HYMANS ROBERTSON

Putting pensions in context

FTSE350 Pensions Analysis 2016

Executive summary

Welcome to Hymans Robertson's eighth annual FTSE350 pensions analysis report, which puts the Defined Benefit (DB) pension schemes of the FTSE350 in the context of the businesses that support them.

Occupational DB schemes have had a very high profile this year. Lots of coverage has focused on distressed schemes such as BHS, Tata Steel and Halcrow. There have been plenty of headlines as deficits hit record highs due to all-time lows in bond yields off the back of the Bank of England's policy response to Brexit. The Work and Pensions Select Committee's view is that "the future of occupational pension schemes is perhaps the greatest challenge facing long-standing British businesses."

With this in mind, we see two strong themes emerging over the next year for DB pensions:

1. **Regulatory change**. The Work and Pensions Select Committee's inquiry into DB funding and regulation closed on 23 September. This could lead to significant change. Most companies remain well placed to support their pension schemes. Indeed, the ratio of dividend payments to deficit contributions has nearly doubled since the start of the decade, for around half of the FTSE350 companies paying both.* Giving these schemes more time to heal, by agreeing to longer term cash commitments and time for investments to deliver, should be enough in most cases. However, pressure relief valves should be considered for distressed schemes who are facing imminent insolvency. These could come in a variety of forms, but ultimately will involve members sacrificing some of their promised benefit to make the scheme more affordable. Any sacrifice would need to be underpinned by the compensation awarded by the Pension Protection Fund.

2. **Cashflow planning.** The Pensions Regulator flagged for the first time in its 2016 annual statement that schemes should start managing their cashflow position more robustly. It's an approach we have strongly advocated for several years, and it may come as a shock to some companies that their schemes weren't doing so already. 57% of schemes now need to generate income and could become forced sellers of assets to pay pensions unless they establish clear income generating strategies. To manage this risk schemes need a clear purpose – this could mean not being overzealous in setting a long term funding target and thereby reducing required returns and enabling immediate de-risking. They also need to agree an appropriate pace for reaching full funding, and in many cases opt for a slower and steadier approach. And finally, precision in the cashflow projections is required as cashflows become ever more uncertain with the pensions freedoms and increased transfer activity.

* https://blog.thepensionsregulator.gov.uk/2016/09/29/db-pension-scheme-deficits/" \l "more-239" https://blog.thepensionsregulator.gov.uk/2016/09/29/db-pension-scheme-deficits/#more-239

Our analysis shows that most companies are able to support their pension schemes, with 83% of companies able to pay off their IAS19 deficit with less than 6 months' earnings. However, crucially the impact of Brexit and the subsequent fall in yields has not flowed through to company and pension scheme reporting yet. The increase in IAS19 pension deficits in the last six months has been eye-watering, going from a surplus of £50bn in March 2016 to a deficit of £165bn at 31 August 2016. This peak-to-trough swing of over £200bn exceeds the annual earnings of the FTSE350, and is more than double the total dividends paid by all UK listed companies.

Funding outcomes have been pretty well split between the hedged and the hedged-nots. The former are largely in a reasonably strong position. However, the latter group have suffered. Unfortunately it's often companies with significant pension deficits that are seeking higher returns and have lower hedging. The stress is likely to be felt most acutely by those very companies that are least well equipped to handle it.

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

Jon Hatchett

Head of Corporate Consulting
jon.hatchett@hymans.co.uk
0207 082 6167
@JHpensions

Regulatory change

What's the issue?

In recent months we've seen a number of high profile stressed schemes, notably BHS, Tata Steel and Halcrow, hitting the headlines. This, in combination with historic lows in bond yields pushing aggregate deficit figures to record highs, has raised questions about how DB schemes are run, and triggered a Work and Pensions Select Committee inquiry. The inquiry closed on 23 September 2016, and could lead to changes coming through in 2017.

What changes might happen?

Our analysis shows that the majority of DB schemes will be able to pay benefits in full. Any changes to the regulatory regime should not penalise sponsors of the large majority of well-run schemes to deal with the challenges faced by a few at the edges. Even for those companies who are better placed, in many cases funding and investment strategies will be under significant strain in the current low yield environment.

The Work and Pensions Select Committee's inquiry will consider different options to safeguard the benefits of scheme members and to prevent pension schemes with unmanageable liabilities sinking companies. While both objectives are laudable, they are somewhat irreconcilable. To make liabilities affordable to distressed companies who are facing imminent insolvency is going to involve cutting back members benefits.

Impact of pressure relief valves on FTSE350 IAS19 deficit:

	Pension increases	
CPI linked	Statutory minimum	Conditional indexation
£80bn saving	£150bn saving	£350bn saving

The likeliest potential change that could be introduced is a pressure relief valve for distressed schemes by cutting back pension increases. Three possibilities include:

1. RPI to CPI over-ride. This would see an end to the current 'scheme rules lottery'. Some schemes are bound by the wording in their rules to use RPI as the basis for pension increases, while others are free to use CPI. Switching to CPI would improve the affordability of schemes for sponsors. If applied to all schemes it would reduce the aggregate FTSE350 IAS19 deficit by c£80bn.

2. Pull back to statutory minimum pension increases. This would allow schemes to reduce pension revaluation and increases to the statutory minimum requirement (which is no pension increases at all on pensions accrued prior to 1997). It provides an even bigger release of pressure, and if applied to all schemes reduces the aggregate FTSE350 IAS19 deficit by c£150bn.

3. Conditional indexation. This would enable schemes to stop paying pension increases altogether for a limited time, until scheme funding and business performance recover. At the extreme, paying no further pension increases forevermore would reduce the aggregate FTSE350 IAS19 deficit by £350bn. This would not apply to all companies, and even then only for a limited period, meaning actual deficit reductions would be a tiny fraction of this.

