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RESEARCH

German companies with UK defined benefit schemes

November 2015

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> Our report analyses the contributions paid, levels of deficit and levels of risk within the schemes.

Introduction

This survey looks at German companies, almost all of which are constituents of the DAX index, which have UK subsidiary companies with defined benefit (DB) pension schemes. The survey covers 22 German companies with around £26.9bn 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. Although the companies are not named directly within this survey, they are represented by the same number in each chart throughout.

The costs and risks associated with DB pension schemes are well known within the industry. In most cases the parent companies in our survey 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 23% of total staff costs, versus a corresponding figure of around 6% for the FTSE350.

I hope you will find our report both interesting and useful as a benchmark of your UK pension exposure against other German-owned companies.

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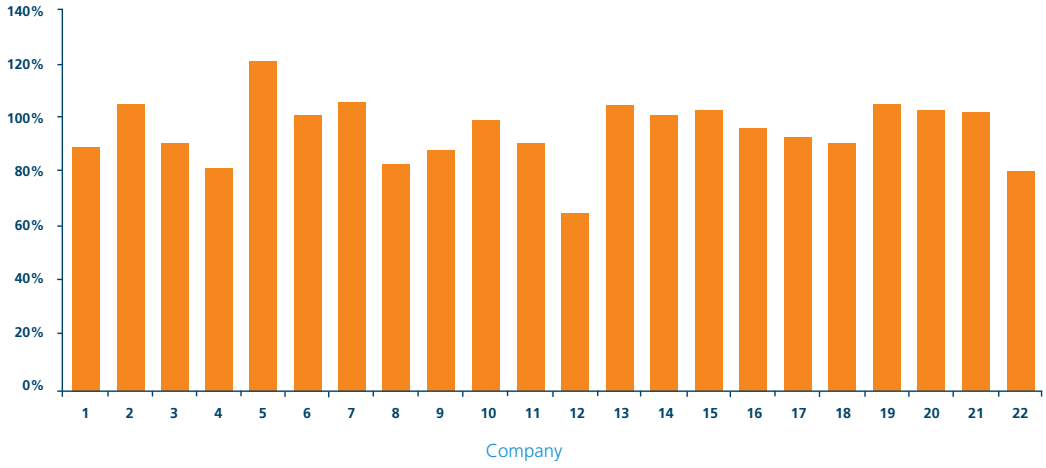
Note: Where figures are not available from a particular company's accounts, we have estimated them based on other information, if possible, or excluded them from the relevant section of analysis.

> The average funding level is around 97%, which is higher than the average funding level of FTSE350 companies' DB schemes at the same date of around 93%.

Funding levels on the company accounting basis

The funding levels (as measured under IFRS) of these companies' schemes are similar to those seen across UK DB schemes as a whole. The average funding level is around 97%, which is higher than the average funding level of FTSE350 companies' DB schemes at the same date of around 93%. There were ten companies with funding surpluses, which are a rare sight within the FTSE350. The least well-funded scheme had a funding level of 67%.

Scheme funding levels



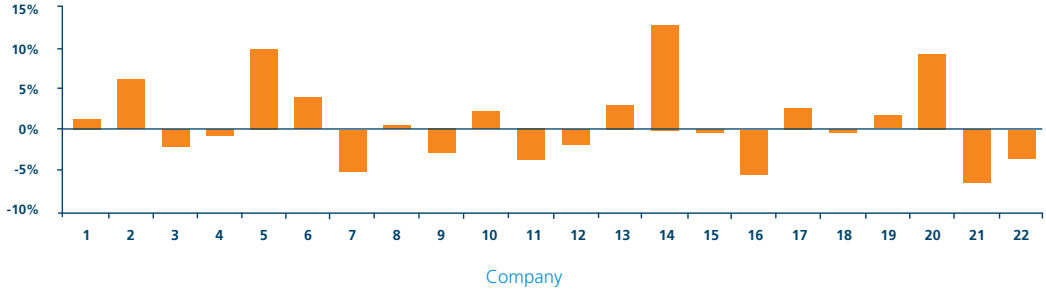
Source: Financial statements as at 31 December 2014

The funding level of course depends on the actuarial assumptions used to calculate scheme liabilities. The strength of assumptions adopted will vary from one employer to another, and from one year to the next but should comply with the international accounting standards at the relevant date.

Changes in funding level

The following chart shows percentage change in the funding levels between 2013 and 2014. The funding level increased by almost 1% on average between year-end 2013 and year-end 2014 for the UK schemes in the survey.

