

**Consultation on the second Levy Triennium:
2015/16 to 2017/18**

Combined Annex

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Annex A: The PPF-specific model: Definitions and scorecards¹

1. Experian definitions

To help with interpretation of the scorecard variables Experian has provided a synopsis of their method of calculation and associated definitions. These definitions are intended to provide a simple summary of the variable. More precise definitions are included in part 3 of the draft 2015/16 Insolvency Risk Appendix.

Variable	Calculation	Description/source
Acid Test	[Current Assets - Stock] divided by Current Liabilities	Filed accounts: Liquidity measure: how many times do the liquid current assets available to the business cover the liabilities due within the next 12 months
Average remuneration per employee	Employee remuneration value on the latest filed accounts prior to the score calculation divided by the total number of employees	Filed Accounts: Average amount that a business pays their employees
Capital Employed	Total Assets minus Current Liabilities	Filed Accounts: Amount of capital being used by the business after paying off short term debts
Capital Employed per Employee	Total Assets minus Current Liabilities divided by the number of employees	Filed Accounts: Amount of capital being used by the business after paying off short term debts per employee of the business
Cash	Cash at Bank or equivalent	Filed Accounts: the book balance of the cash on hand, and any positive current account balance

¹ Annex A updated and corrected on 23 June 2014

Change in Employee Remuneration	Employee remuneration value on the latest filed accounts prior to the score calculation minus employee remuneration from 3 years prior to the score divided by employee remuneration from 3 years prior to the score	Filed Accounts: total amounts received by employees from their employment, including all salaries, expenses and benefits paid
Change in Fixed Assets	Fixed assets value on the latest filed accounts prior to the score calculation minus fixed assets from 3 years prior to the score divided by fixed assets 3 years prior to the score	Filed Accounts: total value of the company's non-liquid assets
Change in Net Worth	Net worth value on the latest filed accounts prior to the score calculation minus net worth from 3 years prior to the score divided by net worth from 3 years prior to the score	Filed Accounts: The amount by which assets exceeds liabilities (excluding intangible assets).
Change in Shareholders' Funds	Shareholders' Fund value on the latest filed accounts prior to the score calculation minus shareholders' fund from 3 years prior to the score divided by shareholders' fund from 3 years prior to the score	Filed accounts: Shareholder Equity

<p>Change in Stock and Work in Progress</p>	<p>Stock and work in progress value on the latest filed accounts prior to the score calculation minus stock and work in progress from 3 years prior to the score divided by stock and work in progress 3 years prior to the score</p>	<p>Filed Accounts: value of stock held by the company. This includes goods or other assets purchased for re-sale, consumable stores, raw materials, finished goods and payments on accounts for items yet to be received. When looking at Stock it is important to recognise that not all items are intended for re-sale, e.g. consumable stores, like oil for machines, are included but will never be sold, they simply assist in the running of the business. Work in progress is stock of an intangible nature. For example, it will include work on longer-term contracts where the end product is not yet completed</p>
<p>Change in Total Assets</p>	<p>Total assets value on the latest filed accounts prior to the score calculation minus total assets from 3 years prior to the score divided by total assets 3 years prior to the score</p>	<p>Filed Accounts: all assets owned by the business</p>
<p>Change in Total Net Assets</p>	<p>Total net assets value on the latest filed accounts prior to the score calculation minus total assets from 3 years prior to the score divided by total assets 3 years prior to the score</p>	<p>Filed Accounts: Within the Not-for-Profit scorecard, "shareholders funds" are replaced by Total Net Assets, which is essentially the same calculation (the difference between Total Assets and Total Liabilities), but reflects the nature of NFPs and the lack of shareholders within these types of organisation.</p>
<p>Change in Turnover</p>	<p>Latest turnover figure minus turnover from 3 years prior to the score divided by turnover 3 years prior to the score</p>	<p>Filed Accounts: Sales accrued by the business</p>

Company Age	Age in years based upon the incorporation date of the company.	Companies House: Date of the incorporation of the business as filed with Companies House.
Creditor Days (Sales Based)	Trade Creditors value on the latest filed accounts prior to the score calculation divided by total turnover multiplied by 365	Filed accounts: speed with which outstanding debts to suppliers are paid
Current Ratio	Current assets figure divided by current liabilities figure	Filed accounts: measure of liquidity denoting a business' capability to pay short-term obligations
Days Beyond Terms Latest Month	Current Number of Days Beyond Terms	Days Beyond Terms is calculated from transactions captured via Experian's payment performance programme. Based on a sample of invoices (~25m captured per month), it indicates whether businesses are paying on time, or late, and if the latter, how many days late on average.
Equity Gearing	Total shareholders fund figure divided by total assets figure from balance sheet	Filed accounts: denotes financial leverage, the ratio demonstrating the level of the business' funding by creditors
Fixed Assets	Total fixed asset figure from balance sheet	Filed accounts: all assets owned by the business that are intended to be kept, not sold or used up in production of goods to be sold
Mortgage Age	Time elapsed between date of score and most recently registered mortgage or charge at Companies House	Mortgages & Charges registered at Companies House

Parent Strength	Insolvency score of the parent corporate group, based upon the corporate group consolidated scorecard	Experian's insolvency score; largely filed accounts but also including mortgages & charges registered at Companies House and days beyond terms is calculated from transactions captured via Experian's payment performance programme.
Pre-Tax Margin	Pre-tax Profit from the P&L divided by total turnover	Filed accounts: Proportion of sales over the last accounting period that can be considered as profit
Pre-Tax Profit	Pre-tax Profit from the P&L	Filed accounts: Pre-Tax profit accrued over the last accounting period
Retained Earnings	Retained earnings figure from the balance sheet	Filed accounts: Earnings not paid out as Dividends, but instead re-invested in the core business or used to pay off debt
Return on Assets	Pre-tax profit figure from P&L divided by total assets from the balance sheet	Filed accounts: shows the profit generated from the assets owned by the business
Return on Capital	Pre-tax profit figure from P&L divided by capital employed from the balance sheet	Filed accounts: shows the profit generated from the net assets owned by the business
Return on Shareholder Funds	Pre-tax profit figure from P&L divided by shareholders funds from the balance sheet	Filed accounts: shows the profit generated from the total financial investment in the company, generated from and on behalf of the shareholders

Sales per Employee	Total sales generated divided by the total number of employees	Filed accounts: shows the average sales figure per employee
Shareholder funds	Shareholders' funds value on the latest filed accounts prior to the score calculation	Filed accounts: Shareholder Equity
Total Assets	Total fixed and current assets from the balance sheet	Filed Accounts: all assets owned by the business
Total Net Assets	Total Net Assets on the latest filed accounts prior to the score calculation.	Filed Accounts: Within the Not-for-Profit scorecard, "shareholders funds" are replaced by Total Net Assets, which is essentially the same calculation (the difference between Total Assets and Total Liabilities), but reflects the nature of NFPs and the lack of shareholders within these types of organisation.

Total Stock and Work in Progress	Stock and work in progress value on the latest filed accounts prior to the score calculation	Filed Accounts: value of stock held by the company. This includes goods or other assets purchased for re-sale, consumable stores, raw materials, finished goods and payments on accounts for items yet to be received. When looking at Stock it is important to recognise that not all items are intended for re-sale, e.g. consumable stores, like oil for machines, are included but will never be sold, they simply assist in the running of the business. Work in progress is stock of an intangible nature. For example, it will include work on longer-term contracts where the end product is not yet completed
Turnover	Total turnover annualised	Filed accounts: Turnover is used as a measure of a company's size
Turnover by Stock	Total turnover divided by stock funds from the balance sheet	Filed accounts: Inventory turnover shows issues with over and understocking.

2. Scorecards

Pension Protection Fund (PPF) insolvency risk scores - synopsis of input variables to scorecards

The following is a list of data input variables identified by Experian that provide a measure of insolvency risk when applied to the PPF universe of levy payers.

The variables have been used to create 8 insolvency risk scorecards. We show here the (rounded) weight that each variable has in the scorecard, as estimated by Experian. These weights do not form a part of the levy calculation. The constants and gradients needed to calculate a score are set out in the draft levy rules published alongside this paper – in the Insolvency Risk Appendix.

