



FTSE100: banking sector leads the way in diminishing DB deficits

Accounting for pension costs by FTSE100 companies

As FTSE100 companies report an overall pensions deficit decrease of £22bn, we delve deeper to understand what this means for the FTSE100.

In 2017, the four major high street banks reported no pension deficit for the first time since our report was launched in 2001 - with an average funding level of 111% and an aggregate surplus of almost £15bn.

Our research shows this is due to good investment returns over the year, supplemented by further contributions made by the banks to reduce deficits. Overall, the FTSE100 deficit stands at £5bn, a decrease of £22bn from the previous year. In contrast to the banking sector, the largest deficits came from Oil and Gas sector.

The average IAS19 funding level for FTSE100 companies in 2017 rose by 5% from the previous year to 96%. The range of funding levels remains broad with some companies still showing a funding level of below 70% and one in nine schemes below 80%. Interestingly, the impact of the 'Pensions Freedom' reforms are starting to show on pension balance sheets.

Overall, liability values have remained relatively stable over the year.

Other highlights of our research include a slight reduction in the assumptions made for future life expectancy, for the second year in a row, reversing a previous trend of increases dating back to the previous decade.

We expect this to continue next year, with the latest version of the mortality projections model showing that mortality rates are not improving quite fast as previously projected.

If all companies move to the updated version of the model this could potentially reduce the value placed on liabilities by around £4 billion for the companies in our report.

The research also shows a trend of changing asset allocations since 2009, with a gradual trend away from equity investment into bonds and alternative asset classes.

Finally, there was a 40% increase in the total benefits paid out of schemes sponsored by FTSE100 companies, as members take transfer values from schemes to access the flexibilities.



We hope that this analysis will be helpful to companies in formulating and benchmarking their own assumptions under IAS19 and FRS102.

Martin

MARTIN HOOPER
Associate and Actuary

Discount rate

At 31 December 2017, the average discount rate used by FTSE100 companies fell by 0.2% pa compared with the previous year.

The discount rates used by the companies in our survey are set out in figure 1.

At 31 December 2017, the yield on the iBoxx over 15 year AA-rated corporate bond index was 2.4% pa and on the Merrill Lynch over 15 year AA-rated corporate bond index was 2.3% pa (2016: 2.6% pa and 2.6% pa, respectively).

After the volatility in market conditions seen in 2016 following the EU Referendum, corporate bond yields remained relatively stable over 2017, with only a slight decrease in yields compared to the previous year.

As a result of relatively stable market conditions over the year, liability values generally remained flat over 2017, while positive investment performance led to funding levels generally increasing over the year.