Percentage change in funding level between 2013 and 2014



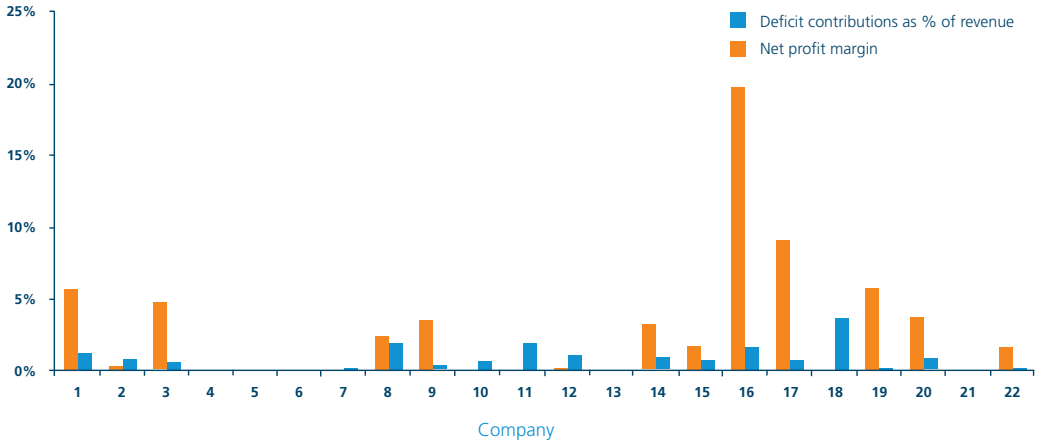
Source: Financial statements as at 31 December 2014

> At current contribution rates it will take an average of 6.8 years for the employers with scheme deficits to clear these, assuming that further deficits do not arise in the meantime.

Pension related cost and impact on financial performance

The following chart shows deficit contributions paid as a percentage of company revenues, against companies' net profit (losses are shown as zero). Company 5 has been omitted as an outlier. Companies 4, 6, 13 and 21 have been omitted due to lack of data.

Company profit vs scheme deficit contributions



Source: Financial statements as at 31 December 2014

For the purpose of this survey, deficit contributions have been derived as total DB contributions paid by the employer less the disclosed 'current service cost' for DB accrual.

The aggregate contribution paid into these DB schemes in 2014 was approximately £422m, with contributions relating to UK past service deficits amounting to £286m. This represents 1.1% of total UK revenues, which is greater than the 0.4% of total revenue contributed by FTSE350 companies on average on average in their 2014 accounts.

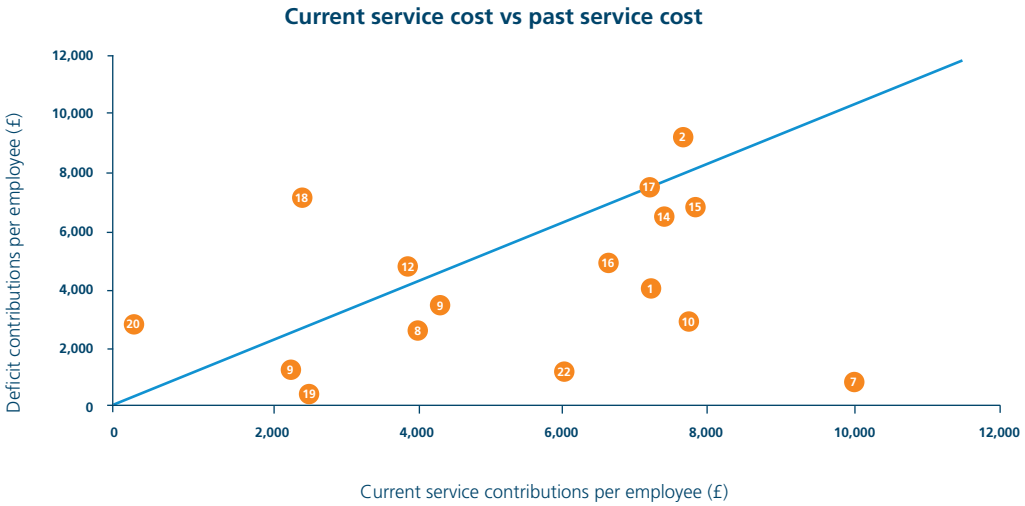
In most cases, the contribution requirements of the schemes are reasonably affordable for the employer and/or parent company, as they generate sufficient levels of profits. However it would appear that some will struggle to meet contribution requirements over the longer term without making changes to their funding strategy. For example, the use of formal guarantees to improve covenant and thereby enable a lower assessment of technical provisions; or asset backed contributions to bolster the assessed value of assets without immediate cash injections.

At a simpler level, the recovery plan could be extended in order to reduce the annual contribution requirement, although this will also depend upon the trustees' view of the company covenant.

At current contribution rates it will take an average of 6.8 years for the employers with scheme deficits to clear these, assuming that further deficits do not arise in the meantime.

> In many cases, companies paid higher contributions towards future service benefits than towards past service deficits.

The following graph compares the future service cost of retirement benefits per employee against the annual contributions paid in relation to past service deficit, also on a per employee basis.