Other changes that could be introduced include more information gathering powers for the regulator, compulsory clearance for transactions with significant pension deficits, and a shortening of the current 15 month triennial valuation timetable.

Our view

Any changes to the regulatory regime should be proportionate and mindful of the fact most schemes are well-run and will be able to pay benefits in full. Giving schemes more time to heal by agreeing to longer term cash commitments and time for investments to deliver will be enough in many cases.

However, allowing pressure relief valves in some carefully prescribed circumstances could enable some members to still receive a higher pension than they would in the PPF, save jobs and prevent catastrophic calls on the PPF. Conditional indexation could be the most appropriate form of relief, as long as it comes with watertight safeguards. For example, the suspension of pension increases should be temporary and with strict restrictions on employers (such as dividend freezes and substantial pension contributions) to align business and scheme members interests. Schemes could also be forced to reinstate lost increases before they could be wound up.

The valuation cycle absolutely should be accelerated. Innovations such as on demand valuations mean results and analysis can be made available to companies and trustees instantaneously.

Cashflow planning

What's the issue?

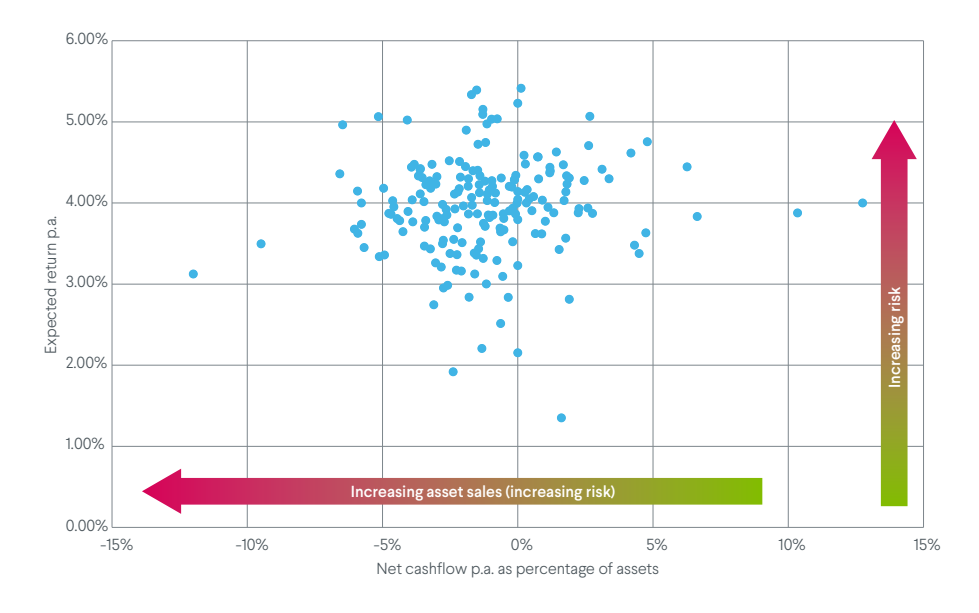
The Pensions Regulator flagged for the first time in its 2016 annual statement the importance of cashflow planning. This is an approach we've been promoting for several years. The importance of this is ratcheting up. Last year 50% of schemes needed to generate income; this year it has increased to 57%.

Proportion of schemes that need to generate income

2014/15	2015/16
50%	57%

As schemes become cashflow negative, they run the risk of becoming forced sellers of assets to pay pensions. These schemes need clear disinvestment strategies to avoid having to sell volatile or illiquid assets in a market downturn. This issue has been exacerbated by the 2015 pensions' freedoms making it more difficult to forecast cash requirements as transfer activity increases. More recently, headlines highlighting the plight of some distressed schemes, and low yields leading to record high transfer values, mean further increases in transfer volumes are likely.

By the time schemes are materially cashflow negative they need to be invested primarily in income generating assets (to meet cashflow requirements) and protection assets (to hedge rates and inflation). This is not a high enough priority for many schemes – the chart below plots the cashflow maturity of each scheme in the FTSE350 against their expected asset return. We'd expect lower returns for more mature schemes, but this is simply not coming though.



Solutions

Schemes need clear purpose, pace and precision to meet this cashflow challenge.

Purpose

Most schemes have a clear long term objective, but this is often not re-tested that regularly. Many schemes are still taking a significant amount of investment risk now to target a very low level of risk and ultimately buy-out in the future. Brexit and the subsequent falls in yields mean these targets are further away than ever.

Rebasing to a long term run-off objective, rather than buy-out, means that investment risk can be dialled down now as required returns fall. This stabilises the funding position and enables a "slow and steady" path to full funding. It also frees up more assets to invest in income generating assets to meet the cashflow challenge, and is not reliant on reaching pre-determined triggers to achieve any de-risking.

Pace

Companies should take their time to achieve full funding. Pensions are a long term game. In our view it is better to take a moderate amount of investment risk and target full funding over a longer time frame than to take significant amounts of investment risk and target full funding over a shorter time frame.

Precision

Ensure cashflow projections are accurate. We now provide our clients with on demand valuations, which mean that liabilities and cashflow projections are refreshed for new membership data on a quarterly basis. With ever increasing cashflow uncertainty, it's critical to do this to ensure funding, investment and hedging strategies are based on accurate MI.

Case study

The table below shows how we restructured the investment portfolio for one of our clients to focus on generating the required cashflows, while reducing volatility and retaining scope for growth.

The portfolio changes doubled income to pay benefits and reduced volatility by 50%. The scheme is now resilient to market fluctuations, and there is no pressure to sell off assets to pay pensions.