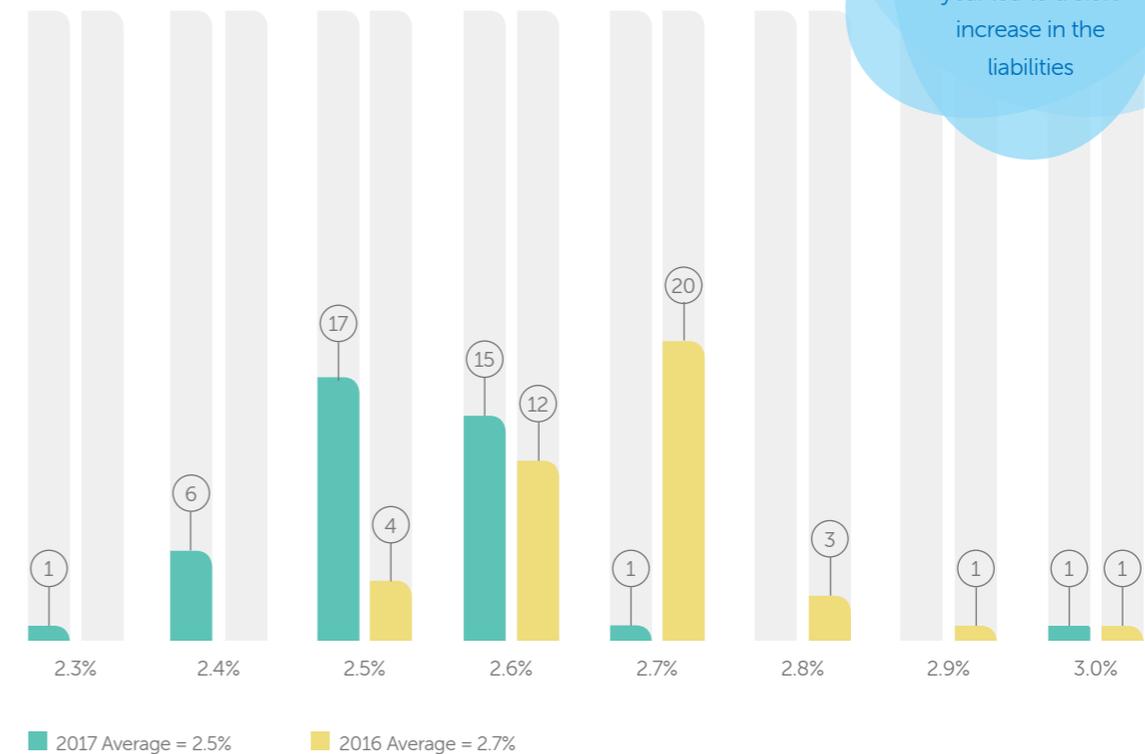


Out of 47 companies surveyed with December 2017 year-ends, 41 disclosed a discount rate assumption between 2.3% pa and 3.0% pa in their pension liability calculations.

This compares to a range between 2.5% and 3.0% seen for the equivalent companies in 2016.

For a scheme with a duration of around 20 years, the year-on-year decrease in the discount rate assumption of 0.2% pa would see liabilities increase in value by around 4%. Across the companies in our survey (which have a slightly shorter duration than this), the corresponding increase in the value of liabilities was approximately £16 billion.

1. DISCOUNT RATES USED BY COMPANIES (% PA)



Year ending	iBoxx over 15 year AA-rated corporate bond index % pa	Merrill Lynch over 15 year AA-rated corporate bond index % pa	Average discount rate % pa
31 December 2017	2.4	2.3	2.5
31 December 2016	2.6	2.6	2.7

As in previous years, the average discount rate exceeded market yields on the iBoxx and Merrill Lynch corporate bond indices by a small margin. This reflects the longer duration of cashflows for the pension schemes in our survey compared with the bonds that make up these particular indices.

As yields on corporate bonds continue to generally increase by term, companies are reflecting this in their choice of discount rate, normally by selecting a rate which is equivalent to a full corporate bond yield curve given the shape of the scheme's cashflows.

Sponsoring companies should carefully review their approach in setting the discount rate. This could mean adjustments to correctly allow for the duration of the scheme or reviewing the constituents and method used to construct the corporate bond yield curve e.g. to remove any bonds which are "non-corporates" such as those issued by universities which may skew the yield curve downwards, particularly at longer durations.



For a typical scheme, an increase in the discount rate of just 0.1% would reduce the overall pension liabilities by around 2%.

In contrast to the volatility seen in 2016 following the EU Referendum, corporate bond yields have remained relatively stable over 2017, with only a slight decrease in yields compared to the previous year.



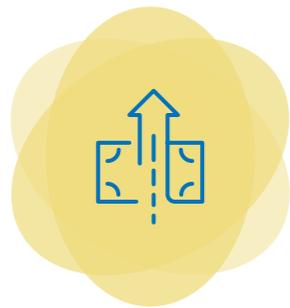
Inflation rate

The average RPI inflation assumption adopted by the companies in our survey decreased by 0.1% pa over the year to 31 December 2017.

RPI inflation

The Bank of England implied Retail Price Index (RPI) inflation spot rate at 20 years (based on the difference between the yields on fixed interest gilts and index linked gilts) was 3.6% pa as at 31 December 2017 (2016: 3.7% pa). At 15 years, the spot rate was 3.5% pa (2016: 3.5% pa).

