This note is for those who will be involved in preparing or auditing pension disclosures under Accounting Standards FRS102 (UK non-listed), IAS19 (EU listed) and ASC715 (US listed) as at 31 December 2019.

We look at the current topical issues as well as the considerations for company directors when setting assumptions, and for auditors in determining whether the assumptions are appropriate.

**Liability values up, but what about assets?**

The movement in funding levels over the period will predominantly depend on the investment strategy adopted by the pension scheme and the chart below shows how this will have developed for three typical schemes.

**PROGRESSION OF IAS19 FUNDING LEVEL FOR TYPICAL SCHEMES**
Although they have increased since 30 September 2019, corporate bond yields are still significant lower than they were as at 31 December 2018, and although inflation expectations have fallen slightly over the year, we would still expect to see significant increases in liability values for the vast majority of schemes. The impact of this on a scheme’s funding level will then depend on what extent asset returns have matched this increase.

Schemes who have hedged the majority of their interest rate risk (typically those which are more mature) may well see an improvement in the funding position, in particular those who are hedging risk on a more conservative basis than that used for pension scheme accounting. The position of schemes with less hedging, and for those who are still taking significant levels of investment risk, will depend largely on the performance of their growth assets (and to some extent any deficit contributions paid), though we expect the majority to be slightly worse off compared to last year.

**Proposed changes from RPI to CPIH in 2030**

As noted in our previous update, the Government has proposed changing the Retail Price Index (RPI) inflation statistic to bring RPI in line with the “CPIH” index. CPIH became the UK’s primary inflation measure in 2017 and essentially takes Consumer Price Index (CPI) and adds a measure of owner occupied housing. It has been proposed that from 2030, index-linked gilt payments will implicitly be linked to CPIH due to the change of the makeup of the RPI statistic. If RPI is aligned with CPIH then RPI would be expected to be lower in future and, all else being equal, the value of index-linked gilts would fall and real yields would likely rise.

Following the news of the proposal there appears to have been a c. 0.3% pa fall in the market’s expectations, as measured by the difference in prices between fixed and index-linked gilts, for post 2030 RPI (this is the total combined fall on 4 September 2019 following the announcement, and on 17 January 2019 following the original House of Lords report on RPI that has led to this issue). The expected difference between RPI and CPIH over the long-term is around 1% pa so the market does not appear to be allowing for the full impact of the potential change at present.

If the changes do go ahead (and the Chancellor’s letter suggests that the changes will go ahead) this would significantly reduce the value of long-dated index-linked gilts, unless compensation is given to holders. RPI-linked pension liabilities would also fall in value, but CPI-linked pension liabilities would likely be largely unaffected.

In relation to accounting assumptions, companies will need to review the methods used for setting both RPI and CPI assumptions going forward in light of the market’s reaction to the proposed changes and we comment further on this below.

**Changes to IAS19**

For reporting periods beginning on or after 1 January 2019, there is a change to the requirements of IAS19 where a plan amendment, curtailment or settlement event has occurred during the period. 31 December 2019 therefore represents the first year-end where these changes will need to be implemented.

The key change to note is the current service cost and net interest cost will need to be recalculated for the remainder of the accounting period, based on the remeasured position following a special event. This creates the possibility that relatively modest augmentations that are accounted for as a plan amendment will have a more significant effect on the P&L charge if, for example, the deficit has increased significantly since the previous year-end.

It is possible that audit firms will require a strict interpretation of whether the impact of this is “material”. For example, they may require companies to make these adjustments if the impact of the event and the recalculation of the other P&L items would have a material impact (rather than just the event itself being material). However, it may be possible for a more pragmatic approach to be taken and this is something that will be worth raising with auditors in the early stages, if this hasn’t been done already.

In cases where events occur on a regular basis, it may also be possible to agree trigger levels, meaning that more minor events can be ignored for this purpose.
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. Figure 1 shows the individual yields on the bonds making up the iBoxx AA Corporate Bond universe as at 31 December 2019.

As can be seen in Figure 1, the yields vary significantly in the short to mid durations, in particular there are now a number of bonds with a duration of less than 15 years and a yield of over 2% pa, but flatten out at the longer durations. We can also see how much bond yields have fallen over the year and how the spot curve has flattened.

A common method to reflect the shape of AA bond yield curve is to base the discount rate on a single equivalent rate rather than a single rate based on an index, and our experience is that the audit firms prefer a cashflow weighted approach to be used. The table below shows single equivalent discount rates (SEDR) using the iBoxx AA-rated corporate bond curve based on sample cashflows for a range of durations:

<table>
<thead>
<tr>
<th>Approximate duration (years)</th>
<th>31 December 2019</th>
<th>30 September 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>1.80% pa</td>
<td>1.60% pa</td>
<td>2.60% pa</td>
</tr>
<tr>
<td>15</td>
<td>1.95% pa</td>
<td>1.75% pa</td>
<td>2.80% pa</td>
</tr>
<tr>
<td>20</td>
<td>2.00% pa</td>
<td>1.85% pa</td>
<td>2.90% pa</td>
</tr>
<tr>
<td>25</td>
<td>2.05% pa</td>
<td>1.90% pa</td>
<td>2.95% pa</td>
</tr>
</tbody>
</table>
At the end of Q4 2019, single equivalent discount rates on AA corporate bonds were significantly lower in contrast to 31 December 2018, but have increased since last quarter. The table above shows that corporate bond yields have fallen by around 0.8–0.9% pa since 31 December 2018, which will result in lower discount rates being adopted for accounting purposes compared to last year. This will result in a higher value being placed on the liabilities; each 0.1% decrease on the discount rate would translate to an increase of approximately 2% in liability value for a scheme with a 20-year duration.