Independents: Small Accounts Scorecard

Variable	Weight within scorecard
Fixed Assets	22%
Total Stock & Work in Progress	10%
Acid Test	32%
Retained Earnings	23%
Days Beyond Terms: Last Months	13%

Independents: Full Accounts Scorecard

Variable	Weight within scorecard
Capital Employed	18%
Return on Shareholder Funds	24%
Turnover	15%
Creditor Days Sales Based	16%
Mortgage Age	18%
Change in Total Assets	9%

Group Members: Full Accounts Scorecard less than £10M Turnover

Variable	Weight within scorecard
Shareholder Funds	14%
Return on Capital	7%
Creditor Days (Sales Based)	11%
Change in Employee Remuneration	15%
Mortgage Age	14%
Parent Strength (see Group Members: Consolidated Accounts Scorecard for breakdown)	38%

Group Members: Full Accounts Scorecard £10M-£50M Turnover

Variable	Weight within scorecard
Pre Tax Profit	22%
Change in Fixed Assets	9%
Capital Employed Per Employee	17%
Mortgage Age	17%
Parent Strength (see Group Members: Consolidated Accounts Scorecard for breakdown)	35%

Group Members: Full Accounts Scorecard £50M+ Turnover

Variable	Weight within scorecard
Pre Tax Margin	27%
Average Remuneration per Employee	9%
Change in Turnover	15%
Mortgage Age	27%
Parent Strength (see Group Members: Consolidated Accounts Scorecard for breakdown) breakdown)	22%

Group Members: Small Accounts Scorecard

Variable	Weight within scorecard
Cash	21%
Retained Earnings	9%
Shareholder Funds	7%
Change in Stock or Work in Progress	21%
Company Age	9%
Parent Strength (see Group Members: Consolidated Accounts Scorecard for breakdown)	33%

Group Members: Consolidated Accounts/Large Company Scorecard

Variable	Weight within scorecard
Capital Employed	33%
Turnover	17%
Turnover by Stock	17%
Return on Assets	12%
Sales by Employee	5%
Change in Net Worth	3%
Mortgage Age	13%

Not for profit scorecard

Variable	Weight within scorecard
Capital Employed	41%
Current Ratio	4%
Total Assets	27%
Equity Gearing	10%
Total Net Assets	15%
Mortgage Age	3%

Annex B: Analysis of Score Changes from D&B to PPF-specific model

Scorecard	Total Number of Employers	Number of Employers seeing an improvement in score	Number of Employers seeing a deterioration in score	Characteristics of employers seeing an improvement in their score	Characteristics of employers seeing a deterioration in their score
Individual Full Account	350	147	197	<ul style="list-style-type: none"> • Scores poorly on the BS items under D&B except for capital employed, which is the only BS item used by Experian under this scorecard (i.e. capital employed >50m) and, • Scores well on P&L items under Experian including Creditor Days Sales (i.e. <10 days)and, • Scores well on non-financials under Experian (i.e. mortgage age >20 years). 	<ul style="list-style-type: none"> • Scores poorly on P&L items under Experian • Scores poorly on non-financials under Experian (i.e. mortgage age <6 years).
Non-For-Profit	3364	1553	778	<ul style="list-style-type: none"> • A minority of employers improving on this scorecard as a large proportion of NFP are placed in band 1 under D&B. • Those improving would typically score poorly on non-financials under D&B and, • Score well under Experian on Capital Employed (i.e. >250K), the main balance-sheet item. 	<ul style="list-style-type: none"> • Will be scored 100 by D&B and, • Scores badly under Experian for Capital Employed (i.e. <100K).

Group Member – Small Account	733	296	430	<ul style="list-style-type: none"> • Scores poorly on non-financials under D&B and, • Scores well on parent company's strength (i.e. a parent score>92) and, • Scores well under Experian on the trend item (i.e. change in stock and work-in-progress between 0-20%). 	<ul style="list-style-type: none"> • Scores well on non-financials under D&B and, • Scores poorly on parent company strength (i.e. parent score<11) and, • Scores poorly under Experian on the trend item (i.e. change in stock and work-in-progress < -30%).
Group Member – Full Account, turnover less than £10M	1903	889	1002	<ul style="list-style-type: none"> • Scores well on parent company strength (i.e. a parent score>92) which has a heavy weight in this scorecard. 	<ul style="list-style-type: none"> • Has a parent company with a low PPFSM score (i.e. <11) and, • Scores poorly under Experian on trend items (i.e. change in employee remuneration < -20%).
Group Member – Full Account, turnover £10M to £50M	2051	1358	604	<ul style="list-style-type: none"> • Scores well on parent company strength (i.e. a parent score>92) which has a heavy weight in this scorecard. 	<ul style="list-style-type: none"> • Scores poorly on parent strength (i.e. parent score<11) and, • Poorly on balanced-sheet items (i.e. capital employed per employee <20k).
Group Member – Full Account, turnover over £50M but total asset less than £500M	2287	1133	1032	<ul style="list-style-type: none"> • Scores badly on balance sheet items as these are only present in the D&B model and absent in the Experian scorecard, and • Scores well on parent company strength (i.e. a parent score>92). 	<ul style="list-style-type: none"> • Scores poorly on parent company strength, and • Scores poorly on P&L items (i.e. pre-tax margin <2%) • Scores well under the D&B non-financial various factors.

<p>Consolidated Account or turnover over £50M and total asset over £500M</p>	<p>2764</p>	<p>1261</p>	<p>1041</p>	<ul style="list-style-type: none"> • Scores poorly on non-financial (various factors under D&B), and • Scores well on capital employed (i.e. capital employed >£150k) as this has the largest weight under Experian but little in the case of D&B. 	<ul style="list-style-type: none"> • Scores badly on balance sheet items (i.e. capital employed < £0) as this has the largest weight under Experian, and • Scores poorly on P&L items (i.e. turnover <£2.5m), • Scores well on the non-financial various factors under D&B.
<p>Individual Small Account</p>	<p>618</p>	<p>166</p>	<p>448</p>	<ul style="list-style-type: none"> • By default, companies filing small accounts will score poorly on P&L items under D&B while P&L items are not included in the Experian scorecard and, • Companies that have a strong liquidity as measured by the acid test (i.e. acid test >1.5) will benefit as this scorecard places a large weight on this ratio, • Score well on payment performance data under Experian (i.e. number of days beyond term <7 days). 	<ul style="list-style-type: none"> • Score badly on balanced-sheet items under Experian by having a low acid test (i.e. acid test <0.5) and, • Badly on payment performance data under Experian (i.e. number of days beyond term >22 days).

Annex C: Impact Analysis

1. Executive Summary

- 1.1 With the move to the PPF Specific Model ("PPFSM"), there is a large redistribution of levy across our universe, c£200 million in aggregate. This is being primarily driven by many employers seeing their relative ranking change under the PPFSM relative to the D&B methodology. Employers who retain or improve their relative ranking may see a material reduction in bills whereas employers whose ranking drops may see an increase in their levy bill.
- 1.2 The recalibration of rates and bands will also have an impact and by design fewer employers will now sit in the top band.
- 1.3 As noted in section 2.3 this analysis is indicative, and results may change. In summary, our analysis shows that:
- The cost of the cap applied to the Risk-Based Levy is reduced and so there is a fall in the scheme based levy (which benefits all schemes) of c£20 million.
 - Around 50 per cent more schemes see a reduction rather than an increase – but, since we are collecting the same amount, those with increases see bigger changes.
 - There is an overall trend of employers being "downgraded" in terms of their band (which could be seen as previously paying too little), resulting in a large change in levy - in aggregate c£200m of levy movement.
 - The proposed levy rates reduces this to an extent, so for example if the present levy rates were used with Experian scores the aggregated levy movement would increase to c£240m.
 - A large number of schemes see big changes in their levy bill.
 - For those who remain in band 1 the overall levy falls in almost all cases – because the levy rate is marginally lower as is the scheme based levy.
- 1.4 From our sample of around 6,100 there are c2,500 schemes with very low levies (less than £10,000). Omitting these from the analysis, there are c2,100 schemes which see a reduction to their levy (34% of all schemes). Of these:
- around 1,500 (24% of schemes) have a decrease of less than £50,000
 - around 300 (5% of schemes) have a decrease of more than £50,000 but less than £100,000
 - around 300 (5% of schemes) have a decrease of greater than £100,000.
- 1.5 Similarly, among those seeing an increase around 1,500 (24%) schemes. Of these:

- around 900 (15% of schemes) have an increase of less than £50,000
- around 200 (3% of schemes) have an increase of between £50,000 and £100,000
- around 200 (3% of schemes) have an increase of between £100,000 and £200,000
- around 200 (3% of schemes) have an increase of more than £200,000.

