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

Foreword

This consultation document sets out our plans for the pension protection levy over the next three years. Stability in our methodology benefits everyone, through greater predictability and hence better planning for levy payers. Our starting point in this review has been therefore that we should only change the rules where there is a strong case to do so, principally through an improvement in the risk-reflectiveness of the levy.

We believe that as a customer focused financial institution we should treat members, levy payers and other stakeholders as if they had a choice about whether to use the Pension Protection Fund or not. Accordingly, we seek to listen to our stakeholders' concerns, and have sought to shape our levy appropriately. In building our proposals for the next three years we have therefore engaged with key stakeholders of pension schemes, of business and of the advisory community, through an Industry Steering Group established for that purpose.

As we have grown in size and experience, we have developed many aspects of our work. As our funds under management have grown, so has the sophistication of our investment strategy. As our member numbers have grown, we have begun work on bringing in house member administration services. And we are now seeking to turn experience of insolvency in our universe to our, and our stakeholders' advantage – by using it to make our levy more reflective of risk.

Our new insolvency risk services provider, Experian, has developed for us a PPF-specific model that is a significant step forward, focussed as it is on the experience of the entities that sponsor defined benefit pension schemes. We have evaluated this model against criteria agreed with the Industry Steering Group - and the evidence in favour of its adoption is compelling.

I should like to thank the members of the Industry Steering Group, PwC, Barnett Waddingham, and all others who have contributed to our thinking and to the analysis in this document. I should also like to thank Dun & Bradstreet who have worked with us in a highly professional way. I can reassure schemes that they will remain able to contact D&B in relation to issues for this year's levy, and can expect the same quality of service they have always received.

Alan Rubenstein
Chief Executive

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1. Introduction and Executive Summary

1.1 The initial Consultation on the PPF levy for the second triennium

1.1.1 The pension protection levy is a key source of funding for the Pension Protection Fund (PPF) and ensures that we can fulfil our responsibilities to provide compensation to members of eligible pension schemes should their employer become insolvent.

1.1.2 We recognise that, as a mandatory cost to schemes, it is important that the design of the levy is appropriate. It is essential that the levy be reflective of risk, but, at the same time, it should be predictable.

1.1.3 In 2011 we put in place our New Levy Framework (NLF), to begin from levy year 2012/13. This aimed to meet both of these challenges.

1.1.4 We delivered a more risk-reflective levy through a range of measures including taking account of investment risk when assessing the funding risk of a scheme. We also reduced the cross-subsidy (which results from capping the highest levies) and made it transparent by recovering the cost through our scheme-based levy. We delivered predictability by using smoothed assessments of funding and insolvency risk to allow us to set Levy Rules that could in normal circumstances be stable for a three year period (a "triennium"), in particular through fixing the scaling factor applied to bills. As a result schemes could expect to see levy bills moving with movements in their risk – though the corollary was that the amount we collect overall varies from year to year.

1.1.5 We are now coming to the end of that first triennium – and next levy year (2015/16) marks the start of our second triennium. We have therefore carried out a full review of our existing rules and whether change is needed.

1.1.6 Our intention is still to aim for stability in our levy rules, and so our starting point is to consider whether change is genuinely justified. We believe this would be the case if the change resulted in a materially more risk-reflective levy. This means many aspects of the levy will remain unchanged.

1.1.7 One area where we will be making a change is the measurement of insolvency risk. The experience we now have of insolvency amongst entities that sponsored defined benefit (DB) schemes allows us to propose through this consultation a significant improvement in the risk-reflectiveness of the levy through the use of a PPF-specific measure of insolvency risk. In other areas of the levy, we expect to better reflect asset backed contributions, contingent assets and last-man standing arrangements.

1.1.8 This consultation is focused on the design of levy for the next three years – which governs distribution of levy between schemes. This consultation closes on 9 July. A further consultation on the final rules will be held in the Autumn – which will include consultation on the Levy Scaling Factor (LSF). That is also when we will publish our Levy Estimate for 2015/16.

1.2 Summary of proposals – measurement of insolvency risk

Overview

1.2.1 We appointed a new insolvency risk services provider, Experian, in July last year following a competitive tender process. They were appointed on the basis of their existing business insolvency risk model, Commercial Delphi. However, they proposed to develop a new scoring methodology specifically for the PPF, which they argued would be superior.

1.2.2 The argument for developing a PPF-specific risk score was based on the significant differences between the nature of the average UK business (on which a generic model is trained) and of the typical sponsor of a DB pension scheme. As a result the factors that are most predictive of insolvency for DB scheme sponsors are likely to be different from those of UK businesses in general.

1.2.3 As shown in chapter 3, the generality of UK businesses have five or fewer employees, were founded since 2005 and are not part of a group. By comparison, most DB sponsors are part of corporate groups, are many times larger and have been established for at least a quarter of a century. They are polar opposites.

1.2.4 We have evaluated Experian's PPF-specific score and the case for using it, set out below (and in full in chapter 3), is compelling.

1.2.5 However, there are a number of options to consider in moving to the PPF-specific model – and these are also explored below.

What is the PPF- specific model?

1.2.6 The approach Experian have used is essentially the same as they use to construct their standard scores – and is an industry standard approach. The key distinction with the Experian PPF-specific model is that it is based on data relating to entities that have been DB pension scheme sponsors in one or more years since 2005 – including the experience of insolvency amongst those entities.

1.2.7 The PPF-specific model is very largely based on financial information, because that is what has proved most predictive amongst our universe of employers. Experian will capture that information from a range of sources including Companies House and the Charity Commissions[1]. For overseas entities, Experian will also capture accounts - so scores will be produced directly and will no longer need conversion. Wherever practical we will be looking to Experian to capture accounts, but we encourage schemes to access the web portal to check that data is held on their employers (and that it is correct).

1.2.8 The very strong focus on financial variables is a change from the approach used for generic models – which include larger numbers of variables with a significant weighting on non-financial variables. This

[1] One or more of the Charity Commission for England & Wales, the Office of the Scottish Charity Regulator or the Charity Commission for Northern Ireland.

change of focus has been strongly supported in stakeholder feedback to date – and comment on the previous model.

How was it evaluated?

1.2.9 The model has been subjected to scrutiny in a number of ways. First we have carried out our own analysis. Secondly, we have engaged PricewaterhouseCoopers (PwC) to provide an independent review that the model represented industry practice. Thirdly, we shared information on the model, our analysis and PwC's conclusions with our Industry Steering Group. This brought together respresentatives from key collective stakeholders: the NAPF, CBI, TUC, the Institute and Faculty of Actuaries, the Association of Consulting Actuaries and from schemes/employers covering a range of industry sectors, with a remit to review emerging proposals.

1.2.10 To evaluate whether the PPF-specific measure would be better suited for use in the Levy than Commercial Delphi, we agreed with our Industry Steering Group a set of nine success criteria.

1.2.11 In summary, the PPF-specific model is superior to Commercial Delphi for five of the success criteria and scored equally with Commercial Delphi for the remaining four. In particular:

- It is significantly more predictive of insolvency. Measured using the Gini coefficient[2], it scores 0.71 which is well above Commercial Delphi (which scores 0.52[3] on our universe), and exceeds our target of 0.55;
- This result is generally stable over different industry sectors, model scorecards, and time;
- The PPF-specifc model provides considerable improvements in transparency and the processes that will be followed in relation to monitoring and appeals. In particular, schemes will be able to see details of the basis on which scores are calculated set out in our levy rules, and see the data on which their score is based through an online tool;
- PwC have confirmed that the model development represents best practice, or in the limited areas that it diverges from common practice, these changes are in their view reasonable in view of the particular use to which the PPF score is to be put;
- PwC consider that because the variables used are heavily weighted towards financial variables, that the measure should be resistant to manipulation.

We provide further detail on our assessment in chapter 3.

1.2.12 It is important to note that, whilst the PPF-specific score is better for our purposes, it is not directly comparable to other such measures and is not designed to be used as a general indicator of insolvency risk. Commercial

[2] An industry standard measure for credit scoring models, explained in chapter 3

[3] This was corrected on 23 June 2014

Delphi and the D&B Failure Score, that we used previously, are high-quality models for assessing the insolvency risk of UK businesses in general.

What areas of the Experian model are still to resolve?

1.2.13 There are two aspects to the model on which we would be particularly keen to have stakeholder input. These are:

- Whether we have identified and assessed the not-for-profit (NFP) sector appropriately and what further steps we could take to refine our ability to capture data on them. We have taken the step of constructing a separate scorecard for NFP entities, as the factors that are predictive of insolvency for commercial entities are less predictive for NFPs. The intention is that our definition of not-for-profit should therefore capture those who would be more appropriately scored against this alternative scorecard. Sections 3.5 and 3.6 cover this;
- Whether there should be an over-ride for entities with a credit rating – so that the PPF-specific score would be replaced by a score calculated by using the default probability implied by the credit rating (adjusted to exclude defaults that are not insolvencies). This is covered in chapter 4.

1.3 Summary of proposals – incorporation of Experian scores in levy

1.3.1 We set out in chapter 5 our proposals for how Experian scores will be incorporated in to the levy. We propose to continue to use a 10 band system for insolvency risk, with the bands designed to each cover around 10 per cent of employers, except that the top band will have around 20 per cent of employers and the bottom two bands will each contain around five per cent. The boundaries would be set in terms of insolvency probabilities, as the model generates scores in the form of insolvency probabilities.

1.3.2 We recognise that, in view of the fact that the low number of actual insolvency events amongst our lower risks provides limited statistical evidence upon which to distinguish between these risks, there is an argument for a broader top band – covering around the top forty per cent of employers – and a reduced total of 8 bands. We have carried out an impact analysis for this option – a key finding of which is that it would mean that those who were and remain in band 1 would see a small rise in levy, instead of a reduction, other things being equal.

1.3.3 In setting the levy rates for our proposed ten bands, we have sought to achieve the following broad outcomes:

- With fewer employers placed in band 1 than under D&B, it is reasonable to expect that schemes whose employers remain in that band should see, if anything, a lower levy (other things being equal).
- To reduce the impact on schemes that move from band 1 under D&B to a lower band, the rate of increase in levy rates from band 1 to the bands immediately below has been limited. This also helps reflect that evidence to differentiate risks amongst the top three bands is limited.

- The range of levy rates from bands 1 to 10, and the largest increase in levy rates from one band to the next, to be similar to now so that the levy impacts of our proposals are restricted to those due primarily to the re-ranking of schemes for insolvency risk under the new model and to our choice of band boundaries.

1.3.4 We ask stakeholders if they favour our proposed 10 band solution or would prefer the alternative option of a wide top band, covering around 40 per cent of employers.

1.3.5 In future years, twelve monthly scores will be used, but for 2015/16 it is proposed only to use scores from 31 October 2014 to 31 March 2015, to provide an opportunity for schemes to verify their own data and address any individual issues they may have. Our analysis shows that using six months' worth of data should not have a material impact on scores.

1.4 Impact analysis.

1.4.1 Moving to use the Experian PPF-specific score (referred to as the Pension Protection Score) will lead to a large redistribution of levy across our universe - on the basis of the levy bands and rates proposed - of around £200 million in aggregate, based on recalculating 2014/15 levies as if PPF-specific scores had been used.

1.4.2 This is primarily being driven by many employers seeing their relative ranking change under Experian's PPF-specific approach as compared with the D&B methodology. This is a result primarily of the model's focus on financial variables (as compared with non-financial factors which feature in off the shelf models) but also differences in the financial variables measured. Analysis set out in chapter 6 provides more detail on this.

1.4.3 Schemes whose employers retain or improve their relative ranking may see a reduction in bill whereas those with employers whose ranking drops may see an increase in bill.

1.4.4 In summary, our analysis shows:

- Fewer schemes are capped and so there is a fall in the scheme-based levy[4] (which benefits all schemes) of around £20 million.
- There are 50 per cent more who see a reduction in levy than those with an increase – but, as a result, those with an increase see bigger changes.
- There is less of a bunching of employers amongst the best scores – so that a proportion of employers are "downgraded" in terms of their band, and it is this that results in a large change in levy for those affected.
- The model results in some employers seeing a material shift in their relative ranking and, as a result, they drop a number of bands. Such schemes will see a material change in levy.

[4] The Scheme-Based Levy is calculated as a proportion of scheme liabilities. It is used to recover the costs of capping, so that cross-subsidy is transparent.

- For those who remain in band 1, the overall levy falls in most cases .

Further detail is set out in chapter 6 and in an accompanying technical annex.

1.5 Transitional protection

1.5.1 In the light of the level of redistribution in levies that will result from the move to Experian, we have considered the case for a transitional measure to reduce the scale of changes in levy in 2015/16 for those most affected.

1.5.2 The impact analysis shows the shifts in levy are not symmetric – with more schemes seeing a reduction in levy than the number seeing an increase.

1.5.3 The principal argument against transitional protection is that those who would otherwise see a benefit from the shift (or indeed see an increase in costs below the threshold for transitional protection) will pay more. Such a scheme might argue this was not fair in view of the model indicating they are of lower risk. In addition, it adds complexity to the levy, and would probably mean a departure from our goal of fixing the rules for three years.

1.5.4 We are not therefore proposing transitional measures as part of the "core package" but we have developed an option we could implement if it had broad stakeholder support.

1.5.5 The transitional option we have modelled would operate at scheme level not in relation to individual employer scores. It would involve comparing the insolvency risk that was calculated for a scheme in 2014/15, with what the assessment would have been had Experian scores been used in 2014/15. Then if the increase is more than 200 per cent, we will abate the 2015/16 bill[5]. The cost of such a measure is estimated to be around £100m, with around 1200 schemes expected to benefit, and we would ensure the cross-subsidy involved was transparent by recovering the reduced risk-based levy through the scheme-based levy. This would increase the scheme-based multiplier by 0.01 per cent of liabilities[6]. Transitional protection would last for one year.

1.6 Customer service

1.6.1 We set out in chapter 8 the work being done to ensure that the level of customer service that can be offered to stakeholders is significantly

[5] This may not mean all bills are capped at a 200 per cent increase, since if the scheme's risk as measured by Experian, deteriorates further between 14/15 and 15/16 then we would not protect the scheme from that increase. We may also not apply a reduction where scores "bounce back" in the 2015/16 year.

[6] The scheme-based levy multiplier applied to the smoothed liabilities of the scheme to charge the scheme-based levy. For a scheme with liabilities of £1 billion, an increase of 0.01 per cent in the multiplier is equivalent to an additional £100,000.

improved following the move to the Pension Protection Score (as it is termed in this context).

1.6.2 A key element of that improved service is a free web portal allowing data and scores to be checked – and a free email alert set up to indicate when a score changes. It will also be possible to download data and carry out "what if" analysis, for example to understand what impact forthcoming accounts will have.

1.6.3 In addition, there will be a product allowing portfolio analysis – called BusinessIQ – which is geared towards users such as consultants. Like the products D&B have offered in the past this will be a paid-for service.

1.6.4 With a new system in place, there may be teething problems. We, and Experian, are eager to work with stakeholders to address any problems that arise. We are already aware that the restriction of access to the scheme and its advisers may be an issue for some employers that would want to be able to monitor directly, and we are working on a solution to that.

1.7 Draft Levy Rules – highlighting areas of change.

1.7.1 We have set out in draft form the sections of the 2015/16 Levy Rules (often referred to as the determination) which will implement the main changes. Stakeholders will have an additional opportunity to comment on a full draft of the levy rules in September – however we felt it would be helpful to share an initial draft covering key changes to provide additional scope for comment – and to help stakeholders' understanding of this consultation document and the questions we are asking. A guide to the levy rules (and which ones are included in this consultation) is in chapter 10.

1.8 Summary of proposals – Triennium review – non-insolvency risk

1.8.1 We carried out a general review of the factors used in calculating the levy for the second triennium. Our approach started from the principle that we would wish to improve the risk-reflectiveness of the levy, but would only make a change where there is a clear case to do so.

1.8.2 This has meant that there are large parts of the methodology that we have not altered. For example we looked at the way we calculate underfunding risk, and the stresses that we use to adjust for investment risk. Had we been setting those for the first time we might have used marginally different factors, but the impact on levies would be very small. So it seems more appropriate to continue with the existing factors, which avoids the administrative burden (however small) that inevitably occurs whenever there is a change in levy rules.

1.8.3 Three areas where we propose change are:

- Type A contingent assets – where Experian have developed for us a straightforward way of reflecting the impact a guarantee being called on would have on the insolvency risk of the guarantor (to create a conditional probability), and to require certification of a fixed sum;

- Asset backed contributions – to ensure recognition is proportionate to the reduction in our risk from the arrangement being in place;
- The discount given for associated last man standing schemes – so that this reflects the extent to which the arrangement is genuinely spreading the risk, rather than being a single standard discount.

1.8.4 By comparison with the move to Experian these will have a limited global impact, but they will result in a significantly more appropriate levy in individual schemes.

2. The Triennial Review

2.1 Context and scope for the review

2.1.1 The first triennium of the New Levy Framework (NLF) started in levy year 2012/13 following extensive consultation. Key messages from our consultations were support for seeking stability and predictability.