Source: Financial statements as at 31 December 2014

Companies 5, 6 and 11 have been omitted due to a lack of data and companies 4, 13 and 21 are deemed to be outliers.

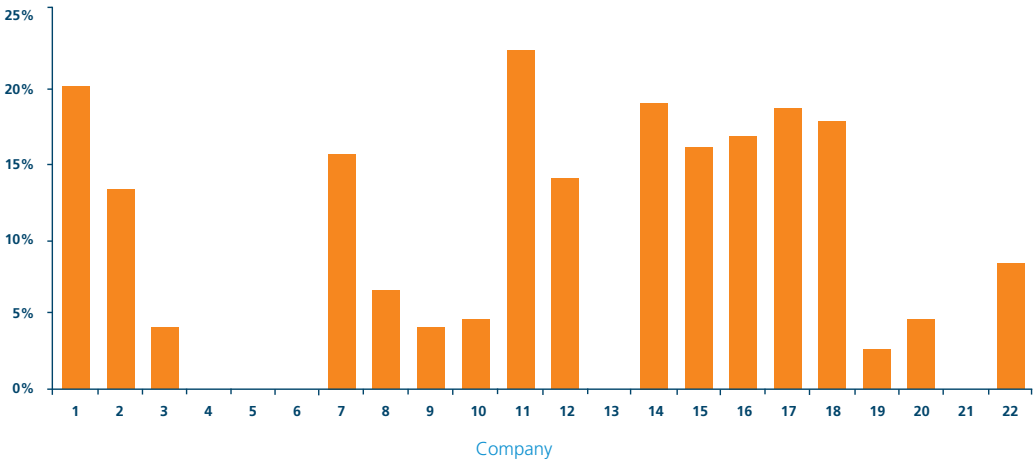
The average deficit contribution paid per employee in 2014 was around £3,900 and the average amount paid in relation to current service benefits was around £5,400 (this includes both DB and defined contribution (DC) arrangements). The average deficit contribution per employee is higher than the FTSE350 companies, which paid around £2,500 per employee in relation to past service deficits.

In many cases, companies paid higher contributions towards future service benefits than towards past service deficits (those below the blue line).

> The income statement may not provide a full breakdown of these costs, meaning that analysts' perceptions of companies' performance can be distorted.

The chart below demonstrates that pension contributions can represent a very significant proportion of total staff costs reported on the income statement. The impact of DB contribution requirements within these figures is diluted by employees who are not members of any pension arrangement and, to a lesser extent, those in DC arrangements. Nonetheless, in some cases, pension contributions are substantially increasing the cash outlay associated with employees' total remuneration. The income statement may not provide a full breakdown of these costs, meaning that analysts' perceptions of companies' performance can be distorted. Companies 5 and 6 have been omitted due to a lack of data, and Companies 4, 13 and 21 are deemed to be outliers.

Total DB contributions as % of staff costs



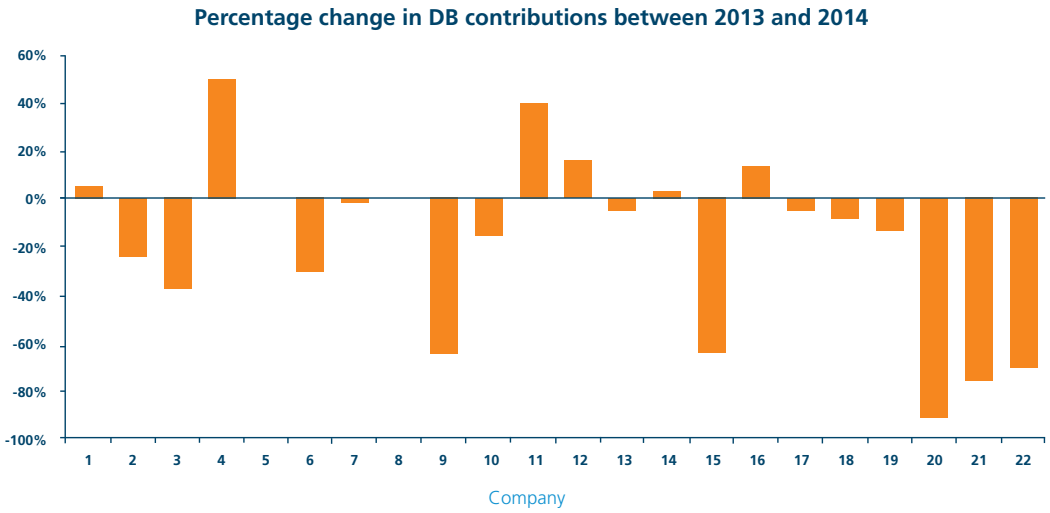
Source: Financial statements as at 31 December 2014

On average, pension contributions paid to DB schemes only (in relation to both past service deficit and current service) represented 12.2% of the total staff cost reported in the financial statements. However, the figure for individual companies varied greatly, from 2% up to 24%. The average contribution is higher than for FTSE350 companies, where the equivalent figure is 6%.