1.6 The c2,100 who see a reduction are fairly evenly distributed across D&B levy bands 2 to 7 but with significantly many coming from those that were in D&B band 1 (and remain there). The c1,500 seeing an increase are reasonably evenly distributed across levy bands 2 to 5 but with a high proportion that have fallen from D&B levy band 1. This migration from band 1 represents to an extent the fact that so many schemes are given a score of 99 or 100 by D&B.

1.7 In addition to the base case a number of sensitivities have been developed

2. Introduction and Methodology

- 2.1 In order to assess the impact of the changes we have reworked the 2014/15 levy estimate of £695 million allowing for the new scores, levy rates and bands. In order to isolate the impact of moving to the PPF-specific model (PPFSM), the Levy Scaling Factor (LSF) has been recalculated so that the same levy amount is targeted. We have kept all other factors unchanged with the exception of the Scheme-Based Levy Multiplier, which has been reset to cover the cost of capping bills in line with our stated policy.
- 2.2 So that the impact of the move to Experian can be understood in isolation, the analysis considers only the new insolvency scores, levy rates and bands. None of the other proposed triennium changes have been included. Further, the analysis excludes the impact of the Credit Rating Override, which is being proposed as an option for consultation.
- 2.3 The analysis should be viewed as indicative. As Experian are still gathering data and scoring more employers, the final levy rates and bands will not be finalised until much later in the year. The analysis should however help Employers to understand how things are likely to move and the factors that will impact their levy bill. The following are the main factors that could cause a change:
- Experian are continually improving their coverage of our universe and in particular the not-for-profit sector. For a handful of material schemes impacted we have assumed a neutral impact in terms of levy bands.
 - The Board is currently reviewing our target levy collections for the next triennium. Any change in approach will feed through to the final LSF.
 - Some companies are part of a non-UK group and as such have non-UK parent. At the time of the analysis not all foreign parents were scored and some subsidiaries of non-UK groups were still scored based on the score of the parent at the UK level.

To enable a meaningful comparison, the calculations have been carried out using scores as at 31 March 2013. Actual levy bills will use scores up to 31 March 2015.

- 2.5 For the purposes of this analysis, multi-employer schemes are allocated to a band by a reverse calculation, deriving a band from the final risk-based levy for that scheme. The scheme is then allocated to the nearest band.

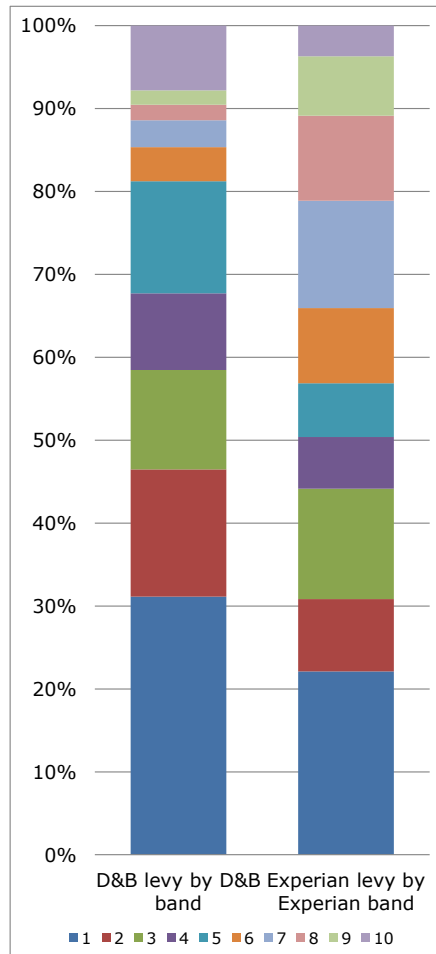
3. Shift in the distribution of Levy

3.1 With the move to the PPFSM, a significant redistribution of levy across the bands is expected. There are a number of key factors driving this:

- There are considerable changes to employer insolvency scores provided by Experian compared with D&B.
- The approach to banding has seen a more even distribution of schemes across ten bands than currently. In particular more differentiation at the top means that we are able to have less concentration in band 1 compared to the existing approach. As a result, many schemes have moved down at least one band.
- The progression of levy rates from one band to the next differs under the two approaches. The choice of levy rates in the top bands has been designed to help reduce the impact of schemes falling out of the top band.

3.2 The expected redistribution of the levy across the bands is illustrated in the chart below:

Chart C.1 Breakdown of levy by band



4. Results: global

- 4.1 The levy scaling factor has changed from 0.73 under the D&B approach to 0.74 under the PPFSM.
- 4.2 The number of schemes that are capped has reduced from around 350 to 330. The aggregate impact of the cap has fallen by approximately £20 million and as a result the Scheme-Based Levy Multiplier has significantly reduced from 0.0056% to 0.0033% of liabilities.
- 4.3 In order to provide a meaningful comparison for each band, we need to consider the combination of the levy scaling factor (LSF) and the levy rates, as shown in the following table:

Table C.2 Breakdown of levy by band

Band	D&B Levy Rate	Experian Levy Rate	D&B Levy Rate x D&B LSF (0.73)	Experian Levy Rate x Experian LSF (0.74)
1	0.18%	0.17%	0.13%	0.12%
2	0.28%	0.23%	0.20%	0.17%
3	0.44%	0.30%	0.32%	0.22%
4	0.69%	0.40%	0.50%	0.29%
5	1.10%	0.53%	0.80%	0.39%
6	1.60%	0.75%	1.17%	0.55%
7	2.01%	1.10%	1.47%	0.81%
8	2.60%	1.61%	1.90%	1.18%
9	3.06%	2.39%	2.23%	1.76%
10	4.00%	3.83%	2.92%	2.83%

- 4.4 From table C.2 we expect that schemes which stay in the same band see a reduced levy because the combined levy rate and levy scaling factor has decreased.
- 4.5 As one would expect, schemes moving from band 1 to band 2 see increases in levy in aggregate. The table shows that the increase incurred by schemes moving from band 1 to band 2 is relatively smaller under the proposed new levy rates (i.e. moving from an aggregate 0.12% to 0.17%) than currently (moving from 0.13% to 0.20%).

- 4.6 This table is helpful but does not explain all changes in levy. For example, it does not allow for the changes to the scheme-based levy or the interaction of several employer insolvency scores of a multi-employer scheme.
- 4.7 The following three bubble charts show how schemes have changed bands moving from the D&B to the Experian approach. The charts are based on the calculation of individual levy bills of schemes and therefore include the scheme-based levy and the particular circumstances of each scheme.
- 4.8 The first and second bubble charts indicate the number of schemes who see reduced or increased levy from moving to the Experian banding structure. There are approximately 50% more schemes seeing a reduction than an increase.

Chart C.3 Migration between levy bands – number of schemes that see a reduction in levy

