

The key financial assumptions required for determining pension liabilities under the Accounting Standards FRS17 (UK non-listed), IAS19 (EU listed) and FAS158 (US listed) are the discount rate and the rate of future inflation. There are a number of considerations for company directors to take into account when setting these assumptions and for auditors in determining whether the assumptions are appropriate. This note sets out some of the technical issues relevant to those involved in the preparation and the audit of pension disclosures.

### Discount Rate

The Accounting Standards require the discount rate to be based on yields on high quality (usually AA-rated) corporate bonds of appropriate currency and duration, taking into account the nature and term of the relevant pension scheme's liabilities. Corporate bond indices are often used as a proxy to determine the discount rate.

The table below shows some of the key market indices that could be taken into account in deriving the discount rate. The yield on government bonds (gilts) is also shown for comparison:

Index (annualised yield)	30/06/2012	31/03/2012	30/06/2011
ML Sterling Non Gilts AA Over 15 years	4.32%	4.66%	5.52%
ML Sterling Corporates AA Over 15 years	4.34%	4.67%	5.49%
iBoxx Sterling Corporates AA Over 15 years	4.25%	4.62%	5.54%
Over 15 Year Fixed Interest Gilts	2.94%	3.29%	4.26%

At the end of Quarter 2 2012, the yields on each bond index shown above were significantly lower than the levels as at the end of Quarter 2 2011. There were also notable falls in yields over Quarter 2 2012 itself. This is likely to result in lower discount rates being adopted for accounting purposes which, all other things being equal, will lead to higher values being placed on pension scheme liabilities.

**Figure 1 Individual yields on the bonds making up the iBoxx AA Sterling Corporate Bond All Stocks Index**

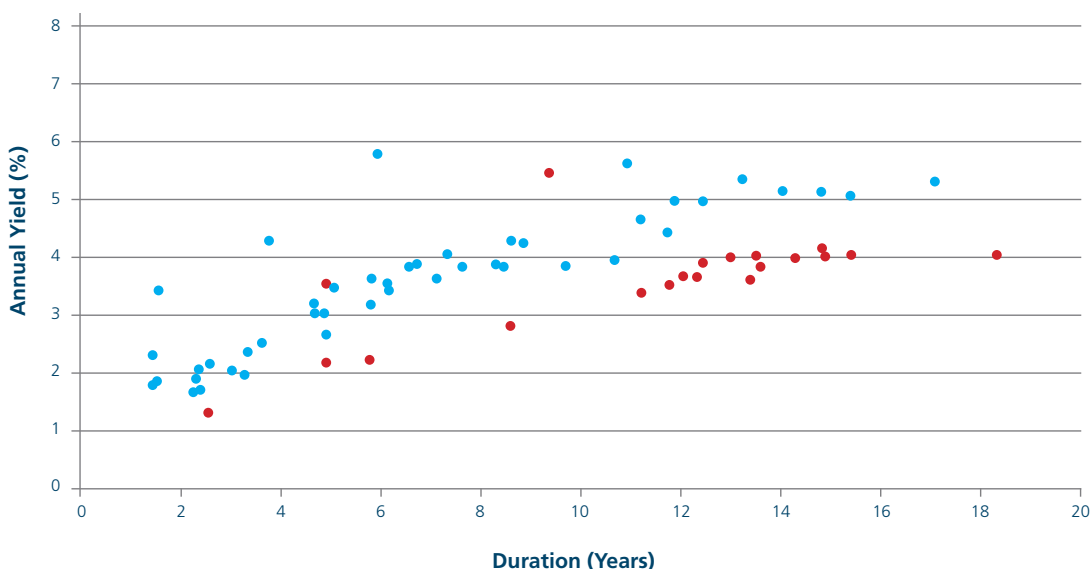


Figure 1 shows the individual yields on the bonds making up the iBoxx AA Sterling Corporate Bond All Stocks Index as at 30 June 2012.