Similar to corporate bond yields, inflation expectations remained relatively stable over 2017, with only a slight decrease in inflation expectations compared to the previous year. This slight decrease served to partially offset the increase in the value of the liabilities due to the decrease in discount rates over the year.



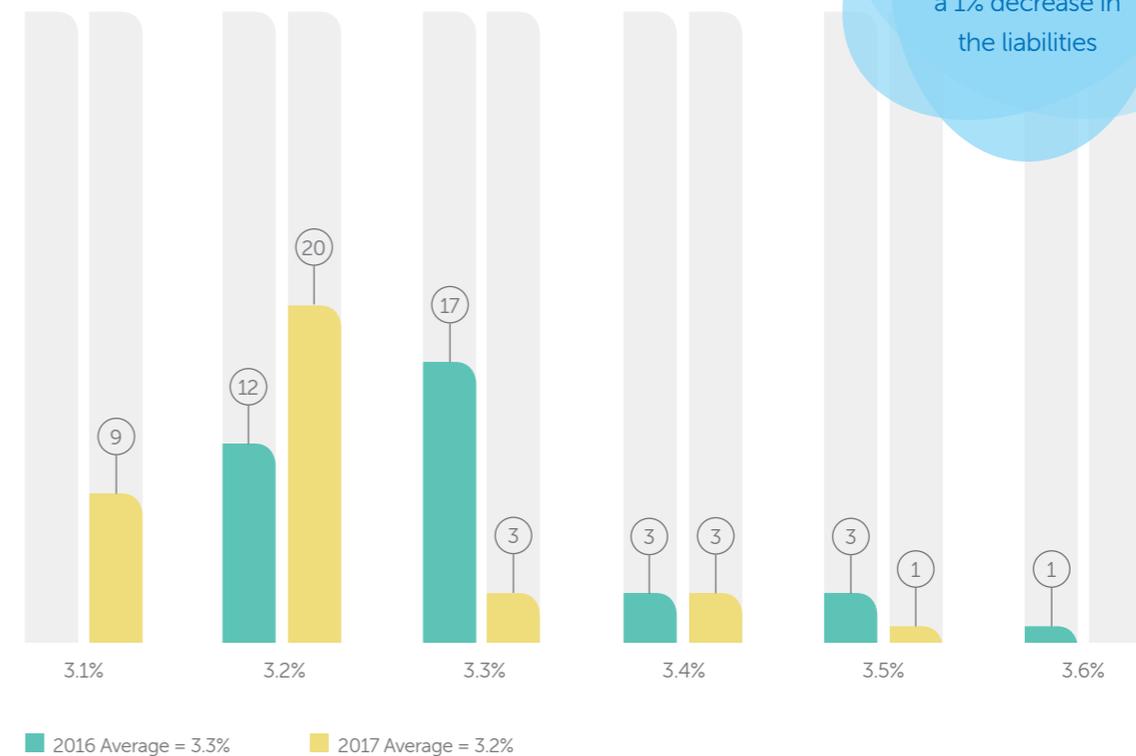
The difference between the market spot rate and disclosed assumptions reflects at least some allowance for an 'inflation risk premium'.

The argument for including an "inflation risk premium" is based on a view that investors are willing to pay more for index linked gilts because of the inflation protection they receive and the lack of supply relative to fixed-interest gilts. The difference also reflects the shape of the inflation curve (which is lower than the 20 year spot rate at both short and long terms).

Our survey indicates a similar allowance as with our 2016 survey, with companies often allowing for adjustments of up to 0.4% pa reflecting their best-estimate assumption for long-term RPI inflation.

On average the companies in the survey assumed that RPI inflation would be lower than the market-implied rate, with the average disclosed at 3.2% pa.