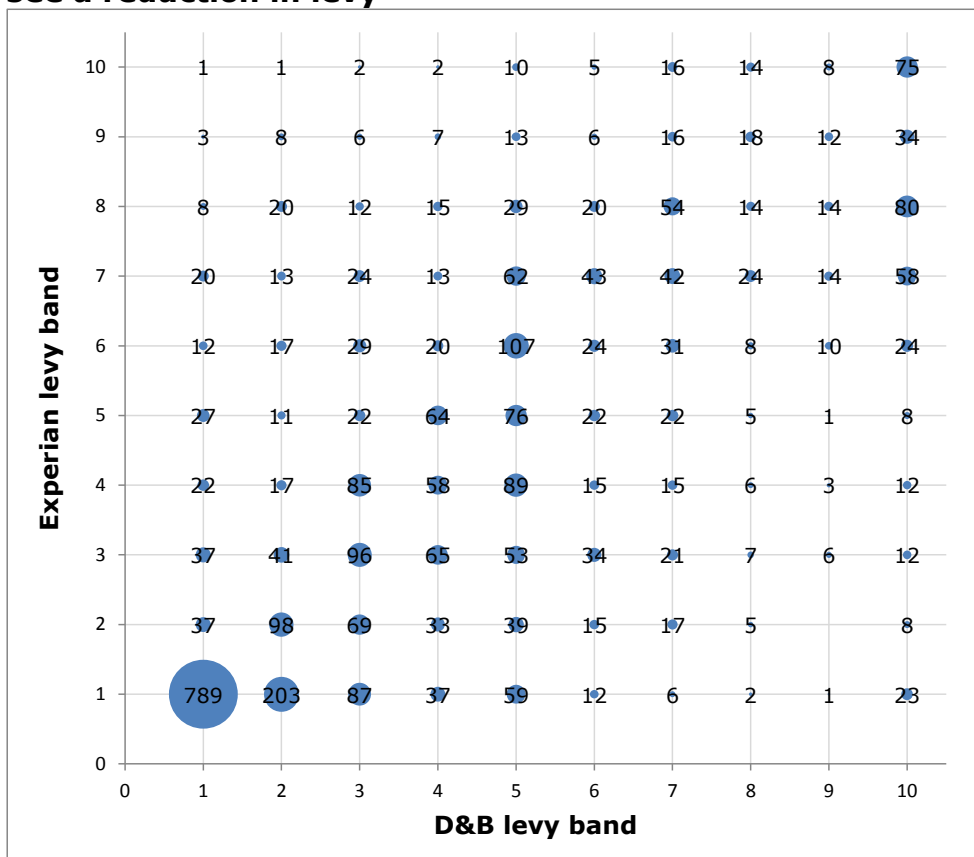
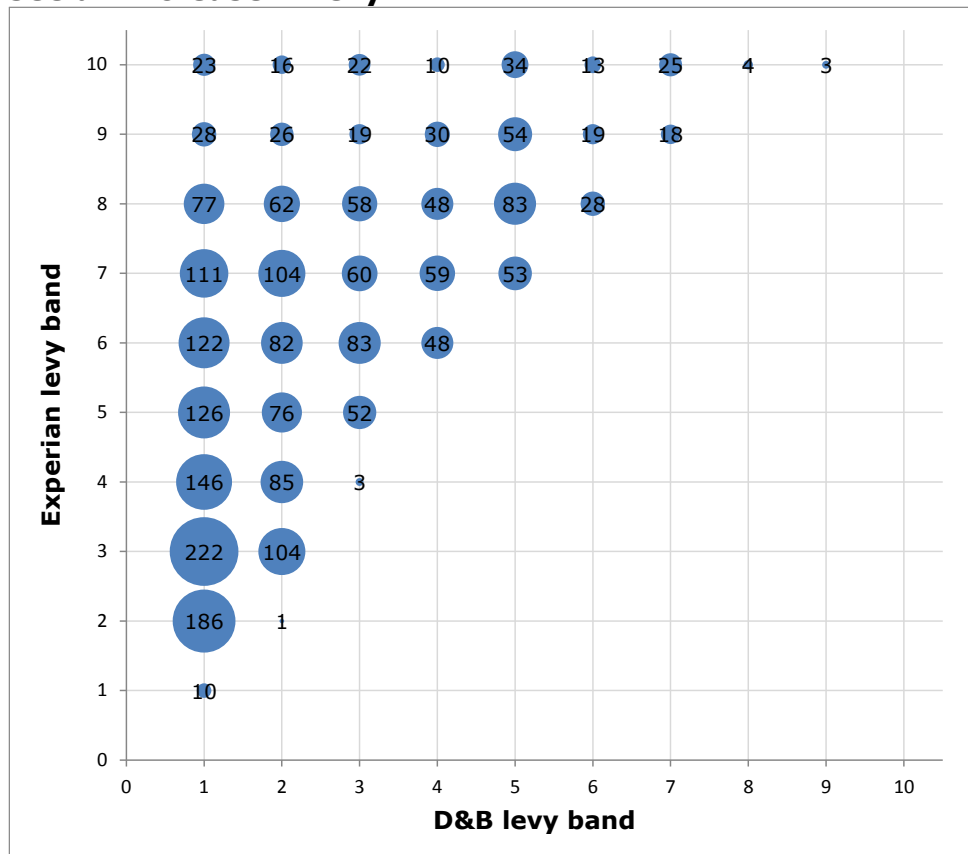


Chart C.4 Migration between levy bands – number of schemes that see an increase in levy



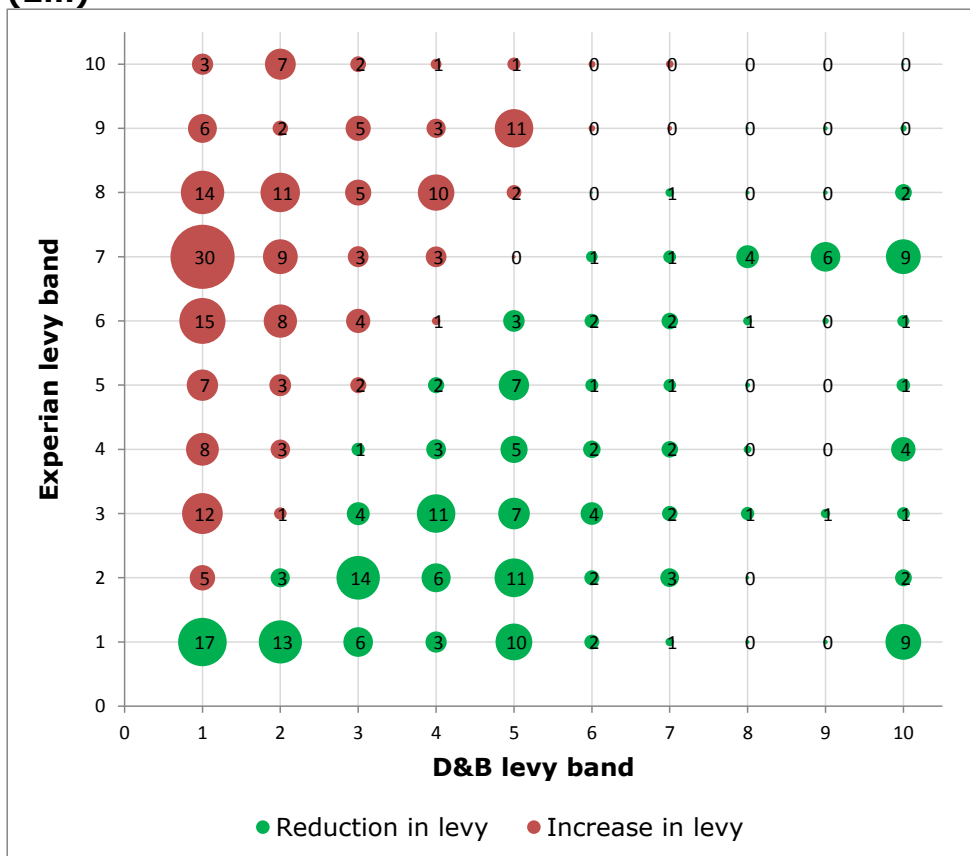
4.9 From the first bubble chart we see a concentration of schemes with a reduced levy remaining in band 1. In addition, there is a wide distribution of those with reduced levy, where the scheme has moved up or down bands. This highlights that many schemes gain despite moving to a worse band. These schemes all pay a low or nil risk-based levy and therefore benefit from the reduction in the scheme-based levy. Currently around 1,000 schemes pay a nil risk-based levy.

4.10 The second bubble chart shows that there are a large number of schemes that see a significant movement to a worse band, reflecting the fact that our model now classifies them as a worse risk. As one would expect, a worsening in bands does lead to an increase in levy.

4.11 The third bubble chart below sums the change in levy within each band movement. Most of the results are unsurprising in that a large change in band is reflected by the large reduction or increase in aggregate levy.

4.12 The change in aggregate levies for schemes remaining in the same band, i.e. the diagonal of bubbles from bottom left to top right, is relatively small. Again highlighting that most of the levy movements are driven by changes to the relative ranking of employers.

