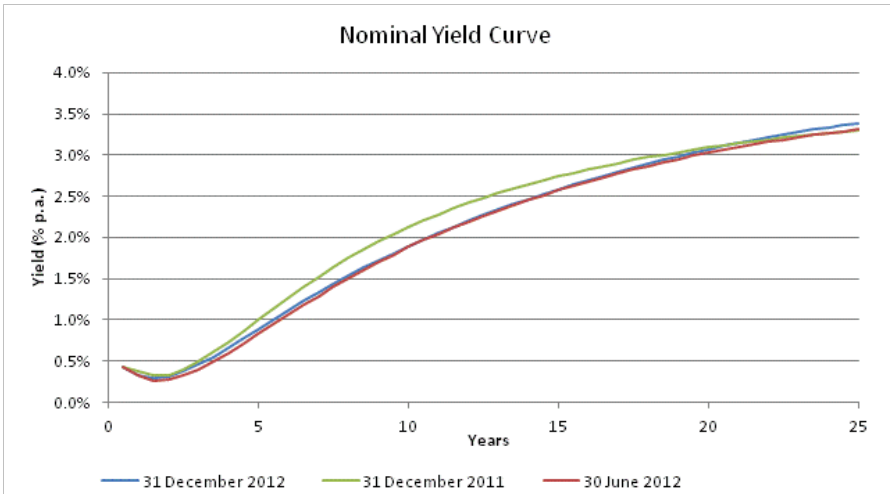
IAS19 states that liabilities should be discounted at a rate equivalent to the "current rate of return available on a high quality corporate bond of equivalent currency and term to the scheme liabilities". It further defines a high quality corporate bond as one that "has been rated at the level of AA or equivalent status".

To that end we have previously recommended a discount rate based on the yield available on a basket of AA-rated bonds (iBoxx Sterling Corporates AA over 15 year Index). Based on this, the discount rate as at 31 December 2012 was 4.1%.

We are aware, however, that the constituents of the iBoxx over 15 year index have terms that are somewhat shorter than those for the pension liabilities of a typical police or fire authority. We estimate the average duration of liabilities in the NPPS and NFPS to be in excess of 25 years and the average duration of liabilities in the PPS and FPS to be around 17 years. Taken together, we estimate the average duration of the liabilities to be around 18 years. In 2012, we looked into alternative indices in order to determine if the iBoxx over 15 year index remained the most appropriate for use in IAS19 calculations for Police and Fire Authorities. In particular, we looked at the yields available on UK Government bonds where longer maturity yields are available. As a result of this, we revised our approach to setting the discount rate as at 31 March 2012. Our approach is outlined in detail below.

Yield on UK Government bonds

The chart below shows the nominal spot yields for a Government - backed loan (i.e. the yield to maturity of a zero coupon bond) at various maturities at 31 December 2011, 30 June 2012 and 31 December 2012.



Source: Bank of England (31 December 2012)

Applying the anticipated future cash flows for a typical Police or Fire authority, and deriving an equivalent single bond yield at a current date, suggests a yield of around 3.2% p.a. would be appropriate as at 31 December 2012. This differs from the Fixed Interest Gilt Yield Index (Over 15 years) of 3.0% p.a. as at 31 December 2012.