2. RPI INFLATION RATE (% PA)



The decrease on average of 0.1% in the year led to a 1% decrease in the liabilities

Year ending	RPI Inflation spot rate % pa (15 years)	RPI Inflation spot rate % pa (20 years)	Average RPI inflation assumption % pa
31 December 2017	3.5	3.6	3.2
31 December 2016	3.5	3.7	3.3

CPI inflation

There is no conventional market for CPI-linked instruments to assist with setting assumptions for statutory CPI increases on pensions in deferment and in payment. The lack of such instruments means that assumptions for CPI will be set relative to the assumption for RPI.

In 2015, the Office for Budget Responsibility (OBR) estimated the gap between RPI and CPI to be around 1.0% pa over the long term, lower than a previous estimate of 1.3% to 1.5% pa in 2011.

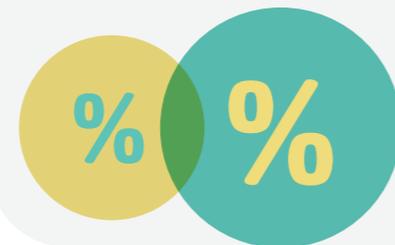
Only a small number of companies in our survey disclosed both an RPI and CPI assumption. The average CPI assumption adopted as at 31 December 2017 was 2.1% pa (2016: 2.3% pa), 1.1% pa lower than RPI. This is a slight increase from the 1.0% p.a. gap that was observed over the period 2014 to 2016.

Salary increases

At 31 December 2017, the average increase in pensionable salaries assumed by firms in our survey was 0.1% pa below RPI inflation i.e. a real increase of -0.1% p.a.

The average assumption of -0.1% pa represents a small decrease in real salary growth (from 0.0% pa in 2016) for the companies in our survey.

Many of the companies surveyed have pensionable salary growth assumptions at or below inflation, reflecting decisions to cap increases in pensionable salary or where pensionable pay has been frozen altogether.



The RPI-CPI gap disclosed by companies at 31 December 2017 ranged from 1.0% to 1.3%, with most companies disclosing a similar RPI-CPI gap to the previous year.

Surplus / deficit

The average IAS19 funding level for the companies in our survey was 96% in 2017, a rise from 91% in 2016.

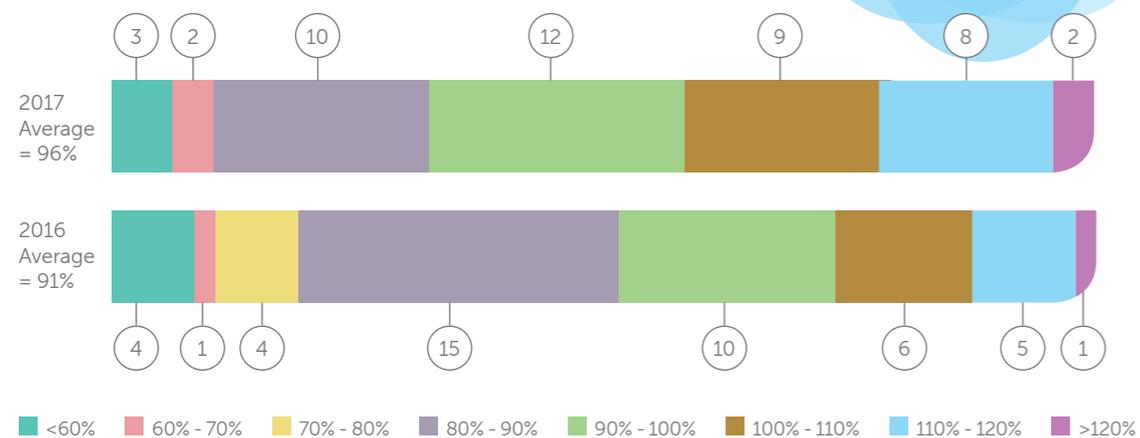
The aggregate funding level stood at 99% at the end of 2017 and the proportion of schemes that were less than 80% funded fell to around one in nine.

Most of the schemes in our survey saw an improvement in their funding level compared to the previous year.