Chart C.5 Migration between levy bands – aggregate change in levy (£m)



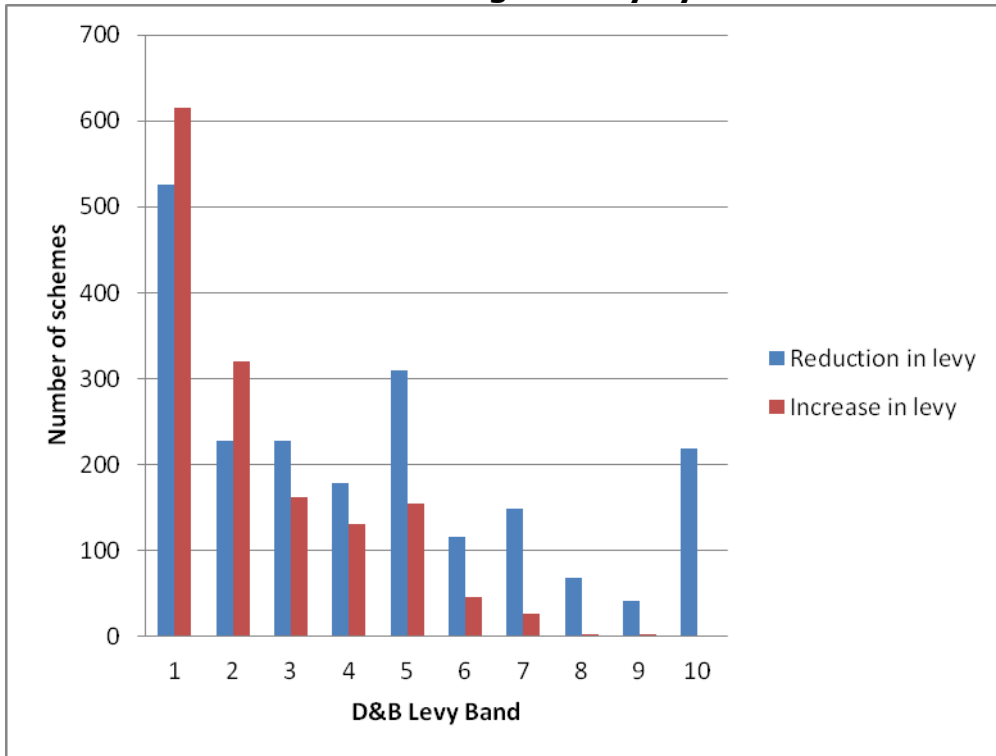
4.13 In aggregate the total change in levy is around £200 million. £115 million of this comes from the change in levy for schemes falling by 5 bands or more.

5. Results: Individual Impacts

- 5.1 As discussed earlier, a significant redistribution of levy is expected as a result of the move to Experian, with all bills seeing some change.
- 5.2 From our sample of around 6,100 there are c2,500 schemes with very low levies (less than £10,000). Omitting these from the analysis, there are c2,100 schemes which see a reduction to their levy (34% of all schemes). Of these:
- around 1,500 (24% of schemes) have a decrease of less than £50,000
 - around 300 (5% of schemes) have a decrease of more than £50,000 but less than £100,000
 - around 300 (5% of schemes) have a decrease of greater than £100,000.
- 5.3 Similarly, among those seeing an increase around 1,500 (24%) schemes. Of these:
- around 900 (15% of schemes) have an increase of less than £50,000
 - around 200 (3% of schemes) have an increase of between £50,000 and £100,000
 - around 200 (3% of schemes) have an increase of between £100,000 and £200,000
 - around 200 (3% of schemes) have an increase of more than £200,000.
- 5.4 As we have more with reductions than increases, those who see their bill rise increase by proportionally more on average than for those for whom bills fall.
- 5.5 For the circa 2,100 with a reduction the average levy decrease is 40%. Of these
- around 900 (14% of schemes) have a decrease of less than 25%
 - around 600 (10% of schemes) have a decrease of more than 25% but less than 50%
 - for around 600 (10% of schemes) levy is more than halved.
- 5.6 The biggest reductions in percentage terms are seven schemes that see their bill divided by 20. These are all cases that have moved from band 10 to band 1.
- 5.7 Similarly, for the 1,500 seeing increases, the average increase is 150%. Of these
- around 300 (5% of schemes) have an increase of less than 25%
 - around 600 (9% of schemes) have an increase of between 25% and 100%
 - for around 600 (10% of schemes) levy more than doubles and for approximately half of these the levy more than trebles.
- 5.8 As one might expect the 5 with the biggest increases in percentage terms are those falling out of band 1 who have a high level of underfunding. For these schemes levy is increased between 13 and 20 times.

5.9 The chart below shows that for those who pay a material levy of more than £10,000, the 2,100 with reductions are fairly evenly distributed across D&B levy bands 2 to 7 but with significantly many coming from D&B band 1. The 1,500 with increases are reasonably evenly distributed across levy bands 2 to 5 but with a clear majority from D&B levy band 1. This migration from band 1 represents to an extent the fact that so many schemes are placed in band 1 under D&B.

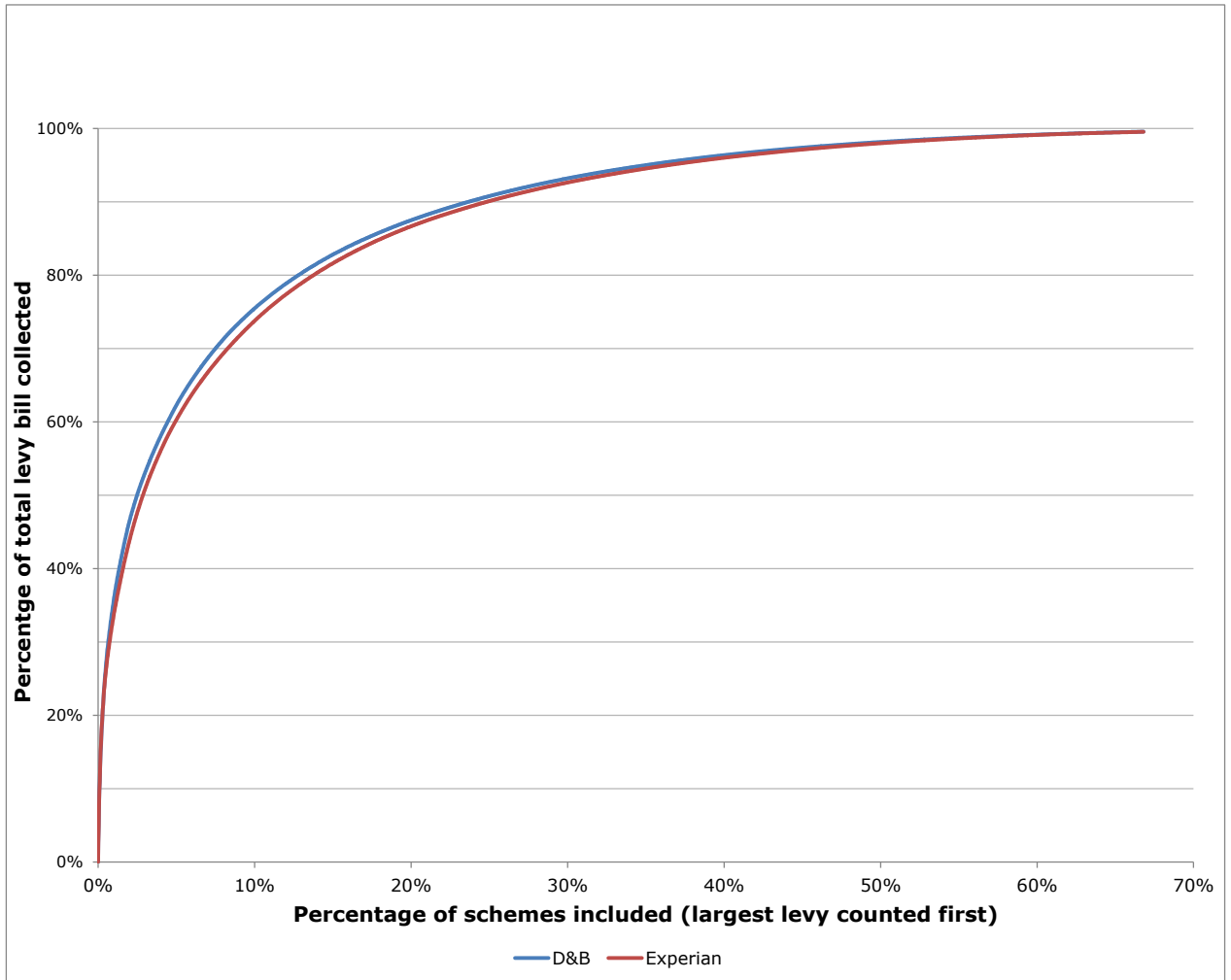
Chart C.6 Distribution of change in levy by D&B band



6. **Results: Concentration risk**

6.1 A feature of our universe is that a large proportion of our levy comes from a small proportion of our schemes. The chart below shows there is a slight reduction in concentration following the move to Experian.

