

# IAS19 Assumptions Report

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June 2017



# Welcome

FTSE350 companies support £900bn of defined benefit pension liabilities. These same companies have a combined market capitalisation of £2,500bn, 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 FTSE350 for their defined benefit pensions disclosures as at 31 December 2016. We consider the key financial assumptions (primarily the discount rate and inflation) and life expectancy.

Our analysis of the financial assumptions is based on 31 December 2016 disclosures to ensure all assumptions relate to the same market conditions. Our analysis of life expectancy covers all companies in the FTSE350 with defined benefit pension obligations (we have referenced the most recent company accounts).

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 2.9%, with an average assumption of 2.7%. 74% of companies used a discount rate within 10bps of the 2.7% average.

## RPI inflation

RPI assumptions varied from 3.0% to 3.7%, with an average assumption of 3.3%. 81% 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.

## CPI inflation

CPI assumptions varied from 2.0% to 2.8%, with an average assumption of 2.3%. This implies the average “wedge” assumed between RPI and CPI was 1.0%, consistent with the 1.0% average in 2015.

## Salary growth

Salary growth assumptions varied from 1.8% to 5.6%, with an average assumption of 3.6% (0.3% higher than the average RPI assumption).

## Longevity

The average pensioner life expectancy was 87.7 years for a male and 89.6 years for a female. The average non-pensioner life expectancy was 89.5 years for a male and 91.6 years for a female. These averages are broadly similar to last year. A number of companies reported falls in disclosed life expectancy, similar to last year. This reflects adoption of more recent projections which show a lower rate of improvement in life expectancies than had been previously estimated.

There is around a 7 year spread in life expectancy assumptions across the FTSE350.

## Additional disclosures

IAS19 requires additional disclosure items now, including detail on asset-liability matching strategies. This provides some additional insights into the de-risking of DB schemes, including:

- Administration expenses ranging from £100k to £6m reflecting the wide range of scheme sizes;
- 19% of companies have disclosed a historical annuity purchase, primarily covering pensions in payment, to help de-risk schemes; and
- 16% of companies have disclosed holding LDI assets to enable capital efficient hedging of interest rates and inflation. This is a large increase from the previous year, though we expect this is due in part to schemes beginning to disclose holdings (rather than schemes investing in LDI). We expect that the actual proportion of companies investing in LDI is even higher than disclosed this year, and therefore this proportion should increase rapidly as disclosures improve.



# Discount rate

£10bn

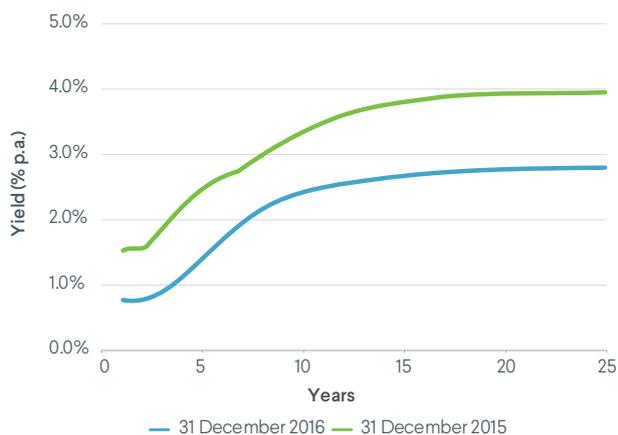
increase in FTSE350  
pension liabilities

-7 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 fell by over 1% over the year.

