

## Impact of pension schemes on UK business





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UK's largest public companies to pay out  
around £20bn in pensions over the next year





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## Introduction

*“This [£20bn] compares to around £90bn spent by the government on state pensions”*

Our 6th annual report on the FTSE350 shows that the defined benefit (DB) pension schemes of the UK’s largest public companies are expected to pay out around £20bn in pensions over the next year. This compares to around £90bn spent by the government on state pensions and shows the massive contribution made by these large companies in supporting their former employees in retirement.

Over the next 60 years or so the total paid is expected to exceed £1.4 trillion. These companies currently only hold assets of £630bn to meet these payments. Much of the gap is expected to be closed by investment returns on the pension scheme assets. However, these are not expected to fully bridge this gap and around £8bn per annum is being paid in by FTSE350 employers. These are all massive numbers and illustrate the considerable future reliance on UK plc, particularly if these pension payments are higher than currently expected, for example due to larger improvements in life expectancy or investment returns not materialising.

Our report summarises the data collected from over 200 companies within the FTSE350 that sponsor DB pension arrangements. Separate analyses have been carried out for FTSE250 companies as well as businesses within different industry sectors. Some of the highlights in our report are:

### **Affordability of deficit contributions**

The amount of cash that sponsors are committing to pay down deficits remained at around £8bn in 2015. Our analysis has taken a closer look at the affordability of deficit contributions in light of research published by The Pensions Regulator (TPR) in its 2016 Annual Funding Statement and highlights the range of contributions that companies have been able to negotiate. TPR’s message focuses on measures of affordability by looking at profitability and dividends payouts – indeed, they say that they expect trustees to challenge dividend policies where deficit contributions are constrained.

We have analysed shareholder returns (via dividend payments and share buybacks) which shows the wide variation within the

*“Following the EU referendum, many firms will be consumed by the outcome and the manifold effects of this on pension provision is far from clear at this stage.”*

universe of DB sponsors in the FTSE350. In addition, our research examines another measure of affordability (free cashflow) which suggests volatility of cashflows paints a more complicated picture than the one presented by TPR.

With even greater business uncertainty following the vote to leave the EU this will only add to the desire of corporates to restrict the contributions they commit to paying into the DB scheme.

### Distribution of pensions spend

Mainly owing to companies reporting at the December year-end, the aggregate deficit for FTSE350 schemes fell from £64bn to £50bn in 2015. However, market conditions thus far in 2016 and the continued volatility of deficits ensures that contributions remain considerable.

On an aggregate level, deficit contributions equate to around 34 pence for every £1 spent on pension provision by companies in our survey. This again illustrates the pensions divide that persists between those with DB benefits and those without.

### Other highlights

- Our analysis shows that many FTSE350 companies remain exposed to considerable risk via their DB obligations as the schemes have high equity holdings and/or little interest rate hedging. For some metrics, these risks have increased in 2015.
- This year we have compared companies' exposure to longevity and equity market risk via their DB pension.

We have also examined defined contribution (DC) arrangements for the companies in our survey – the median amount paid into DC schemes increased by 5% in 2015. The FTSE350 still had over 160 companies offering current employees the benefits of a DB pension somewhere within their



global operations at the time of reporting their 2015 financials. Following the EU referendum, many firms will be consumed by the outcome and the manifold effects of this on pension provision is far from clear at this stage. However, the long-term nature of DB arrangements ensures that they will present challenges for many years to come even where no further benefits are being accrued.

I would like to thank Michal Bobula and John O'Malley from Barnett Waddingham for their work in helping prepare this report.

Please contact me for further information on the results of this research or we would be very pleased to provide those covered by this analysis with a free bespoke report that will show how your company compares with your peers in the FTSE350.

A handwritten signature in black ink, appearing to read 'Nick Griggs'.

**Nick Griggs**

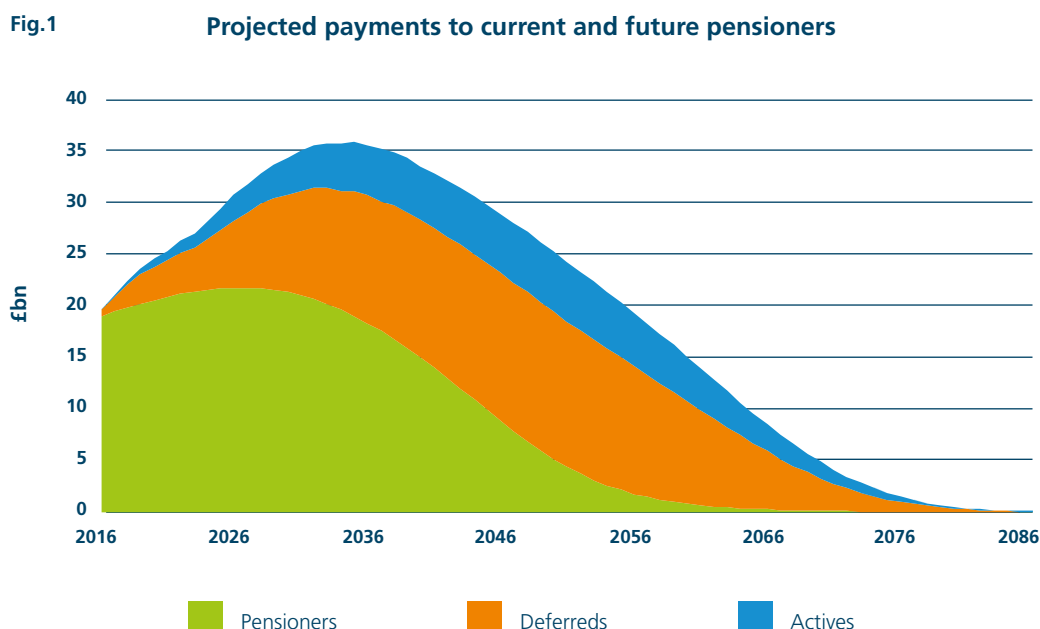
Head of Corporate Consulting

# Background

*“DB pension schemes provided by FTSE350 companies are projected to make payments of approximately £1.4tn over the next 60+ years to meet their obligations, of which £250bn is due in the next 10 years alone.”*

## Future DB cashflows are substantial (and uncertain)

DB pension schemes provided by FTSE350 companies are projected to make payments of approximately £1.4tn over the next 60+ years to meet their obligations, of which £250bn is due in the next 10 years alone. The main factors influencing the amount expected to be paid are future levels of inflation and life expectancies. These factors have remained comparatively stable over the last few years.



FTSE350-sponsored DB schemes currently hold £630bn of assets and so must rely on investment performance and further pension contributions from employers to be able to meet the £1.4tn required if DB obligations are to be provided in full.

During a period when assets have performed well and significant contributions have already been paid, the expectations for future company contributions have not reduced. This is because the assumed level of future investment returns (represented by the discount rate) has fallen. This means that the existing pension scheme assets held are expected to meet a lower proportion of the future payments and therefore schemes remain dependent on companies to cover the remainder of their pension promise.



*“In 2015, the aggregate IAS19 deficit for companies in the FTSE350 decreased from £64bn to £50bn.”*

### DB scheme deficits improve in 2015

The aggregate IAS19 deficit<sup>1</sup> for companies in the FTSE350 decreased from £64bn to £50bn in 2015.

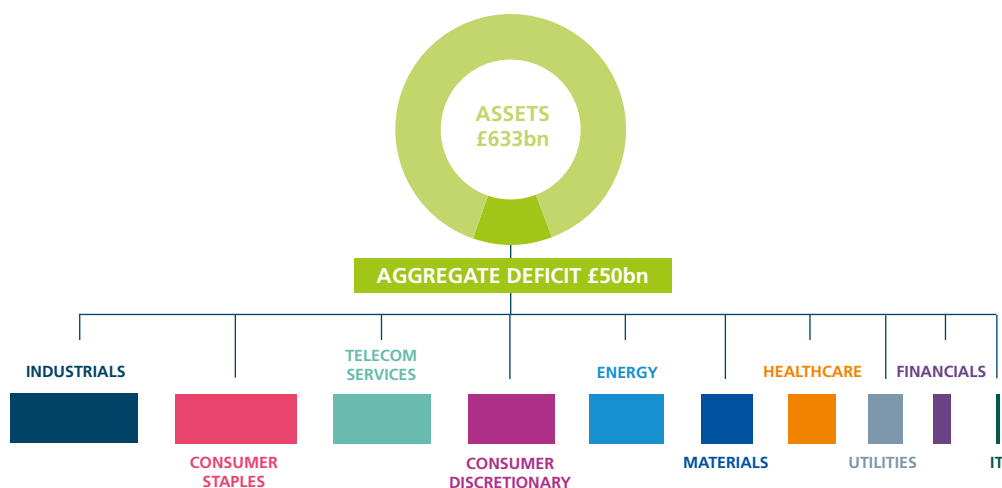
The fall in the reported shortfall can mainly be attributed to the significant reduction in accounting deficits for companies reporting towards the end of the calendar year.