	Asset allocation		
	Old	New	Reason for the change
Equity	62%	35%	Reduced allocation to equities and restructured to provide an income-focused portfolio
Property	7%	11%	Invested in secondary property portfolio providing higher yields, income and significant return potential
Index-Linked gilts	17%	23%	Materially lengthened the duration of index-linked gilts to improve hedging characteristics
Credit	12%	21%	A significant increase and move to a combination of liquid and illiquid credit, to generate short and medium term income
Diversified income	0%	9.5%	An investment in a diversified income fund focused on assets which provide a higher yield
Cash	2%	0.5%	Requirements for cash reduced as overall portfolio income improved

This is one possible strategy that could materially improve scheme affordability and benefit security. But of course the optimal investment strategy will be scheme and sponsor specific.

FTSE350 analysis

Pension deficits

The aggregate IAS19 FTSE350 pension deficit improved over the first half of the year, reaching a surplus of £50bn in March 2016 as corporate bond yields widened. However, Brexit and the resumption of quantitative easing, including direct purchases in the corporate bond market, has since pulled corporate bond yields down to record lows. The IAS19 deficit stood at £165bn at 31 August 2016. The peak-to-trough fall over the last six months is over £200bn, exceeding total annual earnings for the FTSE350.

The graph below shows how the aggregate IAS19 funding position for FTSE350 companies has changed between 31 August 2015 and 31 August 2016.

FTSE350 analysis

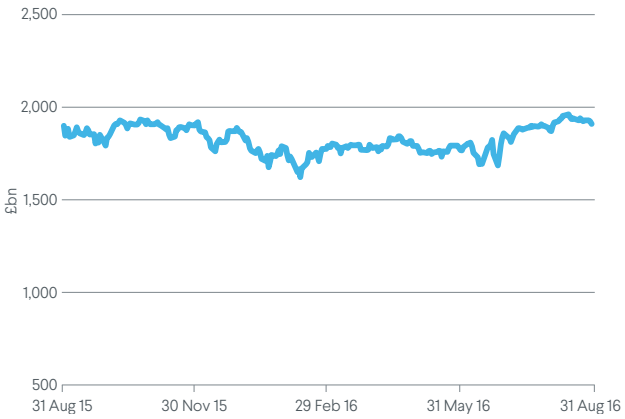
Company performance

The market cap of the 196 companies in the FTSE350 that sponsor a defined benefit pension scheme has increased slightly from £1,900bn at 31 August 2015 to £1,910bn at 31 August 2016.

Earnings for the same companies have decreased in aggregate from £206bn (earnings in year-end accounts up to 30 June 2015) to £163bn (earnings in year-end accounts, where available, up to 30 June 2016).

The actual spending on defined benefit pensions has increased from £13bn (reported contributions in year-end accounts up to 30 June 2015) to £15bn (reported contributions in year-end accounts up to 30 June 2016).

FTSE350 Defined Benefit Pension Scheme Sponsors Market Cap



Date	2014/15	2015/16
Reported earnings	£206bn	£163bn
Reported pension contributions	£13bn	£15bn

Our view

Companies with high hedging remain well placed to support their schemes, and may even be able to use cash proceeds from LDI portfolios to further hedge rates and inflation. Companies with low hedging should reconsider their long term objectives, and in many cases take a lower level of investment risk but hold that risk for a longer period of time to enable a slow-and-steady path to full funding.

FTSE350 analysis

Ability to support pension schemes

At an individual company level, what is really important is the ability of the company to support its pension scheme. To put pension schemes in the context of the businesses that support them, we consider four company metrics: security, affordability, fluctuation and expenditure. These are explained in the table on the right. We calculate these metrics for each company in the FTSE350 with a defined benefit pension scheme, based on information from year-end company accounts between 29 March 2015 and 30 June 2016, and expressed relative to market capitalisation at 31 August 2016. These metrics are then plotted on four axes to give a diamond shape – the larger the shape, the bigger the pension scheme burden on the sponsoring company.

The charts on the right show how the median shape has changed over the last five years for the FTSE350. Our key findings on the changes over the past year are set out below.

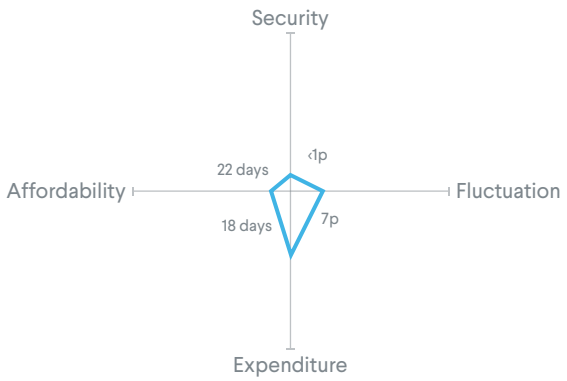
- Security has remained stable. The typical company's IAS19 pension deficit equated to 1p in the pound of market cap (2014/15: 1p in the pound of market cap).
- Affordability has improved, as the reduction in deficits has outweighed the fall in earnings. The typical company could pay off its IAS19 deficit with 22 days of earnings (2014/15: 33 days of earnings).
- Fluctuation has remained stable. The typical company has 7p of un-hedged IAS19 pension liabilities in the pound of market cap (2014/15: 7p of un-hedged pension liabilities).
- Expenditure has increased slightly due to an increase in pension contributions together with a decrease in company earnings. The typical company could generate its annual pension contributions with 18 days of earnings (2014/15: 14 days of earnings).

These metrics become particularly useful when comparing the spread of scores across the FTSE350, which is set out on the next page. Appendix 2 then sets out the scores for all companies in the FTSE350 with a defined benefit pension scheme.