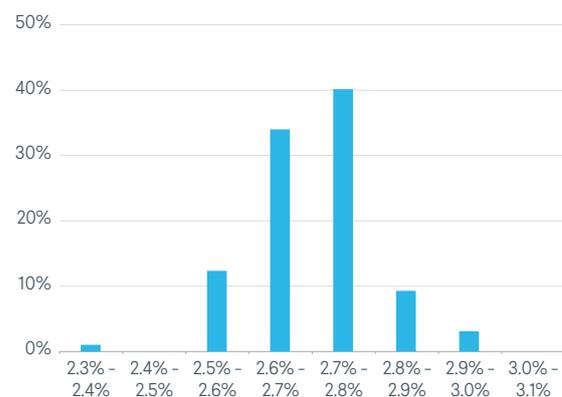
The chart below shows the Hymans Robertson Corporate Bond curve derived from the AA iBoxx index at 31 December 2015 and 31 December 2016. The table shows the index yields on over 15 year iBoxx bonds.



Date	31 Dec 2016
15+ year iBoxx AA yield	2.6% pa
15+ year UK gilt yield	1.8% pa
Average AA credit spread	0.8% pa

The chart below shows the distribution of discount rates adopted by the FTSE350 at 31 December 2016, and the table shows the average discount rate.

## Discount rate



Date	31 Dec 2016
Average discount rate	2.7% pa

## Observations:

- Discount rates continue to be bunched, though less so than last year (86% of companies were within +/-0.1% of the average last year compared to 74% this year).

## | Our view

The larger spread this year potentially reflects companies feeling the need to consider alternative methods, given the markedly lower yields this year. The corporate bond curve has flattened out this year at the long end, never getting above 3.0% which is likely to be why the top end of the range is constrained.

# Inflation

£10bn

increase in FTSE350  
pension liabilities

+9 bps

on inflation

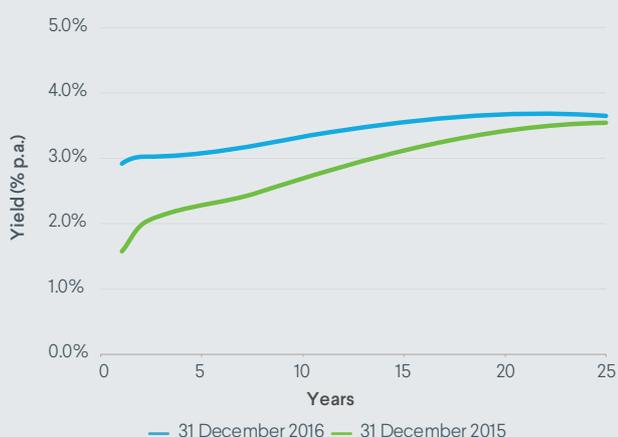
The inflation assumption is the second most significant financial assumption for assessing pension obligations, and typically drives the assumption for salary growth, deferred revaluation and pension increases (to the extent they are inflation linked). A high inflation assumption leads to a high value 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 2016, RPI inflation expectations increased at shorter durations and remained relatively stable at longer durations. Given most schemes have durations of 15–20 years, RPI assumptions are generally higher 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.

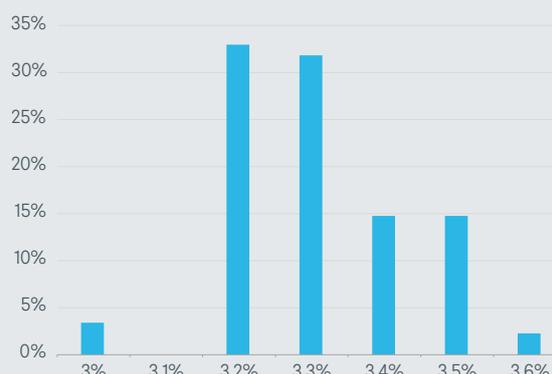
The chart below shows the government bond implied RPI curve at 31 December 2016 and 31 December 2015, with the table showing RPI implied by over 15 year gilt yields at 31 December 2016.



Date	31 Dec 2016
15+ year gilt implied RPI	3.4% pa

The chart below shows the distribution of RPI assumptions adopted by the FTSE350 at 31 December 2016 and the table shows the average assumption.