Where a single equivalent discount rate approach is used, care should be taken, as AA bond yield curves can be derived in a variety of ways. The methodology chosen can lead to significant variations in individual rates and subsequently also in the liability figure derived. Even under this approach which is argued by some to be the most accurate, a range of outcomes are possible depending on the dataset and method used to construct the curve and how this is extended to durations beyond the longest AA rated bond.

Generally, it will be possible to justify a higher discount rate by adopting a ‘single agency’ approach where the discount rate is set by reference to bonds that are rated at AA by one or more of the three main rating agencies. This approach provides a larger universe of bonds (particularly at the longer durations) to be considered when setting the discount rate. Currently, an increase of 0.10% pa to the rate implied by the standard AA rated corporate bond data set is likely to be appropriate, which is slightly higher than last quarter at longer durations.

Inflation

Retail Prices Index (RPI)

As can be seen from the inflation yield curve in Figure 2, market implied expectations for the future vary considerably depending on the term being considered.

Adopting a proxy such as the Bank of England’s (BoE’s) inflation spot rate at a duration equivalent to the scheme’s liabilities does not reflect the variations in expected future inflation rate by term. In particular, this does not reflect the fact that the curve is downward sloping at the long end, and so using a single-equivalent approach it should be possible to justify assumptions below the spot rate at the given duration for most schemes. In fact, our recent experience is that using a spot rate from the curve will generally be above the audit firms’ usual range for RPI inflation assumptions, and so we recommend adopting a single-equivalent approach, particularly where this is also being used to derive the discount rate.

There may be other considerations to take into account when choosing inflation assumptions, such as whether to adjust for a possible inflation risk premium (IRP) 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. Adjustments of up to 0.3% pa are typically used to reflect an IRP although it may be possible to justify adjustments above this level.

As shown in figure 2, inflation expectations have fallen at all terms since last year, particularly at longer durations. The shape has also shifted since last quarter, where inflation expectations were higher at shorter durations.

![FIGURE 2: SPOT INFLATION CURVES (ANNUALISED)](Data Source: Bank of England)
The table below shows single equivalent inflation rate (SEIR) assumptions based on the Bank of England inflation curve and sample cashflows for a range of durations, before any deduction for an inflation risk premium:

<table>
<thead>
<tr>
<th>Approximate duration (years)</th>
<th>31 December 2019</th>
<th>30 September 2019</th>
<th>31 December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>3.30% pa</td>
<td>3.50% pa</td>
<td>3.45% pa</td>
</tr>
<tr>
<td>15</td>
<td>3.25% pa</td>
<td>3.35% pa</td>
<td>3.45% pa</td>
</tr>
<tr>
<td>20</td>
<td>3.20% pa</td>
<td>3.25% pa</td>
<td>3.40% pa</td>
</tr>
<tr>
<td>25</td>
<td>3.15% pa</td>
<td>3.20% pa</td>
<td>3.40% pa</td>
</tr>
</tbody>
</table>

**Consumer Prices Index (CPI)**

The figures above relate to inflation as measured by the RPI. Many schemes have benefits increasing with reference to the Consumer Prices Index (CPI) instead, and assumptions for CPI inflation are generally set with reference to the assumption for RPI inflation given the limited market for CPI-linked investments. The difference between RPI and CPI can be attributed to two things:

- The ‘formula effect’, resulting from technical differences in the way the two indices are calculated; and
- Differences between the compositions of the two indices (i.e. the goods that are included in them).

Towards the end of 2011, the Office for 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% pa and 1.5% pa. A more recent paper published by the OBR in March 2015 suggests the median gap to be about 1.0% pa, while the Bank of England central long-term estimate suggests 1.3% pa. Our experience is that deductions of up to 1.1% pa from the RPI inflation are typically used.

**Implications of the proposed changes to RPI**

The proposed consultation mentioned above has implications for both the derivation of market-implied RPI and for the assumed gap between RPI and CPI.

As noted above, the market does not appear to be allowing for the full impact of the potential change to RPI at present. There may therefore be scope to make adjustments to market-implied RPI inflation post 2030, i.e. to allow for an additional deduction on top of what may already be priced in to the market rates. This could mean a lower RPI inflation assumption could be justified using the single-equivalent approach; the impact of this will depend on what level of deduction is made and the term of a scheme’s liabilities, but could be up to 40 basis points in certain circumstances. We expect that schemes adopting this approach will need to justify this to their auditors, and the change may also trigger additional reporting requirements in certain circumstances.