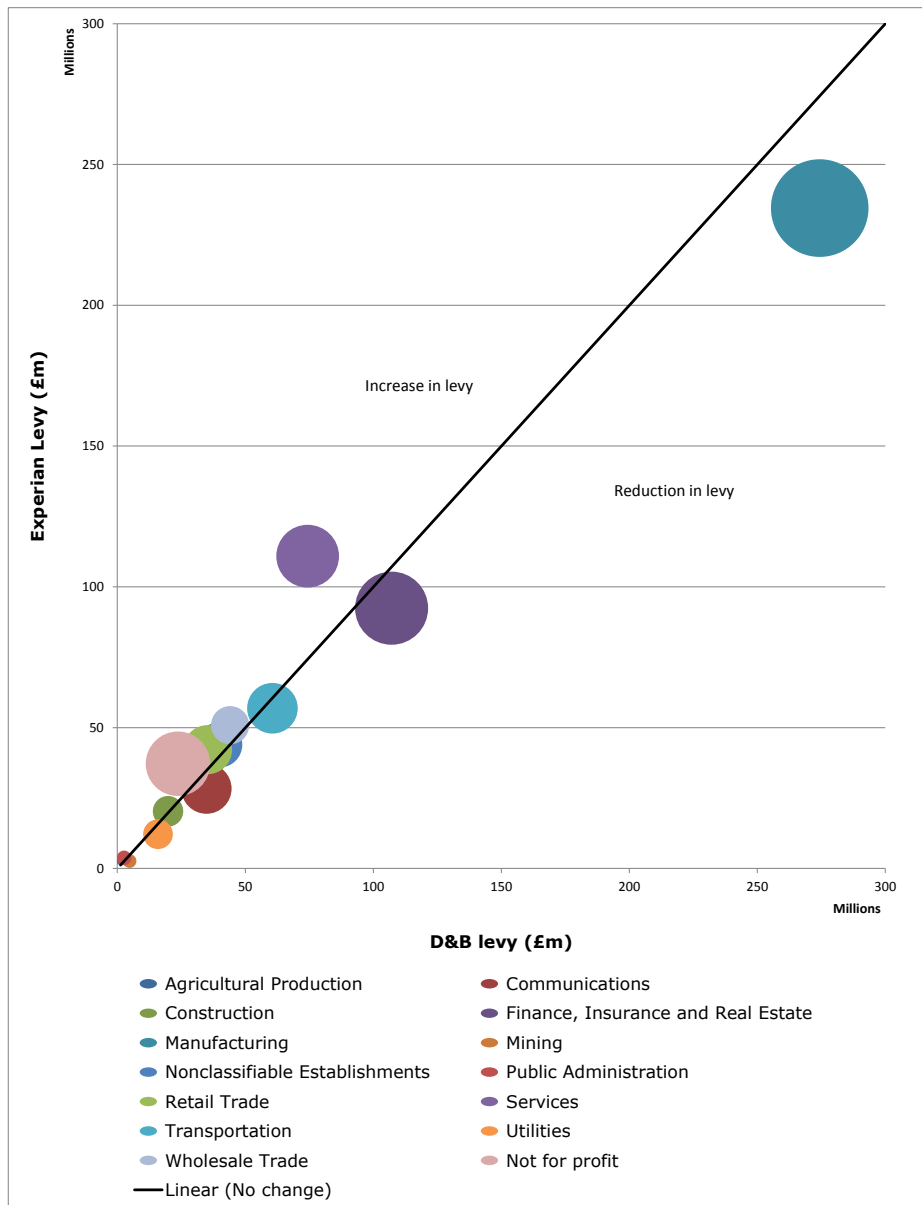
Chart C.7 Concentration of levy: percentage of levy collected from largest schemes



7. Results: Breakdown by sector

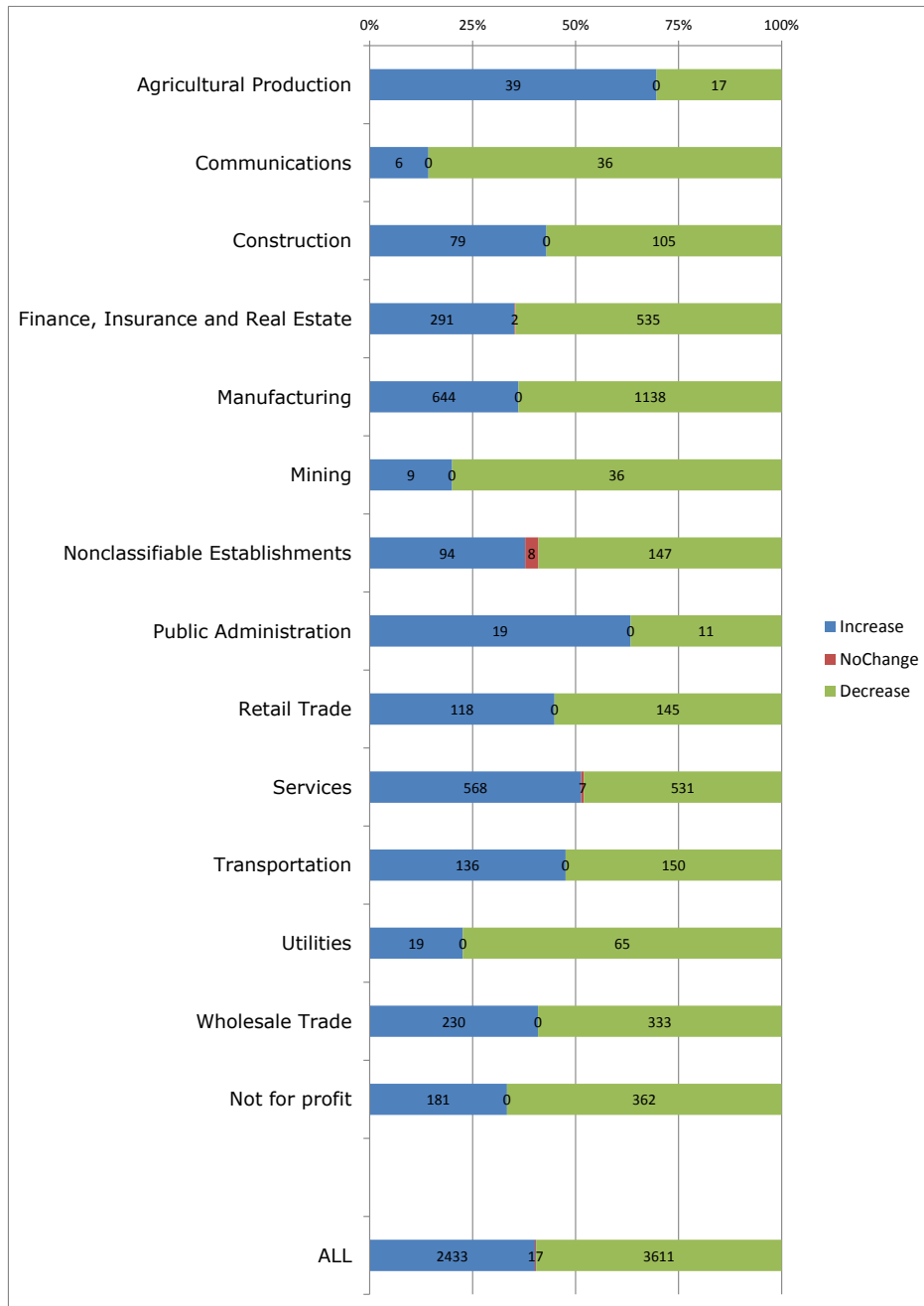
7.1 The graph below shows those seeing a reduction or increase at an aggregate level based on their underlying sector. The black line represents no change, whilst those above the line see net increases and those below see reductions. The size of the bubble represents underfunding, so if underfunding is high even a modest change in levy rates can have a big monetary impact on bills.

Chart C.8 Change in levy by sector



7.2 Manufacturing and the finance sectors see reductions in aggregate. With the main groups seeing increases being the services and not for profit sector. In order to assess if these changes are being driven by large individual changes, the proportion of those seeing reductions or increases under each sector is shown below. This indicates a similar trend.

Chart C.9 Proportion of schemes seeing increase/decrease in levy by sector



8. Transitional Protection

- 8.1 As discussed in chapter 7 of the main consultation document, we are consulting on whether to provide Transitional Protection for the first year that we use Experian scores.
- 8.2 Our proposed approach would be to impose a limit on the increase of the Insolvency Risk element of the Risk-Based Levy, where the limit reflected the relative impact of Experian compared with the current approach. For example if we restricted increases to 200% then a single-employer scheme currently in band 1 that would have an Insolvency Risk of 0.18% would have its Insolvency Risk restricted to 0.54% under Experian (assuming there was no movement in scores under the PPFSM between 2014/15 and 2015/16).
- 8.3 The protection would apply at a scheme level rather than employer level.
- 8.4 We have analysed what impact such Transitional Protection would have. We have found that:
- Imposing a limit on increase in insolvency probabilities to 200% to the Insolvency Risk measured relative to D&B would lead to a reduction in levy collection of around £100m.
 - If we sought to recoup this by increasing the Scheme-Based Levy, this would cause the Scheme-Based element of the levy to increase close to the maximum permitted by legislation (20% of the total levy).
 - Thus our introducing Transitional Protection would see a material increase in levy for those schemes for which the Scheme-Based Levy represented a large proportion of their total.
 - Around 1200 schemes would see a levy reduction, though around half of these are schemes that pay less than £10,000 in levy.
 - Some schemes would save material sums of money under such Transitional Protection (20 schemes would save over £1m and one would save around £7m)

9. Sensitivity of results

9.1 As discussed, a significant proportion of the levy movement is being driven by employers seeing a significant re-ranking relative to other employers under the model. This means that whatever levy design is used, a significant redistribution of levy can be expected. Under the proposed approach, schemes retaining their ranking are rewarded at the expense of those that see their position deteriorate.