Pension deficits remain extremely volatile and changes in market conditions over the year saw FTSE350 funded DB obligations reduce by over £20bn for companies reporting at the end of December. More details on market conditions driving this reduction can be found in our detailed accounting assumptions note<sup>2</sup>.

It was not all positive news for those producing their 2015 accounts, as most companies reporting earlier in the calendar year saw deficits worsen. In March and June, the average discount rate was approximately 1.0% and 0.5% lower than the previous year, leading to some significant actuarial losses and worsening shortfalls.

Pension deficits remain an issue across a wide range of industries. The chart below shows how the aggregate deficit was split between the different sectors, with the more mature industries continuing to share the bulk of DB shortfalls.

**Fig.2 FTSE350 aggregate deficit by sector**

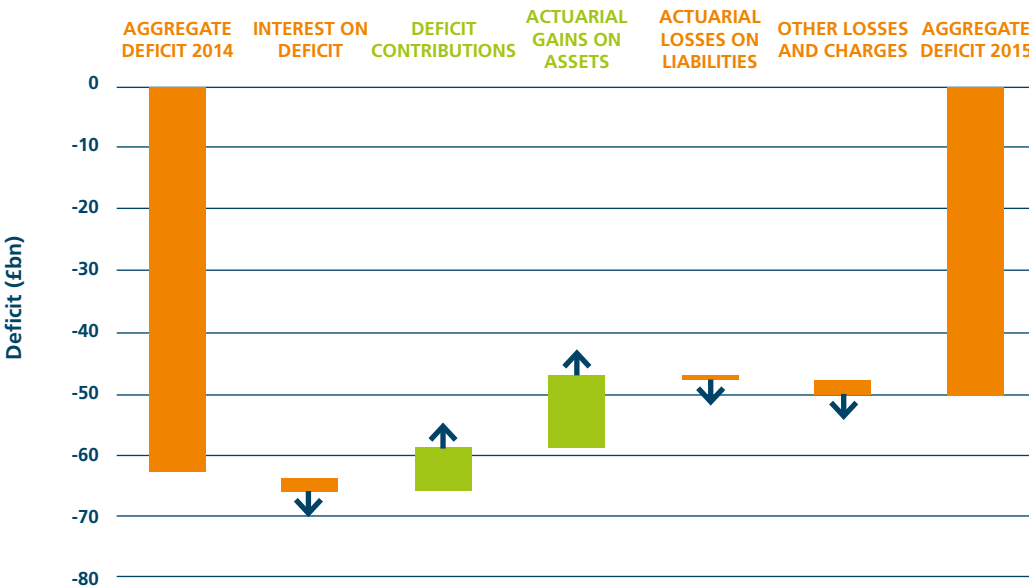


<sup>1</sup> As published in the latest set of published accounts up to and including 31 December 2015 and ignoring 64 companies with an IAS19 surplus or neutral position.

<sup>2</sup> Accounting for pension costs by FTSE100 companies - Survey of assumptions used at 31 December 2015, [www.barnett-waddingham.co.uk/ftse100report](http://www.barnett-waddingham.co.uk/ftse100report)

A more detailed analysis of the decrease in the aggregate deficit over the last year is demonstrated in the graph below. It shows how deficits have been reduced by a combination of actuarial gains on assets and deficit contributions<sup>3</sup>. However, the picture is more complex depending on the month of reporting, with December seeing substantial actuarial losses on assets being more than offset by actuarial gains on the liabilities.

Fig.3 Analysis of change in aggregate deficit in 2015



<sup>3</sup> Deficit contributions approximated by subtracting disclosed service costs (in respect of future pension provision) from the amount of contributions being made into the DB scheme.

*“Since 2009  
cumulative actuarial  
losses have totalled  
around £40bn”*

### Less substantial deficit contributions

In 2015, nearly £8bn was paid by FTSE350 companies to reduce DB deficits. This was slightly higher than in the preceding year, although the aggregate level of deficit contributions remains lower than in the earlier part of the decade.

In the graphic below, the green bars show the expected reduction in deficits since 2009, given the almost £60bn of deficit contributions being paid from that point. However, rather than seeing shortfalls removed net actuarial losses, shown by the orange bars, have offset a large proportion of the benefit of these contributions amidst falling bond yields. Since 2009 cumulative actuarial losses have totalled around £40bn.

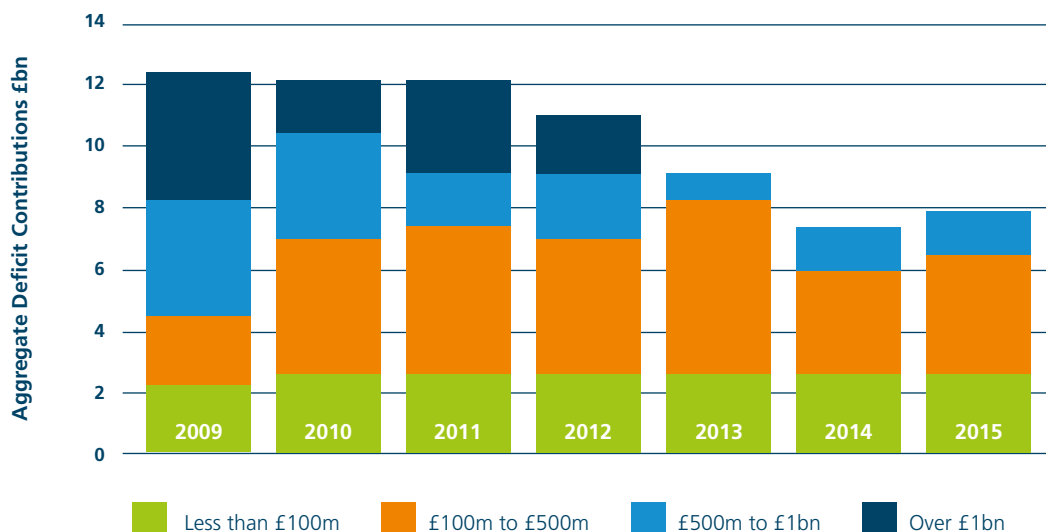
**Fig.4 Progression of aggregate pension deficit since 2009**



The extensive actuarial losses seen since 2009 have predominantly been caused by falling corporate bond yields, which has resulted in a sharp drop in IAS19 discount rates over the period. In 2015, companies in the FTSE350 adopted discount rates that were on average approximately 2.3% pa below those used in their 2009 accounts. For a typical scheme this equates to an increase of over 50% in the expected cost of providing DB obligations.

The other key financial assumption is future inflation expectations. The typical RPI inflation assumption shows a modest drop of around 0.3% between 2009 and 2015, albeit with some volatility in the intervening period.

**Fig.5** **Deficit contribution by size**



The chart above demonstrates the total and distribution of deficit contributions in each year since 2009. Previous years saw a greater proportion of substantial, one-off contributions of over £500m being made to the very largest schemes. In 2015 there were only two companies making contributions of greater than £500m to reduce funding shortfalls, compared with four in 2012 and eight in 2009. However, the volatility of scheme funding deficits means that some larger schemes are already looking to reverse this trend as noted in our Big Schemes Survey 2016<sup>4</sup> – it will be very interesting to observe the impact of this on companies in our FTSE350 survey in future years.

<sup>4</sup> Our Big Schemes Survey relates to private sector DB schemes with assets over £1bn. [www.barnett-waddingham.co.uk/big-schemes-survey2016](http://www.barnett-waddingham.co.uk/big-schemes-survey2016)

# Impact on free cashflow

*“For the FTSE350 deficit contributions as a proportion of total free cashflow has increased significantly in 2015”*

## **An important measure of the affordability of contributions**

In this section, we consider the impact that DB schemes are having on financial flexibility for FTSE350 companies. Whether measured against the ability of companies to generate cash or alternatively, against profit and loss measures, the contributions required to reduce DB scheme deficits must compete with many other financial commitments.