- Non-Financials
- Financials

Data source: Markit Group

## Other issues that should be noted when setting the discount rate include:

- The yields on individual AA bonds vary by duration, as shown on Figure 1. Taking into account the duration of a pension scheme's liabilities when setting the discount rate may result in a different discount rate than if a single index figure is used. Figure 1 illustrates that longer dated stocks generally had a higher yield.
- It is possible to use multiple yields to discount tranches of liabilities at different durations, for example by using an AA bond yield curve rather than merely using a single rate based on an index. Care should be taken, however, as AA bond yield curves can be derived in a variety of ways. The methodology chosen can lead to variations in individual rates and subsequently also in the liability figure derived.
- The yields on AA bonds issued by financial companies continue to be higher than comparable bonds issued by non-financials. However, the spread seems to have narrowed over the quarter suggesting that some confidence has returned to the markets. During the year a number of financial companies were downgraded by the ratings agencies which means that there is now less weight to that sector in the index.

## Inflation

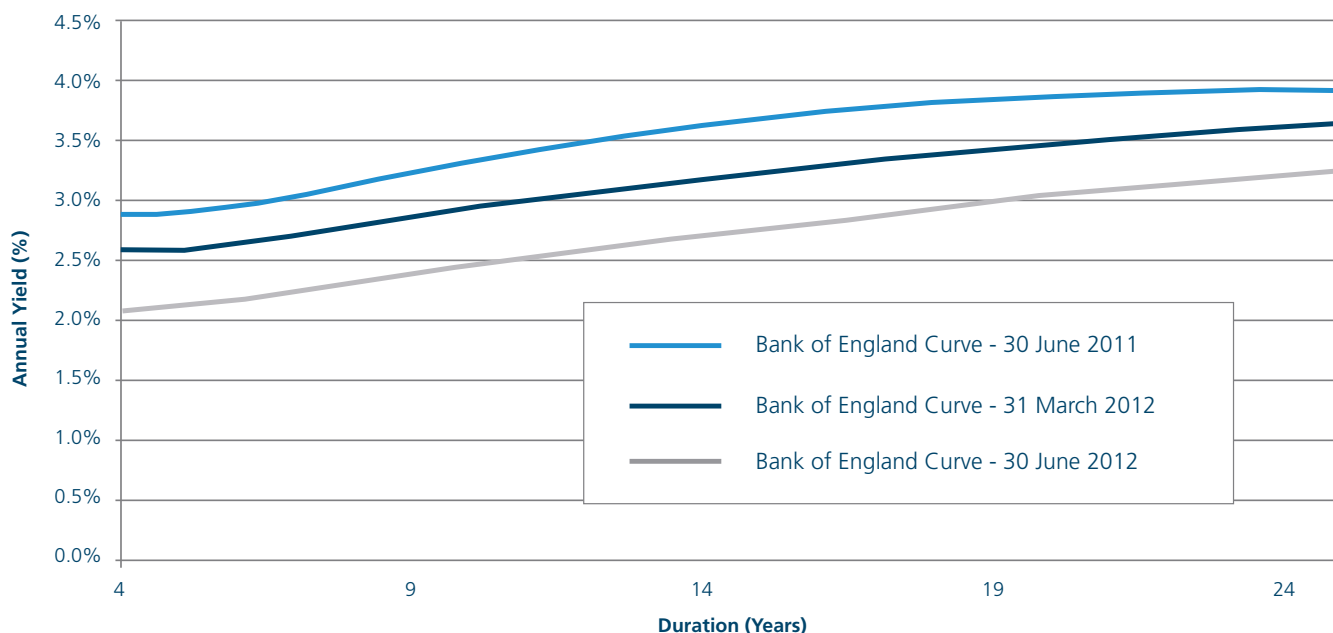
### Retail Prices Index (RPI)

The table below shows the market implied inflation rates. As can be seen from the annualised inflation yield curve in Figure 2, market implied inflation varies considerably depending on the term being considered. It may, therefore, be appropriate to adopt inflation assumptions appropriate to the characteristics of each specific scheme rather than merely adopting a proxy such as the Bank of England's 20 year rate, particularly if the duration is significantly less than 20 years.

There may be other considerations to take into account when choosing inflation assumptions, such as whether to adjust for a possible risk premium that may be implicit in the Bank of England's figures or for any other external factors that the company directors feel should be taken into account in determining this assumption.