## RPI inflation



Date	31 Dec 2016
Average RPI assumption	3.3% pa

## Observations:

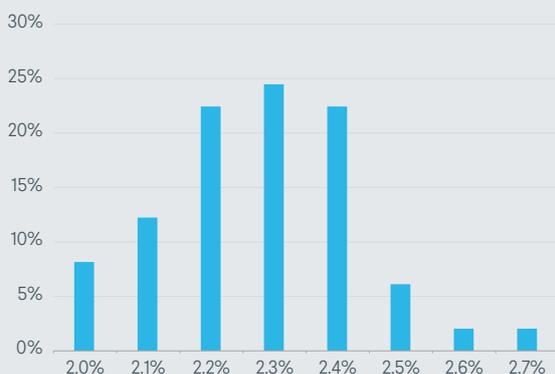
- The average RPI assumption of 3.3% was used by 32% of companies.
- Market implied RPI at a duration appropriate to most pension schemes is c3.5%. 81% of companies used a lower assumption than this, implying that most companies are deducting an “inflation risk premium” from market implied RPI.
- The RPI assumption was again more spread out than the discount rate assumption this year, with a range of 0.7% between the highest and lowest assumptions used.

## 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 FTSE350 at 31 December 2016.

### CPI inflation



Date

31 Dec 2016

Average CPI assumption

2.3% pa

## Observations:

- The CPI assumption is very dispersed with companies adopting assumptions between 2.0% and 2.8%. This is similar to the range last year, when companies adopted assumptions between 1.7% and 2.5%.
- The average CPI assumption of 2.3% 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.

## | Our view

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

# Salary growth

£10bn

increase in FTSE350  
pension liabilities

+75 bps

on salary growth

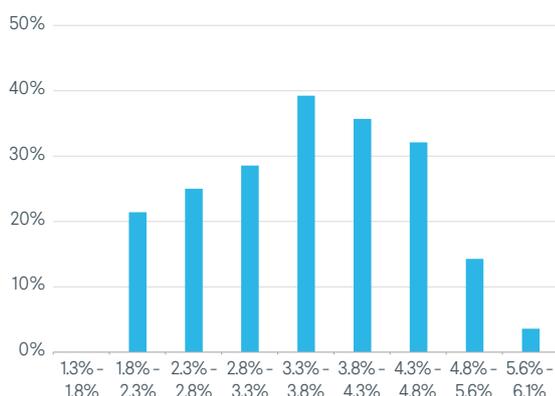
Salary growth is a less significant assumption than the discount rate or inflation assumption as it only impacts on the liability for active members, which is becoming a smaller proportion of total liabilities as schemes close to new entrants and to future accrual. However, it does still have a significant 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 FTSE350 at 31 December 2016.

## Observations:

- Unsurprisingly there is a wide range of salary growth assumptions reflecting differences in pay growth expectations.
- The average salary growth assumption of 3.6% is 0.3% higher than the average RPI inflation assumption.
- 38% of companies use an assumption of less than 3.3% pa (the average RPI inflation assumption adopted), which we expect in part reflects the increased use of pensionable salary caps.

## Salary growth



Date

31 Dec 2016

Average salary growth

3.6% pa

# Longevity

£10bn

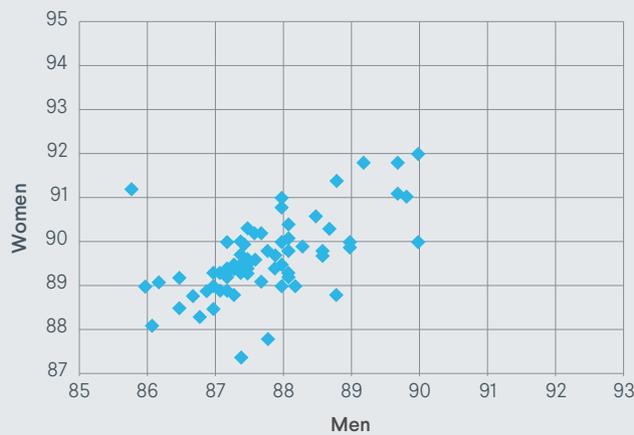
increase in FTSE350  
pension liabilities

+3 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 FTSE350 at their most recent reporting date.