2.1.2 Key features of the new framework have been:

- A fixed formula for three years (subject to the levy ceiling and a maximum increase or decrease in the levy estimate from one year to another of 25%)
- Changes in an individual scheme's levy bill should reflect changes in its risk characteristics
- The measurement of funding on a smoothed basis
- The introduction of investment risk into scheme underfunding
- The averaging of insolvency risk over a year rather than at 31 March.

2.1.3 2015/16 will be the first year of a new triennium. Ahead of the usual annual consultation for 2015/16, which is planned for September, the PPF Board will review the funding strategy and this will inform the setting of the Levy Scaling Factor. Within the impact analysis for this consultation we have used the Levy Estimate for 2014/15 of £695 million as an assumed overall quantum.

2.1.4 Overall, our view is that the NLF has worked well in its early years.

2.1.5 We have reviewed all aspects of the NLF but, with the exception of the issues set out in chapter 9, have concluded there is no need to change the approach we adopt.

2.1.6 The biggest single area for change is to reflect the move to Experian as insolvency risk provider which is covered in detail in chapter 3.

2.2 Preliminary stakeholder engagement

2.2.1 We are grateful for the valuable input of members of the Industry Steering Group (ISG) in the triennial review including the move to Experian. They have helped us to develop key success criteria for comparing the Commercial Delphi and PPF-specific models and have provided feedback on other areas in which we are making proposals.

2.2.2 Over the last six months we have also held meetings with a number of the main consultancies to keep them informed of progress on the triennium review and get their input on specific issues.

2.3 A summary of the NLF

2.3.1 The NLF has two parts. The scheme-based levy is paid by all eligible schemes and is based upon unstressed liabilities reported on a section 179 (s179) basis multiplied by the scheme-based levy multiplier (0.000056 in 2014/15).

2.3.2 The risk-based levy (RBL) is based upon the likelihood of a scheme making a claim on the PPF and the potential size of that claim. The key components of the RBL calculation are the size of the scheme's deficit (referred to as Underfunding), the risk of the scheme employers becoming insolvent and the levy scaling factor (LSF) – 0.73 in 2014/15.

2.3.3 In considering whether we should make changes we have weighed the increased accuracy that might be possible against the inevitable costs of change.

2.3.4 A couple of examples illustrate the approach we have taken. We reviewed the asset and liability stresses, using two additional years of data to 31 July 2013. This analysis suggests that if we were setting stresses for the first time now we might choose slightly different figures, but that the overall impact of using updated stresses would be very limited – most stresses, if they shifted at all, would shift by one or two per cent.

2.3.5 A second example is our review of the treatment of annuities. Currently these are treated as an asset class and given a stress which reflects their expected movement in line with liabilities. It would be possible in principle, though difficult operationally, to remove annuities from the calculation altogether as matching assets. The overall volume of annuities held is however quite limited: at less than 2 per cent of liabilities, and the current treatment applies a stress that is relatively generous. A change in approach would impact relatively few schemes, and whilst giving a theoretically more accurate levy could easily disadvantage more schemes than it helped.

2.3.6 We believe this approach is consistent with the majority of the feedback that we received when setting up the NLF and subsequently, that stability and predictability are valued.

2.3.7 No changes were made to the valuation assumption guidance for s179 valuations during the first triennium, however the basis is reviewed at least annually and by law, the PPF has to set its valuation assumptions to reflect pricing in the bulk annuity market.

2.3.8 For clarification should the s179 valuation guidance be updated during the course of the next triennium, we intend that the output from the underfunding calculation will remain unchanged until the start of the following triennium. Maintaining the Transformation Appendix in this way will enable the total levy estimate to remain appropriate, and will help maintain stability for levy payers within the next triennium.

2.3.9 **Consultation question:** Do you agree that we should seek to maintain stability in the overall methodology for the levy, only making changes where there is evidence to support them?

3. The measurement of insolvency risk: The PPF-specific model

3.1 Introduction - Overview of change

3.1.1 For the levy years up to 2014/15 we used the D&B Failure Score as the basis for assessing insolvency risk in the levy. Following a tender exercise for insolvency risk services in 2012, Experian were appointed from levy year 2015/16. Their appointment was on the basis of their existing, publicly available business product - Commercial Delphi.

3.1.2 In their Invitation to Tender response Experian also proposed an approach based on measuring insolvency risks relative to the entities that sponsor defined benefit pension schemes, rather than the general UK population of businesses.

3.1.3 We decided to test whether this would be better suited to our needs. The evidence, set out later in this chapter, is compelling and we propose to use the PPF-specific score in the levy.

3.2 The Experian Commercial Delphi score

3.2.1 Commercial Delphi is an industry standard business credit referencing product which provides scores on 2.5 million UK businesses. It is a scoring system in many respects similar to D&B's with which PPF stakeholders will be familiar.

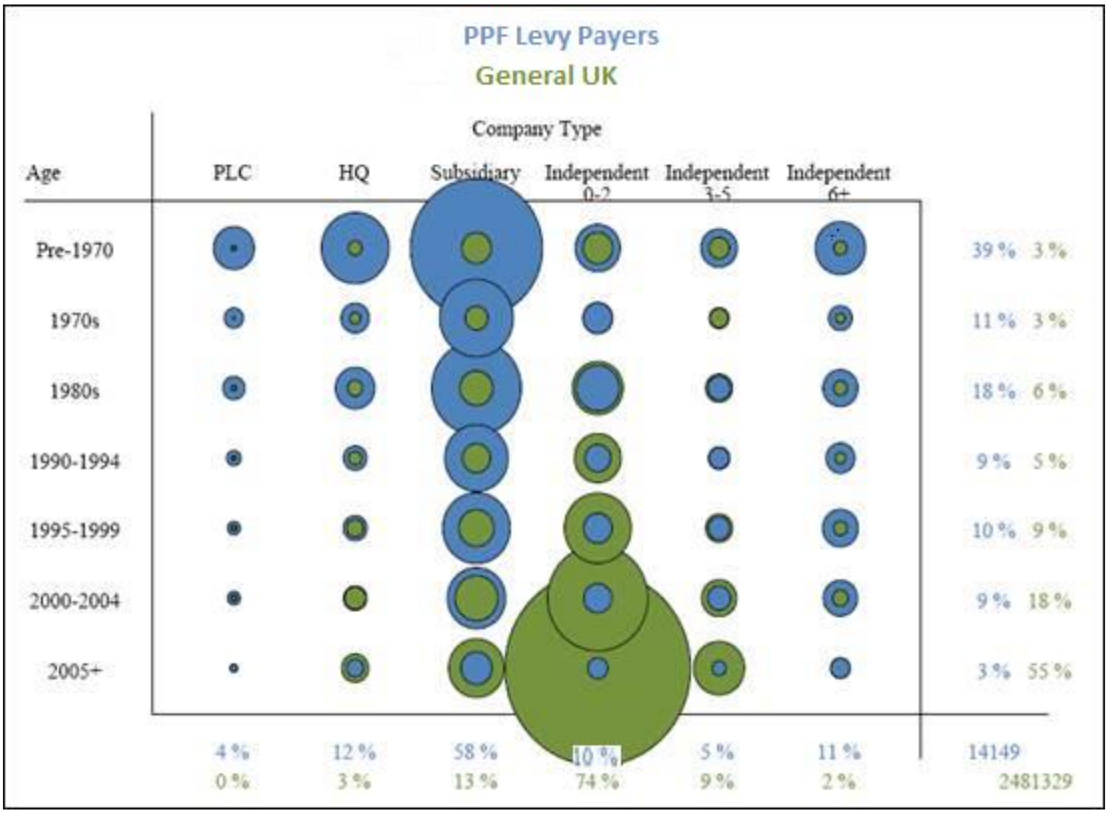
3.2.2 Commercial Delphi uses a range of financial and non-financial data that are considered to be predictive of failure amongst the overall universe of businesses. This includes financial metrics but also, for example non-financial metrics about the directors of the business, industry sector and location. These non-financial data items, whilst they may be predictive of failure generally, have been found to be less predictive than financial data for our universe. And, in addition, the subject of negative comments from stakeholders, who argue that they are often less relevant in the assessment of the sort of businesses that sponsor DB schemes.

3.2.3 As with the D&B Failure Score, it would be possible to provide some information about the data used in the product, but Experian regard the detailed design as commercially confidential.

3.3 The Experian PPF score: core model

3.3.1 Through their tender, Experian proposed to us a model developed specifically to measure insolvency risk amongst those entities sponsoring DB schemes. A model developed on the PPF universe would be more predictive than a model that was developed to measure insolvency risks for all UK businesses because our "universe" of sponsors (sponsors of DB pension schemes) is different from a typical UK business. They are typically much larger, more long-established, and more likely to be part of – or the parent company of – a group of companies. In sector terms there is less of an emphasis on business services and more on manufacturing. As a result of these differences, the best indicators of insolvency might be different. This can be seen in the following tables 3.1 and 3.2, which compare the PPF universe in blue and the general UK business population in green. The bubble size reflects the proportion of entities in that group (e.g. 39 per cent of PPF universe were founded before 1970).

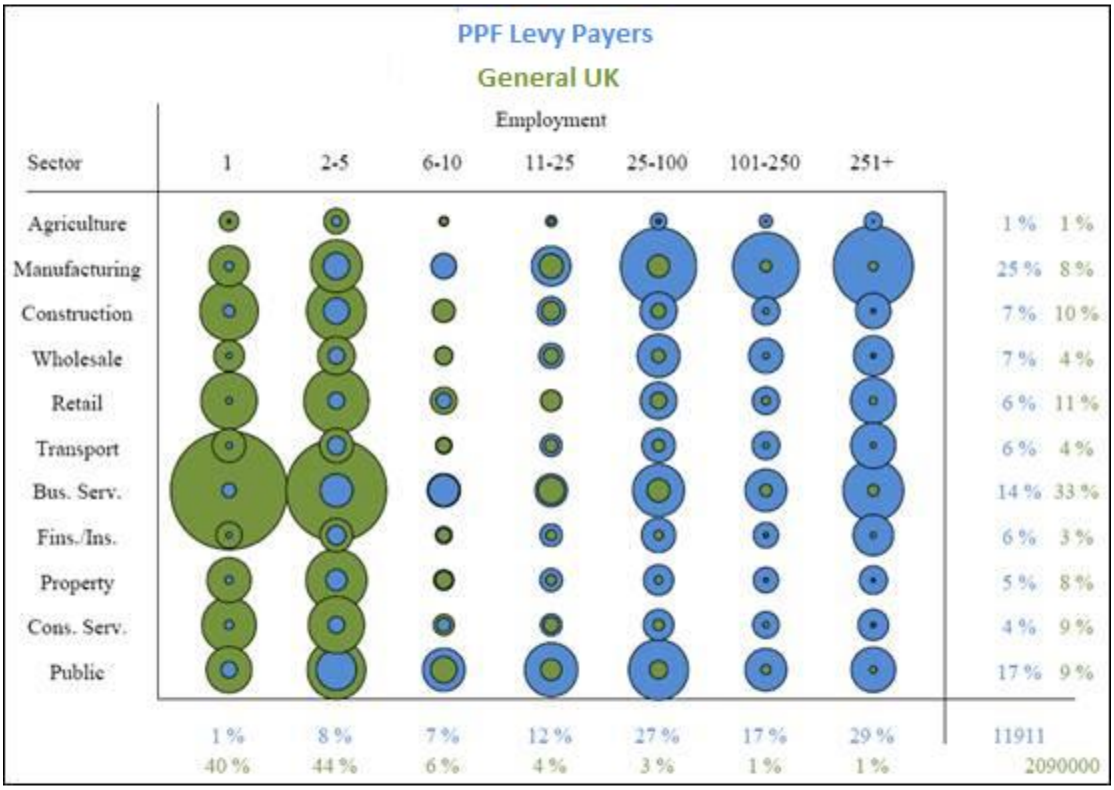
Table 3.1: Age and business structure of PPF and UK populations



Source: Experian UK

3.3.2 It will be seen that in terms of age, the PPF and general UK populations are polar opposites: most UK businesses now in existence were set up in 2005 or later, but by comparison only 3 per cent of PPF employers are that young and half were set up in the 1970s or before. Similarly, most UK businesses are stand alone entities, whilst most PPF employers are either a parent or subsidiary company in a group.

Table 3.2: Comparison of size and sector of PPF and UK populations



Source: Experian UK

3.3.3 A comparison of the size of entity shows a similarly striking contrast: 84 per cent of UK businesses employ five or fewer people, by comparison almost half of the PPF universe employs more than 100 people. In terms of the sectoral make up, the populations are also different, UK businesses as a whole being focused on business services, whilst the PPF sponsors have a three times heavier weighting to manufacturing than the general population, and twice the weighting to financial services and to the broader public sector (note, in this context the data used includes not-for-profit entities).

3.3.4 Because our universe of DB sponsors is so different from the typical UK business, an off-the-shelf product – such as Commercial Delphi – might not be optimal. Instead, Experian proposed to test what factors were actually most predictive of insolvency amongst our sponsors – by looking at those that have failed over the past eight years and those that have not. This was something we had considered in the past but we did not have the experience that would allow us to test it.

The Experian approach to model building

3.3.5 The approach Experian have used is essentially the same as they use to construct their standard scores – and is an industry standard approach. A full explanation of their methodology is included in the Experian Governance Document which will be published shortly.

3.3.6 The key design feature of the Experian PPF-specific model is that it was developed based solely[7] on information about those entities sponsoring DB schemes, and is therefore trained on those variables that are most predictive for this particular group of entities. This means that a PPF-specific score will be different to a Commercial Delphi, or indeed a D&B score, which are designed to be predictive across a much broader population of entities, dominated by small businesses with fewer than six employees and less than eight years old, and therefore less focused on the entities that form the PPF universe.

3.3.7 First, Experian divided the population being analysed into separate sub populations to increase the ability to take account of appropriate data[8] and to maximise predictiveness of the model. Segmentation was based on:

- Whether the entity is not-for-profit or commercial
- Whether the entity is part of a group, or is a stand-alone business
- The data available on it in accounts, as some employers do not file full financial information, and
- For group companies publishing full accounts, the size of the entity and whether it submits consolidated accounts[9].

3.3.8 Sub-dividing in to groups that are more homogeneous, can improve the predictiveness of scorecards. There is however a limit on how small the segments can be, whilst containing enough examples of insolvency to allow robust conclusions about the factors most predictive of insolvency – it would not be practical to subdivide the populations further.

3.3.9 Table 3.3 shows how the PPF universe is distributed according to these segments and the insolvency rate experienced in each segment.

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[7] Except in the case of Not-for-Profit organisations – see section 3.5

[8] It allows the use of data that is not present for the whole population (e.g. full accounts information is not available for all, and the strength of the wider group is not relevant to stand-alone businesses)

[9] For non-UK entities and for the largest entities, with turnover over £50 million and assets of £500 million, Experian recommended using the consolidated scorecard even for those that are subsidiaries

Table 3.3: Segmentation of PPF Universe

Segment	Entities[10]	Insolvencies[11]	Insolvency Rate
Consolidated Groups & Group companies over £500m assets	13,260	152	1.15%
Group Members, Full Accounts: £50m plus turnover	9,062	46	0.51%
Group Members, Full Accounts: £10m – 50m turnover	10,910	74	0.68%
Group Members, Full Accounts: £0 – 10m turnover	13,499	119	0.88%
Group Members Small Accounts	4,308	82	1.90%
Independent Full Accounts	5,497	53	0.96%
Independent Small Accounts	4,081	102	2.50%
Not for profit	10,996	28	0.25%
Overall (all scorecards)	**71,613**	**656**	**0.92%**

3.3.10 As will be seen, in total Experian had available over 71,000 data points, and 656 insolvency events spread across the scorecards. This is enough evidence to support statistically sound conclusions at the level both of the whole population and of the individual scorecards, and to provide the test sample (10 per cent of data) held back to test the model's outputs.

3.3.11 The second stage in model building after segmentation, was an assessment of a range of financial data to determine which were most predictive for each segment – and separate scorecards calculated for each segment. Data was drawn from accounts filed at Companies House, the Companies House Register of Charges (and company age) and Experian's trade payment system.

3.3.12 The variables that feed into the PPF-specific model were selected based upon their predictive power on a standalone basis and then in combination with other variables. This assessment of variables in combination is critical because there can be significant overlap between two variables that are predictive, so that once one is used, the second provides little or no additional benefit. The predictiveness of a scorecard may therefore be maximised by including only a limited number of variables focussed on different aspects of strength / weakness.

[10] This counts each entity separately for each year it is in the PPF universe, so that total is well above the number of employers in any given year

[11] In the seven years from 2006

3.3.13 The variables and the coefficients applied to them vary from scorecard to scorecard[12]. In part this reflects the different data available but primarily it is because companies within different segments have different risk profiles. The complete list of variables with their definitions and the weights for each scorecard is set out in Annex A.

3.3.14 **Consultation question:** Do you consider that the definition of the variables in the scorecards is sufficiently precise to provide for consistent treatment?

3.3.15 By comparison with the large number of factors that feed in to an off-the-shelf score model, the PPF specific scorecards have far fewer, around 5-7, components and are very largely driven by financial data. The limited number of components helps to optimise predictiveness given the relatively limited experience of insolvency amongst DB scheme sponsors that is available to use. We will monitor the performance of the model, to ensure that it remains predictive[13].

