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IASI9 Assumptions Report

July 2018

Welcome

FTSE 350 companies support £800bn of defined benefit pension liabilities. These same companies have a combined market capitalisation of £2,600bn, so the way these liabilities are measured in company accounts is critical for assessing the financial wellbeing of UK plc.

The materiality of IAS19 pension assumptions is not lost on auditors, who are now assessing and challenging pension assumptions more than ever before. Setting appropriate IAS19 assumptions is therefore crucial for companies going through their year-end process.

This survey analyses the key assumptions adopted by the FTSE 350 for their defined benefit pensions disclosures as at 31 December 2017. We consider the key financial assumptions (primarily the discount rate and inflation) and life expectancy. I hope you find this report interesting and informative. Please contact me if you would like to discuss any aspect of our analysis.

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Key findings

Discount rates

Discount rates varied from 2.3% to 2.8%, with an average assumption of 2.5%. 66% of companies used a discount rate within 10bps of the 2.5% average.

RPI inflation

RPI assumptions varied from 3.1% to 3.5%, with an average assumption of 3.2%. 89% of companies used a lower assumption than market implied RPI, showing the continuing wide-spread use of the "inflation risk premium" argument to use a lower assumption than market implied. The typical inflation risk premium deduction is 0.2% p.a.

CPI inflation

CPI assumptions varied from 1.9% to 2.7%, with an average assumption of 2.2%. This implies the average "wedge" assumed between RPI and CPI was 1.0%, consistent with the 1.0% average in 2016.

Salary growth

Salary growth assumptions varied from 1.5% to 5.4%, with an average assumption of 3.2% (consistent with the average RPI assumption).

Longevity

The average pensioner life expectancy was 87.6 years for a male and 89.4 years for a female. The average nonpensioner life expectancy was 89.1 years for a male and 91.0 years for a female. These averages have fallen over the year by 0.2 years for pensioners and 0.5 years for non-pensioners, illustrating that a significant number of companies are reporting falls in disclosed life expectancy. This reflects adoption of the latest projections which show a lower rate of improvement than had been previously estimated.

There is around a 6 year spread in life expectancy assumptions across the FTSE 350.

Allowance for members taking transfer values

An assumption which is starting to require more consideration is the allowance for members taking transfer values out of schemes in the future. The 2015 pension freedoms have led to a sharp uptake in transfers. However, only one company made an allowance for future transfers in last year's disclosures. We might expect more companies to make an allowance in future years as experience continues to emerge, particularly as transfer values can sometimes lead to a funding strain on an IAS19 basis.

Allowance for a pension increase exchange option

No companies surveyed made an allowance for future uptake of a pension increase exchange option at retirement.

Discount rate

£10bn

-6 bps on discount rate

decrease in FTSE 350 pension deficit

The discount rate is the most significant financial assumption for assessing pension obligations. A low discount rate leads to a high value being placed on the pension liabilities. The discount rate is set by reference to high quality corporate bonds of a suitable term. Long dated corporate bond yields fell by around 20 bps over the year.

The chart below shows the Hymans Robertson Corporate Bond curve derived from the AA iBoxx index at 31 December 2016 and 31 December 2017. The table shows the index yields on over 15 year bonds.



0.8% p.a.

The chart below shows the distribution of discount rates adopted by the FTSE 350 at 31 December 2017, and the table shows the average discount rate.



Date	31 Dec 2017
Average discount rate	2.5% p.a.

Observations:

 Discount rates continue to be bunched, though less so than last year (74% of companies were within +/-0.1% of the average last year compared to 66% this year).

Our view

Average AA credit spread

The larger spread this year probably reflects more companies taking alternative approaches to setting the discount rate (particularly at the long end of the curve), given continued low yields. The standard approach to setting a corporate bond yield curve is a "gilts plus spread" approach at the long end of the curve. However, alternative approaches (e.g. the "pure corporate bond" approach) are becoming more common and can add 0.1-0.2% to discount rates.

Inflation



+8 bps

The inflation assumption is the second most significant financial assumption for assessing pension obligations, and typically drives the assumption for salary growth, deferred revaluation and pension increases (to the extent they are inflation linked). A high inflation assumption leads to a high value placed on the pension liabilities.

Most schemes consider a CPI assumption as well as an RPI assumption, with CPI typically being set equal to RPI less a margin.

RPI

Over the year to 31 December 2017 RPI inflation expectations decreased with the reduction being more marginal at the longer end of the curve. Given most schemes have durations of 15-20 years, RPI assumptions are generally lower than those used last year-end. However, there is still quite a range in this assumption, reflecting the shape of the inflation curve and the maturity of different schemes, and the "inflation risk premium" argument often used to justify a reduction to market implied inflation.

The chart below shows the government bond implied RPI curve at 31 December 2017 and 31 December 2016, with the table showing RPI implied by over 15 year gilt yields at 31 December 2017.



3.4% p.a.

15+ year gilt implied RPI

The chart below shows the distribution of RPI assumptions adopted by the FTSE 350 at 31 December 2017 and the table shows the average assumption.



Date	31 Dec 2017
Average RPI assumption	3.2% p.a.