> The contribution level decreased by 17.1% on average between year end 2013 and year end 2014.

Changes in employer contributions

The chart below shows the percentage change in employer contributions to their defined benefit schemes between 2013 and 2014. The contribution level decreased by 17.1% on average between year end 2013 and year end 2014.

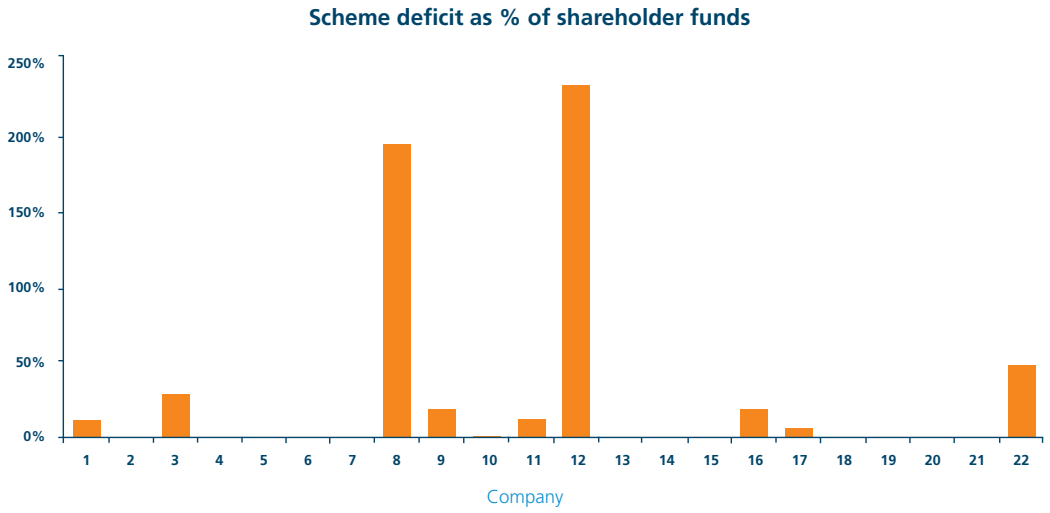


Source: Financial statements as at 31 December 2014

The aggregate contribution paid into these DB schemes in 2014 was approximately £422m, which is lower than the 2013 aggregate contribution of £765m.

Impact on shareholder funds

The following chart shows past service deficits as a percentage of shareholder funds. Companies with no scheme funding deficit have been excluded, as well as two companies 4 and 18 which are deemed outliers.



Source: Financial statements as at 31 December 2014

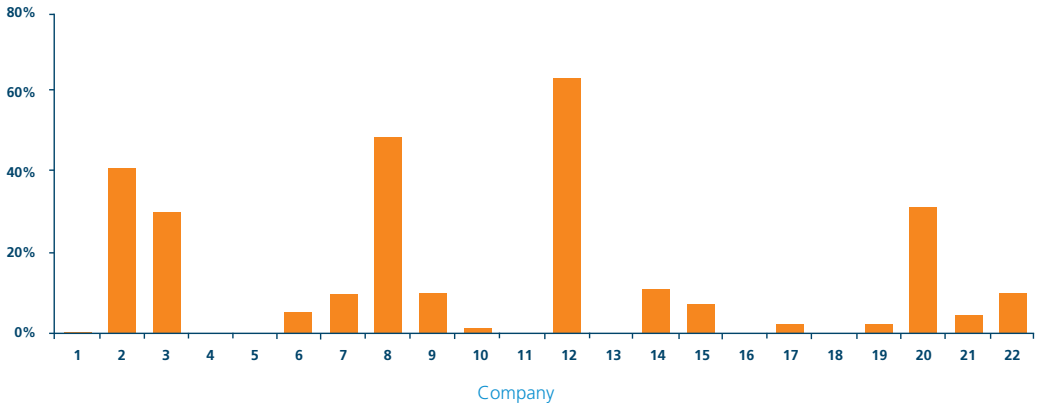
> On average, actuarial movement was about 16.9% of shareholder funds.

For the remaining cases, scheme deficits amount to 59% of shareholder funds on average. The return on shareholder funds could be impacted by this percentage during the period over which the deficit is removed. This can significantly affect the companies' ability to transfer funds back to their parent companies.

Of course, cash contributions are not the only way to reduce deficits. For example, companies could consider re-risking the scheme's investment strategy (i.e. increasing the allocation to growth assets) or undertaking incentive exercises (providing scheme members with options to amend their benefits in ways they might find attractive, but which result in a saving to the scheme – e.g. pension increase exchange, or flexible early retirement).