3.3.16 **Consultation question:** Do you agree that it is appropriate to re-evaluate the model to ensure that it remains predictive?

3.3.17 The focus on financial data reflects the fact that, when tested, non-financial factors such as trade payments, number of directors etc proved less predictive for our universe than key financial factors and mortgage age. Accordingly trade payments appears only in the independent, small accounts scorecard – where the companies assessed are smaller and data more limited.

3.3.18 The advice from Experian, that non-finanical factors do not appear because they are not predictive for our universe, chimes with comments we have received from stakeholders. The focus on financial data is a feature that has been consistently favoured in stakeholder comments to us. Trade payments data, for example, has been argued to be unrepresentative of actual payment policies for larger entities especially, given the small proportion of invoices typically captured, and therefore a poor indicator of increased risk. Concerns have been expressed about the manipulability of factors such as the number and experience of directors on company boards, of geographical location (with companies seeking to move the location recorded for them) even of the line of business of a company – since many entities could be classified to more than one industry.

3.3.19 A key feature of the group scorecards is the inclusion of a component based on the strength of the wider group, assessed by reference to the consolidated accounts of the ultimate parent company of the group. Evidence supports the inclusion of the strength of the parent - and it forms the largest single factor in the group scorecards. The analysis was

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[12] The gradients and constants figures are quoted to 20 decimal points in the scorecards in Part 2 of the Insolvency Risk Appendix, but we plan to reduce this to 10.

[13] We set a benchmark for initial construction of the model in terms of the Gini coefficient, as explained later in this chapter

originally carried out looking at UK ultimate parents, but has since been extended to look at non-UK parent companies, and it has been confirmed that including non-UK parents does not reduce predictiveness, so we intend to treat these in the same way as UK ultimate parents.

3.3.20 As part of the work with the ISG we carried out a review of lessons to learn from previous experience with D&B. It is based on a combination of points from:

- The PPF's experience of insolvency risk issues seen in disputes;
- Stakeholder feedback through previous consultations and specific cases; and
- Recent engagement with stakeholders specifically on the move to Experian.

3.3.21 Please note that the comments in the following table relate to the fact that the likelihood of insolvency is currently measured using a generic, rather than custom-built model, and would be relevant for any 'off the shelf' commercial product.

Learning from our experience to date

Comments received include	Our response
Transparency of Methodology Due to the nature of a generic, commercial insolvency model, levy payers and consultancies have not been aware of its input variables	Detail on how scores are calculated in our Levy Rules (also called the "Determination"), including the coefficients are being provided.
Data capture Because the current model is proprietary, and its input variables cannot be made public, stakeholders have had to learn, over time, what additional information they may need to provide direct to obtain an appropriate score. This has resulted in many appeals. They want clarity on what is needed for Experian.	Exercise carried out to assess need for direct data. Where Experian are unable to source accounts, they will accept direct submission of accounts. Schemes can see what data is held through web portal.
Trade Payment Data Concerns have frequently been expressed to us by stakeholders about the use of trade payment data.	Trade payment information only features in one scorecard - independent small accounts, where other data is limited.
Geographic and Director information Concerns expressed about the relevance of geographic location and the ability to manipulate levies through appointing directors without a change in risk.	None of these data items feature in any of the scorecards.
Scores across corporate groups The very wide range of scores across corporate groups was considered counter-intuitive. Weakness in wider group recognised, but strength not.	Parental strength/weakness reflected in group scorecards through a specific variable.
Score monitoring There has been demand for both free–to-use monitoring services (e-mail alerts) and for paid for services that consultants can use for bulk monitoring of scores – in line with widely appreciated D&B offering	Schemes will be able to monitor scores and data through the portal and set up alerts for free. Experian will also offer a portfolio service for consultants through their paid-for BusinessIQ product.

3.3.22 The model has been subjected to scrutiny in a number of ways. First the PPF has carried out its own analysis. Secondly we have engaged PricewaterhouseCoopers (PwC) to provide assurance that the model represented best practice. Thirdly we shared information on the model, the findings of our analysis and PwC's conclusions with our Industry Steering Group. We are publishing a report produced by PwC alongside this consultation and will shortly publish a governance document produced by Experian.

3.3.23 The scorecard weightings are set out in Annex A.

3.3.24 As stakeholders will, no doubt, appreciate, the core model has been developed on the basis of expert advice and is intended to work as a package. Whilst there may be limited scope for changes to the component parts (for example, through improvements in data coverage and accuracy), the Board will be seeking to avoid this unless it is clearly justified, as there is a risk that unpicking specific parts of the model could make it less predictive overall. For this reason, whilst the Board will consider all comments, it is directing stakeholders' attention to specific areas (such as the CRA option – see chapter 4) and to the broader question of whether the PPF-specific model should be used as opposed to Commercial Delphi.

3.3.25 **Consultation question**: Do you have comments on the design of the "core model" developed by Experian?

3.4 Whether to adopt the PPF specific model or Commercial Delphi

3.4.1 We agreed with the Industry Steering Group a set of nine success criteria to assess the relative merits of the PPF-specific model and Commercial Delphi. These criteria were:

- Predictiveness – how effective are the models when measured against actual experience across the PPF universe?
- Coverage – which model is able to score the highest proportion of the PPF universe?
- Transparency – what can be published about the score?
- Appeals & monitoring arrangements in place
- Model development represents best practice
- Transition from D&B scores
- Is the model resilient to manipulation?
- Can scores be expected to be stable over time (subject to changes in a particular company's fortunes)?
- Will the costs of new system be reasonable for stakeholders?

3.4.2 The PPF-specific model is superior to Commercial Delphi for five of the success criteria and scored equally with Commercial Delphi for the remaining four.

3.4.3 On the ISG's agreed number one priority, predictiveness, the PPF-specific model is substantially better.

3.4.4 Our principal method of assessing predictiveness is to use the Gini coefficient – which varies between 0 (no predictive power) and 1 (perfect prediction). On the PPF universe, the PPF-Specific model scores 0.71, better[14] than the off-the-shelf models (Commercial Delphi scores 0.52[15], and D&B performs similarly).

What is the Gini coefficient?

The Gini Coefficient is a measure of statistical dispersion. It measures the inequality among values of a cumulative frequency distribution, in this case the actual distribution of insolvency events and that predicted by the model. The Gini coefficient has been adopted as an industry standard approach to assessing the ability of credit scoring models to discriminate between risks.

The chart below plots the actual distribution of insolvency events in our experience against that predicted by the PPF-specific model (blue curve). It shows the proportion of insolvencies that are predicted by any given proportion of scores, thus it shows that half of the employers that became insolvent are among the 8 per cent of employers with the lowest PPF-specific scores, and 80 per cent of insolvencies had the lowest 25 per cent of scores.

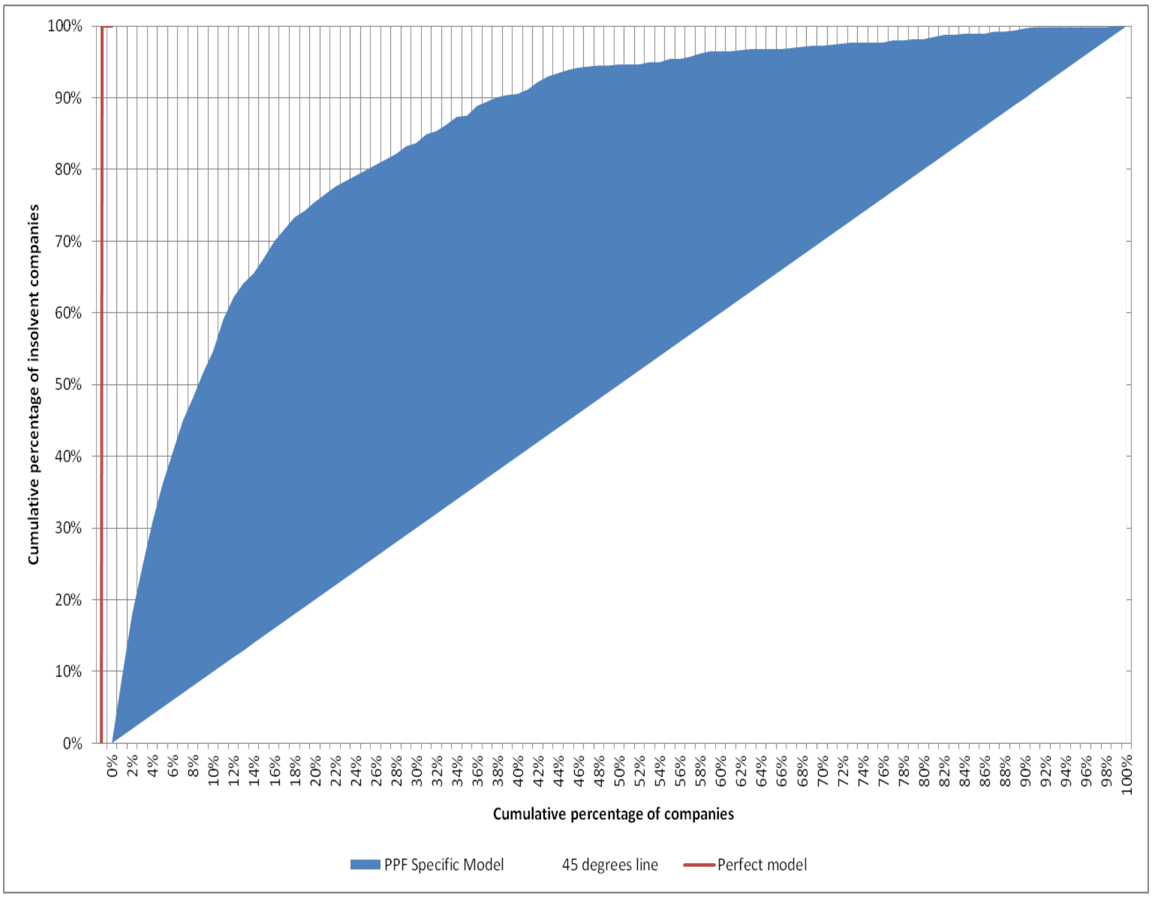
A perfectly accurate model would have given a score of 1 to all employers that then became insolvent – we show this on the chart by the red line. At the other extreme, a model with no predictive power would give only 1 per cent of failures a score of 1, 10 per cent of failures a score of 10 or less and so on - we show this by the diagonal line. The more predictive a model is, the closer its curve will be to the red line and the further it will be from the diagonal line (a model placing 60 per of failures in the bottom 20 per cent of scores is better than one placing only 40 per cent of failures in those scores).

We can also calculate a statistic, the Gini coefficient, to express the accuracy numerically. This simply measures how large the blue area, between the model's curve and the diagonal is as a proportion of the area of the triangle between the perfect model and the diagonal. A Gini coefficient will therefore take a value between 0, reflecting no accuracy at all, and 1 for perfect accuracy.

[14] The industry standard measure of performance for credit risk models is the Gini coefficient, which varies between 0 and 1 (with 1 perfect prediction). PWC, in advising banks on building models, recommend aiming for 0.55 or better. The PPF specific Gini exceeds 0.7.

[15] This was corrected on 23 June 2014

Chart 3.4: Gini coefficient



3.4.5 In testing predictiveness, we did a separate analysis on a proportion of our experience kept back from use in developing the model (what is referred to as a hold-out sample) to independently test the predictive power of the model. Results are consistent with the sample used to develop the model.

3.4.6 The predictiveness was also tested for each scorecard, for different sectors, and for different time periods. On all these tests the outcomes are generally stable over different industrial sectors, model segments, and time. The table below shows the Gini coefficient for each model scorecard.

Table 3.5: Gini by scorecard

Scorecard	Entities[16]	Insolvencies[17]	Gini
Consolidated Groups & Group companies over £500m assets	13,260	152	68.1%
Group Members, Full Accounts: £50m plus turnover	9,062	46	69.8%
Group Members, Full Accounts: £10m – £50m turnover	10,910	74	75.5%
Group Members, Full Accounts: £0 – 10m turnover	13,499	119	71.7%
Non Consolidated Small Accounts	4,308	82	58.2%
Independent Full Accounts	5,497	53	65.6%
Independent Small Accounts	4,081	102	49.0%
Not for profit	10,996	28	57.2%
Overall (all scorecards)	**71,613**	**656**	**70.7%**

3.4.7 We also looked at how close the predicted insolvency probabilities generated by the model were to the observed insolvencies. Again, the PPF-specific score passed this test, whilst Commercial Delphi understated insolvency risks in our universe (a result we have noted in the past in relation to the D&B failure score).

3.4.8 Coverage is similar between the two Experian models, but steps being taken by Experian to extend its data capture will improve coverage of the PPF-specific score, particularly for entities that Commercial Delphi does not currently score.

3.4.9 The use of the PPF-specific model provides significant benefits in terms of transparency. Most fundamentally, schemes will be able to see details of the basis on which scores are calculated set out in our levy rules. A draft of these rules covering the treatment of insolvency risk is included with this document and we are inviting comments on them. By

[16] This counts each entity separately for each year it is in the PPF universe, so that total is well above the number of employers in any given year

[17] In the seven years from 2006

comparison Commercial Delphi is a proprietary tool, which like the D&B Failure Score, cannot be shared to the same extent with levy payers.

3.4.10 Transparency of measurement will also be improved by the ability of schemes to see the data on which their score is based through an online tool (see Chapter 8). Though this is a feature of both models, the ability to share the detailed mechanisms for calculating the PPF-specific score means that Experian are able to offer a downloadable tool to understand the impact of changes in the data captured on the scheme's employers. This will allow, for example, an understanding of the impact of forthcoming accounts, thereby helping with financial planning.

3.4.11 PwC have confirmed that the model development represents best practice, or in the limited areas that it diverges from common practice, these changes are considered reasonable in view of the particular use to which the PPF score is to be put. A copy of their summary report is published with this consultation.

3.4.12 Our conclusion is that the PPF-specific solution is the most appropriate model, and should be used.

3.4.13 **Consultation question**: Do you agree with the success criteria set out by the Industry Steering Group and that the PPF-specific model developed by Experian is a better match with them than Commercial Delphi?

3.5 Experian PPF score: Solution proposed for not-for-profit sector.

3.5.1 Initially, no distinction was made between commercial and not-for-profit (NFP) entities in the modelling Experian undertook to develop the PPF-Specific model. However testing of the model, which included looking at predictiveness for different sectors, highlighted NFPs as an area that should be considered further.

3.5.2 As the data used to develop the model was overwhelmingly based on commercial organisations, the standard model proved less able to rank NFPs accurately (when compared to other sectors) with a Gini coefficient of only 0.31. In addition the overall predicted insolvency rate using the standard model generated for the sector was significantly higher than the observed insolvency rate. This suggested that using the existing scorecards might not be optimal.

3.5.3 Accordingly we evaluated three alternate options:

- Applying a common score for all not-for-profit entities;
- Using the standard model, but applying an adjustment to the score to reflect the lower average insolvency rate for NFPs relative to commercial entities; or
- Building a unique scorecard.

3.5.4 Not-for-profit entities are in general lower risk than commercial organisations and produce an average insolvency probability of 0.25% against 0.92% for the entire PPF universe. However, that would translate in to levy band 6, rather than a higher band, if we based a common score for all not-for-profits on their insolvency rate. This would mean there was no discrimination between strong NFPs and weaker ones, and so this would only be attractive if other solutions to offer a discriminative measure were unworkable.

3.5.5 Using the standard model, but adjusting for the relative insolvency risk of the two populations was tested but found not to provide a sufficient level of predictiveness. Stakeholders may feel it would be unfair to pay a significantly higher levy than another scheme if the evidence for the employers being higher risk was weak.

3.5.6 The low number of insolvency events within the sector in the PPF universe made it difficult to build a discriminative scorecard. For this reason Experian extended the available population by looking outside the PPF universe but choosing entities which were similar to the NFPs of the PPF universe at least in terms of size, maturity and legal form. To help ensure that this didn't skew the results they tested that the additions exhibited the same level of insolvency risk. Extending the population allowed Experian to double the size of the population and allowed more robust conclusions to be drawn.

3.5.7 This extended population has allowed for the construction of a scorecard that shows a similar level of predictiveness to that of the other scorecards (with a Gini coefficient of 0.57).

3.5.8 Adding experience from outside the PPF universe in this way is a departure from the approach we have adopted in general for development of the PPF-specific model – of deriving scorecards purely from information on DB scheme sponsors. However, this approach has allowed a robust scorecard to be developed.

3.5.9 **Consultation question:** Do you agree that it is appropriate to use the separate scorecard developed by Experian not-for-profit entities, even though this requires an extension of the data set used to generate the scorecard?

3.6 Proposed definition of NFP entities

3.6.1 The provision of a separate scorecard for NFP entities means that it will be necessary to specify a set of conditions for use of the scorecard. Options considered included using SIC codes, or Companies House groupings and Charity Commission[18] registration.

3.6.2 Use of SIC codes would be problematic because they distinguish by area of activity rather than NFP status (driving schools and commercial training companies are bracketed with colleges and universities for instance) and they are easy to alter. Using the classification provided by Companies House and the Charity Commission alone would lead to significant omissions. We have therefore developed an approach, building on the classification approach as set out below.