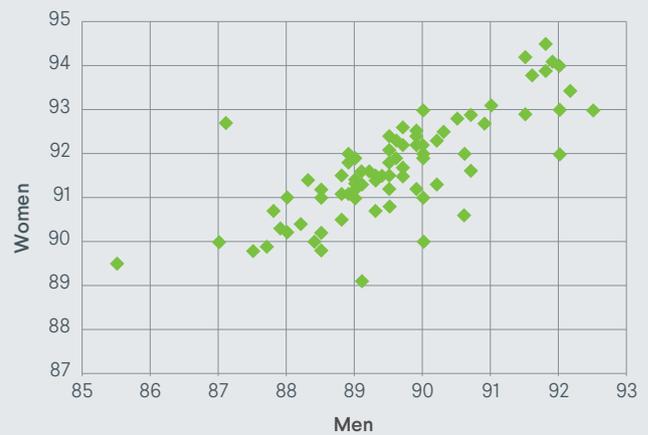
## Pensioners



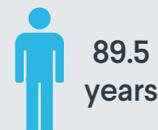
Average pensioner life expectancy



## Non-pensioners



Average non-pensioner life expectancy



There continues to be a large range of life expectancy assumptions for both men and women across the FTSE350, with a spread of around 8 years. With each additional year of life expectancy adding up to 4% to pension scheme liabilities, 8 years equates to a liability difference of around 30%.

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

During 2016 average life expectancies reduced marginally for pensioners and remained broadly unchanged for non-pensioners.

## | Our view

The start of the 2010s have seen much slower improvements at a population level compared to the 2 years per decade experienced during the late 90s and 2000s. This heavier than expected mortality continues to flow through to accounting assumptions where we're seeing further modest decreases in disclosed life expectancy. We expect that companies will continue to disclose lower life expectancies next year as they adopt more recent mortality tables and in particular the updated CMI 2016 projections model.

Our view is that whilst it is reasonable to make some allowance for the recent population based trends, fully adopting the most recent projection models in their core form could risk underestimating future improvements. The CMI model is built using England & Wales population data. Our Club Vita analysis shows that, in contrast to the overall population, longevity improvements have remained stable over the 2010s amongst "comfortable" pensioners (those with larger pensioners and who live in less deprived areas). These comfortable pensioners tend to represent the majority of liabilities for a typical DB pension scheme.

# Additional disclosures

Companies are also required to disclose the following:

- Administration expenses;
- A detailed asset breakdown;
- A description of any asset-liability matching strategies used by the scheme such as annuities, longevity swaps, and LDI;

Administration expenses varied between £100k and £6m indicating the range of scheme sizes supported by FTSE350 companies. There may also be differences in the approach to separating expenses relating to the management of scheme assets from those that do not.

The table below shows the proportion of companies reporting at 31 December 2016 that have disclosed asset-liability matching strategies:

Asset-liability matching strategy:	Buy-in	LDI
Disclosed by the following proportion of companies:	19%	16%

## | Our view

Companies are generally disclosing the bare minimum and not providing enough information on LDI or the subsequent impact of this on their interest rate and inflation protection. This makes it more difficult for investors and other stakeholders to assess the amount of asset-liability risk exposure in these defined benefit schemes.



This communication has been compiled by Hymans Robertson LLP, and is based upon their understanding of legislation and events at the time of publication. It is designed to be a general summary of DB pensions issues and is not specific to the circumstances of any particular employer or pension scheme. The information contained is not intended to constitute advice, and should not be considered a substitute for specific advice in relation to individual circumstances.

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