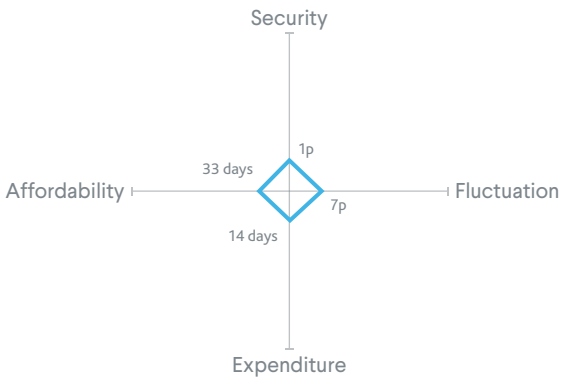
Our view

These metrics suggest companies remain well placed to support their pension schemes. However, we expect this to change as the impact of Brexit flows through to company and pension scheme reporting. Companies with well hedged schemes will remain well placed, but companies with low hedging will have suffered. Unfortunately it's often the companies with significant pension deficits that are chasing returns and have lower hedging, so the stress is likely to be felt by those very companies that are least well equipped to handle it.

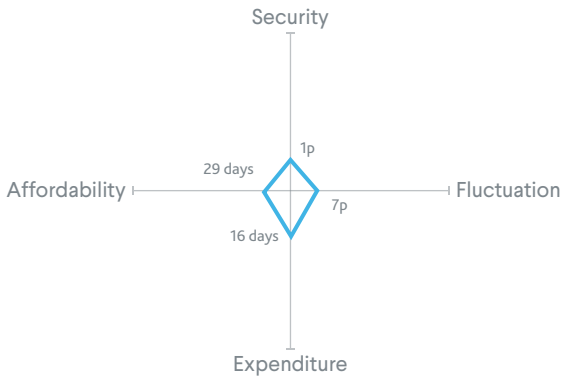
FTSE350 median – 2015/16



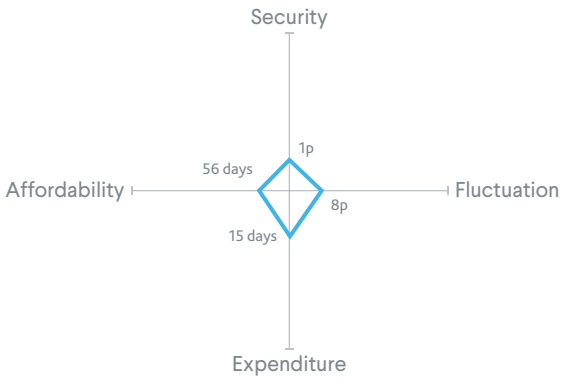
FTSE350 median – 2014/15



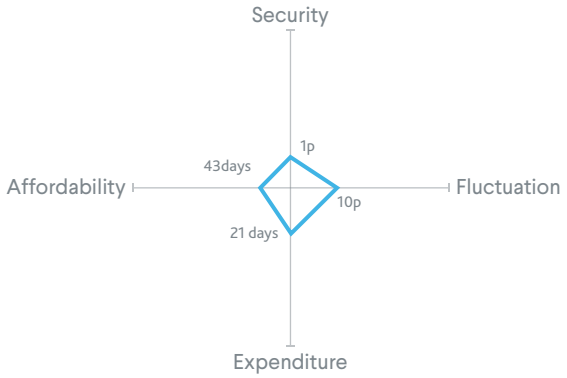
FTSE350 median – 2013/14



FTSE350 median – 2012/13



FTSE350 median – 2011/12



Pension metrics:

Security – pension deficit expressed as pence in the pound of company market cap

Affordability – the number of days of company earnings to pay off the pension deficit

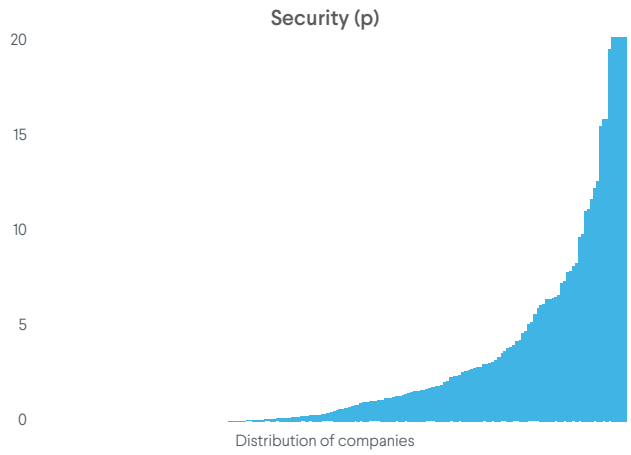
Fluctuation – un-hedged pension liabilities expressed as pence in the pound of company market cap

Expenditure – the number of days of company earnings to generate the annual pension contributions

These charts rank the 196 FTSE350 companies with a defined benefit pension scheme on each of our four metrics, and hence show the spread across the FTSE350.

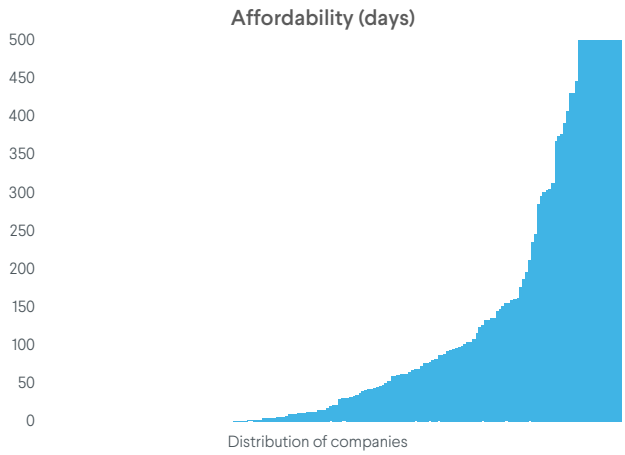
Security

Pension deficit expressed as pence in the pound of company market cap



Affordability

The number of days of company earnings to pay off the pension deficit



There have now been 4 years where no companies have had a pension deficit larger than their market cap. However, falls in market caps and some increases in pension deficits over the year mean many security scores have worsened slightly.

93% of companies have a pension deficit of less than 10p in the pound of market cap.

84% of companies have a pension deficit of less than 5p in the pound of market cap.

It would take 3 companies (listed below) more than 2 years (730 days) of earnings to pay off the pension deficit.