Those companies reporting in US dollars and euros will continue to benefit from the weakness in sterling since the EU Referendum. In effect, any deficit associated with a UK scheme will have fallen in value relative to the reporting currency with all other things being equal.

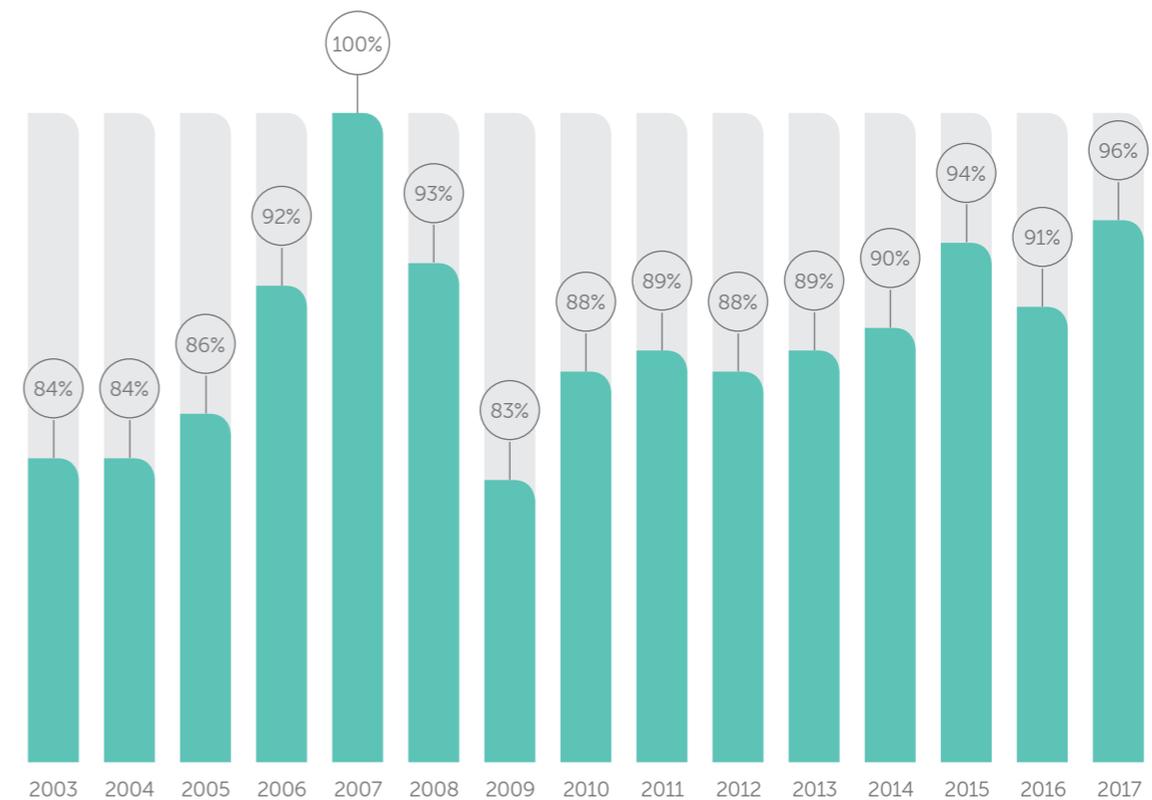
Relatively stable market conditions over the year resulted in similar liability values at the year-end, while positive investment performance over the year led to higher asset values at the year-end, giving an increase in funding level overall.

3. IAS19 FUNDING LEVEL AS AT 31 DECEMBER 2017



The currency movements may mean there is an opportunity for overseas sponsors of UK schemes to settle liabilities at a lower cost. Of course, the ability to take advantage of this and deal with any shortfall will depend on the ability to commit cash and/or other resources from overseas operations to tackle UK obligations.

4. AVERAGE IAS19 FUNDING LEVELS



Life expectancy

In 2017, the average life expectancy assumption from age 65 was 22.7 years, compared with 23 years in 2016.