Separately, making such an adjustment would also impact on the CPI inflation assumption. CPI-linked benefits will not be affected by any changes, and therefore the gap between RPI and CPI inflation will need to be adjusted such that CPI inflation is unaffected. Even if no adjustment is made for the proposed changes, there could be an argument that the current gap should be revisited in light of the allowance that already appears to have been made for the proposed changes in market-implied RPI.

The pension disclosures set out in a company’s accounts need to be accepted by its auditors. We can support audit firms without the benefit of a specialist pension team to understand the assumptions and disclosures prepared by companies that they audit. The required scope of such a review varies and will provide auditors with the level of comfort they require to sign off the accounts.
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, and whilst there is generally a wide range of assumptions adopted, we have seen reductions in mortality improvements over the past few years that have led to lower liability values for accounting purposes through the annual model released by the CMI.

For simplicity, company directors have in the past adopted the same mortality assumptions used by the scheme’s trustees for the funding valuation. However, the trustees are required to use prudent assumptions, whereas the assumptions for company accounting should be a best estimate. We would therefore expect margins for prudence within the mortality assumptions to be removed before being used for accounting purposes, and we are increasingly seeing audit firms picking up on this as well.

There is likely to be more focus on mortality assumptions this year, with the CMI releasing the new S3 series of tables during the year, as well as the CMI_2018 mortality improvements model, which was a more thorough review of the model than just updating to allow for the most recent year of data.

S3 tables

The S3 tables are based on a much larger dataset than the previous S2 tables, though the make-up of this dataset has changed (e.g. it now has much more exposure to public sector schemes). Because of this change, where tables are being adjusted to reflect a scheme’s membership, it does not necessarily follow that the same adjustment should be applied to the new tables. As such, many companies may wait until the next triennial valuation takes place to update the mortality tables, where a more comprehensive review of the scheme’s mortality experience may be carried out. However, others may want to pursue this sooner rather than later.

CMI_2018 model

The 2018 version of the model reflects death data collected during 2018. This showed that the trend of falling mortality improvements continued, and as such this model would be expected to produce lower life expectancies than the 2017 version. On top of this, the CMI reviewed the model and made some changes to the parameters:

- The default value of the smoothing parameter was changed, meaning that more weighting is placed on more recent data. As this shows improvements in life expectancy are slowing, this results in lower life expectancies.

- A new parameter has been introduced: the initial addition to mortality improvements. This allows a scheme to reflect differences between the mortality improvements of its membership and those of the wider population on which the CMI model is based.

Companies may be required to justify their choice of the initial addition parameter, even if the core value of nil is used.

Other assumptions

In the past, assumptions such as amounts commuted for cash at retirement and the proportion of cases where a pension is payable on death may have been set to align with the scheme funding valuation and may therefore contain an element of prudence. Individually such assumptions may not have a material effect on the liabilities but collectively can mean liabilities are overstated relative to a true best estimate. Any such overstatement will be exacerbated in low discount rate environments.

Companies should therefore review other assumptions from time to time to ensure they reflect a best estimate of future experience.

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.
For those involved in Pensions Financial Reporting - FRS102, FRS101, IAS19 and ASC715

There have been several recent and forthcoming changes to the pensions requirements under UK and International Accounting Standards. Our specialist consultants at Barnett Waddingham have extensive experience of advising on the assumptions and preparing the pensions disclosures for inclusion in company accounts under the different accounting standards (e.g. FRS102, FRS101, IAS19 and ASC715) as well as supporting audit firms without the benefit of a specialist pension team to understand the assumptions and disclosures prepared by companies that they audit.

Our specialist consultants can provide interactive workshops focussing on accounting for DB pension arrangements. We will provide background on the theory behind the main pension accounting standards – FRS102, FRS101, IAS19 and ASC715 – and will explore some of the current market factors influencing the disclosures and how these have changed over the last year or so.

For more information please email employers@barnett-waddingham.co.uk.

Illuminate - Instant scenario testing

Pension schemes can have a significant impact on a company’s accounting position. We have added an interactive modelling tool to illuminate to 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 tool allows an instant assessment of the sensitivity of the accounting results to the year-end assumptions so that the finance director can make a fully informed decision on the optimal approach. We can also benchmark your assumptions against those used by FTSE 350 companies, including splitting by auditor if this would be useful.

Impact of pensions on UK business

During 2019, we published a series of reports discussing the impact that pension provision is having on UK business over the period to 31 December 2018, in particular looking at the difference between levels of deficit contributions and dividends, as well considering when companies are likely to be in a position to buyout their schemes and what might help them get there faster.

The full reports are available on our website.

Please contact your Barnett Waddingham consultant if you would like to discuss any of the above topics in more detail. Alternatively get in touch via the following:

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