

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, taking into account the 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)	31/12/2012	30/09/2012	31/12/2011
ML Sterling Non-Gilts AA Over 15 years	4.07%	4.07%	4.63%
ML Sterling Corporates AA Over 15 years	4.05%	4.06%	4.63%
iBoxx Sterling Corporates AA Over 15 years	4.07%	4.02%	4.68%
Over 15 Year Fixed Interest Gilts	3.02%	2.92%	2.96%

At the end of Quarter 4 2012, the yields on each corporate bond index shown above were significantly lower than as at the end of Quarter 4 2011, although gilt yields have increased slightly over the year. 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 as at 31 December 2012 on the bonds making up the iBoxx AA Sterling Corporate Bond All Stocks Index**

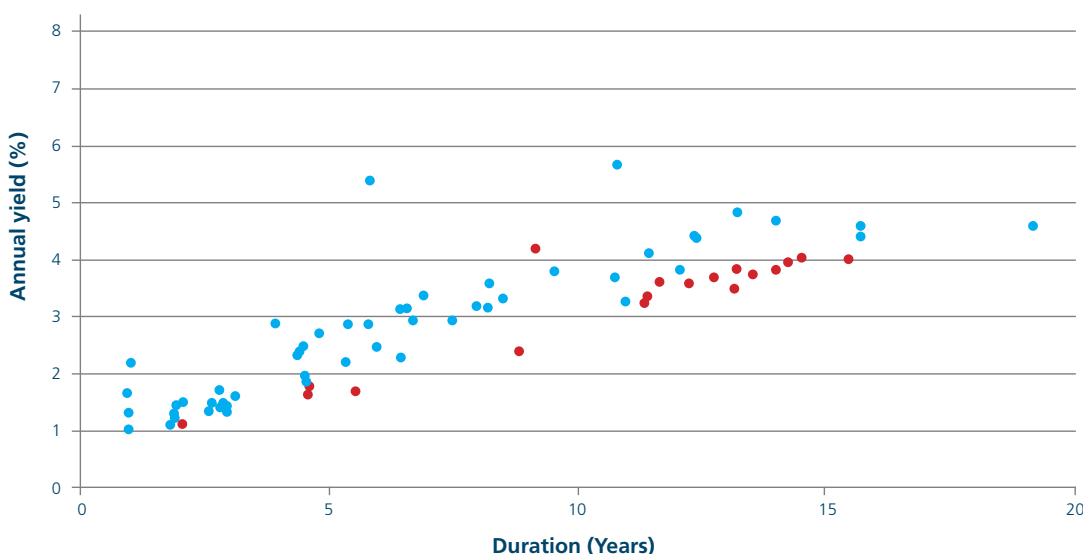


Figure 1 shows the individual yields on the bonds making up the iBoxx AA Sterling Corporate Bond All Stocks Index as at 31 December 2012.

- 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.

The duration of the iBoxx Sterling Corporates AA Over 15 years as at 31 December 2012 is approximately 13 years and this is generally shorter than the duration of most pension schemes' liabilities. In years where the yield curve slopes significantly, as is the case now, this difference in duration can have a significant impact on the value placed on the liabilities. Currently, it might be appropriate to use a discount rate above the index yield, depending on the duration of your scheme's liabilities. Based on Figure 1 and extrapolating beyond the yield on the longest duration AA bonds it could be possible to justify a yield above 4.5% p.a. for an immature scheme. As ever consistency in the approach adopted in previous years should be considered.

We have seen an increasing number of companies using a discount rate above the AA Corporate Bond index yield reflecting this issue.

- 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. Since earlier this year there has been a trend of narrowing credit spreads and this continued over the quarter, arguably suggesting that some confidence is returning to the corporate bond 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

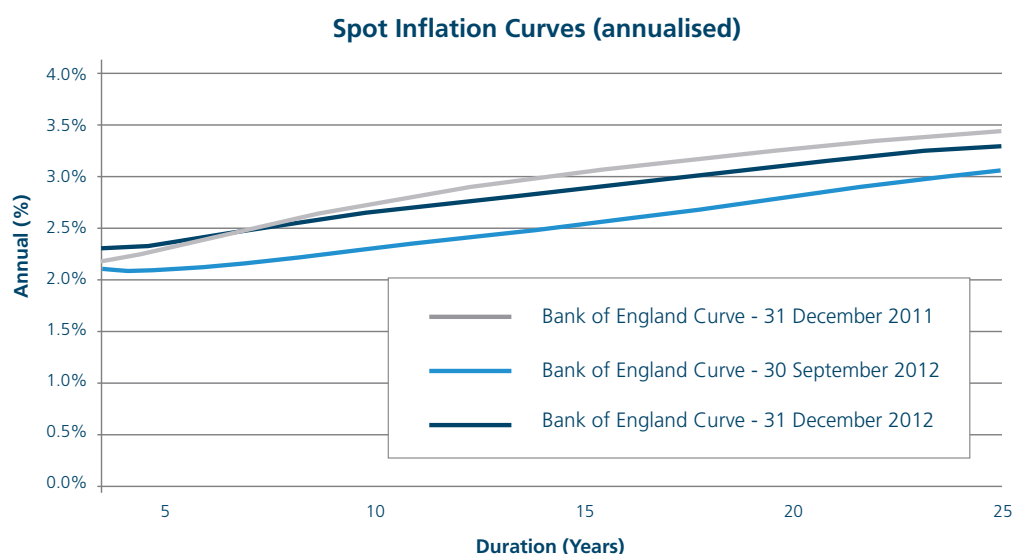
### Retail Prices Index (RPI)

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 different than 20 years. Consistency with the approach adopted to derive the discount rate is important.