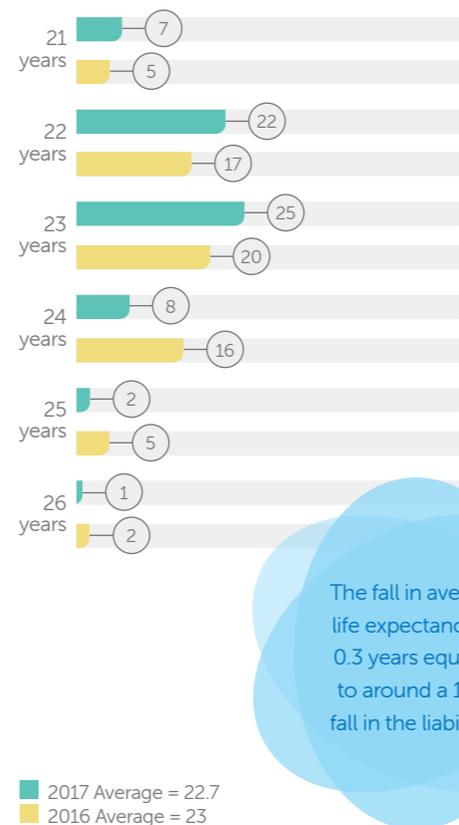
The majority of companies in this year's survey disclosed information on their life expectancy assumption, either by stating the assumed life expectancy or by referring to the mortality tables used for both this year and the previous year, allowing comparisons to be drawn.

The chart in figure 5 shows the life expectancy assumptions for a male aged 65. This covers FTSE100 firms reporting throughout the calendar year of 2017.

The chart in figure 6 shows the changes to life expectancy assumptions from 2016 to 2017 for the 65 companies that stated a life expectancy assumption in their 2017 accounts (presented as the effect on the life expectancy for a male aged 65 at the year end).

For the second year in a row, assumed life expectancies have decreased from those disclosed in the previous year – on average, life expectancy assumptions decreased by 0.3 years at age 65 between 2016 and 2017.

5. LIFE EXPECTANCY – MALE AGED 65



The fall in average life expectancy of 0.3 years equates to around a 1.2% fall in the liabilities

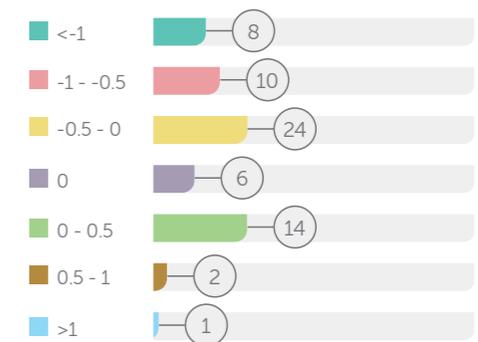
This is likely to reflect the introduction of the CMI ("Continuous Mortality Investigation") 2016 model for UK-based longevity assumptions. Prior to 2016, the average life expectancy disclosed in our surveys had increased from year to year since the widespread adoption of the CMI model for longevity improvements was published. 2016 was the first year that the life expectancy disclosed in our survey fell from year to year, and this trend has continued in 2017.

The subsequent release of the CMI's 2017 projections suggests that further 'gains' may be in store, reflecting the latest information on the expected pace of longevity improvements.

For upcoming accounting valuations, the positive impact could be material. For FTSE100 firms, we estimate that the move to CMI 2017 (from the 2016 model) could reduce defined benefit obligations by around £4bn based on the corresponding fall in life expectancies. On the other hand, the new S3 series of mortality tables published recently indicates that mortality improvements have been greater among members of occupational pensions schemes compared to the population as whole. If these tables are adopted at future valuation then effect may limit (or even reverse) some of the recent reductions in liabilities from updates to the CMI mortality projection model.

The reduction in life expectancy implied by the 2017 CMI model (relative to previous versions) also raises opportunities to consider whether there is any impact on the affordability of actions that can be taken to manage risk in the scheme – for example, pricing of longevity swaps and bulk annuities as well as the feasibility of liability management projects such as enhanced transfer value exercises.