The following chart shows 'actuarial movements' as a percentage of shareholder funds. The actuarial movement consists of the impact of changes in assumptions, experience gains/losses on liabilities, and experience gains/losses on assets. Companies 4 and 5 have been omitted as outliers, while companies 11, 16 and 18 have been omitted due to lack of data.

Actuarial movement as % of shareholder funds



Source: Financial statements as at 31 December 2014

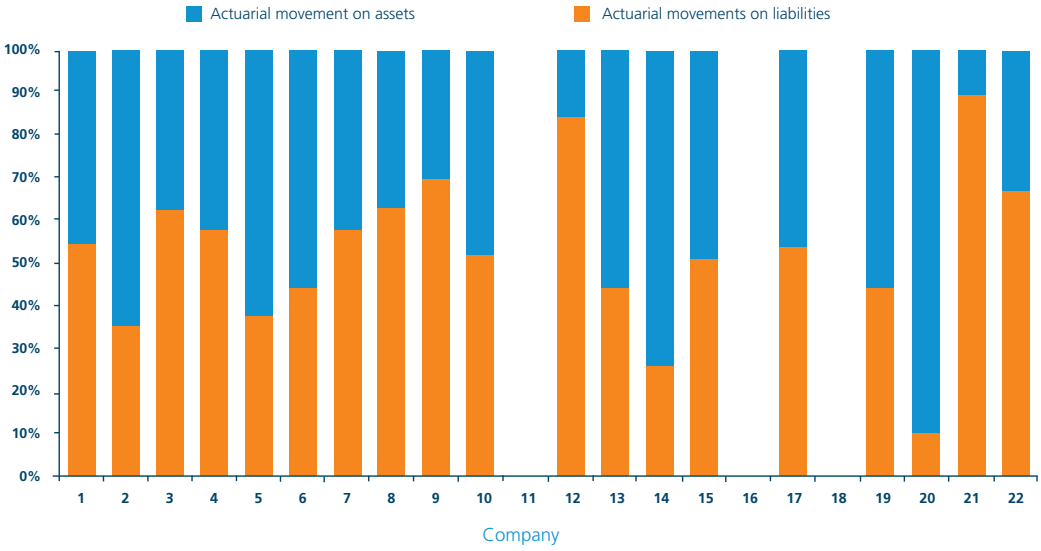
On average, actuarial movement was about 16.9% of shareholder funds. Movements at this level are fairly manageable, but in the case of Company 12 and the two outliers, where the movement is over 60% of shareholder funds, this will have a significant impact on the parent companies' holdings in the UK subsidiary. Given the volatile nature of actuarial assumptions and investment returns, such movements are likely to reoccur on a regular basis.

> In 12 cases, actuarial movements on the liabilities were more significant than those on the assets.

The following chart shows the split of actuarial movements between liabilities (including both experience gains/losses and changes in assumptions) and assets in each case.

The chart shows that in 12 cases, actuarial movements on the liabilities were more significant than those on the assets.

Split of actuarial movement between assets and liabilities



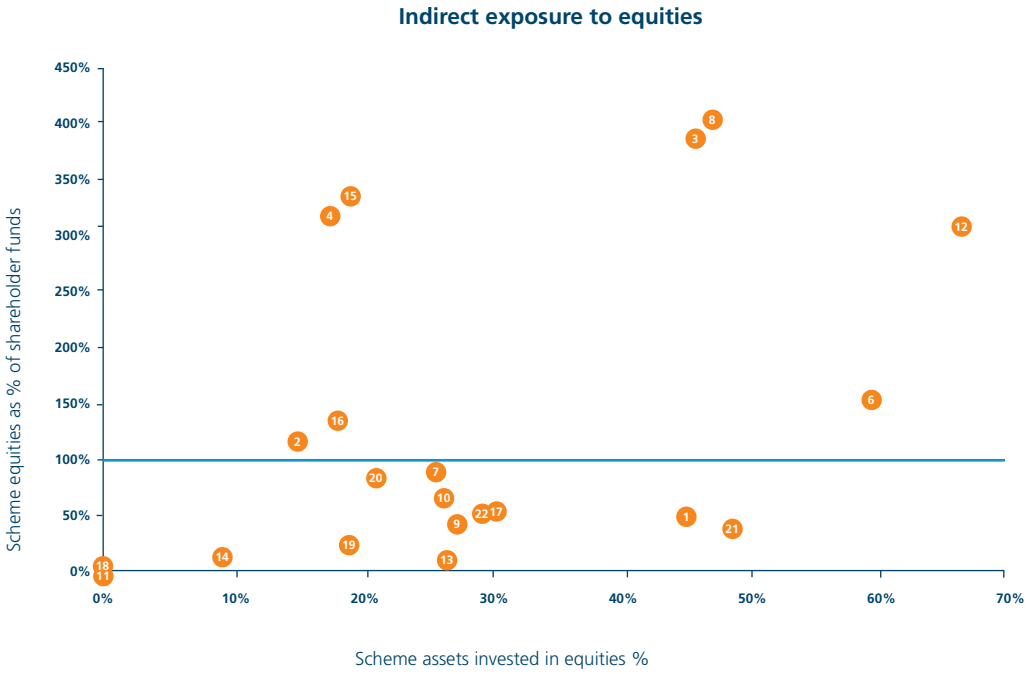
Source: Financial statements as at 31 December 2014