3.6.3 We consider that employers which fall into the following categories should be regarded as NFP entities for the purposes of the Experian

[18] Or Northern Ireland / Scottish equivalents

scorecard (subject to an exclusion relating to dividend payment set out in 3.6.7 below):

(1) Companies limited by guarantee which are exempted under section 60 of the Companies Act 2006 from the requirement to include the word 'limited' in their name. Before it can benefit from this exemption a company must have provisions in its constitutional documents which effectively require it to operate on a not-for-profit basis;

(2) Charities appearing on the registers maintained by the Charity Commission, Office of the Scottish Charity Regulator and Charity Commission for Northern Ireland or which are not required to register;

(3) Industrial & Provident Societies[19] which appear on the Public Register maintained by the Financial Conduct Authority;

(4) Bodies which have been granted a Royal Charter;

(5) Public bodies: broadly, government departments and other public bodies established to perform public functions;

(6) Public non-financial corporations: public corporations are, essentially, bodies controlled by government which derive the majority of their revenues from non-tax sources. The Office for National Statistics, which is responsible for determining whether a body is a public corporation, separates them into two sub-classes: financial and non-financial. Since the former includes the banks in which the government took shares during the financial crisis, which clearly do not operate on a not-for-profit basis, we have decided to limit the category to the non-financial sub-class;

(7) Housing associations: providers of social housing registered as operating on a not-for-profit basis (where applicable) with the relevant regulators in England & Wales, Scotland and Northern Ireland;

(8) Trade unions and employers' associations which appear on the lists maintained by the Certification Officer;

(9) Reserve Forces and Cadets Associations;

(10) any other employer whose constitutional documents explicitly include provisions broadly equivalent to the requirements for the first category.

3.6.4 The specific criteria for these categories are set out in Rule E3.1(8) of the draft 2015/16 levy determination.

3.6.5 While in specific limited circumstances we may require evidence to determine whether an entity meets the test for a particular category, we have sought to develop an objective test.

[19] Description to be updated when the Co-operative and Community Benefit Societies and Credit Unions Act 2010 comes into force

3.6.6 The final category outlined above will require entities to contact the PPF directly and provide appropriate evidence, in order to qualify for assessment under the NFP scorecard.

3.6.7 The NFP definition also includes a filter to exclude employers which have paid a distribution or dividend since 5 April 2005. This is on the basis that this would be a clear indicator that the employer in question does not, as a matter of fact, operate on a not-for-profit basis.

3.6.8 **Consultation question**: Do you have comments on the approach to the rating and proposed identification of not-for profit entities, developed by Experian?

3.7 Data Collection

3.7.1 As previously mentioned, Experian collected data from Companies House to build the model. However, in the live environment, they will be capturing data from a wider set of sources, including using commercial partner organisations. In the course of developing the NFP scorecard, it was apparent that collection of data for this group was much more challenging. This is primarily because many NFP employers do not publicly file accounts with the organisations Experian would generally use to source data. Experian have now established good links with the Charity Commissions. However, in practice, it is unlikely that the same level of efficiency of collection will be achievable.

3.7.2 Additionally, collection of data relating to Employer groups (particularly non-UK parts of the group) is more challenging, as is the collection of consolidated accounts (because not all ultimate parents file them).

3.7.3 As a result:

(1) We are seeking input from stakeholders as to the steps Experian could take to improve their access to data. In particular, those employers which are within the NFP universe we have identified are asked to tell us if their accounts can be publicly accessed through, for example, umbrella governing organisations. If it is practicable to do so, we would then ask Experian to collect from those sources.

(2) In any event, we would encourage any employers which do not file their accounts with Companies House or the Charity Commissions to supply them to Experian voluntarily. In the absence of this, it cannot currently be guaranteed that Experian will be able to source the relevant data to be able to provide a PPF–specific score. As previously, in that event, those employers will be scored using a scheme, industry or blended average (as applicable) which will not, in many cases, accurately reflect that employer's insolvency risk.

(3) We would encourage ultimate parents to provide to Experian a set of audited consolidated accounts for the purposes of accurate assessment of the parent strength score. Without this, Experian will endeavour to create them, but this will be done using a simple summing method with the accounts they have found from official sources, which will not always generate the correct result (particularly in the context of an overseas, or complex group).

(4) For the purposes of NFP categorisation, the Board is currently proposing to assess whether an employer falls within its definition of NFP solely as a matter of fact/law, rather than overlaying the question of whether data to establish that fact was available (to it or Experian) at the relevant time. This departure from its usual practice (which is generally to assess matters based on data on Exchange or available to Experian on a particular date) is justified in this instance given the fact that, at least in some cases, the identification of employers that fall into those categories may not be straight forward (and may require self-identification). If identification methods improve, this departure may be revisited.

(5) To assist with the above, we are also asking those employers who believe that they fall into one of the following categories to contact Experian directly:

- Charities which are not registered owing to an exemption from the registration requirement; and
- Employers which do not fit into any of the specific categories set out above but which can demonstrate that they are prohibited by their constitutional documents from
  - trading for profit; and
  - distributing reserves,

  and which, on winding up, would distribute assets to a body with similar purposes (see Rule E3.1(8) of the draft determination for more precise details).

(6) It is intended to establish a hierarchy so that if there is different information from different sources there is clarity on which will be used. The current proposed hierarchy is set out at Rule E2.5 of the draft determination attached but, in summary, data from Companies House, followed by the Charity Commissions will be prioritised.

3.7.4 **Consultation question:** Are there other public sources of data that Experian should consider extending coverage to?

3.7.5 **Consultation question:** Do you agree with the proposed data hierarchy?

3.8 Note on Applicability

3.8.1 Please note that the PPF-specific score is designed solely for use in assessing the relative risk to the PPF of employers in its levy universe. It should not be used as a general measure of insolvency risk – as it reflects the generally low risk nature of the majority of DB pension scheme sponsors. For that reason it will almost always be lower than the Commercial Delphi score for the same entity, and should not be compared to insolvency scores generated (as Commercial Delphi is) on a higher risk universe.

4. Option of a Credit Rating Override

4.1 Introduction

4.1.1 Our analysis of the performance of the model in various segments of the PPF universe has showed that the PPF-specific model was relatively less predictive for large companies with over £500 million of assets than for our population as a whole. In this segment, the Gini coefficient is 0.48, a level that is acceptable considering how difficult it is to build a scorecard on this population where insolvency events are rare. But it is a low Gini coefficient relative to 0.71, the Gini coefficient of the model on the overall population.

4.1.2 We considered the development of an override for large and complex employers based on size and a few financial metrics but this proved unsatisfactory because:

- the limited number of data points makes it difficult to provide robust empirical justification for such an override; and
- there is no commonly accepted definition of 'large and complex'. Any override we develop would involve a cut-off point above which entities would receive the overridden score and below which they would not.

4.1.3 To improve the accuracy of the model in the segment of large and complex companies we are prepared to consider an override based on credit ratings provided by any of the three market leading Credit Rating Agencies ("CRAs") – Moody's Investors Services, Standard & Poor's, and Fitch Ratings - whenever these are available.

4.1.4 When we considered the use of CRA ratings in the past, we received a mixed stakeholder response and, in view of the limited number of schemes that might then have been affected, the proposals were never carried forward. However, in the light of the inclusion, in the PPF-specific model, of a weighting for the financial strength of a parent company, there are potentially many more schemes that would be affected by the inclusion of a CRA override.

4.1.5 The main reason for considering a CRA rating override is accuracy. The primary business of credit rating agencies is to provide assessments of the creditworthiness of companies. They do so through a combination of quantitative and qualitative analysis of the entities to be rated, with the main factor in their assessments being an evaluation by analysts considering all of the factors that might impact on the likelihood of the company defaulting on a debt. The extent of the assessment that goes into assigning a credit rating is greater than that involved in the assignment of a PPF-specific model score and its result ought therefore to be more accurate.

4.1.6 This assertion is supported by historical data. Table 4.1 below summarises historical default data since 1970 on corporations rated by Moody's Investor Services. These data indicate a Gini coefficient of 0.77, which is higher than the level that can be achieved by any formulaic assessment of creditworthiness.

Table 4.1: Historical defaults among companies rated by Moody's between 1970 and 2013

Rating category	Number of companies rated by Moody's	Number of defaults within 12 months of the rating
Aaa	4,255	0
Aa	14,298	6
A	29,684	14
Baa	27,507	52
Ba	17,201	182
B	21,055	794
Caa-C	6,172	1,006

Source: Moody's Investor Services "Annual Default Study: Corporate default and recovery Rates, 1920-2013"

4.1.7 Credit ratings are also internationally comparable. For example a BBB+ means the same credit risk whether it is for Danish or a Spanish company or indeed a UK one.

4.1.8 If a credit rating override was in place, we would apply it in all cases where a rating is available. We would not give the option to employers to choose whether or not to use the credit rating. This would have given employers the ability to pick the higher of the CRA and the PPF-specific model score.

4.2 How a CRA override would work

Assigning a composite rating to an employer

4.2.1 Ultimately we must assign a single insolvency score to each employer so, where an entity is rated by more than one CRA, we need to take those ratings and convert them into a single composite rating. Our proposed approach[20] for doing this would be:

- Where all three CRAs can provide a rating for an entity we would use the median rating.
- Where two CRAs can provide a rating we would use the lower of the two.
- Where only one CRA can provide a rating we would use that rating.

Converting CRA ratings to PPF insolvency score

4.2.2 Once a single rating has been identified, we need to convert it into a score that we can then use in the levy calculation. To map credit ratings to scores we use historical default rates associated with each of the credit ratings. However while insolvencies are always preceded by defaults, defaults do not always result in insolvencies and in general an entity is more likely to default than to become insolvent. It is, therefore,

[20] This is the most widely used method of combining more than one rating.

necessary to make adjustments to the default rates associated with credit ratings to produce a corresponding insolvency rate.

4.2.3 When we developed our internal model (the Long Term Risk Model) in 2006, Moody's Analytics, based on their experience, recommended that we multiply default probabilities by a factor of 0.8 to translate them into insolvency probabilities. If the CRA option has stakeholder support, we intend to update this advice.

4.2.4 The table below illustrates the way in which credit ratings would be mapped to PPF-specific model scores and levy bands. It is based on a table provided by PwC, with the additional application of the adjustment from default rates to insolvency rates explained above.

Table 4.2: Mapping of credit rating onto levy bands

Credit Rating	Historical default rate associated with credit rating	Corresponding insolvency rate (scaled-down)	Levy band (based on 10-bands)
AAA/Aaa	0.000%	0.0000%	1
AA+/Aa1	0.000%	0.0000%	1
AA/Aa2	0.006%	0.0048%	1
AA-/Aa3	0.044%	0.0352%	2
A+/A1	0.056%	0.0448%	2
A/A2	0.060%	0.0480%	2
A-/A3	0.097%	0.0776%	3
BBB+/Baa1	0.134%	0.1072%	4
BBB/Baa2	0.161%	0.1288%	4
BBB-/Baa3	0.277%	0.2216%	5
BB+/Ba1	0.650%	0.5200%	7
BB/Ba2	0.734%	0.5872%	7
BB-/Ba3	1.675%	1.3400%	8
B+/B1	2.305%	1.8440%	9
B/B2	3.660%	2.9280%	9
B-/B3	6.974%	5.5792%	10
CCC+/Caa	9.148%	7.3184%	10

4.3 Pros and cons of a CRA rating override

4.3.1 Despite the improvement in accuracy, the introduction of a CRA rating override adds an additional element of complexity to the PPF levy setting process and an additional cost to access the CRA data. It may also be viewed as disproportionate given that it is likely to affect only a proportion of the population of PPF levy payers.The table below summarises our view of the pros and cons of a CRA override.

Pros	Cons
• Improved accuracy • International consistency • Resilience to manipulation • Consistent with best practice • Stability • Score justified by externally recognised agency	• Assumptions required to make CRA scores consistent with PPF-specific model scores • Costs of CRA licences • No scope for appeals with credit rating agency • Not full coverage. Ratings only applicable to a proportion of the PPF population • Additional complexity

4.3.2 An impact analysis has been carried out (in chapter 6) on the effect of introducing an over-ride, and it shows a mix of those paying less levy and those paying more (with rather more in the latter category). Any over-ride would be applied wherever there was a rating, rather than being an option for the rated business.

4.3.3 **Consultation question:** Do you favour a credit rating over-ride?

5. Incorporating the new insolvency measure in the levy

5.1 Introduction

5.1.1 This chapter sets out the PPF's proposed approach for setting the levy bands and rates.

5.1.2 The PPF-specific model generates one of a range of insolvency probabilities for each employer or guarantor of a scheme. As this has been derived from claims experience and data relating to the PPF universe, it leads to many seeing their relative ranking change. The approach also leads to a more even distribution across scores replacing the current very strong bunching around the best failure scores and bringing the average insolvency probability of the population up but much closer to the insolvency rates experienced in the PPF universe.

5.1.3 As with D&B failure scores in the past, we group the scores together into a smaller number of insolvency bands and assign a levy rate to each band. The grouping of scores into bands, and the choice of levy rate for each band can have a material bearing on the distribution of levy between schemes and hence on the levy increases and decreases as a result of the move to the PPF-specific model.

5.1.4 As with other aspects of the second triennium, it is our intention to retain those aspects of the measurement of insolvency risk which do not require change. Therefore we would like to limit the changes made to the levy bands and levy rates to the strict minimum so that the impact at a scheme level is limited as far as possible to that caused by the re-ranking of our population of schemes for insolvency risk.

5.2 Levy bands

5.2.1 Our intention in setting bands was to retain the existing approach of using a limited number of broad bands, as reflecting the discriminative power of insolvency models. When consulting on the New Levy Framework in 2010, we initially proposed six bands, but stakeholders expressed their preference for a larger number of bands to limit the cliff-edges between each band, and we settled on a ten band system.

5.2.2 Accordingly, we started our analysis for the second triennium by looking at a ten band system, with equal numbers of employers in each band. However, we discovered that a banding of this kind had two key difficulties. First, amongst those in the best bands, there was relatively little increase in the observed level of insolvency. This is unsurprising given that these are indeed very low risk entities and we have limited experience on which to draw. And conversely, amongst the bottom decile, we saw a very wide range of insolvency probabilities.

5.2.3 We consider that the low number of insolvencies amongst entities that would have received the best scores makes it more difficult to discriminate between highly scored companies - and hence to justify charging strong entities a significantly higher levy than the very strongest. This led us to combine the top two deciles in our proposed approach, and conversely to split the bottom band, where evidence on relative risk is plentiful. Hence, the banding that we propose is a modified decile banding, such that:

- Band 1 covers the 20 per cent of employers with the highest scores;
- Bands 2 to 8 are set to cover 10 per cent of employers in each band; and
- The lowest decile is split so that 5 per cent of employers are in each of bands 9 and 10.

5.2.4 In view of the fact that the low number of actual insolvency events amongst our lower risks provides limited statistical evidence upon which to distinguish between these risks, there would be a case for going further and combining the first three bands into a single band, so that:

- Band 1 covers the 40 per cent of employers with the highest scores;
- Bands 2 to 6 cover 10 per cent of employers in each band; and
- The lowest decile is split so that 5 per cent of employers are in each of bands 7 and 8.

5.2.5 In our impact analysis in chapter 6 we include both our core proposition and this broader band alternative.

5.3 Levy rates

5.3.1 We have calculated rates for each levy band in broadly the same way that we did for the New Levy Framework. For any levy band, the rate is a combination of a component based on expected insolvencies to which is added a risk margin appropriate to the band. We have set the levy rates to meet the following broad outcomes:

- The broad scale of levy rates is kept the same, in particular the difference in levy rates between band 1 and band 10 is unchanged;
- With fewer employers placed in band 1 than under our current approach, it is reasonable to expect that schemes whose employers remain in that band should see, if anything, a lower levy;
- To reduce the impact on schemes that move from band 1 under our current approach to a lower band, the rate of increase in levy rates from band 1 to the bands immediately below has been limited. This also helps reflect that evidence to differentiate risks amongst the top bands is limited; and
- To avoid cliff-edges as far as possible, the increase in levy rates from one band to the next is capped at 60% (the largest increase for our current rates).

5.3.2 **Consultation question:** Do you agree with our proposed aims for setting levy rates?

5.3.3 The proposed levy bands and levy rates are set out in the table below.

Table 5.1: Proposed levy bands and rates 2015/16

Bands	Minimum Insolvency probability	Maximum insolvency probability	% of Employers	Actual Insolvency rate	Levy rate
1	0.000%	<0.030%	20%	0.03%	0.17%
2	0.030%	<0.049%	10%	0.12%	0.23%
3	0.049%	<0.091%	10%	0.12%	0.30%
4	0.091%	<0.150%	10%	0.09%	0.40%
5	0.150%	<0.233%	10%	0.13%	0.53%
6	0.233%	<0.406%	10%	0.17%	0.75%
7	0.406%	<0.762%	10%	0.64%	1.10%
8	0.762%	<1.595%	10%	0.93%	1.61%
9	1.595%	<2.986%	5%	2.50%	2.39%
10	2.986%	100.000%	5%	5.52%	3.83%

5.3.4 By way of comparison, the existing levy bands and rates and distribution of employers between the bands are set out below.