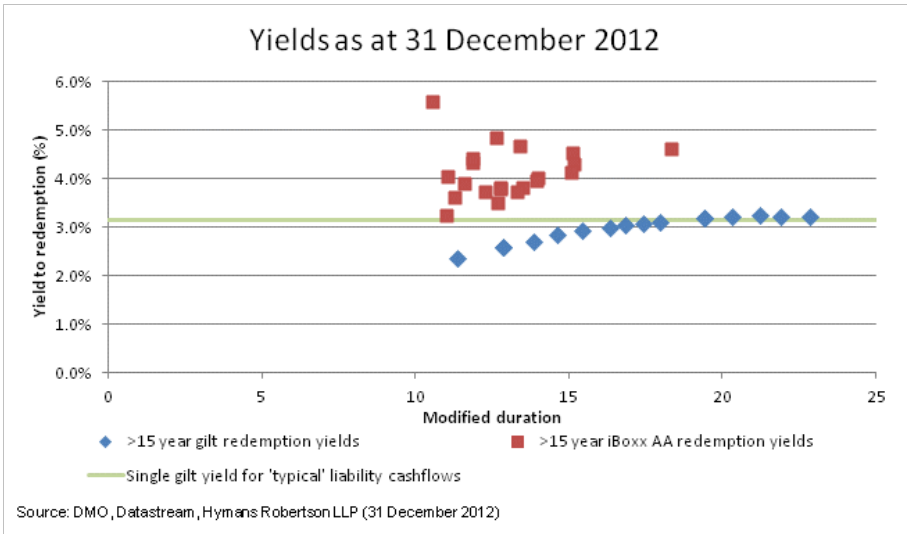
Credit spreads

Government bonds are more secure than AA corporate bonds. Thus, the yield on Government bonds is lower than on AA corporate bonds to reflect the lower default risk.

In order to compare our Government bond yield of 3.2% p.a. with the yield derived from the iBoxx AA index, we have to determine a suitable addition (the 'credit spread') to the yield which will reflect the extra risk involved in using AA corporate bond yields.

In order to determine this addition to the Government yields, we considered the yield for each stock within the iBoxx AA over 15 year index and the corresponding over 15 year Government bond index.

The chart below shows these yields:



This chart indicates a range of 'credit spreads' of between 0.7% p.a. and 3.0% p.a. with a mean spread of around 1.3% p.a. This would suggest a credit spread of 1.3% p.a. would be appropriate as at 31 December 2012.

Discount Rate

This leads to a discount rate for IAS19 purposes of 4.5% p.a. (being 3.2% gilt yield plus 1.3% credit spread) as at 31 December 2012, which is appreciably higher than the over 15 year iBoxx index yield of 4.1% at the same date.

We are comfortable adopting this approach despite the higher resulting discount rate than the iBoxx AA index. This is consistent with the approach taken last year, and we observed a similar difference between our discount rate and the iBoxx index yield during 2012. We believe that this approach (i.e. giving the 4.5% p.a. discount rate) remains appropriate for IAS19 purposes.

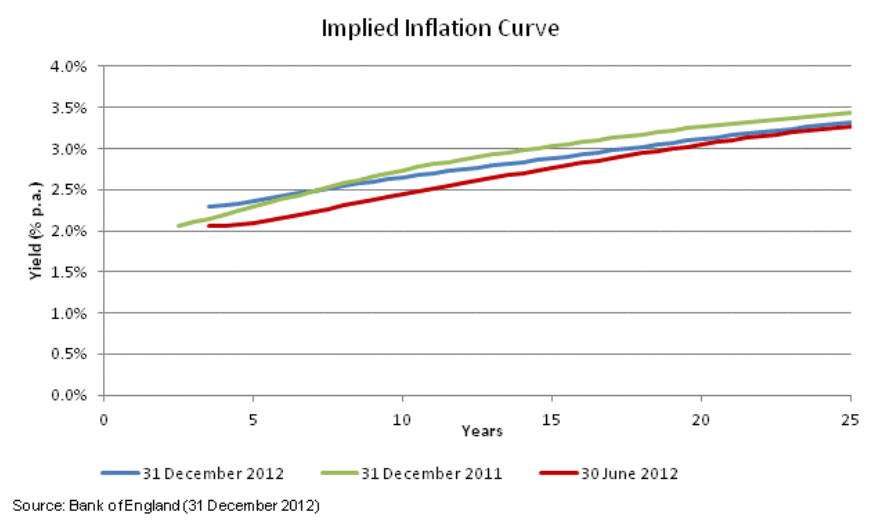
We will of course keep this position under review with particular attention to the position as at 31 March 2013.

We have discussed the above approach with the Audit Commission and their advisors and they have not raised any concerns with this.

Retail Prices Inflation

This assumption is typically derived from yields available on fixed interest and index linked government bonds, and should be consistent with the derivation of the Discount Rate.