83% of companies could pay off the deficit with less than 6 months (183 days) of earnings.

There are 8 companies that have a deficit and reported negative earnings. These have been put at the far right of the above distribution (but are excluded from the list below).

10 highest scores

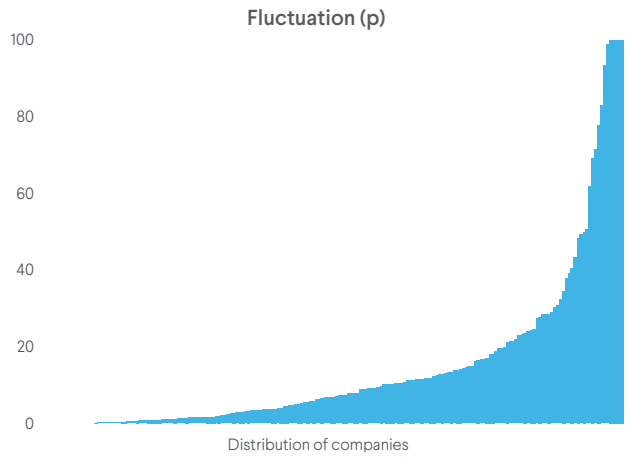
Security	
BAE Systems plc	35
GKN plc	29
Carillion plc	29
Morgan Advanced Materials plc	24
Tesco plc	21
Atkins WS plc	19
BT Group plc	16
Thomas Cook Group plc	16
Mitchells & Butlers plc	15
Kier Group plc	12

10 highest scores (excluding negative earnings)

Affordability	
BAE Systems plc	1,202
GKN plc	955
Morgan Advanced Materials plc	801
Carillion plc	682
Tesco plc	571
Kier Group plc	556
Atkins WS plc	543
BP plc	446
BT Group plc	430
Synthomer plc	430

Fluctuation

Un-hedged pension liabilities expressed as pence in the pound of company market cap



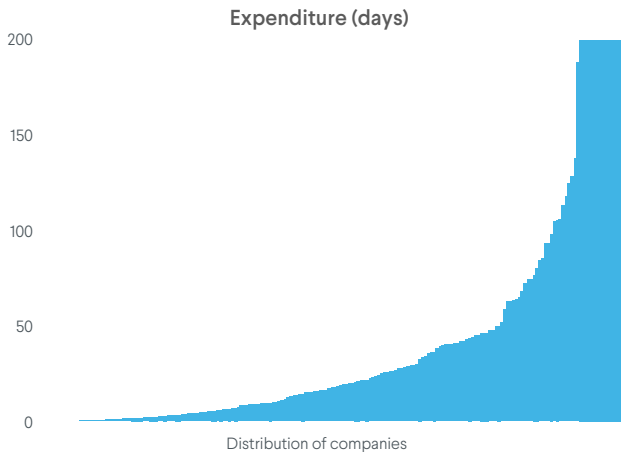
5 companies (listed below) have un-hedged pension liabilities in excess of their market cap, i.e. the un-hedged liabilities are more than 100p in the pound of market cap.

80% of companies have un-hedged pension liabilities of less than 20p in the pound of market cap.

58% of companies have un-hedged pension liabilities of less than 10p in the pound of market cap.

Expenditure

The number of days of company earnings to generate the annual pension contributions



5 companies (listed below) put more than half a year's earnings (183 days) into their pension scheme.

65% of companies put less than 1 month (31 days) of earnings into their pension scheme and 33% of companies put less than 1 week (7 days) of earnings into their pension scheme.

There are 10 companies that paid pension contributions but reported negative earnings. These have been put at the far right of the above distribution (but are excluded from the list below).

10 highest scores

Fluctuation	
Go-Ahead Group plc	182
Stagecoach Group plc	158
FirstGroup plc	139
Carillion plc	118
BAE Systems plc	117
Mitchells & Butlers plc	99
Kier Group plc	93
International Consolidated Airlines Group SA	83
Phoenix Group Holdings	78
Tesco plc	71

10 highest scores (excluding negative earnings)

Expenditure	
RSA Insurance Group plc	960
Serco Group plc	365
Mitchells & Butlers plc	249
Royal Mail plc	220
Barclays plc	188
BAE Systems plc	138
Marston's plc	128
Smiths Group plc	125
Tesco plc	118
Amec Foster	113

Appendix 1

Methodology

We have analysed the 196 companies in the FTSE350 that have defined benefit pension schemes sufficiently material to be disclosed under IAS19 in their annual reports. This excludes all investment funds and trusts, and is based on the FTSE Group listing at 30 June 2016. We have included UK and overseas funded and unfunded defined benefit schemes. Any figures or proportions quoted in this report in relation to the "FTSE350" relate only to these 196 companies.

We have used market capitalisation as at 31 August 2016 to calculate our Security and Fluctuation metrics.

The following information has been taken from companies' most recently published annual reports. We have referenced annual reports with effective dates from 29 March 2015 to 30 June 2016.

- Pension data - extracted from IAS19 disclosures
- Company earnings data - extracted from performance statements generally using Bloomberg. We have taken company earnings before tax, depreciation and amortisation; and therefore this figure is after deducting net interest payments. In doing so we have relied on the accuracy of information provided by Bloomberg.
- Staff, pension and other costs - extracted from the notes to accounts.

Where necessary, figures have been converted to sterling using appropriate exchange rates at the relevant accounting date.

For company expenditure, we have taken the total expenditure on pensions covering contributions for both the accrual of benefits and the repayment of deficits. These figures are as reported in companies' annual reports and include both regular contributions and one-off contributions.

We have included both funded and unfunded defined benefit pension liabilities in our analysis.

To determine un-hedged pension liabilities, we have taken pension liabilities less the value of bond type assets held by the pension scheme. Bond type assets are taken from the IAS19 disclosures. They include government bonds, corporate bonds, LDI funds and buy-ins.