Table 5.2: Levy bands and rates for 2014/15

		D&B	
Bands	Scores	% of Employers	Levy rate
1	100-99	35%	0.18%
2	98-96	13%	0.28%
3	95-92	10%	0.44%
4	91-87	7%	0.69%
5	86-73	12%	1.10%
6	72-66	4%	1.60%
7	65-46	6%	2.01%
8	45-38	2%	2.60%
9	37-30	2%	3.06%
10	29-1	8%	4.00%

5.3.5 The recalibration of insolvency risk has led to some changes in levy rates and as a result the Levy Scaling Factor is expected to change in order to collect an appropriate total levy.

5.3.6 The proposed rates and bands will be reviewed following the consultation, because the distribution of scores could change as Experian progresses in collecting data and extending coverage.

5.3.7 Our core proposal is for the same number of bands as now and with relatively gentle rises in levy rate initially. As described in 5.2.3 we have developed an alternative that would be to charge a flat levy rate across a wide first band, with then a bigger increase in levy rate subsequently. This option is set out below.

Table 5.3:Alternative Option: Bands and Rates 2015/16

Bands	% of Employers	Actual Insolvency rate	Levy rate
1	40%	0.08%	0.22 %
2	10%	0.09%	0.40%
3	10%	0.13%	0.53%
4	10%	0.17%	0.75%
5	10%	0.64%	1.10%
6	10%	0.93%	1.61%
7	5%	2.50%	2.39%
8	5%	5.52%	3.83%

5.3.8 **Consultation question:** Do you agree it is appropriate to divide the entities with the best insolvency probabilities in to a number of bands, to ensure that the cliff-edges between subsequent bands are limited, or do you favour a broad top band?

5.3.9 **Consultation question**: Do you agree with the proposed 10 levy bands and rates?

5.4 Averaging of insolvency probabilities for 2015/16

5.4.1 We do not propose changing the principle of averaging employer insolvency probabilities over twelve months, which was introduced for the first triennium.

5.4.2 However we explained in our March update that we appreciated that levy payers would want to understand how their monthly scores (insolvency probability) were calculated and to check that the data on which it is based is correct before those probabilities counted in their levy calculations.

5.4.3 We explained that we would propose that scores would only be collected for use in the 2015/16 levy from 31 October 2014 onwards. It means that, for 2015/16 only, a six month average will be used in the levy calculation. As the scorecards are largely based on financial data and our analysis has shown that the insolvency probabilities are likely to show limited volatility, we believe this is the correct approach to take.

5.4.4 **Consultation question:** Do you agree that for 2015/16 levy year insolvency probabilities are averaged from 31 October 2014 to 31 March 2015?

6. Impact analysis

6.1 Introduction

6.1.1 This section covers two analyses of the impact of moving to the PPF-specific model. First, we look at the factors that influence whether one scores better or worse under the PPF-specific score. Secondly we have carried out a conventional impact analysis. Full material is included in the combined annex.

6.2 Key factors in shifts in ranking: Barnett Waddingham findings

6.2.1 In order to understand and explain the key drivers of changes in the move from D&B scores to the PPF-specific model and because the detail of D&B's methodology is proprietary information, we commissioned Barnett Waddingham to provide an analysis based on their insights into the D&B model gained from their client advisory work. Please note that Barnett Waddingham's analysis has been produced independently of D&B. All the material in this section, and Annex C is based on their analysis.

6.2.2 The PPF-specific model has 8 scorecards. D&B's generic scoring approach, as part of its standard methodology, comprises 6 scorecards, one of which specifically segments low risk entities..

6.2.3 For the development of the PPF-specific model, input variables were selected from an extensive list of candidate variables using statistical analysis to identify variables that are explanatory. As a result of this analysis a small number of inputs were selected, typically 5 or 6 and a maximum of 7. By contrast, the D&B system uses many more variables (between 20 and 30).

6.2.4 In its standard methodology D&B places some weight on non-financial variables. These include factors such as the composition of the Board and the track record of individual directors, the geographical trading reach of the business and its industry sector, and the presence or absence of - County Court Judgments (CCJs) weighted according to the relevance to business size and type.

6.2.5 By contrast these non-financial factors do not feature in any of the scorecards of the PPF-specific model. In addition trade payment performance, which features in the D&B model, appears only in the independent small accounts scorecard of the PPF-specific model.

6.2.6 In the four scorecards for group members Experian places a significant weight (up to 38%)[21] on the strength of the parent company. This is a variable that does not feature as strongly in the D&B system. However D&B reflect parental weakness in the circumstances deemed relevant by D&B (and have used a modified approach at our request in recent years). In addition, D&B scores look upward at the financial strength of the global group.

[21] Corrected on 23 June 2014

6.2.7 D&B scores are generally higher than PPF-specific model scores with 26% of the PPF universe scored 100 and 51% scored 95 and over. This implies that a company scored lower under Experian would not necessarily pay a higher levy.

6.2.8 To allow for differences in the two score distributions the analysis effectively compares the ranking that results from PPF-specific model scores to that derived from D&B's. For the purpose of this analysis, a company that ranks better under the PPF-specfic model than under D&B is described as improving in score and conversely a company that ranks better under D&B than under the PPF-specific model, as falling in score – even if their levy band does not alter as a result.

Characteristics of those seeing relative improvement in score / worsening in score

6.2.9 More detail can be found in Annex B that sets out scorecard by scorecard the number of employers seeing a change in levy. .

6.2.10 The results of the analysis carried out with Barnett Waddingham are essentially unsurprising. Most scorecards see a balance of those benefiting and those seeing a worsening in score – with only the not-for-profit sector seeing a trend to worsening. In the case of this scorecard this appears to be the result of the previous treatment being out of line with the overall level of insolvency experienced by the sector..

6.2.11 Barnett Waddingham identified no groups that appeared to be experiencing an unexpected shift in scores:

<u>Likely improvement in score</u>

6.2.12 Employers that score badly under D&B with respect to the non-financial variables (CCJ, payment performance data, Directors etc.) but well with respect to financial variables taken into account by Experian are likely to see an improvement as a result of the move to the PPF-specific model.

6.2.13 Employers that are members of a group where the parent has a strong PPF-specific model score are also likely to see an improvement.

<u>Likely fall in score</u>

6.2.14 Employers that score well under D&B with respect to the non-financial variables but badly with respect to financial variables taken into account by Experian are likely to be see falls in scores.

6.2.15 Employers that are members of a group where the parent has a weak PPF-specific model score are also likely to falls in scores.

6.2.16 Employers that were previously scored by D&B under the low-risk industry scorecard are likely to be see falls. This is true in particular for not–for-profit entities which were all placed in band 1 under D&B.

6.2.17 Employers that have issued recently (one or two years ago) secured charges and are scored under one of the 3 "Group members – full account" scorecards.

6.3 Impact analysis on change of insolvency risk provider

Methodology

6.3.1 In order to assess the impact of the changes on levies we have reworked the 2014/15 levy estimate of £695 million allowing for the new scores, levy rates and bands – using a new Levy Scaling Factor (LSF) 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.

6.3.2 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. The analysis covers in turn the impact of our core proposal, the credit rating override, and the transitional protection model considered.

6.3.3 The analysis should be viewed as indicative as Experian are still gathering data and the final levy rates and bands will not be finalised until much later in the year. It should however help stakeholders to understand how things are likely to move and the factors that will impact their levy bill. In order to illustrate the impact changes in scores may have, the results have also been calculated with a global adjustment to the LSF to allow for a £50 million reduction due to scores changing. See section 9 of Annex C for further details.

6.3.4 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.

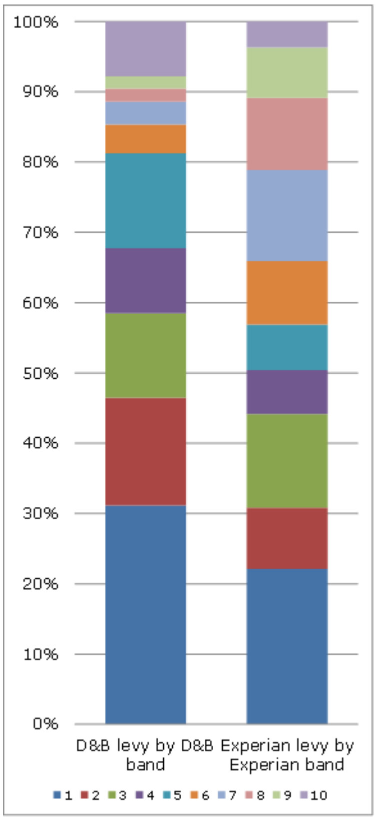
Shift in the distribution of levy

6.3.5 Under the proposed Experian approach, 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 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; and
- 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 minimise the impact of schemes falling out of the top band.

6.3.6 The expected redistribution of the levy across the bands is illustrated in the graph below:

Chart 6.1 Breakdown of levy by band



Results: Overall

6.3.7 The Levy Scaling Factor has changed from 0.73 under the D&B approach to 0.74 under the proposed Experian approach.

6.3.8 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. Cross-subsidy has therefore been reduced.

6.3.9 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 6.2 Breakdown of levy by band

Band		1	2	3	4	5	6	7	8	9	10
D&B	levy rates	0.18%	0.28%	0.44%	0.69%	1.10%	1.60%	2.01%	2.60%	3.06%	4.00%
	with LSF = 0.73	**0.13%**	**0.20%**	**0.32%**	**0.50%**	**0.80%**	**1.17%**	**1.47%**	**1.90%**	**2.23%**	**2.92%**
Experian	levy rates	0.17%	0.23%	0.30%	0.40%	0.53%	0.75%	1.10%	1.61%	2.39%	3.83%
	with LSF = 0.74	**0.12%**	**0.17%**	**0.22%**	**0.29%**	**0.39%**	**0.55%**	**0.81%**	**1.18%**	**1.76%**	**2.83%**
	change	-6%	-16%	-31%	-41%	-51%	-53%	-45%	-38%	-21%	-3%

6.3.10 From the table 6.2 we expect that schemes which stay in the same band benefit because the combined levy rate and levy scaling factor has decreased.

6.3.11 Schemes moving from band 1 to band 2 see increases in levy in aggregate. The table shows that the loss under the Experian approach (i.e. moving from an aggregate 0.12% to 0.17%) is relatively smaller than the loss under the D&B approach (moving from 0.13% to 0.20%).

6.3.12 However, the story is not as clear-cut as shown by the table. For example, this does not allow for the changes to the scheme-based levy or the interaction of several employer insolvency scores of a multi-employer scheme.

6.3.13 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.

6.3.14 The first and second bubble charts indicate the number of schemes who see an improvement or worsening from moving to the Experian banding structure. There are approximately 50% more seeing an improvement than a worsening.

Chart 6.3 Migration between levy bands – number of schemes that see a reduction in levy

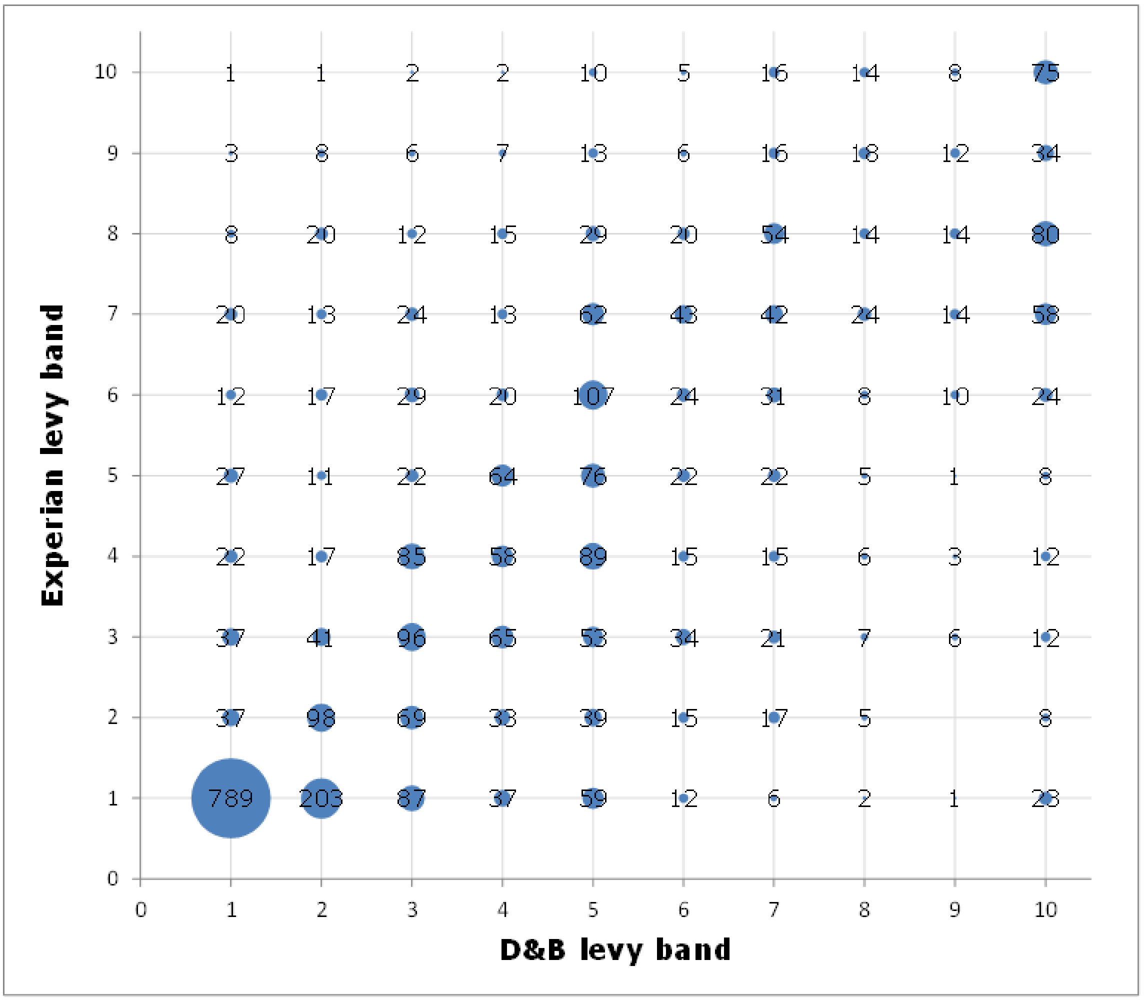
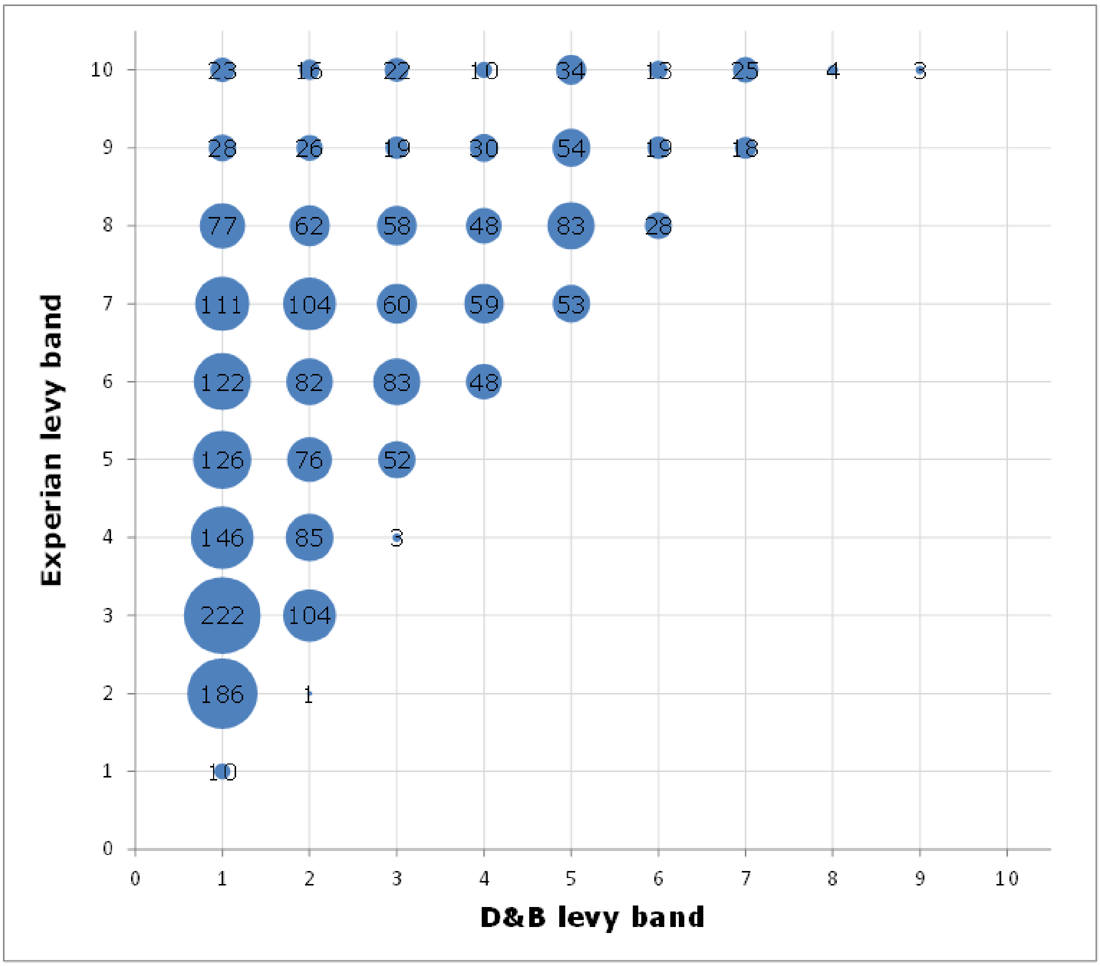


