

IASI9 Assumptions Report

July 2019



Welcome

FTSE 350 companies support £700bn of defined benefit pension liabilities. These same companies have a combined market capitalisation of £2,300bn, 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, particularly after the FRC review of auditing practices last year and some high profile corporate failures. Setting appropriate evidence based 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 2018. We consider the key financial assumptions (primarily the discount rate and inflation) and life expectancy. In this year's survey we have also considered the provisions made for GMP equalisation, following the High Court ruling in October last year.

I hope you find this report interesting and informative. Please contact me if you would like to discuss any aspect of our analysis.



Alistair Russell-Smith

Head of Corporate Consulting
alistair.russell-smith@hymans.co.uk
0207 082 6222

Key findings

Discount rates

Discount rates varied from 2.7% to 3.1%, with an average assumption of 2.8%. 88% of companies used a discount rate within 10bps of the 2.8% average.

RPI inflation

RPI assumptions varied from 2.8% to 3.5%, with an average assumption of 3.2%. 87% 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 2.0% to 2.5%, 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 2017. However, this year 35% of companies used a wedge of 1.1%.

Salary growth

Salary growth assumptions varied from 1.8% to 5.4%, with an average assumption of 3.2% (consistent with the average RPI assumption).

Longevity

The average pensioner life expectancy was 87.4 years for a male and 89.2 years for a female. The average non-pensioner life expectancy was 88.9 years for a male and 90.8 years for a female. These averages are 0.2 years lower than last year, 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 5 year spread in pensioner life expectancy, and 6 year spread in non-pensioner life expectancy, assumed across the FTSE 350.

GMP equalisation

GMP equalisation reserves ranged from 0% to 2.7% of IAS19 liabilities, with an average reserve of 0.5%. The impact of GMP equalisation was less than 1% of IAS19 liabilities for 73% of 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 although there has been significant fluctuation around the rates of transfers out. Only one company disclosed an explicit allowance for future transfers in last year’s disclosures. However, 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 disclosed an explicit allowance for future uptake of a pension increase exchange option at retirement.



Discount rate

£10bn

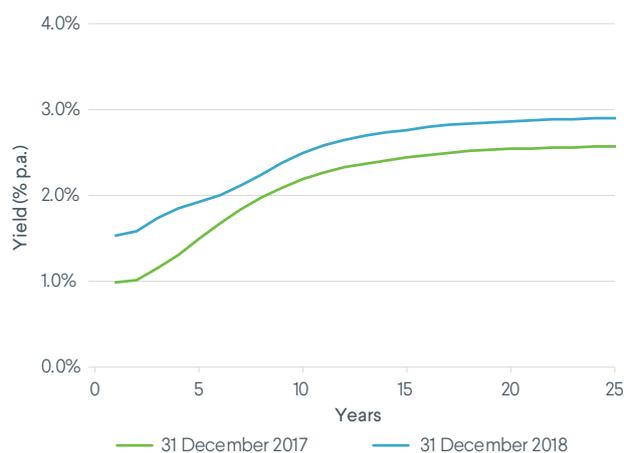
increase in FTSE 350
pension deficit

-8 bps

on discount rate

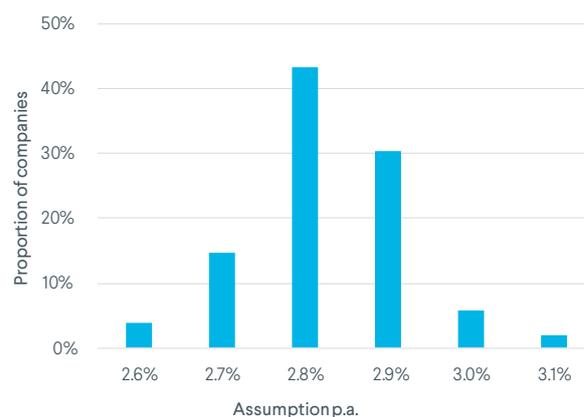
The discount rate is the most significant financial assumption for assessing pension obligations. A low discount rate leads to a high value being placed on the pension liabilities. The discount rate is set by reference to high quality corporate bonds of a suitable term. Long dated corporate bond yields rose by around 30 bps over the year.