There may be other considerations to take into account when choosing inflation assumptions, such as whether to adjust for a possible inflation 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. The justification for including an inflation risk premium is arguably less strong under current market conditions due to the high level of demand for fixed interest gilts.

Index (annualised rate)	31/12/2012	30/09/2012	31/12/2011
Bank of England 20 year market implied inflation	3.12%	2.81%	3.27%
Bank of England 15 year market implied inflation	2.88%	2.54%	3.03%

Figure 2



Data source: Bank of England

Implied rates of future inflation have increased during Q4 and are now slightly lower than those of a year ago at the longer durations but are slightly higher at the shorter 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 help offset part of 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 compositions of the two indices. In 2010 a change was made to the way the indices were calculated and at the time this was 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.

The current Government CPI inflation target is 2.0% p.a.

## Is the calculation of RPI about to change?

The Consumer Prices Advisory Committee (CPAC) (who advises the UK Statistics Authority on various issues relating to the calculation of RPI and CPI) has recently concluded that there is no justification for using different methods in the calculation of RPI and CPI. As a result, the Office for National Statistics (ONS) carried out a consultation exercise on options for changing the calculation method during October and November 2012.

An announcement from the ONS with the conclusion to the consultation and a recommendation is due on 10th January 2013.

The ONS will need to consult with the Bank of England on whether any change in RPI would be "materially detrimental to the interests of the holders of relevant index-linked gilt edged securities". If so, the Chancellor would need to agree to the change.

If all parties agree to the change, the ONS is expected to introduce it with the annual update of the RPI when it is published on 19 March 2013. Commentators and the market alike expect there to be some degree of change in the calculation methodology, with RPI being closer aligned with CPI. If this happens, the value of liabilities linked to RPI would be expected to fall to the extent that these views are not already priced into the markets' expectations for future RPI inflation.

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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.

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 should consider reviewing their mortality assumptions to ensure these are not overly prudent and that their pension liabilities are not being overstated.

Barnett Waddingham has developed a tool to help companies analyse the appropriateness of their mortality assumptions by looking at scheme-specific factors such as the socio-economic make-up of the membership. To find out more about this please contact us using the details at the bottom of this note.

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## 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 were summarised in our *30 June 2012 Current Issues in Pensions Financial Reporting*.

### Potential impact on Profit & Loss for companies reporting under IAS19

Accounting deficits and future Profit & Loss (P&L) charges might be affected by the significant fall in corporate bond index yields since Q4 2011 although falling inflation expectations and an increasing number of companies allowing for the upward sloping AA yield curve to set the discount rate will have partially offset the impact. The transition to the new version of IAS19 will also require the expected return on assets assumption to essentially be set equal to the discount rate which, in most cases, will increase IAS19 P&L charges further (for accounting periods beginning on or after 1 January 2013).

### New disclosure requirements

The 31 December 2013 year end is the earliest for which the revised standard will apply. The new standard amends the disclosure requirements to be more focussed around the risk posed by the scheme to the company. In particular, the new requirements include:

- an explanation of the risks associated with the defined benefit plan, including comment on significant concentration of any risk, as well as the actions being taken to address them
- sensitivity analyses of key assumptions
- commentary on the impact of future uncertain cash flows as well as information about the maturity profile of the defined benefit plan.

Companies with 31 December year end may want consider obtaining projections this year to better understand the impact of the revised standard.

# Other Pension Accounting Issues

## Recent Market Volatility

Equities are generally at a much higher level than they were at this time last year although accounting liabilities are, however, also likely to be higher due to lower discount rates.

The overall effect of market movements will differ for schemes depending on their asset allocation. Schemes with a significant proportion of their assets invested in equities might see improvements in their accounting positions (over the 12 months to 31 December 2012), with equity growth exceeding the effect of falling corporate bond yields. However, ignoring deficit contributions and scheme experience, many schemes (particularly those holding gilts) are likely to see a worsening in their accounting position because of narrowing credit spreads.

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## 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).

### Pension Scheme Accounting Modeller – Instant Scenario Testing

Pension schemes can have a significant impact on a company's accounting position. Our interactive modelling tool can help Finance Directors understand and quantify the factors influencing the financial position of the Scheme so that they can be linked into the company's own internal plans for its core business.

The software allows an instant assessment of the sensitivity of the accounts to the year end assumptions so that the Finance Director can make a fully informed decision on the optimal approach.

It also allows companies reporting under IAS19 to view the impact of the forthcoming changes to IAS19 on their accounting figures.

For the full article please click [here](#).



### Finance Directors' Guide to Pensions

The [www.fdpensions.co.uk](http://www.fdpensions.co.uk) website has been created as a single point of call for FDs to keep up to date with important pensions' issues and to provide a single source of clearly written information on the pensions' issues that you will come across.

Please visit the [accounting section](#) for a clear, detailed guide to all aspects of pension scheme accounting.

This bulletin is a summary of some recent developments and not a comprehensive description. Although we try to ensure its accuracy, Barnett Waddingham LLP accepts no liability for any errors or omissions it may contain. Readers should take professional advice in relation to their own circumstances and/or refer to the original source material as appropriate. Barnett Waddingham LLP holds your contact details for its own communication purposes only. We do not disclose these details to third parties. If you no longer wish to receive newsletters from us, please let us know.

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