Chart 6.4 Migration between levy bands – number of schemes that see an increase in levy



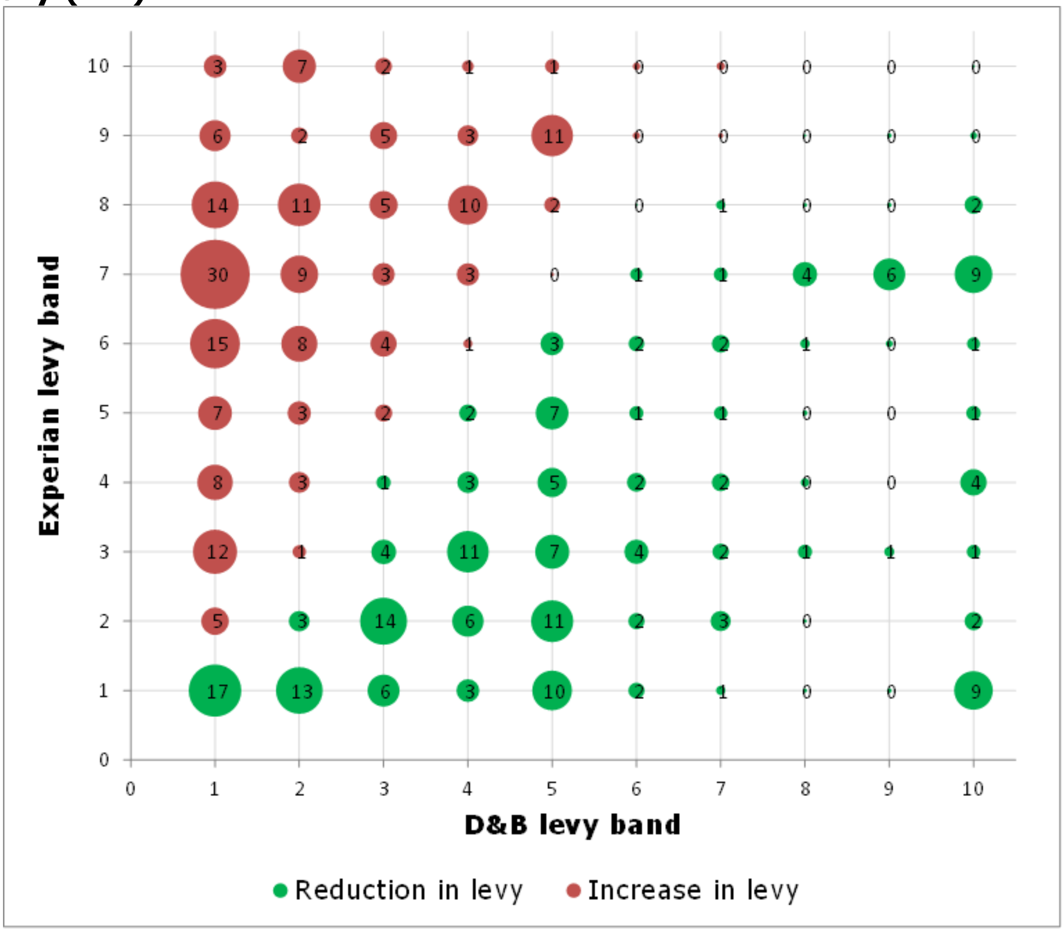
6.3.15 From the first bubble chart we see a concentration of those improving being schemes remaining in band 1. In addition, there is a wide distribution of improving schemes where the scheme has moved up or down bands. This highlights that many schemes see an improvment despite moving to a worse band. 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.

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

6.3.17 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 win or loss on aggregate levy.

6.3.18 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 6.5 Migration between levy bands – aggregate change in levy (£m)



6.3.19 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.

Results: Individual Impacts

6.3.20 As discussed earlier, a significant redistribution of levy is expected as a result of the move to Experian, with all bills seeing some change.

6.3.21 From our sample of around 6,100 there are c2,500 schemes (42% of all schemes) with very low levies of less than £10,000. Omitting these from the sample, c2,100 schemes see an improvement (34% of all schemes) with an average levy decrease of 40%. Of these

- 1,500 (24% of schemes) have a decrease of less than £50,000
- 300 (5% of schemes) have a decrease of more than £50,000 but less than £100,000
- 300 (5% of schemes) have a decrease of greater than £100,000.

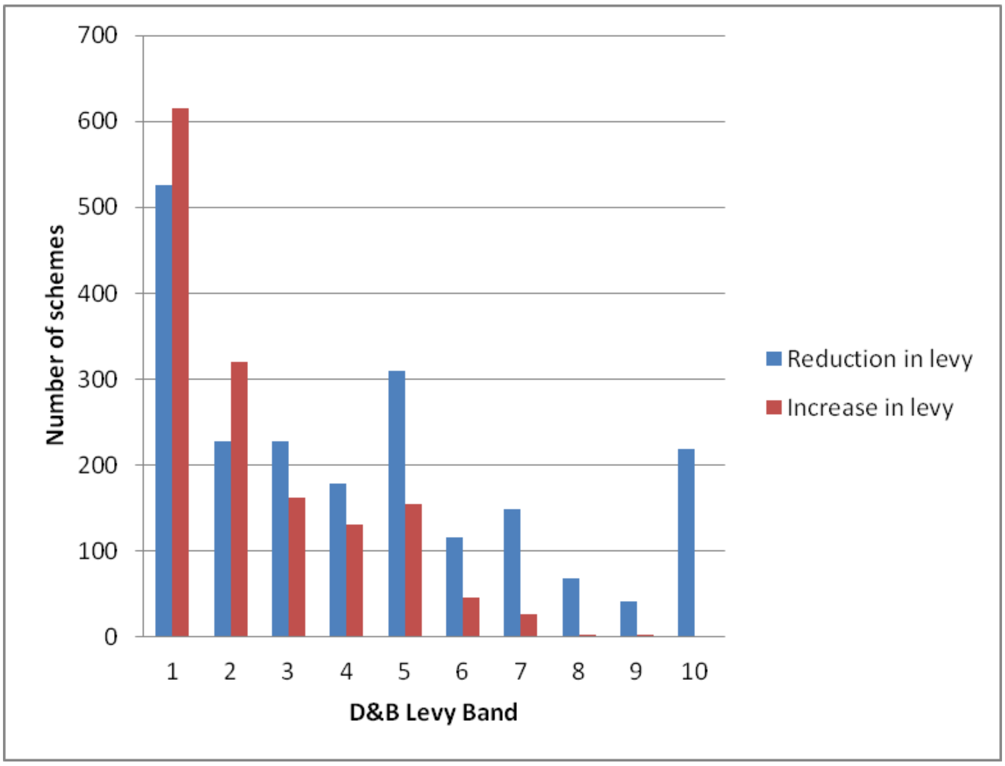
6.3.22 Similarly, those seeing an increase comprise around 1,500 (24%) schemes with an average increase of 150%. Of these

- 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.

6.3.23 As we have more schemes seeing a fall in levy than with an increase, those who see their bill increase by proportionally more on average than for those for whom bills fall. Further detail is available in the combined annex.

6.3.24 The chart below shows that the for those who pay a material levy of more than £10,000, the 2,100 schemes benefitting 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 who see a worsening 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 a large extent the fact that so many schemes are rated band 1 under D&B.

Chart 6.6 Distribution of change in levy by D&B band



6.4 Analysis of options

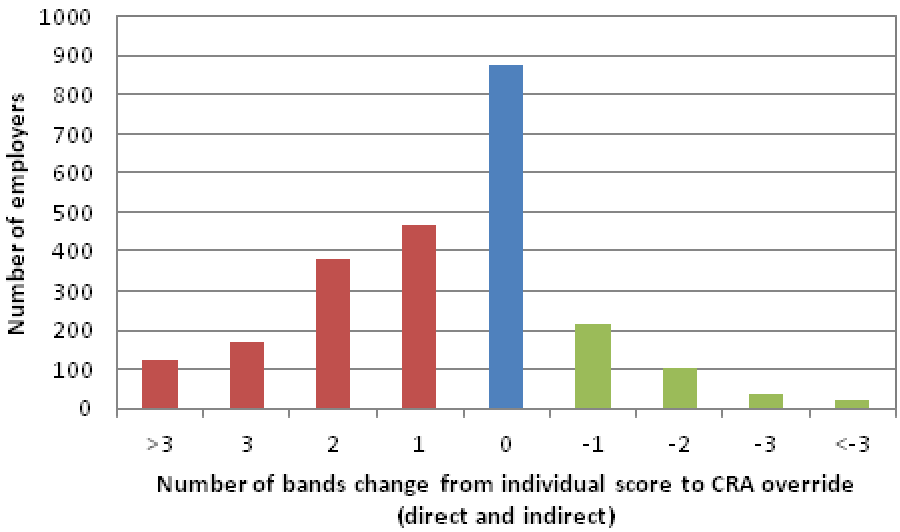
6.4.1 As set out earlier in this document we have developed a number of options. Further information is included in Annex D. Summary information is provided below:

Credit rating override

6.4.2 We have assessed the impact of using credit ratings for all those employers and ultimate parents of employers (whose score is used in the calculation of group company scores) that have a rating. Effects are both direct – where the employer's score changes to being based on a credit rating and indirect, where the employer is still rated using the PPF-specific model, but its ultimate parent has a credit rating, in which case the impact of that parent on the the employer's score may change.

6.4.3 The impact on employer scores is shown in the chart 6.7 below. It will be seen that the most common single outcome is for the employer's band to remain unchanged. Some employers move up a band or more (shown in green) but a larger number of employers see a fall in their band (shown in red).

Chart 6.7 Impact of using credit ratings



Broad top band

6.4.4 The same levy rate of 0.22% has been appled for bands one to three. The rate used represents the average (weighted by the proportion of employers in each band) of the rates currently applying under the 3 bands.

6.4.5 The table below shows the total levy changing hands under this scenario. At an aggregate level the results are similar.

Table 6.8 Comparison of LSF and levy changing hands under the Broad top band scenario

Scenario	LSF	Levy change (£m)
Base	0.74	200
Constant rate band 1-3	0.72	200

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

Table 6.9 Comparison of levy rates and LSF under the Broad top band scenario

Band		1	2	3	4	5	6	7	8	9	10
Base	levy rates	0.17%	0.23%	0.30%	0.40%	0.53%	0.75%	1.10%	1.61%	2.39%	3.83%
	with LSF = 0.74	0.12%	0.17%	0.22%	0.29%	0.39%	0.55%	0.81%	1.18%	1.76%	2.83%
Flat rates	levy rates	0.22%	0.22%	0.22%	0.40%	0.53%	0.75%	1.10%	1.61%	2.39%	3.83%
	with LSF = 0.72	0.16%	0.16%	0.16%	0.29%	0.38%	0.54%	0.79%	1.16%	1.72%	2.76%

6.4.7 Moving to the "broad top band" approach produces a lower LSF compared with the proposed approach. The combined factors are worse for band 1 compared with the proposed approach. Despite the similar levy changing hands (table 6.8), the vast majority of schemes remaining in band 1 become see an overall worsening under this approach.

7. Transitional protection

7.1 Introduction

7.1.1 The move to the PPF-specific model will see significant shifts in levies as set out in the impact analysis in chapter 6. This chapter considers the case for a form of transitional protection for those schemes seeing the largest changes in levy.

7.1.2 The issue of transitional protection was discussed at the Industry Steering Group, in the context of preliminary impact analysis of the changes as they stood at that time and it was noted that there were potentially significant changes for some schemes.

7.1.3 The main concern with any form of transitional protection that limits or delays the impact on those losing out is that it is essentially a cross-subsidy. It needs to be borne in mind that it can be argued that this simply delays the use of the most accurate calculations: with those underpaying doing so for longer and those overpaying having to wait for a fairer calculation.

7.1.4 Neither the PPF, nor other members of the Industry Steering Group are making a positive case for the inclusion of transitional protection, but we agreed that it should be offered as an option for consultation comments. It would only be implemented if there were broad support.

7.2 Potential Methods for transitional protection

7.2.1 We considered several alternative options

i. Limiting changes in levy from 2014/15 to 2015/16 (though these could occur for other reasons than shifts to a new provider, including shifts in funding);
ii. Using a transitional set of levy rates – designed to reduce movements in levy, transitioning to the theoretically "right" charge over time;
iii. Creating an override, limiting movements in band, to say four or five bands or
iv. Comparing scheme insolvency risk (termed IR) for 2014/15 for both the existing levy and one using the new scores, and then apply an adjustment for the 2015/16 levy.

7.2.2 Our assessment of the options above are as follows

i. Seeking to limit the increase in levy that a scheme faces on the basis of the change between their levy in 2014/15 and that in 2015/16 is not attractive. It doesn't distinguish between changes caused by the move to Experian and those caused by a worsening in the risk of insolvency (on any measure), changes in risk reduction measures or a general worsening of underfunding.
ii. This option would be very complex, would run counter to the aim of stability of structure during the triennium period and could be criticised as delaying the 'benefits' of more accurate insolvency risk assessment.
iii. Whilst transparent ("adjusted" scores could be viewed in the portal) it would not be well targeted on those with the biggest change in levy. Most schemes are multi-employer and it would help those whose levy

rises because of a big shift in bands for one employer when a scheme with slightly smaller shifts in all its employers, and a much larger levy increase, would not benefit[22].

iv. The most appropriate method seems to be based upon comparing the insolvency risk (IR) calculated in the levy bill for 2014/15 with what the measure would have been had the new scores been used in 2014/15.

7.2.3 IR, the insolvency risk for the scheme, is calculated based on a weighted average of the levy rates for each individual employer – which are in turn based on which band the scores for the year place the employer in. It is the insolvency related component of the levy formula:

IR x U x LSF = Risk-based levy

(Where U is Underfunding risk, and LSF, the Levy Scaling Factor)

As such, an increase in IR for the scheme is proportional to the increase in the risk-based levy, whereas an adjustment relating to individual employer scores would not be. In this suggested transitional mechanism we propose to limit increases caused by the move to Experian to 200 per cent.

Example calculation

A scheme sees its insolvency risk, IR, rise from 0.3% to 1.5% when scores using the new model are used to recalculate its 2014/15 levy, and as a result its levy rises by by a similar factor.

It is eligible for transitional protection as the increase is more than 200 per cent. The calculated IR for 2015/16 will be reduced by a factor of 0.9/1.5, subject only to there being no substantial improvement in scores on the new basis between 2014/15 2015/16. e.g.

(i) The scheme's initially and calculated IR for 2015/16 is also 1.5%, which is then reduced to 0.9%

(ii) The scheme's initially calculated IR for 2015/16 is 2%, which is then reduced to 1.2% [2 * (0.9/1.5)].

(iii) The scheme's IR is calculated as 0.3%.Because there has been a substantial improvement since 2014/15 transitional protection is not applied.

7.2.4 Comparing the actually calculated figure for 2014/15, and what would have been calculated using the new scores recognises the impact of the change in scoring methodology in isolation. And, because the

[22] For example. If we set the maximum shift at 5 bands, then a multiemployer scheme with 10 employers all initially in band 1, that saw one employer move to band 8 would have its levy bill reduced, whilst another scheme seeing all employrs move from band 1 to band 6, and in all probability a far larger rise in levy, would not.

comparison operates on the insolvency risk for the scheme as a whole (rather than at employer level), it will identify which schemes are the most affected.

7.2.5 The disandvatage of this approach is that it not transparent – it will not be possible to view "adjusted" scores in the portal – but where a cross-subsidy exists it is of primary importance that it is targeted on those that actually see a significant rise in levy due to the shift to the new model.

Additional design features

7.2.6 The proposed protection would operate only in relation to the insolvency risk of the employers, and would not be extended to guarantors (i.e. the comparison would always be of "IR," not of "IR_G"). This is partly to limit complexity but also reflects that the contingent asset regime is a voluntary scheme to offer reductions in levy for reduced risk, and it would seem inappropriate to apply a cost to all levy payers to fund a continued recognition of risk reduction that isn't in place).

7.2.7 There would need to be some work done to design an override so that a scheme seeing a temporary worsening in score that was substantially reversed by the time the 2015/16 levy was calculated did not benefit from transitional protection.

7.2.8 We believe that operationally we could carry out the calculations and this approach retains a sufficiently strong link to the insolvency risk of the scheme employers.

7.2.9 The scheme would only be operated in the first year of the triennium.

7.2.10 We would recover the cost of this cross-subsidy through an increase in the scheme based levy multiplier, so that the cost of transitional protection is spread across <u>all levy payers</u>. This is consistent with the approach that we take for capping the costs of levy payers through the cap on the risk-based levy.