9.2 In order to highlight this point, the results have been calculated using three alternative bases for levy rates. The levy bands have been left unchanged

- Scenario 1 – global adjustment to LSF to allow for a £50 million reduction in levy collection resulting from improved scores
- Scenario 2 – D&B levy rates applying
- Scenario 3 – A broad band one; for bands one to three the same levy rate of 0.22%. The levy rate applying to these bands has been calculated as the average rate applying (weighted by proportion of employers).

9.3 The table below shows the total levy changing hands under these scenarios compared with the main results, illustrating that the chosen banding helps to minimise the overall impacts.

Table C.10 Levy changing hands under different sensitivities

Scenario	LSF	Levy change (£M)
Base	0.74	200
Adjustment to LSF to allow for a £50m reduction in levy	0.79	230
D&B rates	0.50	240
Constant rate band 1-3	0.72	200

9.4 In order that a comparison across bands can be made, the tables below combine the levy scaling factor (LSF) and the levy rates:

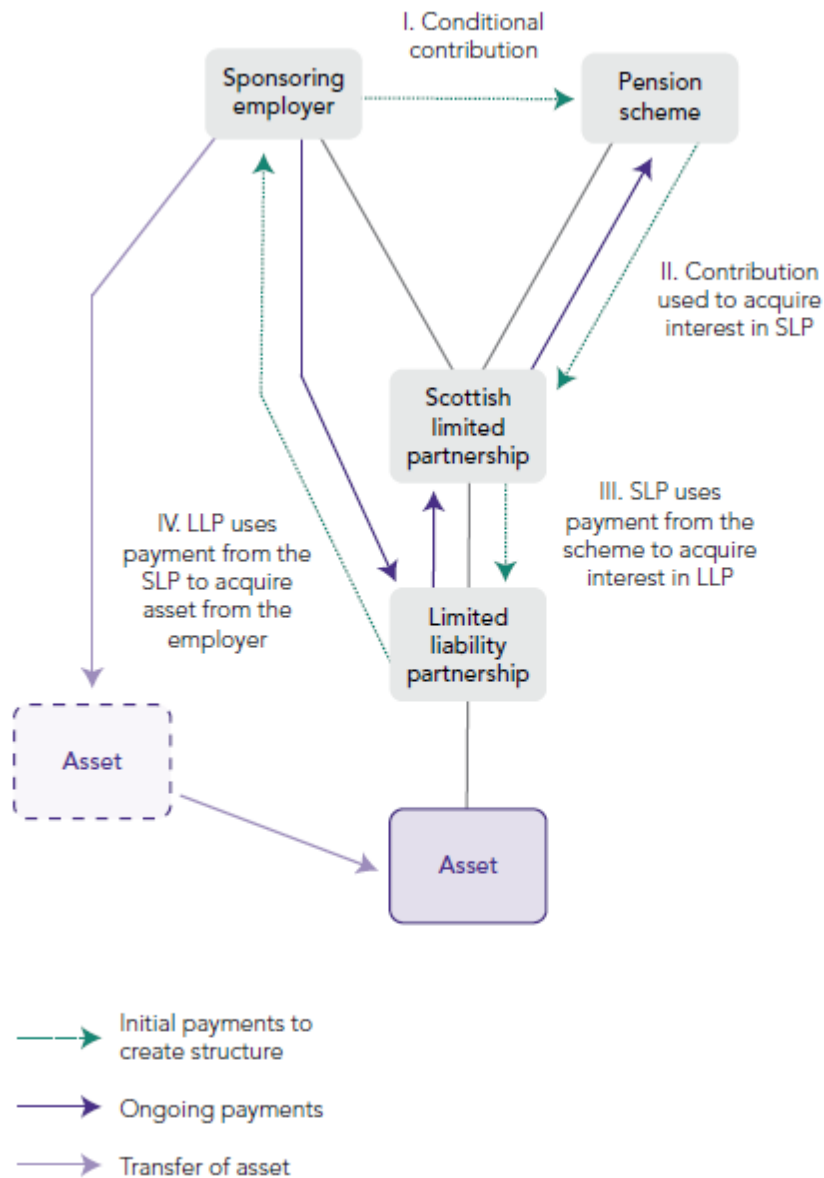
Table C.11 Comparison of levy rates and LSF under sensitivities

Band	Base Levy Rate	D&B rates	Constant rate bands 1 to 3	Base Levy Rate x LSF (0.74)	Base Levy Rate x higher LSF (0.79)	D&B Levy Rate x LSF (0.50)	Constant rate bands 1 to 3 x LSF (0.72)
1	0.17%	0.18%	0.22%	0.12%	0.13%	0.09%	0.16%
2	0.23%	0.28%	0.22%	0.17%	0.18%	0.14%	0.16%
3	0.30%	0.44%	0.22%	0.22%	0.24%	0.22%	0.16%
4	0.40%	0.69%	0.40%	0.29%	0.32%	0.34%	0.29%
5	0.53%	1.10%	0.53%	0.39%	0.42%	0.54%	0.38%
6	0.75%	1.60%	0.75%	0.55%	0.59%	0.79%	0.54%
7	1.10%	2.01%	1.10%	0.81%	0.87%	1.00%	0.79%
8	1.61%	2.60%	1.61%	1.18%	1.27%	1.29%	1.16%
9	2.39%	3.06%	2.39%	1.76%	1.88%	1.51%	1.72%
10	3.83%	4.00%	3.83%	2.83%	3.02%	1.98%	2.76%

- 9.5 Increasing the LSF to 0.79 from 0.74 in anticipation of an improvement in Experian scores means that those schemes which do not achieve an improvement will be a little worse off – by around 10% for schemes in band 1. Table C.10 shows that the amount of levy changing hands under this scenario is a little higher, £230m rather than £200m.
- 9.6 The table above shows that moving to D&B levy rates and recalibrating the LSF to meet the targeted overall levy produces a lower combined factor at either end of the spectrum but a higher combined factor for the middle bands. Also, the change to individual scheme levies underlying the “D&B rates” approach is more volatile as highlighted by the table in C.10 i.e. increases and reductions at an individual level are significantly larger.
- 9.7 Moving to the “flat rates” approach produces a slightly lower LSF compared with the proposed approach. As you would expect, the combined factors are worse for band 1 compared with the proposed approach.

Annex D: Asset backed contributions

Example arrangement²



² This chart is taken from the Pension Regulator's 'Asset Backed Contributions: Guidance for trustees and their advisers', November 2013

Annex E: Last Man Standing Schemes - example calculation

Proposed Associated LMS Example Calculations (using 2014/15 LSF & Levy Bands/Rates and £10,000,000 Underfunding)

Scheme A (highly concentrated)

Employer	Failure Score	Levy Rate	Number of members	Weighted Levy Rate
Employer 1	100	0.0018	15,000	27
Employer 2	100	0.0018	5	0.009
Sum of levy rates				
		27.009		
Total Number of Members				
		15,005		
Weighted average levy rate				
		0.0018		
Current calculation				
Scheme structure factor applied	0.0018 x 0.9 = 0.001620			
Levy calculation	10,000,000 x 0.001620 x 0.73 = £11,826			
Proposed calculation				
Scheme structure factor part (a)			0.90	
Scheme structure factor part (b) Herfindahl	Employer 1	$(15,000/15,005)^2 = 0.9997 \times 0.9997 = 0.9994$		
	Employer 2	$(5/15,005)^2 = 0.0003 \times 0.0003 = 0.0000$		
0.1 x (0.9994 + 0.0000) = 0.0999			0.0999	
Total scheme structure factor			0.9999	
Scheme structure factor x weighted levy rate	0.0018 x 0.9999 = 0.001799			
Levy calculation	10,000,000 x 0.001799 x 0.73 = £13,133			

Scheme B (more dispersed)