However, it is likely that the majority of the movements in liabilities seen relates to changes in assumptions. Specifically, changes to the discount rate, inflation assumption, and longevity assumptions. In years where no formal valuation has been completed (usually two out of every three years) it is common for disclosures to be prepared using a roll-forward method where experience gains/losses on liabilities may automatically be reported as zero.

> It would seem there is a case here to suggest that some of the parent companies are almost as exposed (or even more exposed) to the performance of their schemes' equity holdings as to the performance of their own subsidiary companies.

Indirect exposure to equity markets

A company's indirect exposure to equity markets via its pension scheme investments is sometimes overlooked. The chart below shows the level of equity investment both as a percentage of shareholder funds (vertical axis) and as a percentage of total scheme assets (horizontal axis). Company 5 has been omitted as an outlier.



Source: Financial statements as at 31 December 2014

The risk associated with investment in equities via the pension scheme could be deemed very significant in some cases. For example, in the case of Company 5, which is excluded in the above graph, the scheme's equity allocation is approximately 10% and yet this represents around 890% of the parent company's stake (measured by the value of shareholder funds) in the UK subsidiary.

The specific arrangements between subsidiary companies and their parents can sometimes lead to misleading results.

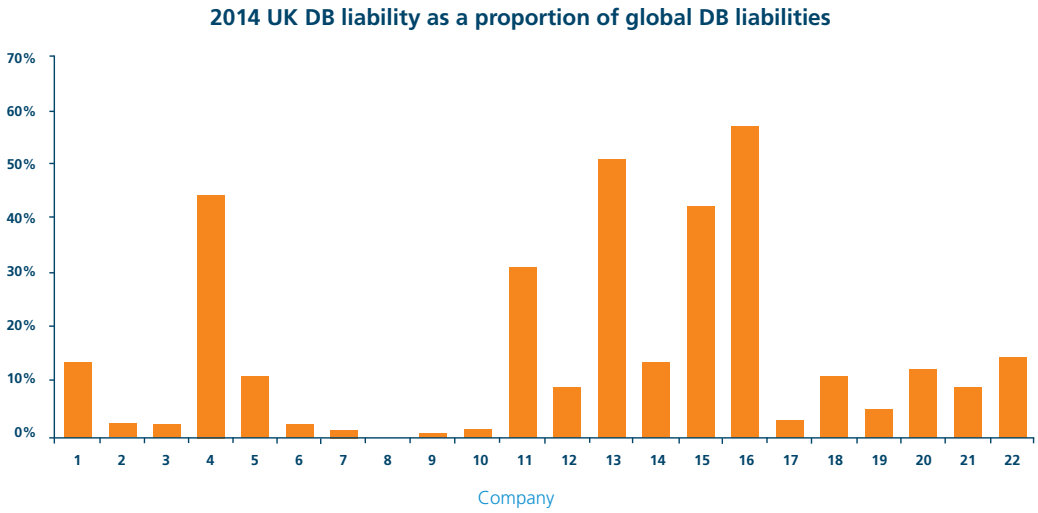
However, it would seem there is a case here to suggest that some of the parent companies are almost as exposed (or even more exposed) to the performance of their schemes' equity holdings as to the performance of their own subsidiary companies.

If this position is deemed undesirable then the schemes' holdings in equities could be reduced (in exchange for assets more closely aligned with the liabilities, such as bonds, property or liability driven investment funds). However, such a change could come with a significant increase in the expected cost of providing benefits under the scheme.

> On average, the UK liabilities account for 15% of the global liabilities related to DB schemes.

UK and global comparison: Impact of UK DB liabilities

The chart below shows the companies' DB liabilities as a proportion of their global DB liabilities.



Source: Financial statements as at 31 December 2014

On average, the UK liabilities account for 15% of the global liabilities related to DB schemes. However, the distribution is wide, as illustrated above, with the results ranging from below 1% to around 57%.