Employers will be aware of The Pension Regulator’s Code of Practice for funding DB schemes. In 2014, the updated code was announced with much fanfare relating to the new statutory objective to minimise any adverse impact on the sustainable growth of an employer.

Although the code is intended to provide more freedom for employers whose DB commitments are affecting their ability to invest for sustainable growth in the business, pension managers and trustees could be forgiven for sensing a different message in the Regulator’s latest Annual Funding Statement. This statement suggests that employers could be committing more resources to deficit reduction based on their analysis of trends in profitability and dividend returns to shareholders.

One measure of a company’s performance is its ability to generate cash, which may in turn be utilised to provide the financial resources to make additional investments, repay debt, build reserves or return cash to the shareholders.

Our analysis shows that there are a significant number of companies paying deficit contributions at a level which is higher than their free cashflow<sup>5</sup>. The unfortunate consequence for these companies is the need to rely upon external sources of finance or to draw upon their cash reserves. This in effect represents the ‘hidden cost’ of pension provision potentially having more widespread implications on the business.

Free cashflow is cash generated by a company over and above that required to maintain or expand its asset base. In 2015, total deficit contributions represented 9% of total free cashflow for the FTSE350, which has increased significantly from the equivalent figure in 2014 (5%). The worsening of this ratio in 2015 is widespread across the FTSE350.

<sup>5</sup> Free cashflow is cash generated by a company over and above that required to maintain or expand its asset base. Adjustment has been made for treatment of interest paid which has been included in the operating cashflows throughout the sample

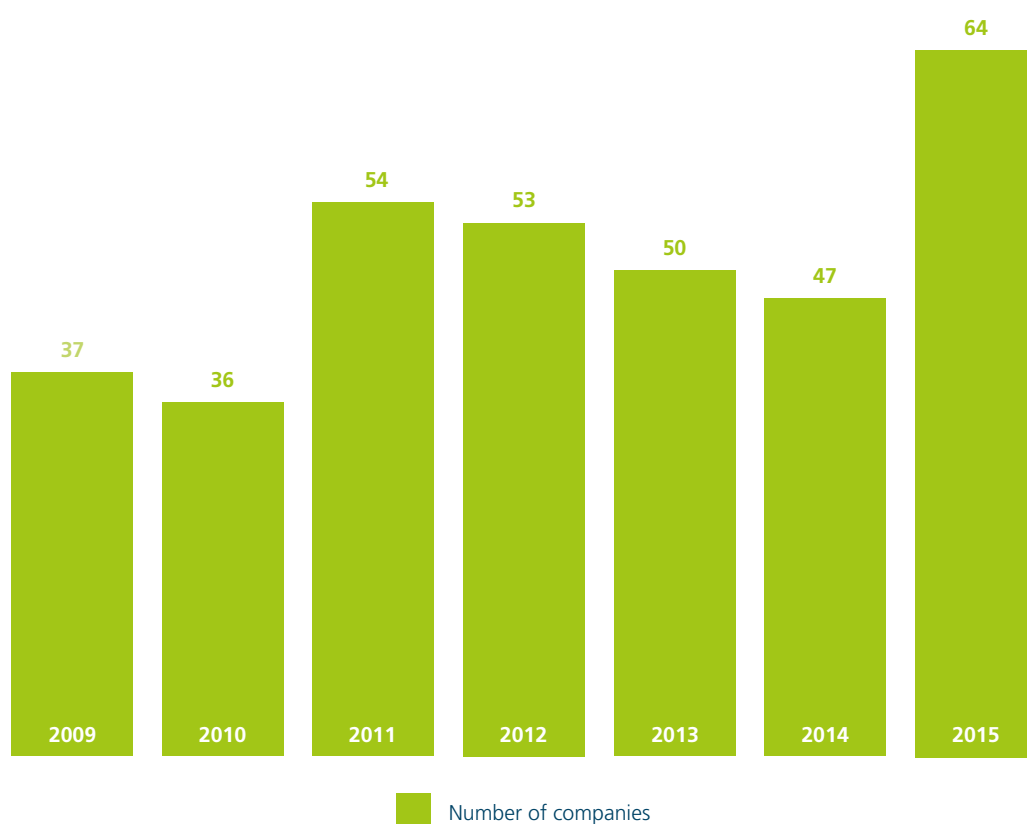


*“There were 30 companies for whom free cashflow decreased by more than 50% in 2015, but who paid at least the same level of deficit contributions as the previous year”*

The graph below shows the number of companies whose deficit contributions exceeded free cashflow in 2015, compared with previous financial years. The figure of 64 in 2015 was the largest since the beginning of our research. It indicates the inherent volatility of cashflows for many firms and the difficulty companies have in quickly reducing deficit contributions if cashflow becomes tighter.

Fig.6

### Deficit contributions greater than free cashflow



Analysis from TPR focused on the affordability of contributions in the context of profitability<sup>6</sup>. However, it is likely that many finance directors will also been concerned with the cash available when in negotiation with pension trustees particularly as recovery plans are lengthy commitments. The recent EU referendum vote will have only added to this uncertainty.

Our data shows that the cash generated from day-to-day business activities for FTSE350 companies sponsoring DB schemes has declined in 2015, perhaps contradicting the Regulator's claims about the increased affordability of additional contributions.

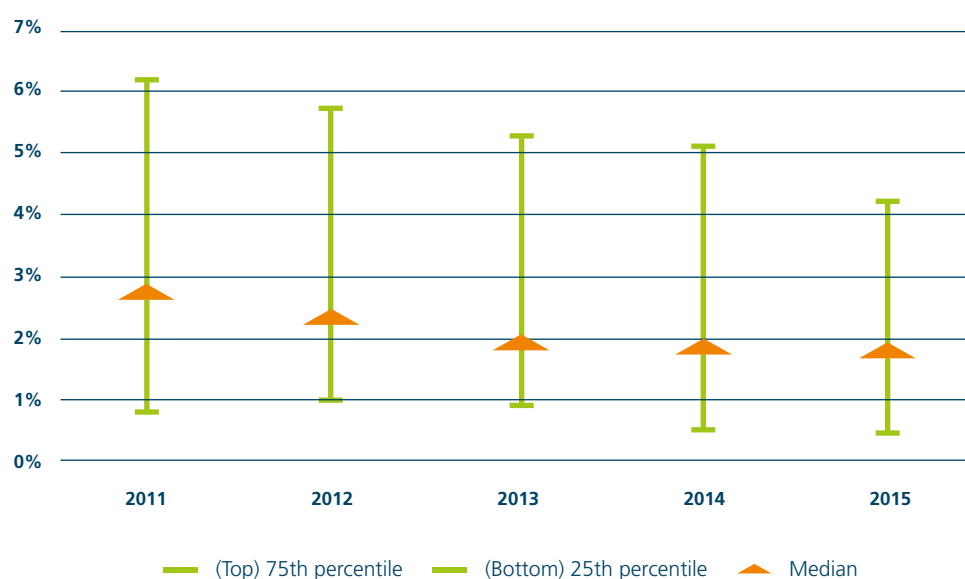
<sup>6</sup> Under IAS19, the cost of a pension scheme included in the Income Statement is based on the cost of benefits accrued over the accounting period (the current service cost) and the interest on an accrued DB deficit. The level of contributions actually paid (regular and deficit contributions) are included in the Cash Flow Statement

*“For 59 companies, annual deficit contributions are higher than the contributions in respect of pension benefits being earned each year for current employees”*