7.3 Impact analysis

7.3.1 We have analysed what impact such Transitional Protection would have on the results summarised in the preceding sections of our impact assessment. We have found that:

- Imposing a limit on increase in Insolvency Risk at 200% measured relative to actual 2014/15 levies would lead to a reduction in levy collection of around £100m.
- This would cause the Scheme-Based element of the levy to increase from £35m to £135m, which is just under the 20% maximum permitted by legislation. This would increase the scheme-based multiplier by 0.01 per cent of liabilities.
- 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 in 2015/16, though around half of these are schemes that pay less than £10,000 in levy,

and some might lose more from the increased SBL than they gain from transitional protection.

- 20 schemes would save over £1m and one would save around £7m.

7.4 Stakeholder views

7.4.1 We are seeking feedback on whether schemes favour introducing transitional protection, given that it will have a cost for those who are not beneficiaries.

7.4.2 The PPF is essentially neutral on the issue. Implementing a transitional protection scheme would add complexity, but would be practical if there were widespread support for it.

7.4.3 **Consultation question:** Do you support transitional protection for those most affected by the move to the new methodology, recovered through the scheme-based levy?

8. Customer Service

8.1 Introduction

8.1.1 A key benefit of adopting a PPF-specific model is that it provides the opportunity to offer much more transparent measure of insolvency risk.

8.1.2 In addition, Experian are committed to delivering a high quality customer service function – with online access to scores and data.

8.2 Understanding the way your score is calculated

8.2.1 A key feature of the PPF-specific model is that the rules setting out how scores will be calculated will be set out in detail in the Levy Rules (Determination).

8.2.2 This brings the calculation of insolvency risk more in line with the approach used for other aspects of the levy such as the measurement of underfunding risk – by allowing external calculation.

8.3 Score monitoring

8.3.1 The PPF/Experian web portal allows trustees and other scheme representatives authorised by trustees to view their employers' monthly scores.

8.3.2 The portal will be live shortly, with access initially granted to scheme trustees **only**. As 'super users', trustees can add users from a list of approved scheme representatives. Conversely, super users can also remove users who are no longer connected to a scheme. Trustee contacts will be contacted by Experian shortly after the 29th May and full instructions on how to access the portal will also be provided. Trustees will also be able to grant administrator access to scheme representatives.

8.3.3 Access to the portal is free to Trustees and their approved representatives. At present, scheme level access (which is how the portal is currently designed) is limited to scheme representatives (including advisers and administrators), as a result of legal restrictions. In response to comments from stakeholders, we are also looking to develop a solution to allow employers to access information about their score too, at employer level.

8.3.4 Upon logging on, users will be able to see a summary of the employers and guarantors associated with their scheme, their 'Pension Protection Scores' for the last 12 months, the effective date of the financial data used to calculate the scores, and the date that financial data was supplied to Experian. Once we have finalised our levy banding following consultation, this information will also be provided. If we decide to implement the credit rating override, information related to it will also be visible on the portal.

8.3.5 Users will also be able to select individual employers or guarantors, and view more detailed information about them. The following information will be available:

- the entity's name and other relevant identifying features;

- its ultimate parent company, if applicable;
- its industry sector;
- the applicable scorecard;
- the current Pension Protection Score and the applicable date – ie, the most recent month end;
- the detailed financial data used to calculate the score; and
- the previous monthly Pension Protection Scores.

8.3.6 Users will be able to download 'what if' reports, in the form of Excel spreadsheets, setting out a detailed breakdown of the score calculation for each employer or guarantor. These reports will allow them to see how the score is affected if particular input variables change.

8.3.7 Separately from the free-to-use-portal, Experian offer a paid-for BusinessIQ platform. BusinessIQ provides access to an advisor's 'portfolio' of employers, and allows users to view the information at an employer, rather than scheme, level (subject to appropriate authorization, as required by Experian). Schemes or advisors that wish to use this additional service should contact Experian.

8.4 Experian Customer Support

8.4.1 Experian have established a dedicated Customer Support team to deal with queries from portal users. Although scores will only be available on the portal itself, the team will provide both telephone and email support to portal users.

8.4.2 Examples of specific customer services include:

- Users will be able to set up automated alerts when their score changes as a result of changes to input data (such as new accounts information).
- Same day, automated response telephone and email support for portal users with score queries.
- Two day target for resolution of informal queries.
- Seven day target for correcting data errors.
- The use of unique incident report numbers that can be used to monitor.
- Consultancy and support in understanding and interpreting an employer's Pension Protection Score.

8.4.3 Any questions they receive about the levy that do not concern insolvency risk will be referred to the PPF.

8.4.4 We are exploring the possibility of allowing access to the portal via the Pension Regulator's Exchange database, though this is not available at present.

8.5 Checking and correcting data

8.5.1 In chapter 5 we explained why we propose to only use scores from 31 October 2014 in the levy calculations for 2015/16, primarily because we acknowledge that it is important schemes have an opportunity to understand scores generated by the PPF-specific model and check the data used.

8.5.2 The period leading up to October offers an opportunity for schemes to raise any questions with Experian about data that has been incorrectly included (or omitted), the result calculated through the relevant scorecard, or whether the correct scorecard is being used. We encourage schemes to access the portal and ensure that information is up-to-date and accurate as soon as they can to ensure that changes have a chance to be effective before October. This may involve providing updated information on Exchange and the public sources Experian use for data. If data is incorrect Experian's scoring team aim to correct it in seven working days.

8.5.3 Once the scores that will count for the 2015/16 levy calculations have been calculated, an appeals process will be available for dispute resolution. As with D&B appeals in the past, it will be the average score for 2015/16 (which forms part of the invoice calculation) which is appealable.

8.5.4 Initially appeals will be considered by Experian, but if scheme representatives are not satisfied with the outcome, they will be able to use the PPF's statutory reviews process. Ultimately this will mean that schemes will be able to have appeals heard by the PPF Ombudsman, in the same way that other elements of the levy can be now. We believe this extra degree of scrutiny will be welcomed by schemes.

8.5.5 However we hope that given the increased transparency it will be clearer to schemes whether elements of data that have been included or excluded, so that schemes are able to gain clarity more simply and quickly and that overall the level of reviews may fall.

9. Other Changes proposed for the Triennium

9.1 Introduction

9.1.1 As noted in chapter 2, only limited changes are planned apart from those resulting from the switch to Experian. The following chapter sets out what is proposed.

9.2 Asset backed contributions

Background

9.2.1 Asset backed contributions (ABCs) are a relatively new investment structure and were not considered as part of the New Levy Framework, when it was being developed in 2010. Typically, they involve an arrangement where the scheme invests, though a special purpose vehicle (SPV), in assets of the employer or other group entities and receives payments over time from the SPV which have the effect of improving its funding.

9.2.2 As these structures have become more prevalent and given their impact on individual schemes' levies, it is appropriate to consider how these should be valued as part of the levy calculation. An example of an ABC structure is included at Annex D of the Combined Annex.

9.2.3 Published reports on ABCs suggest that the setting up of new ABCs is accelerating and that the range of schemes accessing them is broadening (see KPMG's Asset Backed Funding for Pensions – Survey 2014). KPMG's report identified 20 new ABCs put in place during 2012/13, with the total value of all ABCs to date, of around £7bn. The most commonly used asset used to back ABCs is property. Other assets used include receivables, trademarks, stock and inter-company loans (themselves backed by assets).

9.2.4 In November 2013 TPR issued guidance which highlighted risks associated with ABCs. It explained the need for trustees to take 'extensive legal, actuarial, asset valuation and covenant advice' before they enter into an ABC arrangement, and suggested they consider alternatives including contingent asset arrangements.

Levy impact of ABCs

9.2.5 Currently ABCs are typically included in scheme assets reported through s179 valuations and valued in line with the accounts valuation based upon an assessment of the net present value (NPV) of future cashflows from the arrangement. This value is then rolled forward and stressed and smoothed for the purposes of calculating the levy.

9.2.6 There is currently no requirement for the asset underlying the ABC to have a value equal to the NPV nor for consideration of whether that value may reduce on employer insolvency. As a result, a scheme with an ABC arrangement in place may pay a substantially lower levy than is appropriate based upon the risk it poses to the PPF, at a cost to other schemes (which are essentially cross-subsidising it).

9.2.7 This can result in a very significant boost to scheme funding with immediate recognition for cashflows which may be paid over 20 years or longer. However, on an insolvency the scheme might receive substantially less than the NPV – either due to diminution in value of the asset on insolvency or because it was simply never worth the same amount as the NPV. We do however recognise that in some cases the arrangement may be fully collateralised.

9.2.8 We therefore consider that an appropriate basis for valuing the reduction in the underfunding risk is to base it upon the lower of the NPV of remaining contributions or the value of the underlying asset on an insolvency basis after stressing.

9.2.9 From 2014/15 schemes are required to specifically report ABCs on Exchange. In 2014/15 all ABCs are being stressed as 'other', unless a Bespoke Stress Calculation has been submitted. Under our proposal from 2015/16 the insolvency value of the underlying asset would be stressed on the basis of the appropriate class (so if the income generating asset is a property then the property stress would be used). If the arrangement is over collateralised (the insolvency value of the asset after stressing exceeds the NPV of future cashflows) the NPV value would be used without stressing (akin to cash).

Proposals

9.2.10 We propose to use information submitted through the scheme return, to remove any value attributed in the scheme accounts from the s179 asset value reported in Exchange and then instead to allow schemes to submit a voluntary form certifying the ABC. This certification would provide recognition on the lower of the insolvency value of the underlying asset or the NPV of future cashflows.

9.2.11 The value included for the ABC on the s179 would be required to be provided on Exchange. This value would be taken out of the s179 values used in the Underfunding calculations for the levy. Similarly, the asset classes would be recalibrated so that the percentage allocated to an ABC arrangement is ignored.

9.2.12 We are aware that schemes have, in some cases, certified payments made to set up an ABC as deficit reduction contributions through our DRC form. Where an ABC is in place, we will therefore need to disapply the DRC, and schemes will need to resubmit, without any recognition of sums relating to an ABC, if they wish to gain credit for other deficit reducing payments. Recognition of contributions/cashflows relating to ABCs would be solely through the ABC certificate.

9.2.13 We considered alternative options for the form and process around the voluntary certification. These options included the frequency with which insolvency valuations of the asset would be required and whether credit for an ABC could be claimed before it is included in a s179 valuation.

9.2.14 Our proposal is that schemes would need to certify annually (if they wish to receive credit for an ABC), only cashflow information would need to be updated annually and the most expensive element – obtaining a valuation of the asset on an insolvency basis – along with the NPV value would only be required every three years, consistent with the s179 timescale. Our proposed approach allows credit to be claimed for cashflows following the setting up of an ABC without having to wait until the next s179 valuation is completed.

9.2.15 Therefore, schemes submitting a valid voluntary certificate in respect of an ABC arrangement will get full credit for the cashflows certified plus the lower of the stressed insolvency value and the NPV less the certified cashflows.

9.2.16 In the case where the scheme's ABC funding cap is met the ABC arrangement will cease to make cashflow payments. In this case the ABC arrangement will get full credit for the cashflows plus where the underlying asset backing the ABC arrangement is still made available on the employer's insolvency the stressed insolvency value.

Which underlying assets should be recognised?

9.2.17 In terms of their economic effect (for PPF levy purposes), ABCs are most closely comparable with a secured guarantee (which we term a Type B contingent asset). Accordingly we have based our approach to certification broadly on the requirements for these types of guarantees.

9.2.18 Our starting point would be to only consider ABC recognition in the levy in respect ofthe same underlying assets as for Type B contingent assets, namely cash, UK property or securities.

9.2.19 The reasons we currently only recognise these asset classes for Type B contingent assets include:

- the inherent difficulties in valuing more intangible assets,
- a well developed basis for professional valuation (eg: RICS based valuation for property),
- robust approach to valuation in the event of employer insolvency (eg: employer-occupied property must be valued on a vacant possession basis; employer related securities valued at zero).

9.2.20 We consider the same considerations apply to the assets underlying ABCs. Restricting recognition of ABCs to the same asset classes also ensures consistency with the contingent asset regime and recognises TPR's advice to trustees that the use of a contingent asset arrangement should be considered as an alternative to an ABC.

9.2.21 In practice, we are not aware that cash or third party securities would be an attractive underlying asset for an ABC structure. So we have drafted our proposals on the basis that only UK property-based ABCs will be recognised in the levy.

9.2.22 If stakeholders wish to make a case for wider recognition, the issues listed above would need to be satisfactorily addressed.

9.2.23 We are not proposing to require standard form documentation and are including a draft voluntary form in Annex F that would be used to claim credit. This draft focusses on the valuation and cashflow information to obtain credit in the levy calculations.

9.2.24 We are also publishing a draft Determination extract for 2015/16 covering ABCs.

9.2.25 **Consultation question:** Do you agree that the appropriate route to reflecting ABCs in the levy is to value them based on the lower of the value of the underlying asset (on employer insolvency) after stressing or the net present value of future cashflows?

9.2.26 **Consultation question:** Do you agree that a credit should only be allowed where the underlying assets for the ABC is UK property? Do you have any comments on the example voluntary form/required confirmations?

Example voluntary certificate

9.2.27 We are including in the Annex an example voluntary certificate to provide stakeholders with an indication of how the final form will look in practice, and to set out what certifications we consider will be required in order for schemes to be able to certify. These certifications are taken from paragraph 7 of the draft ABC Appendix. The example Qualifying ABC Arrangement set out in the certificate relates to real estate, reflecting our proposed approach as set out at paragraph 9.2.21 above.

9.3 Type A Contingent Assets

9.3.1 Contingent assets have been in place since the first risk based levy. In principle the PPF welcomes the establishment of contingent assets where they either reduce the risk of schemes entering the PPF or serve to mitigate the extent of a claim upon our resources. However our experience has been that the recovery from a guarantor has generally proved negligible in relation to the guaranteed sum, and also that in some cases Type A contingent assets have been certified where it was clear that they would be of little or no value.

9.3.2 We have flagged our concerns in consultations on the levy rules in 2012/13 and 2013/14, and through introducing a requirement for trustee certification in respect to the strength of the guarantor. Despite these controls, our testing of a proportion of Type A contingent assets has given rise to a high rate of rejections in both years. This was largely anticipated for those cases which were selected by comparing the guarantor’s financial strength against the value of the guarantee; however a particular cause for concern is a number of rejections amongst cases selected on the basis of a random sample.

9.3.3 As a result, there is a strengthening case for removing recognition of Type A contingent assets altogether for future levy years. We recognise, however that this approach would represent a significant departure from our policy of recognising risk-reduction measures, and would result in higher levies for those stakeholders with a viable commitment from the guarantor. In view of this, we are therefore seeking to develop options that could allow the regime to continue.

9.3.4 We considered requiring a confirmation from an appropriate source (e.g. an auditor, or an insolvency practitioner) but this would place the same burdens on those with sound as with questionable guarantees.

Proposals

9.3.5 As an alternative therefore, we have been exploring three elements.

9.3.6 Firstly the new scorecards, with their recognition of parental strength or weakness reduce the incentive for putting contingent assets in place, where this is simply to reflect variations in score across the group.

Cash sum basis of certification

9.3.7 Secondly, we believe there are cases when trustees do not have a clear view of the value that will be placed on the contingent asset in the levy. This is because certification is often defined by reference to an up-to-date funding level calculated on the s179 valuation basis, making allowance for smoothing and stressing. This measure may not be as clearly understood or known as the latest reported s179 valuation results, particularly since the underfunding risk figure is calculated by the PPF . One possible solution is to require trustees always to certify a fixed amount (the "Realisable Recovery") which they are confident the guarantor could pay if called upon. This approach would help to focus trustees on their assessment of the amount the guarantor would be capable of meeting in circumstances where the employer is insolvent.

9.3.8 In the 2014/15 levy consultation we suggested changing the wording of the existing trustee certification as to guarantor strength, in response to stakeholder feedback. Although there was broad support for the revised wording there were mixed views on whether it should be introduced ahead of the second triennium, so we did not make the change for 2014/15.

9.3.9 We now propose to introduce the new form of wording with effect from the 2015/16 levy year, amended to take into account the requirement to certify the Realisable Recovery:

"The trustees, having made reasonable enquiry into the financial position of each certified guarantor, are reasonably satisfied that each certified guarantor, as at the date of the certificate, could meet in full the Realisable Recovery certified, having taken account of the likely impact of the immediate insolvency of all of the relevant employers."

9.3.10 Finally we have worked with Experian to understand whether there is an appropriate method to adjust guarantors' insolvency risk scores, taking account of the additional potential liability they are taking on by acting as a guarantor.

Adjusting guarantor insolvency scores

9.3.11 We asked Experian whether they could suggest to us a basis on which to adjust the guarantor insolvency score taking account of the guaranteed amount as a liability of the guarantor. However because of the different variables used on different scorecards, it proved impractical to reflect the liability directly through the scorecard variables.

9.3.12 However Experian's analysis indicated that there is a clear relationship between a rise in gearing for a business (defined as total liabilities over total assets) and increased insolvency risk.