When a company makes any pension deficit adjustment for IFRIC14, our analysis references the IAS19 pension surplus / deficit prior to the IFRIC14 adjustment.

Our analysis for companies that operate sections in the Railways Pension Scheme is after the liability / deficit reduction on account of franchise adjustments and employees' share of the deficit.

Appendix 2

Company scores

Basic materials

Company	Financial accounting year	Security pence per pound of market cap	Affordability days of earnings	Fluctuation pence per pound of market cap	Expenditure days of earnings
Anglo American plc	31-Dec-15	0	0	21	NE
BHP Billiton plc	30-Jun-15	0	245	0	0
Croda International plc	31-Dec-15	1	73	15	44
DS Smith plc	31-Mar-15	6	187	21	16
Elementis plc	31-Dec-15	2	62	27	63
Essentra plc	31-Dec-15	0	0	7	9
Evraz plc	31-Dec-15	12	NE	28	NE
Fresnillo plc	31-Dec-15	0	12	0	1
Glencore International plc	31-Dec-15	1	NE	9	NE
Johnson Matthey plc	31-Mar-16	0	0	11	40
Mondi plc	31-Dec-15	3	76	3	1
Rio Tinto plc	31-Dec-15	3	92	17	15
Synthomer plc	31-Dec-15	11	430	23	36
Vedanta Resources plc	31-Mar-15	4	16	4	1
Victrex plc	30-Sep-15	0	1	1	0
Sector median		**1**	**67**	**10**	**16**

NE - Negative Earnings

Communications

Company	Financial accounting year	Security pence per pound of market cap	Affordability days of earnings	Fluctuation pence per pound of market cap	Expenditure days of earnings
BT Group plc	31-Mar-16	16	430	62	105
Euromoney Institutional Investor plc	30-Sep-15	0	10	2	3
Informa plc	31-Dec-15	0	5	2	0
ITV plc	31-Dec-15	2	86	30	50
Pearson plc	31-Dec-15	0	0	6	40
United Business Media Ltd	31-Dec-15	1	42	10	8
Vodafone Group plc	31-Mar-16	0	10	3	1
WPP Group plc	31-Dec-15	1	45	2	14
Sector median		**1**	**26**	**5**	**11**

Consumer, cyclical

Company	Financial accounting year	Security pence per pound of market cap	Affordability days of earnings	Fluctuation pence per pound of market cap	Expenditure days of earnings
Barratt Developments plc	30-Jun-15	0	0	1	9
Bellway plc	31-Jul-15	0	7	1	4
Berkeley Group Holdings plc	30-Apr-15	0	0	0	0
Bovis Homes Group plc	31-Dec-15	0	0	5	0
Cineworld Group plc	31-Dec-15	0	0	0	4
Compass Group plc	30-Sep-15	0	4	7	36
Crest Nicholson	31-Oct-15	1	17	9	21
DCC plc	31-Mar-16	0	0	0	5
Debenhams plc	29-Aug-15	0	0	0	19
Dixons Carphone plc	02-May-15	11	406	19	23
Galliford Try plc	30-Jun-15	0	0	9	33
GKN plc	31-Dec-15	29	955	50	50
Grafton Group plc	31-Dec-15	1	40	12	7
Greene King plc	30-Apr-15	2	46	13	5
Home Retail Group plc	28-Feb-16	6	NE	32	NE
Howden Joinery Group plc	31-Dec-15	2	80	18	93
Inchcape plc	31-Dec-15	0	0	0	10
Intercontinental Hotels Group plc	31-Dec-15	1	30	2	2
International Consolidated Airlines Group SA	31-Dec-15	0	0	83	84
Kingfisher plc	31-Jan-16	0	0	3	18
Ladbrokes plc	31-Dec-15	0	0	13	5
Marks & Spencer Group plc	02-Apr-16	0	0	18	41
Merlin Entertainments plc	31-Dec-15	0	5	1	1
Millennium & Copthorne Hotels plc	31-Dec-15	1	30	1	9
Mitchells & Butlers plc	27-Sep-15	15	296	99	249
N Brown Group plc	28-Feb-15	0	12	5	7
Next plc	30-Jan-16	0	0	4	3
Pendragon plc	31-Dec-15	6	102	41	7
Persimmon plc	31-Dec-15	0	0	4	9
Redrow plc	30-Jun-15	0	5	2	1
Sig plc	31-Dec-15	3	94	11	14
Sports Direct International plc	27-Apr-15	0	2	0	0
Taylor Wimpey plc	31-Dec-15	3	104	17	14
Thomas Cook Group plc	30-Sep-15	16	390	24	39
Travis Perkins plc	31-Dec-15	0	1	14	46
WH Smith plc	31-Aug-15	0	0	0	9
Whitbread plc	03-Mar-16	4	151	20	43
William Hill plc	31-Dec-15	0	0	0	13
Wolseley plc	31-Jul-15	0	12	15	20
Sector median		**0**	**5**	**7**	**10**