6. CHANGE IN LIFE EXPECTANCY SINCE 2016



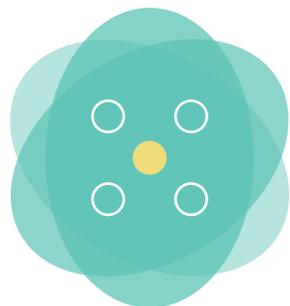
Asset allocation

At 31 December 2017, schemes had around 24% of their assets allocated to growth assets (2016: 28%).

Figure 7 shows the progression in asset allocations over time for the firms in our survey with December year ends.

The trend for schemes to move away from investing in equities continues with the amount allocated reduced by almost 50% since 2009.

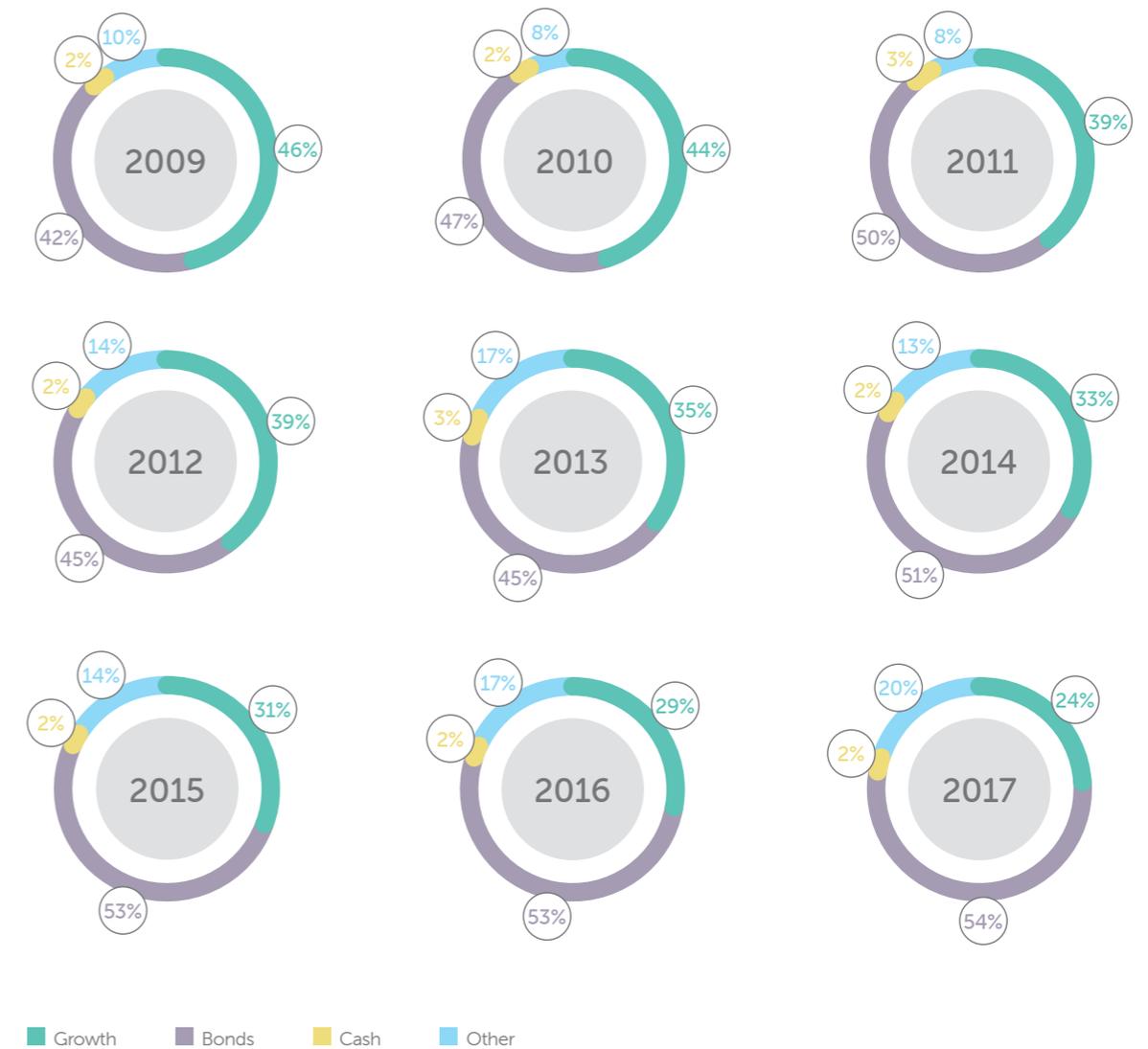
The average allocation to growth assets (equities and property) has steadily decreased from 46% in 2009, to 24% in 2017. Bonds and fixed income assets have increased from 42% in 2009 to around 54% in 2017.