Observations:

- The average RPI assumption of 3.2% was used by 48% of companies.
- Market implied RPI at a duration appropriate to most pension schemes is c3.4%. 89% of companies used a lower assumption than this, implying that most companies are deducting an "inflation risk premium" from market implied RPI of around 0.2%.
- In the last few years we have seen a wider range of assumptions adopted for RPI than for the discount rate.
 However, this has changed this year, and there is now more dispersion in discount rates than in RPI.



CPI

Some pension increases are linked to CPI rather than RPI. This switch to CPI typically occurred for deferred increases as opposed to pension increases after retirement.

The chart below shows the distribution of CPI assumptions adopted by the FTSE 350 at 31 December 2017.

Observations:

- The CPI assumption is very dispersed with companies adopting assumptions between 1.9% and 2.7%. This is similar to the range last year, when companies adopted assumptions between 2.0% and 2.8%.
- The average CPI assumption of 2.2% p.a. is 1.0% lower than the average RPI assumption, which gives an indication of the average differential assumed between RPI and CPI. This is the same differential as reported last year.





Average CPI assumption

2.2% p.a.

Our view

The assumed "wedge" between RPI and CPI is likely to remain at around 1.0%.

Salary growth

£10bn

increase in FTSE 350 pension deficit +65 bps on salary growth

Salary growth is a less significant assumption than the discount rate or inflation assumption as it only impacts on the liability for active members, which is becoming a smaller proportion of total liabilities as more schemes close to future accrual. However, it does still have a significant impact on the service cost, recognised in the income statement, for schemes that are open to future accrual.

The chart below shows the distribution of salary growth assumptions adopted by the FTSE 350 at 31 December 2017.

Observations:

- Unsurprisingly there is a wide range of salary growth assumptions reflecting differences in pay growth expectations.
- The average salary growth assumption of 3.2% is consistent with the average RPI inflation assumption.
- 45% of companies use an assumption of less than 3.2% p.a. (the average RPI inflation assumption adopted), which we expect in part reflects the increased use of pensionable salary caps.



Average salary growth

3.2% p.a.

Longevity

£10bn increase in FTSE 350 pension deficit +4 months

on life expectancy

Longevity is the most significant non-financial assumption. The charts below show the distribution of male and female life expectancy assumptions for pensioners and non-pensioners used by the FTSE 350 at their most recent reporting date. These assumptions build in an allowance for how longevity is expected to change in the future.



There continues to be a wide range of life expectancy assumptions for both men and women across the FTSE 350, with a spread of around 6 years. These differences will reflect different views on the current longevity of scheme members (driven by industry, sociodemographics etc) and on how longevity is expected to change in the future for those members. With each additional year of life expectancy adding up to 4% to pension scheme liabilities, 6 years equates to a material difference in liabilities of around 25%.

Unsurprisingly, non-pensioners are expected to live longer than current pensioners, with life expectancy assumed to improve by just under one year every decade over the long term.

Our view

In general the 2010s have seen much slower improvements compared to the 2+ years per decade experienced during the late 90s and 2000s. These slower improvements (which equate to heavier mortality than would otherwise have been expected) continues to flow through to accounting assumptions this year, where we're seeing further decreases in disclosed life expectancy. We expect that companies will continue to disclose lower life expectancies next year as they reflect the most recent mortality tables and in particular the updated longevity projections model (referred to as the CMI2017 model).

Our view is that adopting the most recent projection models without some adjustment to reflect the experience of DB pensioners and, in particular, the socio-demographic split of members, could underestimate future improvements in life expectancy.

The commonly used models for projecting longevity are supplied with England & Wales population data. Analysis from our colleagues in Club Vita shows that, in contrast to the overall population, longevity improvements have remained stable over the 2010s amongst "comfortable" pensioners (those with larger pensions and good lifestyles). These comfortable pensioners are important in a DB scheme context as they often represent the majority of liabilities for a typical DB pension scheme. Using a model that projects longevity based on E&W population data will understate the improvements 'comfortable' pensioners have experienced recently, and potentially understate their longevity (so liabilities) in the future.

Our guidance would be to ensure that, as well as taking account of recent experience, the socio-demographic profile of scheme members is reflected in both the assumption for current longevity and the assumption for how longevity will change in the future.



CETVs and Pension Increase Exchange

The combination of pension freedoms and historically low gilt yields has resulted in a marked increase in the volume of Cash Equivalent Transfer Values ('CETVs') being paid out, with c£50bn paid out in DB transfers since 2015. Such material experience means consideration should be given to making an allowance for future transfers out in company accounting disclosures, particularly as in some cases this can lead to an increase in the IAS19 liability (whilst transfers usually lead to a gain on longer term funding targets this is not always the case on an IAS19 measure). Our analysis shows that at 31 December 2017 one company (in the financial services sector) adopted an allowance for future transfers, and this increased their DB liabilities by 2%.

Pension Increase Exchange ('PIE') options are available in a number of FTSE350 schemes. However, our analysis shows that none of the companies surveyed adopted an assumption for future uptake of PIE within their financial statements.

Our view

Companies are only just starting to think about CETV experience and may take the view that it's simply too early to tell if the recently experienced high volumes are likely to persist in future. However, we believe that future allowance may become more common, particularly within the financial services sector where volumes appear particularly high.

We expect that making an allowance for future uptake of a Pension Increase Exchange (PIE) option at retirement is likely to remain at lower levels. PIEs are more typically run as bulk exercises for current pensioners, in which case a gain is recognised at the point the offer is run, with no requirement for a future uptake assumption.





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