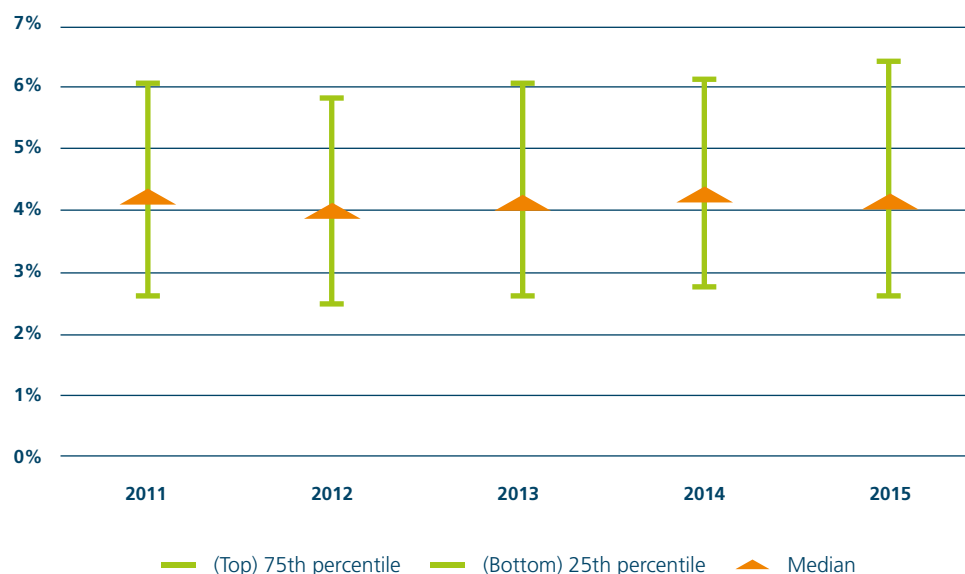
## Deficit contributions versus ongoing contributions

Of course, the aggregate level of deficit contributions does not tell the whole story for companies in the FTSE350. On a more granular level, we have also examined payments made by individual companies to remove DB shortfalls and that being paid to fund additional benefits earned each year as a proportion of overall staff costs.

Fig.7 Deficit contributions as % of staff costs



## Ongoing contributions as % of staff costs



*“At least one-third of companies operating in the Consumer Staples, Consumer Discretionary and Telecoms sectors are paying more in deficit contributions than they are for future pension provision for current employees.”*

In 2015, the median company in the FTSE350 was paying deficit contributions that equated to less than 2% of overall staff costs. By comparison, the cost of providing additional benefits earned each year for current employees, including DC arrangements, was around 4% of overall staff costs in 2015. The graph above also illustrates the relative stability of ongoing contributions as a proportion of staff costs relative to deficit contributions over the same five-year period.

For those companies in the FTSE350 with DB schemes, the aggregate amount paid towards reducing DB deficits in 2015 represented around one third of the total contributions paid towards pension provision (at 34 pence in the pound). Within the context of auto-enrolment and encouraging younger generations to save for retirement, it is remarkable to consider the level of resources that UK businesses are still having to commit towards legacy benefits, a substantial portion of which will relate to beneficiaries who are no longer in their employment.

At least one-third of companies operating in the Consumer Staples, Consumer Discretionary and Telecoms sectors are paying more in deficit contributions than they are for future pension provision for current employees. Conversely, all of the companies in the Energy sector are paying more towards future pension provision than towards plugging deficits.

## Big Schemes Survey: £1bn+

The private sector's big schemes are the industry's trend-setters. Many well – established pension innovations have originated at the larger end of the industry, but have worked their way down to the smaller schemes as they become more refined and accessible.

Our fourth annual survey of 160 private sector defined benefit (DB) schemes in the UK with assets of over £1bn focuses on scheme type, asset allocation, investment performance, deficit contributions, and adviser fees. Some of the highlights include:

- 64% of final salary schemes in our survey are closed to new members and a further 33% are also closed to future accrual, leaving just 13% open to new members
- 67% of schemes have a deficit on their company accounting basis, which is lower than last year, when 75% of schemes were in deficit
- Excluding one significant outlier, the average annual employer deficit contribution was £97m
- A significant portion (23%) of assets have been classed as 'other' i.e. hedge funds and derivatives or funds where the allocation between equities, gilts, property etc. could not easily be determined
- The average 3-year investment return was about 10.4% per year (for end dates ranging between March 2014 and March 2015), and the 5-year return was about 10.2% per year. The 1-year return over this period was higher, at around 14.4%
- The average annual investment management fee was around 0.2% of assets, which is unchanged from last year

➤ [www.barnett-waddingham.co.uk/bigsschemessurvey2016](http://www.barnett-waddingham.co.uk/bigsschemessurvey2016)

Please look out for our latest research on big schemes.



# Impact on shareholders

*“Over the last seven years the net dividends paid by FTSE350 companies which sponsor DB schemes was around £350bn. By comparison, there has been over £70bn paid into DB schemes to reduce funding deficits.”*

## Deficit contributions versus dividends

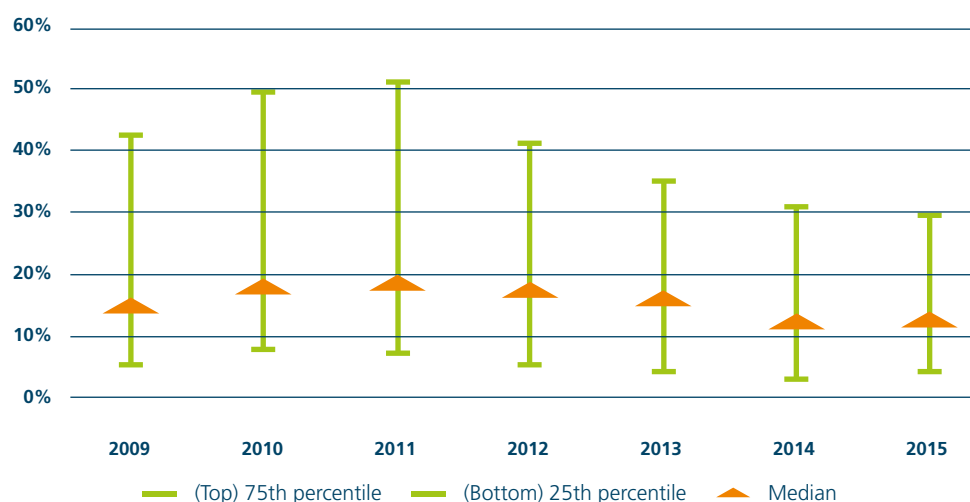
The presence of a DB deficit is an interesting issue for shareholders and there is evidence that certain events related to DB schemes can have an impact on a company's share price<sup>7</sup>.

In theory, companies with pension deficits face a trade-off and must balance the payment of higher contributions to reduce pension deficits with requirements to make investments for the future growth of the company, reduce any non-pension-related debt or pay dividends.

Over the last seven years the net dividends paid by FTSE350 companies which sponsor DB schemes was around £350bn. By comparison, there has been over £70bn paid into DB schemes to reduce funding deficits.

The chart below demonstrates deficit contributions as a proportion of dividends for the FTSE350 including the median and the upper and lower quartiles.

**Fig.8** Deficit contributions as % of dividends



While the relative amounts paid vary significantly across the FTSE350, our research shows that in 2015 deficit contributions as a proportion of net dividend payments increased marginally to 13% compared with the previous year (2014: 12%). However, this was still below the levels seen in the period 2009 to 2013.

<sup>7</sup> 'Impact on a company's share price of its final salary pension scheme' [www.barnett-waddingham.co.uk/note3](http://www.barnett-waddingham.co.uk/note3) – Barnett Waddingham research



Despite the significant amounts being committed towards securing historical pension benefits, a recent statement<sup>8</sup> by TPR has suggested that firms are still not doing enough in this regard. TPR's analysis has focussed on the comparative fall in deficit contributions as a proportion of dividends for the FTSE350 since 2010. They have noted that this is largely due to *"the significant increase in dividends over the period, without a similar increase in contributions"*.

This is a legitimate point and it may well provide trustees with a useful benchmark to consider when undertaking valuation discussions regarding the affordability of deficit contributions.

Nevertheless, the reduction in deficit contributions relative to dividends has to be considered in a wider context of the trade-off facing finance directors. There are a wide range of factors affecting how companies look to reward shareholders and the interaction between this and the commitment to reduce DB deficits is rarely straightforward.

### **Total shareholder return**

Our analysis looks at the total returns to shareholders (measured as net dividends plus share repurchases). In the past five years aggregate payments were above £70bn a year for FTSE350 firms sponsoring DB schemes. On an aggregate level it could be suggested that companies have enough cash to further reduce pension deficits by increasing contributions – this appears to be one of the conclusions of TPR's research.

However, it is very important to understand that there are significant differences between individual companies. We analysed changes to shareholder payouts and changes to deficit contributions.