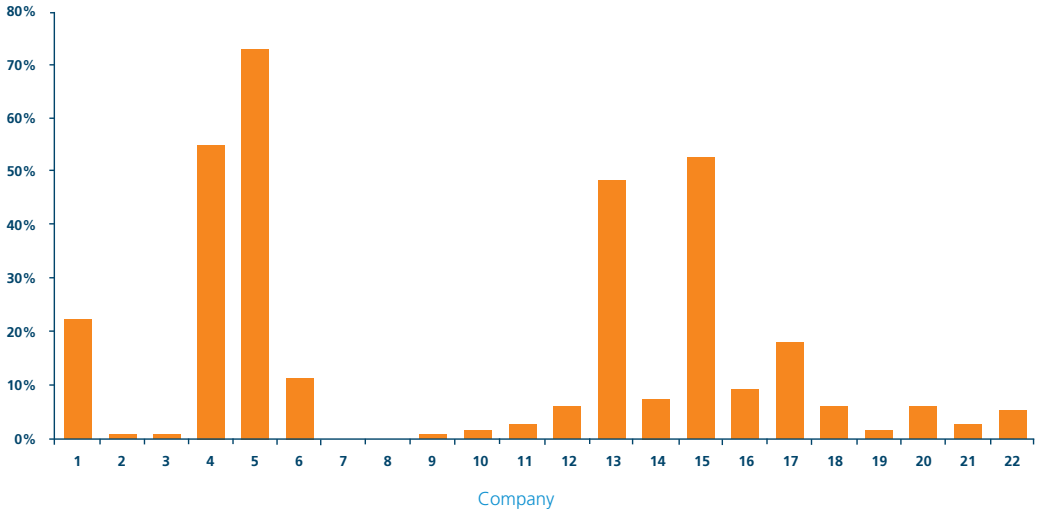
> While the companies produce an average of 15% of global contributions being made by UK subsidiaries, the variation in the proportions across the companies is extensive from below 1% to around 73%.

Impact of UK DB contributions

The following chart displays the companies' UK contributions as a proportion of the global contributions made to DB schemes.

While the companies produce an average of 15% of global contributions being made by UK subsidiaries, the variation in the proportions across the companies is extensive from below 1% to around 73%.

2014 UK DB contributions as a proportion of global DB contributions



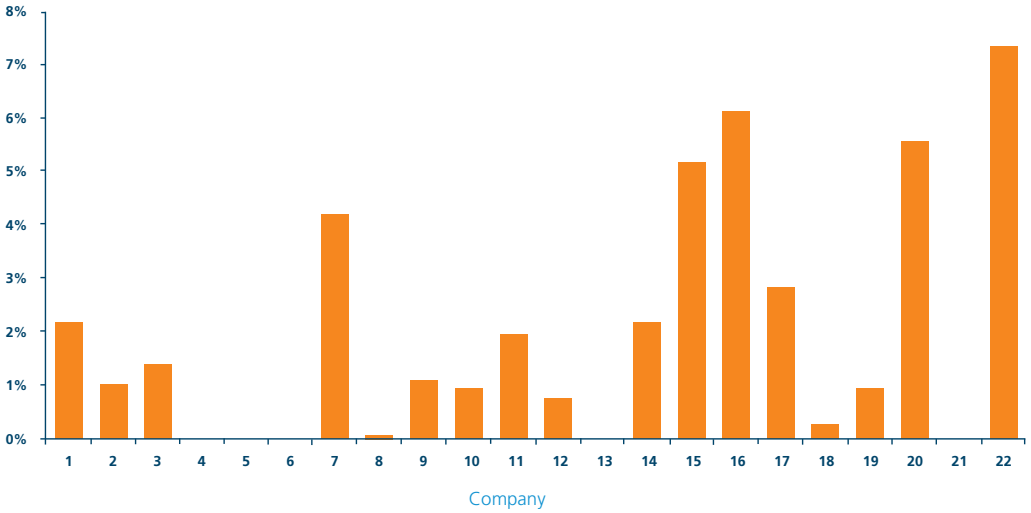
Source: Financial statements as at 31 December 2014

> The average proportion of global revenue produced by UK subsidiaries for the companies shown is 2%.

UK subsidiary revenue

To provide context for the UK proportions of the global liabilities and contributions previously shown, the following chart shows the UK revenue as a proportion of the global revenue.

2014 UK revenue as a proportion of global revenue



Source: Financial statements as at 31 December 2014

The result for all companies is 7% or under. The average proportion of global revenue produced by UK subsidiaries for the companies shown is 2%.