Index (annualised rate)	30/06/2012	31/03/2012	30/06/2011
Bank of England 20 year market implied inflation	3.05%	3.50%	3.87%
Bank of England 15 year market implied inflation	2.77%	3.25%	3.69%

**Figure 2** Spot Yield Curves (annualised)



Data source: Bank of England

Implied rates of future inflation are lower than those of a year ago at all durations. Allowing for a lower implied inflation rate would in isolation result in lower pension scheme liabilities (to the extent that benefits are linked to inflation). For schemes with a significant proportion of benefits linked to inflation this will go some way towards offsetting the increase in liabilities resulting from the lower discount rate.

## Consumer Prices Index (CPI)

The figures above relate to inflation as measured by the Retail Prices Index (RPI). Many schemes now have benefits increasing with reference to Consumer Prices Index (CPI) instead, and over the last 20 years CPI has been on average around 0.7% p.a. lower than RPI. Of this, 0.5% p.a. could be attributed to the "formula effect" resulting from technical differences in the way the two indices are calculated, and the remaining 0.2% p.a. could be attributed to differences between the composition of the two indices. In 2010 a change was made to the way the indices were calculated and this is expected to increase the difference between CPI and RPI going forward. The "formula effect" since 2010 has been observed to be between 0.8% p.a. and 1.0% p.a.

Towards the end of 2011, the Office of Budget Responsibility (OBR) published a paper on the gap between RPI and CPI which suggested that the other factors mean the gap could be between 1.3% p.a. and 1.5% p.a. However, this assumes that the constituent effect will continue unchanged, and there is no guarantee that this will be the case over the long term.

As well as the OBR paper, the Consumer Prices Advisory Committee (CPAC) (who advises the UK Statistics Authority on various issues relating to the calculation of RPI and CPI) are also looking at the difference in RPI and CPI. The investigation will seek to improve understanding of the differences between the two indices "and to press for any unjustified element of that difference to be eliminated or reduced as far as possible". Depending on the result, they may recommend the modification of one (or both) of the two indices.

There is some pressure from various parties to eliminate or reduce some of the differences between the RPI and CPI. Whether this will lead to fundamental changes to either of these indices, which are used in many pension increase calculations, remains to be seen. Even more uncertain is whether the Government will allow the changes to affect their official inflation measure, particularly given the recent switch to using CPI. The Bank of England would also have to determine whether any changes to the RPI would affect index-linked gilt holders.

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## Mortality

Demographic assumptions used for accounting disclosures can have a significant impact on the accounting figures. The most significant of these is the mortality assumption. Barnett Waddingham's *survey of assumptions used by FTSE 100 companies* showed a difference of up to five years in the life expectancy assumptions adopted. Each additional year of life expectancy can add around 3% to the value of pension scheme liabilities and hence the chosen assumption can have a big impact on the results.

Historically for simplicity, company directors have often adopted the same mortality assumptions used by the scheme's trustees for the funding valuation. As pension costs have increased there has been an increasing tendency to adopt different assumptions. Trustees are required to use prudent assumptions whereas the assumptions for company accounting should be a best estimate. Companies could consider reviewing their mortality assumptions to ensure they are not using overly prudent and potentially overstating pension liabilities in their accounts.

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## Recent Market Volatility

The rises over the final quarter of 2011 and the first quarter of 2012 were followed by falls in the equity markets in the second quarter of 2012. Equities are at a lower level than they were at this time last year. However, those schemes holding bonds (particularly gilts) will have benefitted to an extent from a significant increase in the value of these investments. Liabilities are, however, likely to be higher due to lower expected discount rates.

For most schemes the funding level assessed under the accounting standards is likely to have deteriorated over the year, although not to the extent seen when measured on schemes' funding bases. Funding bases typically reference government bond yields, whereas accounting bases reference corporate bond yields.

All else being equal, further falls in government bond yields over the quarter will have increased the value placed on scheme liabilities under the scheme funding measure, although for some schemes this might have been mitigated to a significant extent by falls in inflation expectations.

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## EU endorse new IAS19 standard

The International Accounting Standards Board (IASB) published a revised IAS19 standard in June 2011 which is intended to simplify and improve the quality of disclosures made about employee benefits plans. It will also have a real impact on the disclosed profits of companies with defined benefit plans. The new standard was formally endorsed by the EU in June 2012 and is effective for accounting periods beginning on or after 1 January 2013, although earlier adoption is encouraged. The key changes to the standard are as follows:

### Finance cost changes

The IASB has confirmed a change in the way the finance cost element is calculated. At present, the finance cost is the company's best estimate of the expected return on the scheme's assets, less the interest on the liabilities calculated using the discount rate for the period. To ensure greater consistency between companies and to remove the scope for manipulation, the finance cost will now be calculated as the interest on the scheme deficit (or surplus) using the discount rate for the period.