The chart below show the Bank of England implied inflation curve over a range of maturities at 31 December 2012, 30 June 2012 and 31 December 2011. The rate appropriate for the typical police or fire authority future cash flows is 3.2% p.a. as at 31 December 2012. The implied inflation curve is derived from the yields on both fixed and index linked gilt yields, and so is consistent with the average gilt yield underpinning the discount rate.



Source: Bank of England (31 December 2012)

Pension Increases

In the June 2010 Emergency Budget, the Chancellor announced that public sector pension increases will from now on be linked to the Consumer Prices Index (CPI) rather than the RPI. The Government has since formally implemented this proposal, and a legal challenge to this was rejected.

Therefore, as in previous IAS19 exercises, the assumption regarding future pension increases for the March 2013 IAS19 will be linked to CPI.

We have in the past estimated that CPI would be approximately 0.8% below RPI. Taking account of how this gap is expected to change in the future, our current best estimate of the gap (taking into account differences in the way CPI and RPI are calculated) remains a reduction of 0.8%. This would give an assumption at 31 December 2012 of 2.4% p.a.

Longevity Assumptions

The post retirement mortality assumption that we recommend is adopted for the IAS19 2013 exercise is the same to that adopted last year.

The baseline assumptions to be adopted for the 2013 IAS19 exercise will be the S1NMA and S1NFA year of birth tables. Medium cohort improvements with a 1% p.a. underpin, will also be included. This allowance for future improvements in life expectancy is consistent with the continuing trend of authorities who report under IAS19 to make allowance for increasing life expectancy.

Retirement Age

In line with the 2012 calculations, we have assumed that officers will retire when they reach 30 years of service, unless they reach the normal retirement age for their rank before this date.

Salary Scales

The promotional salary scales for all schemes are based on published salary scale tables and are as per those used last year. Details of the salary scales can be found in the appendix to the relevant report.

Salary Growth

In line with the 2012 calculations, the assumption for the rate of increase in pensionable salaries is 1% per annum above market derived CPI. This assumption makes allowance for the current conditions and pay restraints, whilst assuming that pay awards will return in the longer term.

Allowance for Contingent Injury Benefits

An approximate allowance has been made for contingent injury pensions in line with last year's disclosures.

Historic data was not available to allow the required analysis to be carried out so that the assumptions could be set with reference to incidence rate and amount of injury benefit awarded. Therefore, the assumption was set following a high level analysis of injury liabilities and pension amounts relative to normal pension liability and pension amounts.

This approach in effect assumes that the historic relationship between injury and pension benefit liabilities has been broadly consistent and will continue to be so. Having reconsidered this position, we have continued with the assumptions adopted last year. However we will continue to monitor this.

Risks and Uncertainties

There are risks and uncertainties associated with whatever assumptions are adopted. IAS19 requires the assumptions to be determined on a 'best estimate' basis. However, the assumptions are effectively projections of future investment returns and demographic experience many years into the future and there is inevitably a great deal of uncertainty inherent in what constitutes as 'best estimate' with such projections. For the purpose of this paper, best estimate means that the proposed assumptions are 'neutral': there is an equal chance of actual experience being better or worse than the assumptions proposed. It is also important to note that IAS19 requires the discount rate to be set by reference to the yields on high quality corporate bonds. The Police and Fire pension schemes are unfunded and the figures shown in your IAS19 are unlikely to reflect either the contributions due or the eventual cost of providing the benefits.

One risk to the Authority is that it determines assumptions that are more prudent (for example a lower discount rate, higher longevity) than its peers, leading to a relatively poorer reported financial position.

The Authority therefore needs to take into account both the requirement for a 'best estimate' set of assumptions and the need not to overstate the pension liabilities relative to its peers.

There is also a risk that the Authority determines assumptions that are less prudent than its peers. As noted above, this does not have an impact on the underlying cost of the scheme.

But analysts may take a view that you are understating your pension liabilities if you use weak assumptions and this may have adverse consequences.