In 2015 61 companies (2014: 61) increased payouts to shareholders and at the same time reduced deficit contributions. It may be argued that those companies have enough cash resources to increase deficit contributions. It was noticeable that the average implied period for clearing the pension deficit, given current contribution levels, decreased in 2014 and 2015 for this group of companies. This might suggest that positive progress was being made to clear the deficit and significant up front contributions were potentially paid. This may well explain the decision to increase shareholders returns whilst deficit contributions decreased.

Further analysis shows that 51 companies (2014: 60) adopted a seemingly more balanced approach and increased or at least maintained both shareholder payouts and contributions.

However, some FTSE350 companies seem to be facing greater financial constraints and financial pressure in relation to their DB scheme as 28 companies (2014: 20) reduced distributions to shareholders but increased or maintained deficit contributions, showing a commitment to pension deficit recovery plans. For this group of companies, it is perhaps not surprising that the implied period for clearing the pension deficit increased in 2014 and was then largely unchanged in 2015.

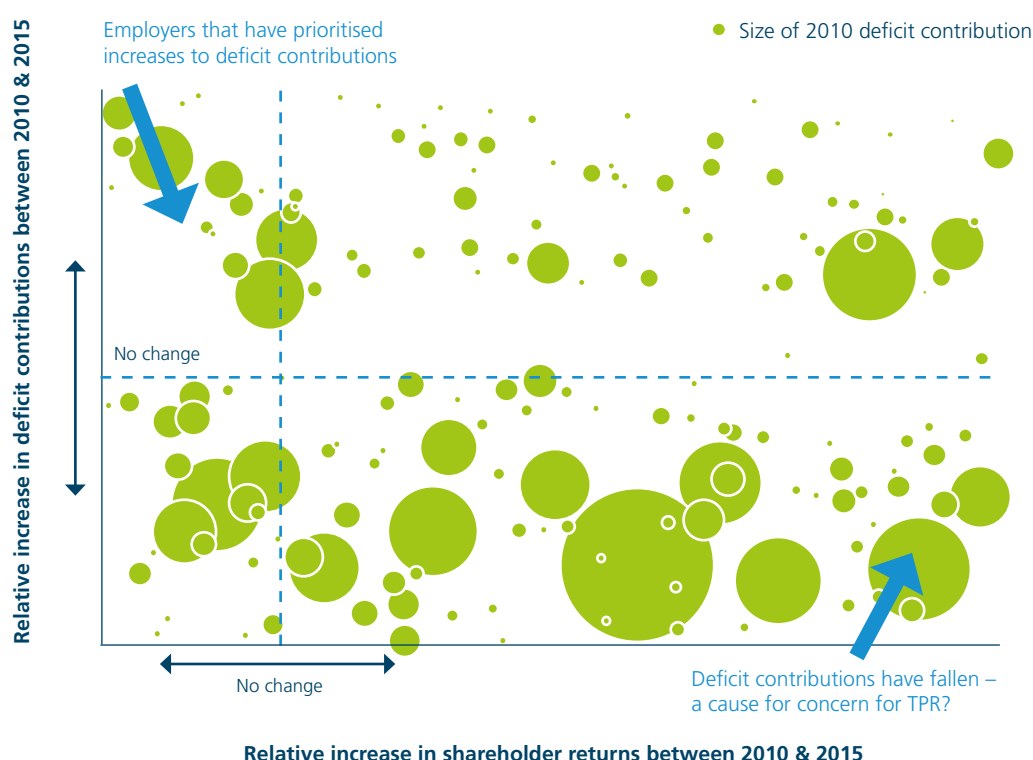
<sup>8</sup> TPR's 2016 Annual Funding Statement [www.thepensionsregulator.gov.uk/press/pn16-24.aspx](http://www.thepensionsregulator.gov.uk/press/pn16-24.aspx)

*“In 2015, 28 companies decreased returns to shareholders whilst increasing or maintaining DB deficit contributions”*

In summary, it is important to understand a complexity of corporate financial decisions especially in the context of volatile share price values in 2015 and attempts by companies to support their market values.

The below chart shows how the deficit contributions and total shareholder returns varied amongst FTSE350 firms between 2010 and 2015.

**Fig.9 Deficit contributions and shareholder return – 2010 and 2015**



The chart shows the relative change in both shareholder returns and deficit contributions amongst the FTSE350 companies between 2010 and 2015. The graph also illustrates the quantum of deficit contributions paid in 2010 via the size of the bubbles. Unsurprisingly, some of the companies already paying larger contributions in 2010 will have seen shareholder returns increase at a higher rate (some in the bottom-right sector) over the last 5 years.

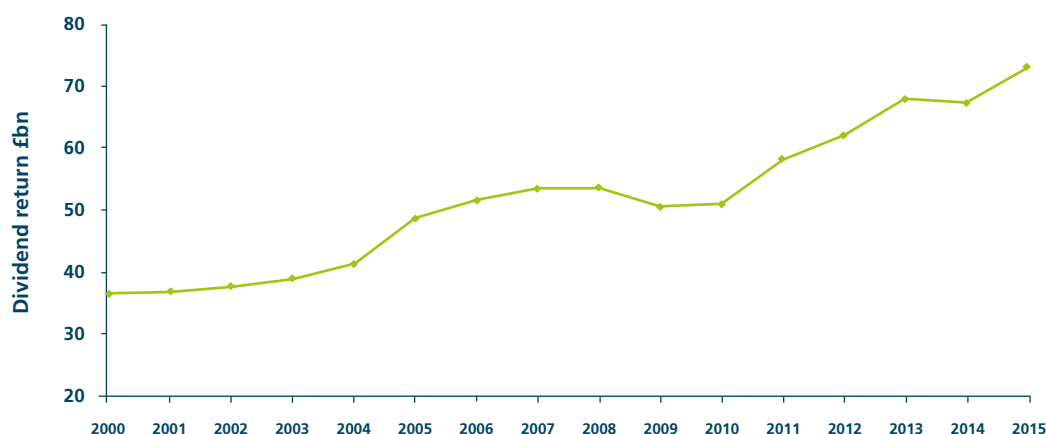
### Dividend returns over the medium term

From a longer term perspective, it is worth considering TPR's emphasis on dividend payments and affordability against the economic cycle. Aside from expectations that dividends will offer investors a real return over time, there will also be changes in how companies look to prioritise rewarding shareholders and the expectations of investors.

The graph below illustrates the FTSE350 dividend return since 2000.

Fig.10

FTSE350 dividend return



TPR's analysis correctly notes the increase in dividends over the period since 2010 but should also be seen in the context of the volatility in dividend returns and the recovery of shareholder value following the financial crisis. The starting point of 2010 could have the undesired effect of distorting any analysis given the underlying economic fluctuations which have impacted the level of dividends seen over the past five years.

Indeed, there is no guarantee for investors that dividends will continue to increase as the economic cycle matures. At the time of writing, the Bank of England has predicted an economic slowdown in the coming quarters, while there is significant volatility in stock markets and considerable uncertainty relating to the outcome of the EU referendum.

Therefore, maintaining the current liquidity levels represents a natural attempt to provide a necessary safety cushion and flexibility to make financial decisions. Given all of these factors, it is not implausible that companies with deficit recovery plans could begin to see the proportion of contributions relative to dividends increase once again.

# Impact on cash holdings

*“There were 22 companies in our survey that would have been able to fund a full pension scheme buy-out using the increase in their cash holdings between 2014 and 2015”*

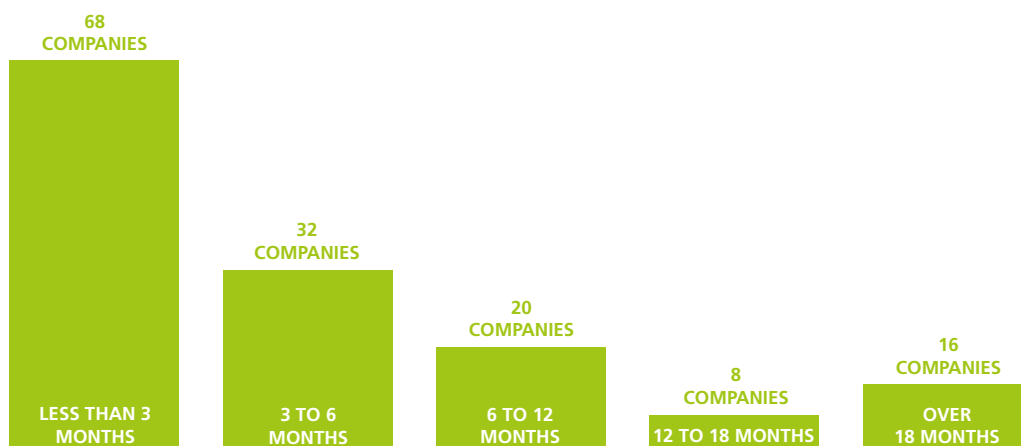
## IAS19 deficit and cash holdings

Many scheme sponsors will find that commitments to DB obligations consume a substantial proportion of the cash being generated from core operations.