The chart below shows the Hymans Robertson Corporate Bond curve derived from the AA iBoxx index at 31 December 2017 and 31 December 2018. The table shows the index yields on over 15 year iBoxx bonds.



Date	31 Dec 2018
15+ year iBoxx AA yield	2.8% p.a.
15+ year UK gilt yield	1.8% p.a.
Average AA credit spread	1.0% p.a.

The chart below shows the distribution of discount rates adopted by the FTSE 350 at 31 December 2018, and the table shows the average discount rate.



Date	31 Dec 2018
Average discount rate	2.8% p.a.

Observations:

- Discount rates continue to be bunched, and more so than last year (66% of companies were within +/-0.1% of the average last year compared to 88% this year).

| Our view

A higher concentration around the average assumption this year may reflect the toughening stance taken by auditors when reviewing pension disclosures, following increased scrutiny of the profession in response to high profile corporate failures like Carillion. Higher corporate bond yields in general this year may also have reduced demand for alternative approaches. We do still continue to see a range of discount rates though, which may be due to some companies taking alternative approaches to setting the discount rate (particularly at the long end of the curve) which can add 0.1-0.2% to discount rates.

Inflation

£10bn

increase in FTSE 350
pension deficit

+13 bps

on inflation

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

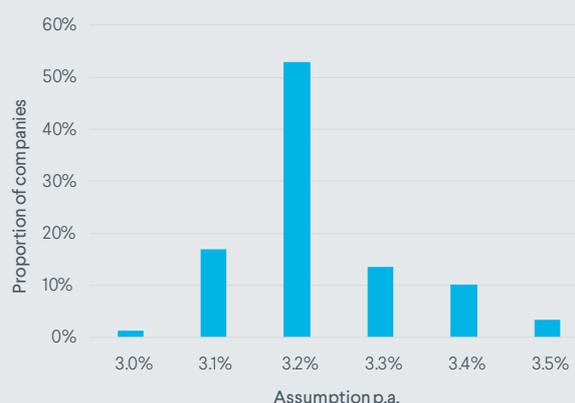
Over the year to 31 December 2018, long term RPI inflation expectations remained broadly unchanged, but with a marginal increase at the short end of the curve. Given most schemes have durations of 15-20 years, RPI assumptions have generally been consistent with those used last year-end. However, there 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 2018 and 31 December 2017, with the table showing RPI implied by over 15 year gilt yields at 31 December 2018.



Date	31 Dec 2018
15+ gilt implied RPI	3.4% p.a.

The chart below shows the distribution of RPI assumptions adopted by the FTSE 350 at 31 December 2018 and the table shows the average assumption.



Date	31 Dec 2018
Average RPI assumption	3.2% p.a.

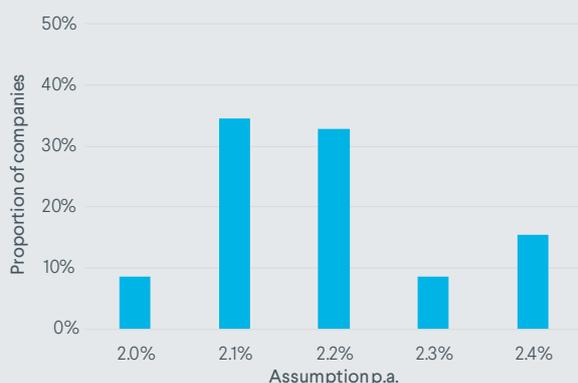
Observations:

- The average RPI assumption of 3.2% was used by 53% of companies, compared with 48% last year.
- Market implied RPI at a duration appropriate to most pension schemes is c3.4%. 87% 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%.
- Historically, we’ve tended to see a wider range of assumptions adopted for RPI than for the discount rate, a trend which has been repeated this year.

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 2018.



Date

31 Dec 2018

Average CPI assumption

2.2% p.a.

Observations:

- The CPI assumption is dispersed with companies adopting assumptions between 2.0% and 2.4%. This is a smaller range than last year, when companies adopted assumptions between 1.9% and 2.7%.
- 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.
- However, it is noticeable that 35% of companies used a wedge between RPI and CPI of 1.1% p.a. this year, indicated by the large proportion of companies using a 2.1% p.a. CPI assumption this year.

| Our view

A wide dispersion of CPI assumptions compared to RPI this year may suggest there continues to be limited consensus between companies on future expectations for the RPI-CPI differential. Whilst the median RPI-CPI wedge of 1.0% p.a. is unchanged from last year, it is interesting to see an increasing proportion of companies adopting a wedge of 1.1% p.a.