NE - Negative Earnings

Consumer, non cyclical

Company	Financial accounting year	Security pence per pound of market cap	Affordability days of earnings	Fluctuation pence per pound of market cap	Expenditure days of earnings
Aggreko plc	01-Dec-15	0	1	1	2
Ashtead Group plc	30-Apr-15	0	0	2	0
Associated British Foods plc	30-Sep-15	0	5	13	21
Astrazeneca plc	31-Dec-15	3	126	7	26
Atkins WS plc	31-Mar-16	19	543	69	74
Babcock International Group	31-Mar-16	4	147	31	58
Barr (A.G.) plc	30-Jan-16	2	93	9	17
Berendsen plc	31-Dec-15	0	0	3	5
Booker Group plc	25-Mar-16	1	61	7	2
British American Tobacco plc	31-Dec-15	0	12	3	21
Britvic plc	30-Sep-15	0	0	11	48
BTG plc	31-Mar-15	0	0	0	11
Bunzl plc	31-Dec-15	1	35	3	12
Capita plc	31-Dec-15	2	162	9	29
Coca-Cola HBC AG	31-Dec-15	2	68	4	9
Dairy Crest Group plc	31-Mar-16	4	154	22	106
Dechra Pharmaceuticals plc	30-Jun-15	0	10	0	5
Diageo plc	30-Jun-16	2	145	8	21
Dignity plc	31-Dec-15	1	53	5	6
Experian plc	31-Mar-16	0	0	3	3
G4S plc	31-Dec-15	6	304	25	74
Genus plc	30-Jun-15	5	376	19	40
Glaxosmithkline plc	31-Dec-15	2	51	16	0
Greencore Group plc	25-Sep-15	10	373	24	45
Greggs plc	31-Dec-15	0	13	6	0
Hays plc	30-Jun-15	0	4	7	28
Homeserve plc	31-Mar-16	0	0	1	6
Imperial Tobacco Group plc	30-Sep-15	2	60	10	15
Intertek Group plc	31-Dec-15	1	NE	2	NE
J Sainsbury plc	28-Feb-16	8	124	49	63
Marston's plc	03-Oct-15	0	0	28	128
PZ Cussons plc	31-May-15	0	0	6	27
Qinetiq Group plc	31-Mar-16	3	133	43	52
Reckitt Benckiser Group plc	31-Dec-15	0	11	2	10
Rentokil Initial plc	31-Dec-15	0	0	3	2
Sabmiller plc	31-Mar-16	0	4	0	1
Savills plc	31-Dec-15	1	48	8	27
Serco Group plc	31-Dec-15	0	0	0	365
Smith & Nephew plc	31-Dec-15	1	67	5	26
Tate & Lyle plc	31-Mar-16	5	211	20	63
Tesco plc	27-Feb-16	21	571	71	118
Unilever plc	31-Dec-15	2	88	13	26
United Drug plc	30-Sep-15	1	87	9	28
WM Morrison Supermarkets plc	31-Jan-16	0	0	15	46
Sector median		**1**	**52**	**8**	**26**

NE - Negative Earnings

Diversified

Company	Financial accounting year	Security pence per pound of market cap	Affordability days of earnings	Fluctuation pence per pound of market cap	Expenditure days of earnings
Drax Group plc	31-Dec-15	3	69	12	26
Inmarsat plc	31-Dec-15	0	0	1	1
Mitie Group plc	31-Mar-15	4	98	13	8
Sector median		**3**	**69**	**12**	**8**

Energy

Company	Financial accounting year	Security pence per pound of market cap	Affordability days of earnings	Fluctuation pence per pound of market cap	Expenditure days of earnings
Amec Foster	31-Dec-15	8	303	10	113
BP plc	31-Dec-15	7	446	38	77
John Wood Group plc	31-Dec-15	0	0	7	4
Royal Dutch Shell plc	31-Dec-15	7	158	34	24
Sector median		**7**	**231**	**22**	**50**

Financial

Company	Financial accounting year	Security pence per pound of market cap	Affordability days of earnings	Fluctuation pence per pound of market cap	Expenditure days of earnings
3i Group plc	31-Mar-15	0	0	0	0
Aberdeen Asset Management plc	30-Sep-15	0	0	1	17
Aviva plc	31-Dec-15	0	0	0	47
Barclays plc	31-Dec-15	0	0	29	188
Beazley plc	31-Dec-15	0	1	1	2
Brewin Dolphin Holdings plc	30-Sep-15	1	62	11	65
British Land Co plc	31-Mar-16	0	2	1	1
Capital & Counties Properties plc	31-Dec-15	0	0	1	0
Close Brothers Group plc	31-Jul-15	0	0	1	0
Countrywide plc	31-Dec-15	0	6	1	29
Derwent London plc	31-Dec-15	0	0	0	0
Direct Line Insurance Group plc	31-Dec-15	0	0	0	2
Grainger plc	30-Sep-15	0	15	3	10
Great Portland Estates plc	31-Mar-15	0	1	0	0
Hammerson plc	31-Dec-15	1	34	1	2
Henderson Group plc	31-Dec-15	0	0	0	3
Hiscox Ltd	31-Dec-15	0	0	5	0
HSBC Holdings plc	31-Dec-15	0	0	4	20
International Personal Finance plc	31-Dec-15	0	1	3	3
Investec plc	31-Mar-16	0	0	0	3
Jardine Lloyd Thompson Group plc	31-Dec-15	6	368	17	40
Land Securities Group plc	31-Mar-16	0	0	0	0
Legal & General Group plc	31-Dec-15	10	301	14	23
Lloyds Banking Group plc	31-Dec-15	0	0	12	NE
London Stock Exchange Group plc	31-Dec-15	0	30	1	0
Man Group plc	31-Dec-15	0	0	2	72
Old Mutual plc	31-Dec-15	0	0	1	3
Paragon Group of Cos plc	30-Sep-15	2	60	7	9
Phoenix Group Holdings	31-Dec-15	0	0	78	64
Provident Financial plc	31-Dec-15	0	0	0	13
Prudential plc	31-Dec-15	0	0	0	6
Rathbone Brothers plc	31-Dec-15	0	29	7	45
Royal Bank of Scotland Group plc	31-Dec-15	1	NE	28	NE
RSA Insurance Group plc	31-Dec-15	0	0	0	960
Schroders plc	31-Dec-15	0	0	0	0
Segro plc	31-Dec-15	0	0	1	11
St Modwen Properties plc	31-Dec-15	0	0	1	0
Standard Chartered plc	31-Dec-15	2	NE	5	NE
Standard Life plc	31-Dec-15	0	0	0	3
Tullett Prebon plc	31-Dec-15	0	0	21	0
Sector median		**0**	**0**	**1**	**5**