Looking at the 2015 financials, we estimate it would take the median company over three months to clear their IAS19 deficit using net cash generated from their core activities. However, some companies would need much longer than this, with 24 companies needing net cash from over 12 months of core activity.

The distribution of periods required by FTSE350 companies is shown in the graph below.

**Fig.11 Time needed to clear current IAS19 deficit using net cash generated from core activities**



## Potential to Buy-Out

Clearly, using cash reserves to address the pension scheme deficit may not been seen as a priority. However, many companies will be looking to de-risk their DB schemes, which would be expected to increase longer-term pension costs.

In our survey, 95 of the companies analysed would be able to achieve a full buy-out of their funded DB liabilities from their cash holdings alone (2014: 94 companies), although for 35 of these companies it would have involved committing over 50% of their total cash holdings.

Meanwhile, there were 22 companies in our survey that would have been able to fund a full pension scheme buy-out using the increase in their cash holdings between 2014 and 2015.

# Impact on balance sheet

*"In 2015, there were six companies with a surplus that exceeded 10% of their market capitalisation."*

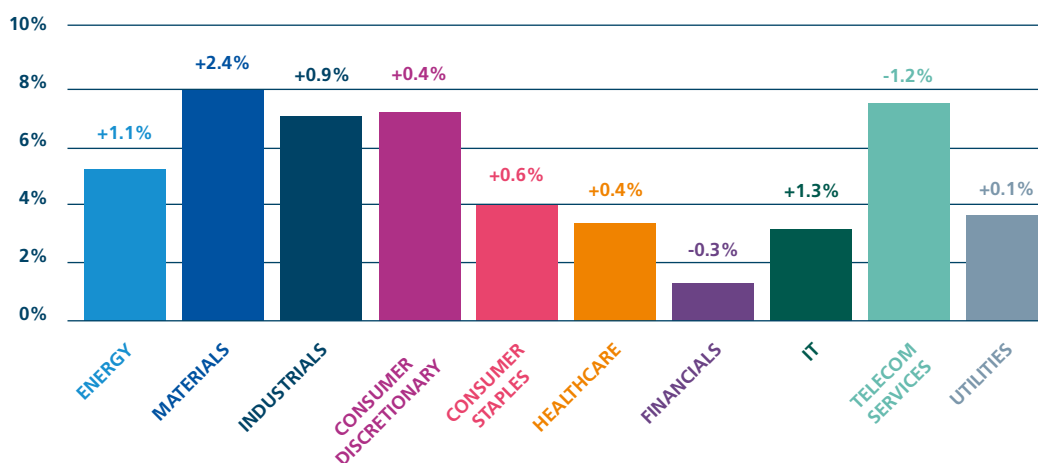
## Market capitalisation

A straightforward way to compare the relative impact of DB deficits on the financial strength of sponsoring employers is to examine the size of the deficit against its market value.

For many FTSE350 firms, a largely flat market performance over 2015 resulted in deficits increasing as a proportion of the market capitalisation. This ratio increased to 5.7% in 2015 (2014: 4.9%). This ratio was higher for the FTSE250 than the FTSE100 (6.5% versus 4.3%), suggesting that larger companies are burdened by DB plans to a slightly lesser extent than smaller FTSE350 firms.

The chart below highlights differences across the individual sectors.

**Fig.12 Deficit as % of market capitalisation by sector (and % change from 2014)**



For 18 companies, the deficit exceeds 10% of the market capitalisation of the company (2014: 18 companies). Furthermore, in a period when advisors will have been reminding sponsors and trustees of the need to preserve the power to pay a surplus back to the employers, there were six companies with a surplus that exceeded 10% of their market capitalisation.

**Fig.13**

Deficit as % of the Market Cap (if the DB scheme is ignored)	2010	2011	2012	2013	2014	2015
	6.3%	5.8%	5.4%	4.5%	4.2%	4.7%



# Impact on risk

*“In the FTSE350, 26 companies had pension obligations that exceeded the market capitalisation of the company.”*

## Impact of DB pensions risk

In 2015, the total DB scheme funded assets for FTSE350 companies totalled £633bn.

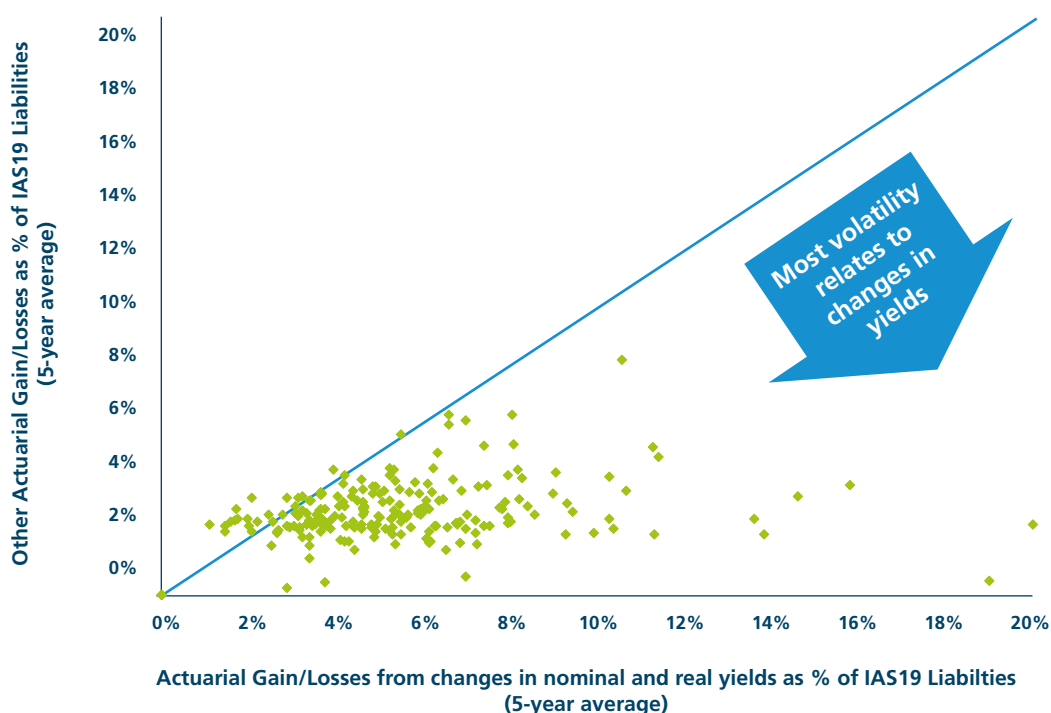
The exposure of the company to equity markets via their pension scheme is often considerable. Despite the lower allocation to equities seen in recent years, equity risk remains substantial for some companies.

Of the companies analysed, there were nine with an equity holding in their scheme which was more than 50% of the market capitalisation of the company (2014: 7 companies). We found that 26 companies have total pension obligations that exceeded their market capitalisation (2014: 19 companies).

Historically the level of equities held by a DB scheme was seen as an indicator of the level of risk within the pension scheme. Over the last few years, however, changes in the discount rate and inflation assumptions affecting the measurement of pension liabilities have caused greater volatility in IAS19 funding levels.

This is illustrated in the graph below.

**Fig.14 Impact of Nominal and Real Yield Risk on IAS19 Funding Level**



The graph illustrates the volatility caused by changes in yields over the past five years against other sources of actuarial gains and losses (for example, movements in equity markets and changes to demographic assumptions). The graph shows that for the vast majority of companies the greatest volatility has come from an investment strategy that is only partially hedged against movements in real and nominal yields.

Even where the pension scheme has significant bond or swap holdings, there is still considerable volatility where a scheme is significantly underfunded or where liabilities have a longer duration than the 'matching' assets held.

Actuarial gains and losses, although not reported in a company's Profit and Loss account, are the main cause of change in the pension scheme liability disclosed on the balance sheet. In 2015, actuarial gains and losses on assets and liabilities on average resulted in a 5% movement in the equity position of FTSE350 companies (2014: 6%). This shows the significant volatility that the pension scheme brings to a business.