We expect the trend of using a higher RPI-CPI differential is unlikely to persist, particularly in light of a report issued by the House of Lords Economic Affairs Committee in January 2019. This highlighted a number of deficiencies with the RPI measure of inflation and set out a series of recommendations for consideration by the Government to address these deficiencies. Whilst there is uncertainty regarding which, if any, of these recommendations will be adopted, financial markets have already reacted to this report and are broadly pricing future RPI at c0.1% p.a. lower (which would correspond to a reduction in the RPI-CPI wedge of c0.1% p.a.).

Salary growth

£10bn

increase in FTSE 350
pension deficit

+90 bps

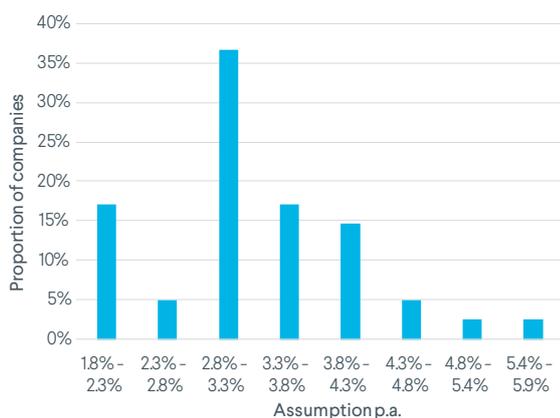
on salary growth

Salary growth is a less significant assumption than the discount rate or inflation assumption as it only impacts on the liability for active members. This 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 2018.

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.
- 37% 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.



Date	31 Dec 2018
Average salary growth	3.2% p.a.

Longevity

£10bn

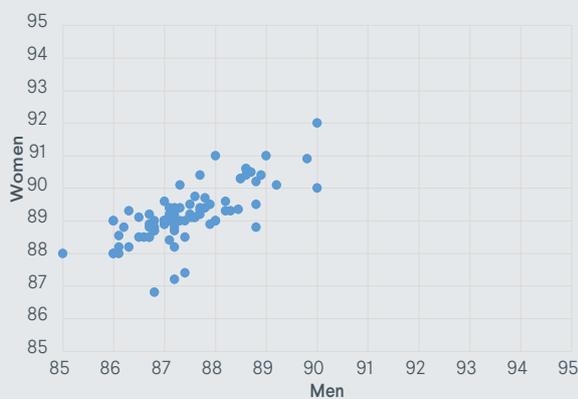
increase in FTSE 350
pension deficit

+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.

Life expectancy for pensioners



Life expectancy for non-pensioners



Average pensioner life expectancy

 **87.4**
years

 **89.2**
years

Average non-pensioner life expectancy

 **88.9**
years

 **90.8**
years

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 5 years for pensioners and 6 years for non-pensioners. These differences will reflect different views on the current longevity of scheme members (driven by industry, socio-demographics 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.

The average disclosed life expectancies have reduced by 0.2 years for pensioners and 0.2 years for non-pensioners over the last year.



| Our view

In general, the 2010s have seen much slower improvements in longevity compared to the 2+ years per decade experienced during the late 90s and 2000s. There is now a growing consensus that the slower mortality improvements observed in the general population since around 2011 may represent a new trend rather than a 'blip'. 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 CMI 2018 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. Indeed, the CMI themselves have issued a health warning that schemes should use a parameterisation of the CMI 2018 model which is appropriate for their specific populations.

The commonly used models for projecting longevity are supplied with England & Wales (E&W) population data. Analysis from our colleagues in Club Vita shows that, in contrast to the overall population, "Comfortable" pensioners (those with larger pensions and good lifestyles) have been more resilient to the slowdown in longevity improvements than the general E&W population. 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.