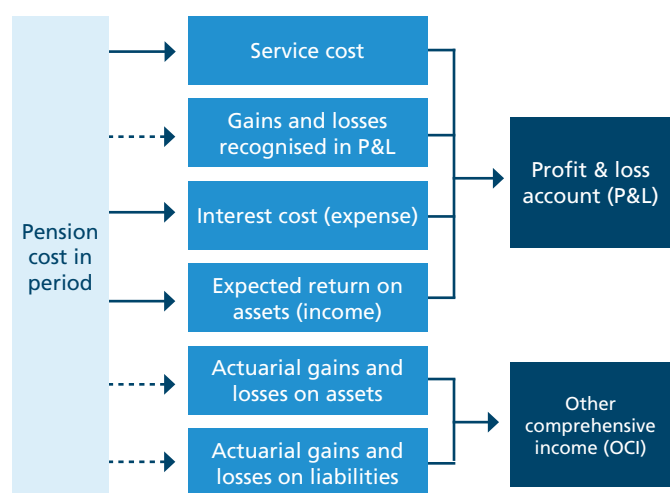
This is likely to see an increase in costs for most companies as they will no longer be able to take credit for the expected higher returns from assets such as equities.

## Deferred recognition of gains and losses

Under the current version of IAS19 it is possible for companies to defer recognition of actuarial gains and losses using a method known as the “corridor” approach. This leads to variations in the way companies report pension costs as:

- elements of the pension costs can be recognised in different expense categories within the accounts
- gains and losses can be either recognised in the current period or alternatively in future periods (i.e. deferred) depending upon the approach taken
- companies will generally recognise deferred gains and losses over different periods of time

The diagram below shows the breakdown of the main elements of the pension cost under the current version of IAS19. The dashed lines illustrate how gains and losses can either go through Profit & Loss (P&L) or through the Other Comprehensive Income (OCI).

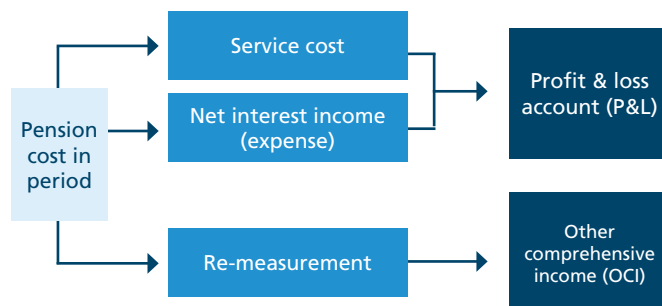


The IASB has confirmed that companies will no longer be allowed to defer recognition of actuarial gains and losses and instead, they will be recognised immediately on the balance sheet through the OCI. Therefore, all companies will recognise the full deficit on their balance sheets.

This change should be applied retrospectively and so will require an adjustment to equity for those companies affected.

## Pension cost impact

The pension expense item will be simplified as shown by the diagram below:



The “Re-measurement” item will include all fluctuations in the assets and liabilities that do not go through the P&L.

## Treatment of expenses

Administration costs, other than those relating to investment management, will need to be expensed as they are incurred. This is in contrast to the initial proposals regarding the changes to IAS19. Originally it was felt that all future expenses would have to be capitalised as an additional Balance Sheet liability but this no longer appears to be the case.

## Recognition of past service costs

Curtailments are accounted as past service costs (or negative past service costs). The definition of a curtailment is now changed to only include those events which result in a significant reduction in the number of employees.

Gains and losses arising on settlements of liability will continue to form part of the pension cost for the period. This is a change from the initial proposals which were for these to go through the OCI.

## Additional disclosure requirements

The risks associated with defined benefit plans and multi-employer plans and sensitivity analyses on key assumptions are now a disclosure requirement.

## Further Information

Please contact your Barnett Waddingham consultant if you would like to discuss any of the above topics in more detail. Alternatively, please email [corporateconsulting@barnett-waddingham.co.uk](mailto:corporateconsulting@barnett-waddingham.co.uk).

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