For some companies the movements have been even more severe, with eight companies seeing actuarial gains and losses leading to changes in equity of more than 25% (2014: 10).

### **Longevity risk**

One of the risks pension schemes are exposed to is the longevity of its pension scheme members. The past decade has seen longevity expectations increasing significantly. When coupled with the low interest rate environment, this has been a key factor in increasing DB obligations of sponsors.

Other pension scheme risks tend to get greater attention as they lead to short term volatility whereas the impact of the longevity changes emerges gradually over several years. For example, between 2009 and 2015 FTSE100 companies have seen the longevity of male pensioners increase by approximately one year<sup>9</sup>. While companies had set aside provision for life expectancies to increase over time, this actual increase was more than expected and has added approximately £8bn to pension liabilities. Interestingly, the most recent mortality study produced by the actuarial profession suggests that we could be seeing a slowing or potentially a reversal of this trend although it is far from clear-cut.

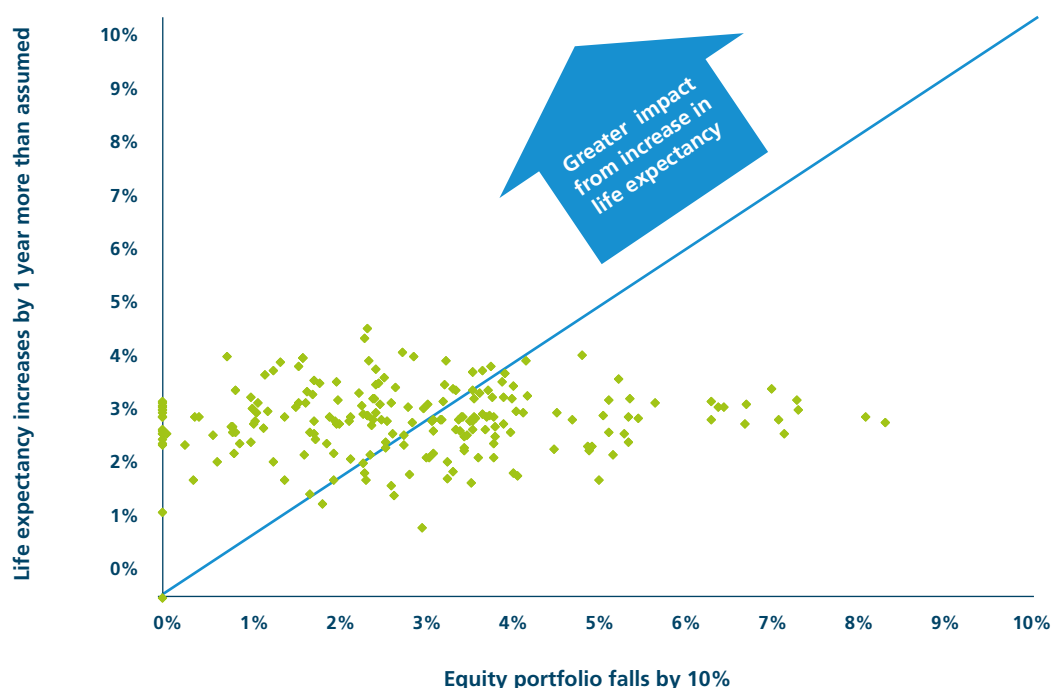
While the risk posed by longevity is not as immediate as, say, large falls in equity values or falling interest rates, it has already proved to be an expensive risk to have taken over the long term. Longevity risk is largely unrewarded so the scheme is not expected to benefit from holding the risk. If you believe that you pay a moderate premium for purchasing inflation-linked assets of around 0.2% per annum (for example, as an inflation risk premium) then the headline cost of protecting against inflation risk and longevity risk are broadly similar.

*“Indeed for companies in the finance sector, the advent of Solvency II may encourage more hedging of longevity risk”*

The significance of the longevity risk for a pension scheme depends on the maturity of both its member age profile and its investment strategy. The chart below shows the potential impact for FTSE350 companies if the longevity assumption were increased by one year. The impact of equity values falling by 10% has been included for comparison.

Fig.15

Increase in Deficit as % of DBO



The level of equity risk clearly depends on the exposure to equity markets and many companies have taken steps to mitigate this risk through a variety of different investment strategies. The mitigation of longevity risk is more complicated, although insurers, re-insurers and investment banks are offering longevity swaps for pension schemes allowing longevity risk to be hedged. A handful of such deals have been transacted directly for pension schemes. These types of contracts can either be written as a derivative or with an insurance ‘wrapper’. The option of combining hedges for interest rate and inflation risks with longevity swaps also exists<sup>10</sup>.

Indeed for companies in the finance sector, the advent of Solvency II may encourage more hedging of longevity risk with the Prudential Regulatory Authority (PRA) recognising<sup>11</sup> the regime provides firms with “an additional incentive to undertake transactions to transfer longevity risk by way of reinsurance”.

<sup>10</sup> Longevity swaps – Finance Directors’ Guide to Pensions [www.barnett-waddingham.co.uk/longevityswaps](http://www.barnett-waddingham.co.uk/longevityswaps)

<sup>11</sup> Prudential Regulation Authority letter on longevity risk transfers [www.bankofengland.co.uk/pradocuments/about/insdirectorsletter09022016.pdf](http://www.bankofengland.co.uk/pradocuments/about/insdirectorsletter09022016.pdf)

### The bulk annuity market

2015 was another busy year for the UK bulk annuity market with £12.3bn of bulk annuity transactions being completed. This was slightly below the record value achieved in 2014 of £13.2bn, but is still more than double the levels we saw around five years ago. This strong market activity is only anticipated to grow further given the inherent demand of DB schemes for de-risking as they continue to mature.

Solvency II, the new statutory solvency regime for insurers, came into force on 1 January 2016. Solvency II affects the insurer's capital requirements and therefore has some potential influence on their pricing. The early indications are that for policies covering pensioner members (the most common approach when a full scheme buy-out is not affordable) the pricing has remained broadly consistent with 2015 (after allowing for the impact of financial market movements), while for policies covering non-pensioners there has been some level of increase. In practice, the insurers will continue to seek to optimise their position under the new regime.

There have also been some significant changes in the market participants over the last year. Scottish Widows (part of the Lloyd's Banking Group) have joined the market, while Canada Life have also re-joined. In addition, Partnership and Just Retirement, the specialist medically underwritten providers, have merged to form JRP Group.

Attractive pensioner pricing over the first half of 2016 has continued to offer schemes the opportunity to exchange their low yielding assets, such as gilts, for a pensioner buy-in at little or no cost. Some schemes have taken advantage of this and have been able to insure part of their pensioner liabilities without adversely affecting their funding level.

The medically underwritten annuity market has also continued to grow rapidly with around £2bn of transactions now having been completed. In 2015, medically underwritten deals accounted for 12% of the total bulk annuity market. This has largely been driven by some very competitive pricing, with significant savings achieved relative to a traditional non-underwritten approach. Barnett Waddingham advised Renold plc, a global engineering company, on two underwritten top-slicing deals (where the highest liability pensioners are insured) during 2015. We achieved implied pricing in excess of gilt yields plus 0.5% pa, and removed the concentration of longevity risk associated with the largest pensioners.

While the formation of JRP Group may be expected to impact competition within the medically underwritten market to some extent, we would anticipate that an underwritten approach will continue to offer some schemes with attractive opportunities for example, top-slicing deals for medium-to-larger pension schemes.