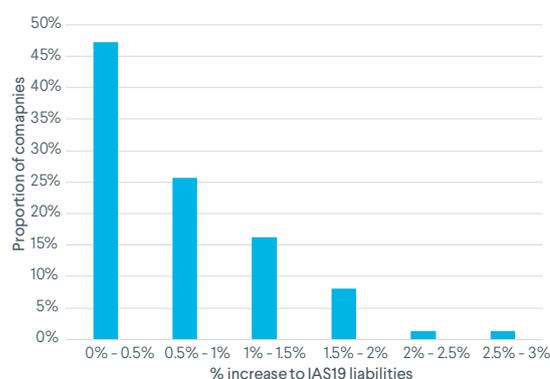
Our guidance would be to ensure that, as well as taking account of recent experience, the socio-demographic profile of scheme members is reflected in both the assumption for current longevity and the assumption for how longevity will change in the future.

GMP equalisation

On the 26th October 2018, a High Court judge ruled that the trustees of UK defined benefit pension schemes must compensate members for sex inequalities attributable to guaranteed minimum pensions (GMPs).

Following this judgement, normal industry practice is for companies to allow for this through a balance sheet adjustment at their year-end, estimating the additional GMP equalisation reserve required using equalisation method 'C2' (which was the only method from the Lloyd's judgment that did not require employer consent). This impact generally goes through P&L as an exceptional item.

The chart below shows the distribution of GMP equalisation reserves used by the FTSE 350 at 31 December 2018, as a percentage of IAS19 liabilities.



Observations:

- The average GMP equalisation reserve was 0.5% of IAS19 liabilities, with 73% of companies estimating a reserve of less than 1.0% of IAS19 liabilities.
- The largest GMP equalisation reserve estimate was 2.7% of IAS19 liabilities.

| Our view

Our analysis suggests the financial impact of GMP equalisation will generally be less than the 1-2% of liabilities initially assumed by the industry. Given the relatively small impact on the liabilities, the priority for corporates should be implementing the change as efficiently as possible. This may well mean using GMP conversion (method D2 in the Lloyds judgement) to make a one-off change to pension amounts and avoid the need for expensive dual administration systems.

CETVs and Pension Increase Exchange

The combination of pension freedoms and historically low gilt yields has resulted in continued high volumes of Cash Equivalent Transfer Values ('CETVs') being paid out 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 2018, one company (in the financial services sector) continued to disclose an explicit allowance for future transfers, although their assumed rate of future transfers was halved this year compared to last year in light of more recent experience.

Pension Increase Exchange ('PIE') options are available in a number of FTSE 350 schemes. However, our analysis shows that none of the companies surveyed explicitly disclosed 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. From our data, we can see that transfer value requests are continuing to fluctuate around what are historically high levels of engagement. It's incredibly hard to make an accurate prediction on whether high engagement rates will continue in the future as there are a range of factors which may impact members' decision making. These could include:

- Brexit uncertainty leading to members being more risk averse, or delaying a decision with their pension, similar to putting off selling or buying a house - for many individuals their pension will be one of their biggest assets.
- The GMP equalisation ruling resulting in schemes putting on hold transfer requests, or delaying the implementation of member options exercises, until additional guidance is available.
- Stricter advice standards imposed on IFAs and an increased FCA spotlight, in light of high profile scandals such as British Steel, leading to fewer recommendations to transfer out.

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 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 less justification for a future uptake assumption.

Recent changes to IAS19



For accounting year-ends from 1 January 2019, changes to IAS19 mean if there has been a special event such as a curtailment or settlement during the reporting period, companies may have to re-measure their pension cost for the remainder of the accounting year on market conditions at the event date. Depending on how they are structured, examples which could trigger this include a closure to accrual, benefit change, risk transfer, or member option exercises.

| Our view

Whilst the impact these new rules have on profit may be positive or negative depending on how markets have moved over the period, corporates will need to be mindful when planning certain initiatives to manage their pension obligations. The changes introduce significant uncertainty around the aggregate profit and loss impact of these exercises and, given the materiality of many company's DB obligations, an exercise could result in a significant change to profits.

This change is unlikely to be of significance for companies undertaking standard buy-ins or buy-outs (buy-ins are not treated as a settlement or curtailment, and buy-outs settle all liabilities, meaning the pension cost for the remainder of the year would be zero). However, this is likely to be an important consideration for companies undertaking a partial buy-out, such as the record breaking £4.6bn transaction completed between L&G and Rolls Royce earlier this year, due to the pension cost attributed to the residual pension liabilities being remeasured on new market conditions.