Only around one fifth of firms at the December year end have a greater proportion of assets invested in growth assets compared with bonds.

The average proportion in 'other' asset types has also increased over the past eight years; in 2017, this was around 20% of the total assets invested. This reflects a growing use of instruments such as Diversified Growth Funds and Liability Driven Investments.

7. ASSET ALLOCATION TREND



Benefit payments

On average, benefit payments increased by 40% from 2016 to 2017.

Most schemes experienced an increase in benefit payments over the period 2016 to 2017. The increase was typically in the range 0%-50%, although a few schemes saw much larger increases.

We would generally expect to see an increase in benefit payments from year to year, as members retire and draw their pension, and existing pensions in payment receive annual pension increases. In addition, the 'Freedom and choice' pension flexibilities which came into effect from April 2015 may have given rise to an increase in transfer activity from DB schemes to DC schemes, which could lead to large one-off increases in benefit payments for an individual year.

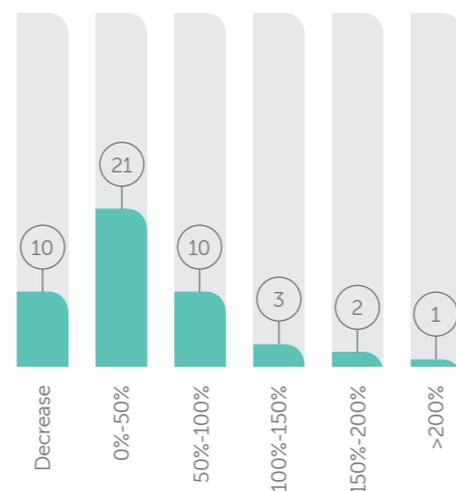
In view of this, companies may wish to consider making an allowance for members taking transfer values in their accounting assumptions.

The effect of such an allowance on the value of the liabilities will depend on the strength of the transfer value basis relative to the strength of the accounting basis, as well as the liability profile of the membership.

In general though, younger members taking a transfer value would be expected to improve the accounting funding level, whereas for older members it could worsen the funding level.

Alternatively, it could be seen as too early to draw any definitive conclusions about long-term transfer value activity, and companies may instead wish to wait and see whether the trend of increasing benefit payments continues in future years.

8. CHANGE IN BENEFIT PAYMENTS 2016-2017



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How we can help

Barnett Waddingham is proud to be a leading independent UK consultancy at the forefront of risk, pensions, investment and insurance.

We provide a full range of services for corporate sponsors in relation to DB and DC pension schemes and other benefits, we advise over 15% of the FTSE350 companies with a DB scheme.

We are ideally placed to fully consolidate your company's global pension arrangements for year-end reporting. We use our proprietary web-based software and a UK based team of experts to ensure work is carried out efficiently.

Our consultants' extensive knowledge is backed by a commitment to research and a suite of proprietary online tools and software that enable us to offer unique insights and a personalised, flexible service for our clients.

⋮ Everything we stand for at Barnett Waddingham is embedded in our
⋮ promise – to do the right thing.



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