IAS19 Results as at 31 March 2013

If the market conditions at 31 December 2012 applied at 31 March 2013, Authorities would notice an increase in their IAS19 liabilities as at 31 March 2013 compared with the liabilities as at 31 March 2012, although this would depend on the membership profile of the scheme.

This is principally due to the fact that the financial assumptions at 31 December 2012 are less favourable than they were at 31 March 2012, particularly due to the decrease in Government bond yields without a corresponding reduction in inflation. This increases the value of the liabilities and thus has a negative impact on the IAS19 position.

The disclosures show separately the balance sheet position and reconciliation in respect of normal pension and injury benefits separately.

A more detailed description of the factors affecting the change in IAS19 results between this year and last year is outlined below.

Factors that affect the IAS19 position balance sheet

PPS, NPPS, FPS and NFPS benefits are linked to price inflation and salary inflation. Therefore, we need to compare the real discount rate (i.e. net of price inflation) from year to year when assessing the effect of changes in financial assumptions on the IAS19 liabilities. If market conditions at 31 December 2012 applied at 31 March 2013, the real discount rate would have decreased from 2.2% p.a. as at 31 March 2012 to 2.1% p.a. as at 31 March 2013. This is due to the fall in Government bond yields without a corresponding equal fall in inflation.

All else being equal, a lower real discount rate leads to a higher value being placed on the liabilities. Therefore the change in real discount rate between March 2012 and December 2012 will have a negative impact on the IAS19 balance sheet, increasing the total value of the liabilities by around 3% to 5% typically, depending on the average age of the membership.

The reduction in the rate of pensionable pay increases by 0.1% reduces the value placed on the liabilities for serving officers. The impact on the balance sheet depends on the profile of each schemes membership.

In summary, the vast majority of authorities would witness a slight deterioration in their IAS19 balance sheet this year, with IAS19 liabilities bigger in monetary terms than last year if market conditions at 31 December 2012 applied at 31 March 2013. The fall in Government bond yields without a corresponding fall in inflation is the principle reason for this.

Factors that affect the IAS19 position revenue account

Changes in the real discount rate also have an effect on the 2012/13 service cost.

However, as mentioned above, it is important to note that whilst the IAS19 balance sheet figures are based on assumptions at the end of the accounting period, the service cost is based on the assumptions at the start of the period. Therefore, the service cost for 2012/13 is based on the financial assumptions as at 31 March 2012.

The real discount rate decreased from 2.6% p.a. at 31 March 2011 to 2.2% p.a. at 31 March 2012. This serves to make the cost of new benefits earned by employee members over 2012/13 more expensive than was the case in 2011/12 under IAS19.

In summary, most authorities should notice an increase in their 2012/13 IAS19 service cost in percentage terms compared to the 2011/12 figure provided last year. This is principally due to a negative change in financial assumptions at the start of the accounting year.

Your IAS19 position

The tables provided in our IAS19 results schedules adhere to the requirements of the accounting standard.

Set out below is a brief guide to these tables and how you can use them to reconcile the movement in IAS19 position over the previous accounting year.

Section 3 – Balance sheet disclosures as at 31 March 2013

This table does exactly what it says on the tin. The liabilities and deficit under IAS19 as at 31 March 2013 are shown, along with the corresponding figures for the previous year and in particular, this shows how the IAS19 position has moved over the last year.

Section 4 – Revenue account costs for the year to 31 March 2013

The purpose of the tables in Section 4 is to explain the reasons why this position has moved from year to year. In other words, it summarises and quantifies the effect of all of the factors responsible for the movement in IAS19 assets and liabilities over the last year. The reconciliation of the normal and injury benefits are shown separately.

Section 5 – Projected pension expense for the year to 31 March 2014

This table sets out our estimate of the pension cost for 2013/14, based on the assumptions at 31 March 2013 (the start of the period).

IAS19 (Revised)

IAS19 is changing for accounting years starting on or after 1 January 2013. However, due to the unfunded nature of the Police and Fire Pension Schemes, the change will have no impact.

If you have any questions please get in touch with your usual Hymans Robertson contact.

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