NE - Negative Earnings

Industrial

Company	Financial accounting year	Security pence per pound of market cap	Affordability days of earnings	Fluctuation pence per pound of market cap	Expenditure days of earnings
BAE Systems plc	31-Dec-15	35	1202	117	138
Balfour Beatty plc	31-Dec-15	8	NE	51	NE
BBA Aviation plc	31-Dec-15	2	133	14	68
Bodycote plc	31-Dec-15	0	0	1	4
Carillion plc	31-Dec-15	29	682	118	98
Clarkson plc	31-Dec-15	0	22	14	19
Cobham plc	31-Dec-15	2	96	5	38
CRH plc	31-Dec-14	0	14	5	21
Diploma plc	30-Sep-15	1	38	3	2
Electrocomponents plc	31-Mar-16	4	196	11	42
FirstGroup plc	31-Mar-16	12	99	139	25
Go-Ahead Group plc	30-Jun-15	5	136	182	105
Halma plc	31-Mar-16	2	104	5	16
IMI plc	31-Dec-15	0	0	12	8
James Fisher & Sons plc	31-Dec-15	5	136	6	18
Keller Group plc	31-Dec-15	4	76	8	5
Kier Group plc	30-Jun-15	12	556	93	93
Laird plc	31-Dec-15	0	0	2	4
Marshalls plc	31-Jan-15	0	0	3	2
Meggitt plc	31-Dec-15	8	235	17	42
Morgan Advanced Materials plc	31-Dec-15	24	801	48	80
National Express Group plc	31-Dec-15	0	0	0	6
Renishaw plc	30-Jun-15	3	160	12	8
Rolls-Royce Holdings plc	31-Dec-15	1	13	11	44
Rotork plc	31-Dec-15	1	62	7	22
Royal Mail plc	31-Mar-16	0	0	0	220
RPC Group plc	31-Mar-16	6	312	10	15
Senior plc	31-Dec-15	1	43	9	34
Smiths Group plc	31-Jul-15	2	65	39	125
Spectris plc	31-Dec-15	1	41	1	2
Spirax-Sarco Engineering plc	31-Dec-15	3	156	10	15
Stagecoach Group plc	30-Apr-16	4	65	158	85
Ultra Electronics Holdings plc	31-Dec-15	6	284	13	46
Vesuvius plc	31-Dec-15	3	82	11	19
Weir Group plc/The	31-Dec-15	3	NE	11	NE
Sector median		**3**	**97**	**11**	**30**

NE - Negative Earnings

Technology

Company	Financial accounting year	Security pence per pound of market cap	Affordability days of earnings	Fluctuation pence per pound of market cap	Expenditure days of earnings
Aveva Group plc	31-Mar-16	0	21	4	15
Sage Group plc/The	30-Sep-15	1	44	1	2
Sector median		**0**	**33**	**2**	**8**

Utilities

Company	Financial accounting year	Security pence per pound of market cap	Affordability days of earnings	Fluctuation pence per pound of market cap	Expenditure days of earnings
Centrica plc	31-Dec-15	1	19	23	41
National Grid plc	31-Mar-16	3	77	24	35
Pennon Group plc	31-Mar-16	1	33	10	33
Severn Trent plc	31-Mar-16	6	176	28	16
SSE plc	31-Mar-16	1	39	8	30
United Utilities Group plc	31-Mar-16	0	0	1	29
Sector median		**1**	**36**	**17**	**31**

Appendix 3

Report authors

Jon Hatchett

Jon is a Partner and leads our corporate consulting business. He specialises in advising corporate entities on their pension issues including long-term strategy and has led our development of at-retirement member education and engagement programmes.

Jon is a Fellow of the Institute and Faculty of Actuaries as well as a Chartered Enterprise Risk Actuary. Jon's strategic approach helps his clients manage the cost and risk involved in achieving their objectives. Jon is a regular industry speaker on risk management issues, sits on the Board of Examiners for the Institute and Faculty of Actuaries, and has authored a number of research papers.

Alistair Russell-Smith

Alistair is a Partner based in our London office. He specialises in providing advice to corporate clients, focussing particularly on benefit change and liability management. He is also a scheme actuary, providing pensions advice to a range of trustee clients. Alistair advises clients on a breadth of pensions accounting issues including international, US, Canadian and UK pensions accounting standards.

Stuart Gray

Stuart is a Fellow of the Faculty and Institute of Actuaries and works with a variety of corporate and trustee clients. He specialises in pension scheme accounting and PPF-levies, writing many of our publications in these areas. He also has an interest in the implications for pension schemes of resource and environment constraints and is a member of the Actuarial Profession's working party investigating this.

Kieran Mistry

Kieran has assisted in advising private sector companies on liability management exercises, as well as the pensions considerations for a number of corporate transactions. He also has experience advising companies on pensions accounting under a variety of accounting standards. He is also a member of our Risk Transfer team, working with companies as well as trustees, to help them find opportunities to reduce their pension scheme's risks in a cost effective and intelligent way.

Commonly used terms

Affordability: the number of days of company earnings to pay off the pension deficit

Annual pension contributions: this includes both deficit repair contributions and future accrual contributions

Earnings: company earnings before tax, depreciation and amortisation

Expenditure: the number of days of company earnings to generate the annual pension contributions

Fluctuation: un-hedged pension liabilities expressed as pence in the pound of company market cap

Market cap: prevailing company share price multiplied by the number of shares in issue

Pension deficit: pension liabilities less the market value of pension scheme assets

Pension liabilities: pension liabilities under IAS19 as disclosed in a company's annual report

Security: pension deficit expressed as pence in the pound of company market cap

Un-hedged pension liabilities: pension liabilities less the value of bond type assets held by the pension scheme

HYMANS ROBERTSON
CLUB VITA

London | Birmingham | Glasgow | Edinburgh T 020 7082 6000 | www.hymans.co.uk | www.clubvita.co.uk