**Gavin Markham, Head of Bulk Annuities – Partner at Barnett Waddingham**

*“As schemes progress along their de-risking journey, a partial buy-in or buy-out can become an increasingly important option – removing not only the financial risks but also the longevity risk for the members insured. For larger schemes, completing transactions for tranches of schemes can allow the level of de-risking to be tailored to their specific objectives and provide tangible steps towards an ultimate target of full buy-out. Employers need to be aware of the options available and market developments, either on a traditional or medically underwritten basis, so they are in a position to respond to market opportunities as they arise”*

# Impact on Profit & Loss account

*“Between 2014 and 2015, the median increase in employer contributions to DC schemes was 5%”*

## Service costs

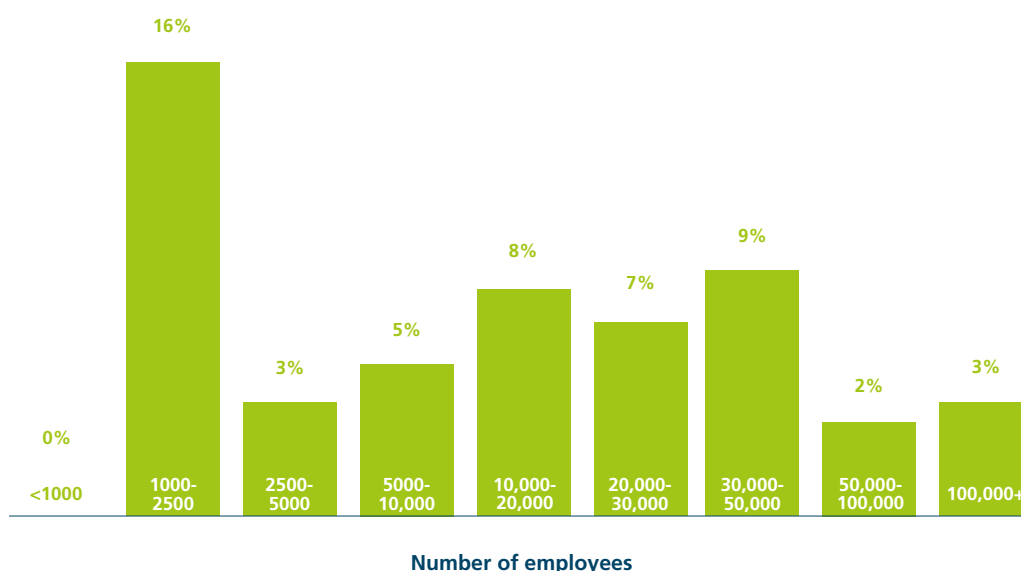
The cost associated with providing future pension provision remains an increasing pressure for many companies in the FTSE350. The average annual cost of pension provision (including DC schemes) earned by employees has averaged around £2,800 per employee in 2015 (2014: £2,800).

With employers in the UK now having to comply with auto-enrolment, those companies in the FTSE350 will have had to comply by enrolling staff in some form of workplace saving scheme. In almost all cases, this would be expected to be a DC arrangement for new staff members. Thus, it is not surprising to see median DC costs as a proportion of total staff costs increase once more in 2015 to 2.9% (2014: 2.8%; 2013: 2.5%).

When viewed by company size, the below graph shows that it was the smallest employers who saw the largest increase. It is likely that continued compliance with auto-enrolment in the UK will have been a driving factor, as well as those companies who are closing to DB accrual and diverting members into DC schemes potentially for the first time.

Fig.16

Annual Increase in Employer DC contributions

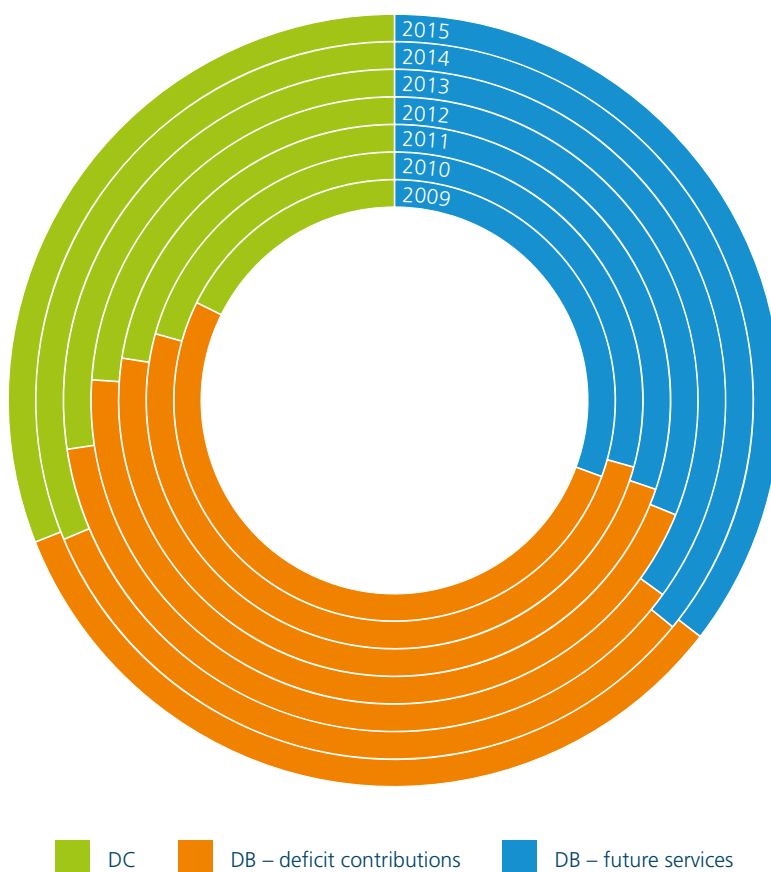




The graph below shows how FTSE350 pension costs have been split over the past seven years. The amount paid into DC arrangements has increased each year, and now accounts for nearly one-third of total pension costs for firms in our survey. However, DB future service costs remain substantial and have constituted around one-third of pension costs for firms in our survey over each of the past three years.

**Fig.17**

**Total pension contributions – FTSE350**



# Appendix

**Fig. 1:** Nominal projected payments for current and future pensioners have been approximated using disclosed obligations and benefit payments for DB schemes in the FTSE350.

**Fig. 2, 3, 4:** Aggregate deficit calculations include unfunded liabilities and exclude surpluses.

**Fig. 3, 5, 6, 7, 8, 9, 17:** Deficit contributions approximated by subtracting disclosed service costs (in respect of future pension provision) from the amount of contributions paid by companies into the DB scheme. A number of companies are excluded which do not pay deficit contributions based on this method in the relevant years.

**Fig. 6:** Free cashflow measured as adjusted free cashflow.

**Fig. 7:** Ongoing contributions assumed to equal DB service costs plus contributions paid into DC arrangements.

**Fig. 8:** Dividends paid calculated as the net dividends paid (dividends paid less dividends received).

**Fig. 9:** Cash returns to shareholders is net dividends paid plus share repurchases/ buybacks.

**Fig. 10:** Dividend return is approximated by the product of market capitalisation and dividend yield. This is for the entire FTSE350 Index, inclusive of companies without DB arrangements.

**Fig. 12, 13:** Market capitalisation recorded at earnings publication date for each company.

**Fig. 15:** Increase in IAS19 deficit from change in longevity assumption is taken from IAS19 sensitivity information for the bulk of companies in our survey. Where these sensitivities not disclosed, this has been estimated from other information disclosed relating to financial and demographic assumptions.

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## European companies with UK defined benefit schemes

The costs and risks associated with DB pension schemes are well known within the industry. With unprecedented changes to occupational pensions in the UK and with further revolutionary changes in the regulatory pipeline, the need for European parent companies of UK subsidiaries with DB schemes to manage these risks has become even more important.

Our European companies report relates to constituent companies of the Dutch AEX, French CAC40, German DAX, Spanish IBEX, Italian FTSE MIB and Scandinavian OMX share indices that have UK subsidiary companies with DB pension schemes. The survey covers 79 European companies with around £107bn of UK pension liabilities between them.

Our report analyses the contributions paid, levels of deficit and levels of risk within the schemes. Data has been taken from the latest available financial statements of the UK subsidiary companies, which are as at 31 December 2014 in most cases.

In most cases the parent companies in our report are leading players in their industries and are able to absorb reasonably substantial pension costs. However, the impact upon performance and return on investments of the UK subsidiary companies can be more pronounced. Comparisons of these subsidiaries against other UK companies without legacy DB pension liabilities, especially on a cash basis, could be heavily influenced by the pension related costs and cash contributions.

There are also some surprising results, for example that although the average funding level of these schemes is slightly higher than the FTSE350 average, the total contributions paid last year (for past service deficit and current service) represented 14.1% of total staff costs, versus a corresponding figure of just 6% for the FTSE350 in that same year.

➤ [www.barnett-waddingham.co.uk/europeansurvey](http://www.barnett-waddingham.co.uk/europeansurvey)

Our 2015 research will be published later this year.

## Contact information

Please contact your usual Barnett Waddingham consultant if you would like to discuss any of the matters raised within this survey in more detail. Alternatively, contact us on:

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