Employer	Failure Score	Levy Rate	Number of members	Weighted Levy Rate
Employer 1	100	0.0018	4,000	7.2
Employer 2	100	0.0018	3,000	5.4
Employer 3	100	0.0018	3,000	5.4
Employer 4	100	0.0018	2,000	3.6
Employer 5	100	0.0018	2,000	3.6
Employer 6	100	0.0018	1,005	1.809
Sum of levy rates				
		27.009		
Total Number of Members				
		15,005		
Weighted average levy rate				
		0.0018		
Current calculation				
Scheme structure factor applied	0.0018 x 0.9 = 0.001620			
Levy calculation	10,000,000 x 0.001620 x 0.73 = £11,826			
Proposed calculation				
Scheme structure factor part (a)			0.90	
Scheme structure factor part (b) Herfindahl	Employer 1	$(4,000/15,005)^2 = 0.2666 \times 0.2666 = 0.0711$		
	Employer 2	$(3,000/15,005)^2 = 0.1999 \times 0.1999 = 0.0400$		
	Employer 3	$(3,000/15,005)^2 = 0.1999 \times 0.1999 = 0.0400$		
	Employer 4	$(2,000/15,005)^2 = 0.1333 \times 0.1333 = 0.0178$		
	Employer 5	$(2,000/15,005)^2 = 0.1333 \times 0.1333 = 0.0178$		
	Employer 6	$(1,005/15,005)^2 = 0.0670 \times 0.0670 = 0.0045$		
0.1 x (0.0711+ 0.0400 + 0.0400 + 0.0178 + 0.0178 + 0.0045) = 0.0191			0.0191	

Total scheme structure factor			0.9191	
Scheme structure factor x weighted levy rate	0.0018 x 0.9191 = 0.001654			
Levy calculation	10,000,000 x 0.001654 x 0.73 = £12,074			

Annex F: Asset backed contribution – example PROPERTY voluntary certificate

Asset backed contribution certification form

Enter Scheme PSR:	<input type="text" value="12345678"/>
Scheme name:	<input type="text" value="The ABC Test Pension Plan Scheme"/>

Asset details

Type of ABC asset	<input type="text" value="Property"/>
Certificate number	<input type="text" value="AAA-999"/>
Levy year (to be applied for)	<input type="text" value="2015/16"/>

Agreement details

Date of agreement	<input type="text" value="31/03/2013"/>
Date of s179 valuation	<input type="text" value="31/03/2012"/>
Is the ABC arrangement allowed for in the latest s179 valuation?	<input type="text" value=""/>
Value of ABC arrangement as per s179 valuation	<input type="text" value="£1,234,567"/>

Audited values at later of s179 or date of Agreement

Insolvency value of the asset	<input type="text" value="£1,123,456"/>
Net Present value	<input type="text" value="£1,112,345"/>
Date of ABC certificate	<input type="text" value="28/02/2015"/>
Payments received from SPV ¹ since s179 date or Date of agreement if later	<input type="text" value="£987,654.32"/>
Has the Scheme funding cap been achieved?	<input type="text" value=""/>
If the funding cap has been achieved will the asset underlying ABC arrangement still be made available to the scheme on insolvency?	<input type="text" value=""/>
Is the ABC allowed for in a submitted Deficit Reduction Certificate?	<input type="text" value=""/>

¹ - Special Payments Vehicle

Chargor details

Name of chargor	<input type="text" value="The Flintstone Towers Limited"/>
Type of organisation	<input type="text" value="Private dwelling"/>
Registration number	<input type="text" value="Yabba Dabba Doo"/>
Charities number	<input type="text" value=""/>
Address	<input type="text" value="345 Cave Stone Road"/>
	<input type="text" value="Bedrock"/>
	<input type="text" value="Arkanstone"/>
Post-code/Zip-code	<input type="text" value=""/>
Country	<input type="text" value="USA"/>

Certification

Certification (a)	I confirm that I am authorised by or on behalf of the trustees of the Scheme to complete the ABC Certificate.	<input type="checkbox"/>
Certification (b)	I confirm that the Scheme trustees and the ABC Counterparty have entered into a Qualifying ABC Arrangement in respect of real estate situated in England and Wales, Scotland or Northern Ireland;	<input type="checkbox"/>
Certification (c)	I certify that the Qualifying ABC Arrangement:	<input type="checkbox"/>
	(i) is a legally binding, valid and enforceable obligation of the ABC Counterparty;	<input type="checkbox"/>
	(ii) contains provision for Security Rights in favour of the Scheme trustees;	<input type="checkbox"/>
	(iii) will be in force for at least the entirety of the Levy Year with no right for the Employer or the ABC Counterparty to derogate from the matters confirmed in the ABC Certificate.	<input type="checkbox"/>
	(iv) The Security Rights have been registered in accordance with the relevant Local Registration Requirement.	<input type="checkbox"/>

	(v)	The Qualifying ABC Arrangement:	
	(A)	is a legally binding, valid and enforceable obligation of the ABC Counterparty; and	<input type="checkbox"/>
	(B)	requires the ABC Counterparty to make income payments to the Scheme trustees, the amount and period of which corresponds with the calculation of the Net Present Value.	<input type="checkbox"/>
	(vi)	The income payments which are payable to the Scheme trustees under the Qualifying ABC Arrangement are derived only from ABC Asset(s) which are real estate situated in England, Wales, Scotland or Northern Ireland.	<input type="checkbox"/>
	(vii)	The ABC Asset is owned outright by the ABC Counterparty and is not subject to any prior or pari passu security or other interest which would defeat or preclude an attempt by the Scheme trustees to exercise their rights on the insolvency of the Employer or otherwise under the ABC Arrangement;	<input type="checkbox"/>
	(viii)	The Qualifying ABC Arrangement or another legally binding, valid and enforceable agreement between the Scheme trustees and the ABC Counterparty contains provisions giving the Scheme trustees rights in respect of the ABC Asset equivalent to those contained in the Qualifying ABC Arrangement if the Qualifying ABC Arrangement is found to be void or illegal;	<input type="checkbox"/>
Certification (d)		The declarations made pursuant to sub-paragraphs (c)(i) to (c)(viii) above are given on the basis of a legal opinion received from an appropriately qualified person and are made subject only to the assumptions and qualifications specified in that opinion;	<input type="checkbox"/>
Certification (e)		I confirm that the trustees have obtained a valuation of the property that is the ABC Asset, as at the date specified above, the valuation has been prepared by a chartered surveyor who is a member of RICS and has appropriate indemnity cover in place, the valuation has been prepared in accordance with paragraph 7(3)(b) of the Appendix and the valuation includes allowance for any encumbrances recorded in the certificate of title referred to in (f) below;	<input type="checkbox"/>
Certification (f)		I confirm that the Scheme trustees and/or the ABC Counterparty have obtained a certificate of title from an appropriately qualified person and dated not more than 7 days prior to the effective date of the Qualifying ABC Arrangement which confirms that the ABC Counterparty has good and marketable title to the property that is the ABC Asset and records any material encumbrances to that property. Having made appropriate enquiries the Certifier is satisfied that, as at the date of the ABC Certificate, there are no matters affecting the title to the property which were not disclosed in the certificate of title referred to above, or that to the extent there are any such matters, they have been allowed for in the valuation of the property referred to above;	<input type="checkbox"/>
Certification (g)		I confirm that insurance on terms equivalent to those required by the Contingent Asset Appendix in respect of a Type B(ii) Contingent Asset is in place and all premiums have been paid; and	<input type="checkbox"/>
Certification (h)		I confirm that I have notified the Board of any attempt that has been made to enforce the rights in favour of the Scheme trustees pursuant to the ABC Arrangement to acquire, call for or exercise step-in rights or other similar rights in respect of the ABC Asset in the event of the insolvency of the Employer.	<input type="checkbox"/>
Certification (i)		I confirm that the information contained within the certificate is complete and accurate, and the trustees of the scheme/section undertake to notify the Board promptly if the terms of the Qualifying ABC Arrangement or the ABC Arrangement are amended in any respect, the Qualifying ABC Arrangement or the ABC Arrangement is terminated or any of the information in the certificate otherwise ceases to be true and correct on or before 31 March 2016.	<input type="checkbox"/>
Certification (j)		I am aware that it is a criminal offence under section 195 of the Act for any person knowingly or recklessly to provide false or misleading information to the Board in circumstances in which the person providing the information intends or could reasonably be expected to know, that it would be used by the Board for the purposes of exercising its functions.	<input type="checkbox"/>