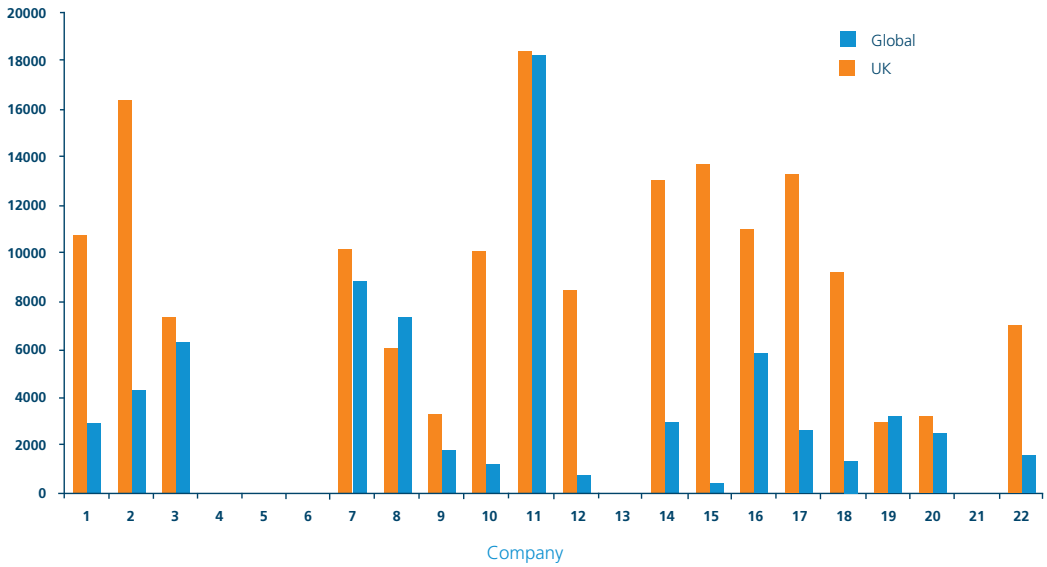
This is an interesting result, because despite UK subsidiaries on average producing 2% of the global revenue, they account for an average of 15% of the global DB liabilities and contributions.

> The average UK contribution in 2014 was just over £9,800, whereas the average global contribution was just under £4,300 per employee.

Global total pension contributions

The following chart puts into context the total contributions made globally into both DB and DC pension schemes per employee compared with the corresponding figure for the UK. Companies 4, 13 and 21 have been omitted as they are deemed to be outliers, while companies 5 and 6 have been omitted due to lack of data.

2014 total contributions per employee (£)



Source: Financial statements as at 31 December 2014

Interestingly, for the majority of these schemes the contributions made to UK schemes per employee were significantly in excess of the equivalent global contribution. The average UK contribution in 2014 was just over £9,800, whereas the average global contribution was just under £4,300 per employee.

Summary of data

The following table provides a summary of some of the information used in this survey:

2014 year end	DB Scheme Assets (£m)	DB Scheme Liabilities (£m)	Surplus/(Deficit) (£m)	Deficit Contributions (£m)	Service Costs (£m)	UK Subsidiary Revenue (£m)
1	1,260	1,430	-170	26	29	2,153
2	550	520	30	4	0	438
3	500	520	-20	2	0	447
4	5,780	7,110	-1,330	109	55	0
5	1,010	810	200	35	0	1
6	110	110	0	2	1	0
7	430	390	40	0	7	4,159
8	20	30	-10	1	0	35
9	130	150	-20	2	0	536
10	120	120	0	2	2	401
11	4,130	4,580	-450	31	0	1,497
12	30	50	-20	1	1	107
13	2,000	1,780	220	18	3	0
14	290	280	10	3	2	280
15	350	330	20	2	1	175
16	2,930	3,040	-110	15	13	813
17	50	50	0	1	0	199
18	270	290	-20	1	0	28
19	270	240	30	1	2	316
20	3,770	3,450	320	23	2	3,082
21	230	220	10	2	0	0
22	1,090	1,350	-260	6	18	10,762

2013 year end	DB Scheme Assets (£m)	DB Scheme Liabilities (£m)	Surplus/(Deficit) (£m)	Deficit Contributions (£m)	Service Costs (£m)	UK Subsidiary Revenue (£m)
1	1,140	1,310	-170	25	27	1,980
2	490	490	0	5	0	360
3	460	470	-10	4	1	410
4	4,870	5,940	-1,070	61	48	0
5	850	740	110	35	0	0
6	90	90	0	3	1	0
7	370	330	40	1	7	4,030
8	20	20	0	1	0	40
9	120	130	-10	4	1	560
10	100	100	0	2	3	450
11	3,830	4,080	-250	22	0	1,500
12	30	40	-10	1	1	100
13	1,720	1,570	150	19	3	0
14	230	260	-30	3	2	280
15	320	310	10	5	1	160
16	2,740	2,700	40	11	13	800
17	40	40	0	1	0	190
18	240	270	-30	1	0	30
19	230	200	30	1	2	320
20	3,440	3,430	10	360	1	2,660
21	230	200	30	8	0	0
22	1,000	1,180	-180	59	21	9,570

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Contact information

If you would like to discuss any of the matters raised in this survey then please contact Andrew Vaughan FIA, who is a corporate actuary based in our London office, on:

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November 2015 | 3714002