9.3.13 Experian identified (using the PPF population over the years 2007-2012) the incidence of insolvency following a worsening of gearing of different amounts. The result of their work was the following table which demonstrates a relationship between increased levels of gearing and increased rates of insolvency. (The column 'adjusted factor' reflects the observed ratio save in the range 0.05 to 0.10 where interpolation has been used to create a smoothed progression).

Table 9.1 Incidence of insolvency following worsening gearing

Change in gearing	Total Businesses	Total Insolvent	Observed insolvency rate	Compared to baseline [23]	Adjusted factor
-0.01 to <0.01	4,569	19	0.42%	1.00	**1.00**
0.01 to <0.02	1,742	8	0.46%	1.10	**1.10**
0.02 to <0.05	3,648	33	0.90%	2.18	**2.18**
0.05 to <0.10	3,166	23	0.73%	1.75	**2.71**
0.10 to <0.20	2,589	35	1.35%	3.25	**3.25**
0.20 to <0.50	1,564	22	1.41%	3.38	**3.38**
0.50 to <1	297	7	2.36%	5.67	**5.67**
1+	174	8	4.60%	11.06	**11.06**

9.3.14 We could therefore treat the existence of a Type A contingent asset as if it were an increase in gearing, and apply a factor derived from Experian's work indicating what that does to risk. This would mean that if the addition of the guarantee amount to the existing liabilities resulted in a change in gearing from 0.70 to 0.85, the increase in gearing would be 0.15 and the factor applied to the guarantor's insolvency probability would be 3.25.

9.3.15 We accept that an argument could be put for calculating the factors in a different way to that set out above – particularly in the bands (0.02 to 0.05) and (0.05 to 0.10). We are also willing to consider alternative evidence that stakeholders wish to put forward on this issue which make the adjustments more accurate.

9.3.16 We would not apply this adjustment to scores derived from credit ratings, and an adjustment would only be made in relation to the

[23] Baseline taken as observed insolvency rate for gearing change below 1%, namely 0.42%

guarantor's score as a guarantor (if it were also an employer to the scheme the score as an employer would not be altered).

9.3.17 We have carried out an initial impact analysis of the effects of a direct adjustment based on Experian's table above, though more work would be needed to understand the effects fully. This table shows the impact that the factors would have had on guarantors using 2013/14 guarantee information and Experian scores. It shows how guarantors would have moved from their starting band and is based upon the proposed ten band option.

Table 9.2 Guarantor change in banding when factor is applied based upon adding the deemed guarantee amount to its liabilities

Levy Band	Total in Original Band	No Change	To Band 1	To Band 2	To Band 3	To Band 4	To Band 5	To Band 6	To Band 7	To Band 8	To Band 9	To Band 10
1	133	116		10	7	0	0	0	0	0	0	0
2	42	19			12	9	2	0	0	0	0	0
3	44	19				14	9	1	1	0	0	0
4	63	43					8	9	3	0	0	0
5	52	24						12	10	5	0	1
6	31	10							15	6	0	0
7	31	12								15	4	0
8	19	5									10	4
9	25	12										13
10	4	4										

9.3.18 One approach we could consider would be to apply the factors from the above table to the insolvency probabilities generated by the model and then map the transformed probability to a levy band. Alternatively it would be possible to create a conversion to apply after banding – with a progressively more significant shift in band for larger contingent assets.

9.3.19 We believe that our experience of guarantees means that to justify continued recognition of Type A contingent assets changes are needed, that result in the adjustment of guarantor scores before recognition is provided.

9.3.20 The work done by Experian demonstrates a link between increases in gearing and an increased risk of insolvency and we consider that the two options set out both represent suitable means of adjusting guarantor scores (at different levels of complexity).

9.3.21 **Consultation question:** Do you support the proposal to make the certification of contingent assets more transparent, through requiring certification of a fixed amount which the guarantor could pay if called upon?

9.3.22 **Consultation question:** Do you have any comments on the proposed revised wording for trustee certification for Type A contingent assets ?

9.3.23 **Consultation question:** Do you agree with our proposals to adjust guarantor scores to reflect the value of the guarantee they are potentially liable for? Do you favour the adjustment being achieved by a factor being applied to the guarantor's Pension Protection Score or by an adjustment of the guarantor's levy band?

9.3.24 **Consultation question:** What other measures do you suggest to ensure that, where a scheme certifies information about a contingent asset to the PPF, any resulting levy reduction is proportionate to the actaul reduction in risk?

9.4 Last Man Standing (LMS): Scheme Structure Factor

9.4.1 LMS schemes are multi-employer arrangements which do not have an option or requirement to segregate assets on the cessation of any participating employer. Broadly speaking, no claim would arise upon the PPF for such schemes until all employers had entered insolvency, leading to a potentially lower risk when compared to single employer schemes or those with an option or discretion to segregate.

9.4.2 Scheme structure factors (SSF) have existed for LMS schemes since the introduction of the risk-based levy. The SSF is used in the insolvency risk calculation and is applied to each employer's levy rate when calculating the overall weighted average. The scheme structure factors therefore result in a levy reduction.

Non-associated LMS schemes

9.4.3 For non-associated LMS schemes (also knows as 'centralised schemes') , the Herfindahl index (Hf) has been used as the basis of the scheme structure factor from the start of the New Levy Framework (NLF) in 2012/13. Hf is the sum of the squares of the proportion of members associated with each employer and is based on a measure of concentration used in competition policy.

9.4.4 Given the small number of non-associated LMS schemes (27 in 2013/14), and that a range of options were considered in 2011 we have not carried out any detailed work on further refining the scheme structure factor for these arrangements.

Associated LMS schemes

9.4.5 The scheme structure factor applied to associated LMS schemes is currently 0.9, a 10 per cent discount on the levy payable relative to a comparable segregated arrangement. As this factor has been in place since the introduction of the risk-based levy we considered that the new triennium was an appropriate juncture for review.

9.4.6 Anecdotally we are aware that there is significant misreporting of scheme structure. We are therefore considering whether to require confirmation that legal advice has been taken on the scheme structure claimed. This confirmation could be along the lines of the following:

9.4.7 "We believe that, based on legal advice we have received, our scheme rules do not contain a requirement or discretion for the trustees to segregate assets on cessation of participation of an Employer."

9.4.8 We attempted to use our own experience of the failures of employers within associated LMS schemes to provide evidence of whether the LMS structure has prevented schemes entering the PPF. Unfortunately due to limited data within the PPF we have had to look outside for evidence.

9.4.9 In addition to anecdotal evidence that a wider group failure usually follows the insolvency of a group member we have carried out a limited piece of analysis. Using a database of insolvencies in 2011 and 2012, on a random selection of cases, we found that in 19 out of 20 cases wider group failure did follow an initial insolvency. This suggests that any discount provided for associated LMS schemes in the levy should assume a high correlation between the failure of a group member and the wider failure of the group.

Member concentration

9.4.10 Secondly, examining the schemes that we invoiced in 2013/14 we found that around 1,000 schemes identified themselves as LMS. An analysis of the concentration of members within LMS schemes, was carried out and it was found that

- Over half of LMS schemes have more than 80% of their members allocated to one employer (a point at which it is likely that the failure of the main employer would bring down the rest of the group).
- Almost 40% have over 90% of members in the main employer
- 10% have 99%+ in one employer

9.4.11 There exists the potential for abuse with the addition of a very small well-rated employer to a single large employer generating significant levy savings without any marked reduction in risk.

9.4.12 It has been suggested that an alternative approach would be to simply base the insolvency risk for the whole scheme on the largest or strongest employer within the scheme. Our view is that the existence of a weaker (or several weaker employers) within an associated LMS scheme will, to some degree, mean that the insolvency risk of the scheme as a whole is affected. The weighting of the insolvency risk of all the employers, proportionate to their scheme membership, reflects this in a straightforward manner. Moreover it cannot be assumed that the main employer will be the last man standing in practice and indeed we are aware of cases where very small group employers have been left 'holding the baby'.

9.4.13 We are therefore proposing a revised scheme structure factor for associated LMS schemes which combines the existing value of 0.9 with the Herfindahl index to reflect the degree of dispersal. The formula is: (0.9 + 0.1*Hf).

9.4.14 The Herfindahl index will always have a value between zero and one, giving rise to SSFs between 0.9 and 1 under the proposed approach. If the scheme membership is widely dispersed the discount would be at a similar level to the current discount, but where the membership is highly concentrated, with perhaps a handful of members in employers other than the largest, very little discount would be applied.

9.4.15 We estimated that the current SSF of 0.9 for associated LMS schemes gave rise to a total risk-based levy discount of £26 million in 2013/14. By comparison, we estimate that our proposal would have led to a levy discount of £7 million, i.e. an additional £19 million of levy collection relative to the current approach. Based upon the estimated levy calculations for 2014/15 using Experian data the proposal would increase levy charged by £22 million.

9.4.16 **Consultation question:** Do you agree with the proposed form of confirmation when Last Man Standing scheme structure is selected on Exchange?

9.4.17 **Consultation question:** Do you agree with the revised scheme structure factor calculation proposed for associated last man standing schemes?

9.5 Updates to contingent asset standard form agreements

9.5.1 We are currently reviewing the standard form contingent asset agreements, and intend to release the draft updated agreements for information as part of our September 2014 consultation on the 2015/16 Determination, with final form updated agreements to take effect from December 2014. Any changes are likely to be minor (updating to reflect changes of law, market norms etc) rather than significantly changing the substance of the agreements. As the Determination requires schemes to certify contingent assets using the most recent standard form agreement in force as at the date of execution, parties who wish to put in place a new contingent asset between now and December 2014 should use the existing (December 2009) standard form versions.

10. Extracts from the 2015/16 Levy Rules

10.1 Introduction

10.1.1 In a departure from our approach in 2012/13, we have included with this consultation an early draft of those sections of the Levy Rules and appendices which are most substantially affected by the matters on which we are consulting.

10.1.2 This chapter provides a short explanation of the structure of the levy rules and the key new components.

10.2 What we have included

10.2.1 Included are extracts of the main body of the determination, together with the Insolvency Risk Appendix (IR Appendix) and ABC appendix. We will update other aspects of the Levy Rules for our consulation on the Levy Rules in September, which may include further adjustments to the transformation appendix and the DRC appendix to reflect the proposals in this consultation.

10.2.2 **The broad structure of the Levy Rules:**

Part A – This covers general information including defined terms. Where new or amended definitions are required in relation to the insolvency risk or ABC sections of the determination we have included them here.

Part B - This deals with corrections and other information issues. We have included just rules B1 and B2.1, as only these rules have been updated.

Part C – This deals with the high-level elements of the levy calculation, and is not included at this stage.

Part D – This deals with the calculation of Underfunding and includes the high level rules covering how the proposals on recognition of ABCs feed into Underfunding.

Part E – This deals with measuring employer insolvency risk and is the key part of the Rules which has been updated and this whole section is therefore included – further details on this section are provided below.

Part F – This deals with rules for scheme transfers (i.e. block transfers) and is not included at this stage.

Part G – This deals with risk reduction measures and is not included at this stage.

New Part H – This sets out the levy rules for schemes wanting to obtain credit for ABCs .

Contingent Asset Appendix – This deals with requirements for and recognition of Contingent assets and is not included at this stage.

Deficit Reduction Contributions Appendix – This deals with DRCs and is not included at this stage.

Insolvency Risk Appendix – As with Part E, this deals with measuring employer insolvency risk. It has therefore been substantially updated and this whole Appendix is therefore included – further details on this Appendix are provided below.

Investment Risk Appendix – this deals with investment risk adjustments, in particular, the stressing and smoothing of assets and is not included at this stage.

MFR Conversion Appendix – this sets out the formulae for adapting MFR valuations to estimate liabilities on a s179 basis. This has not been affected and is therefore not included.

Transfers Appendix – this sets out the requirements in relation to certifying block transfers and the methodology used to take them into account and is not included at this stage.

Transformation Appendix – this sets out the formulae for transforming s179 valuations for the purposes of calculating the levy. As set out above, consequential adjustments could be made at a later stage to reflect the recognition of ABCs (and the revised definition of money purchase benefits), but this is not included at this stage.

10.2.3 Guide to the structure of the Rules relating to Insolvency Risk

Rule E1 – Explains the calculation of the scheme's insolvency risk, IR.

Rule E2 – Data Collection - what data is collected and what are the rules around submission and deadlines.

Rule E3 and Part 1 of the IR Appendix – Employer categorisation – how employers are assigned to the various scorecards.

Rule E4 and parts 2, 3 and 4 of the IR Appendix – Calculations of Scores – once an employer is assigned to a scorecard or deemed CRA Rated how its monthly and mean scores for the 6 month period are calculated.

Part 5 of the IR Appendix – adjustments (e.g. for insolvency events and contingent assets recognised for 2015/16).

Part 6 of the IR Appendix – Possible CRA methodology – see chapter 4.

Part 7 of the IR Appendix – calculation principles (rounding, averages etc).

Rule E5 and Part 8 of the IR Appendix – Calculation of LR – once there is a mean score for the 6 month period, how this is converted into a levy rate. If no mean score could be generated, how LR is calculated (by scheme, industry and blended average).

Rule E6 – Multi-Employer Schemes – once LR is calculated for all Employers how that is translated into the LR for the scheme.

Rule E7 – Experian appeals – what can be appealed, by whom and what are the other rules surrounding the Experian process.

11. Consultation Arrangements and Key Dates

11.1 Introduction

11.1.1 This chapter provides contact details to respond to this consultation. Key dates for the calculation of 2015/16 levies are also set out below.

11.2 Summary of Consultation Questions/Issues

Chapter 2

1. Do you agree that we should seek to maintain stability in the overall methodology for the levy, only making changes where there is evidence to support them?

Chapter 3

2. Do you consider that the definition of the variables in the scorecards is sufficiently precise to provide for consistent treatment?
3. Do you agree that it is appropriate to re-evaluate the model to ensure that it remains predictive?
4. Do you have comments on the design of the "core model" developed by Experian?
5. Do you agree with the success criteria set out by the Industry Steering Group and that the PPF-specific model developed by Experian is a better match with them than Commercial Delphi?
6. Do you agree that it is appropriate to use the separate scorecard developed by Experian not-for-profit entities, even though this requires an extension of the data set used to generate the scorecard?
7. Do you have comments on the approach to the rating and proposed identification of not-for profit entities, developed by Experian?
8. Are there other public sources of data that Experian should consider extending coverage to?
9. Do you agree with the proposed data hierarchy?

Chapter 4

10. Do you favour a credit rating over-ride?

Chapter 5

11. Do you agree with our proposed aims for setting levy rates?

12. Do you agree it is appropriate to divide the entities with the best insolvency probabilities in to a number of bands, to ensure that the cliff-edges between subsequent bands are limited, or do you favour a broad top band?

13. Do you agree with the proposed 10 levy bands and rates?

14. Do you agree that for 2015/16 levy year insolvency probabilities are averaged from 31 October 2014 to 31 March 2015?

Chapter 7

15. Do you support transitional protection for those most affected by the move to the new methodology, recovered through the scheme-based levy?

Chapter 9

16. Do you agree that the appropriate route to reflecting ABC's in the levy is to value them based on the lower of the value of the underlying asset (on employer insolvency) after stressing or the net present value of future cashflows?

17. Do you agree that a credit should only be allowed where the underlying assets for the ABC is UK property? Do you have any comments on the example voluntary form/required confirmations?

18. Do you support the proposal to make the certification of contingent assets more transparent, through requiring certification of a fixed amount which the guarantor could pay if called upon?

19. Do you have any comments on the proposed revised wording for trustee certification for Type A contingent assets?

20. Do you agree with our proposals to adjust guarantor scores to reflect the value of the guarantee they are potentially liable for? Do you favour the adjustment being achieved by a factor being applied to the guarantor's Pension Protection Score or by an adjustment of the guarantor's levy band?

21. What other measures do you suggest to ensure that, where a scheme certifies information about a contingent asset to the PPF, any resulting levy reduction is proportionate to the actual reduction

in risk?

22. Do you agree with the proposed form of confirmation when Last Man Standing scheme structure is selected on Exchange?

23. Do you agree with the revised scheme structure factor calculation proposed for associated last man standing schemes?

11.3 Consultation Arrangements

11.3.1 The consultation on the 2015/16 Triennium will run from 29 May 2014 to 5pm on 9 July 2014. Please ensure that your response reaches us by the deadline. Submissions may be made by email or post, using the details below.

Email: consultation@ppf.gsi.gov.uk

Postal address: Chris Collins
Chief Policy Adviser
Pension Protection Fund
Renaissance
12 Dingwall Road
Croydon, Surrey
CR0 2NA

11.3.2 Please state whether you are responding as an individual or representing the views of an organisation. If you are responding on behalf of an organisation please make it clear who the organisation represents and, where applicable, how the views of members were assembled.

11.3.3 There will be an additional consultation on the 2015/16 Levy Rules in the Autumn, with conclusions and the final Determination made in December.

11.3.4 Under the Freedom of Information Act 2000 (FoIA), all information contained in the response, including personal information may be subject to publication or disclosure. By providing personal information for the purpose of the public consultation exercise, it is understood that a respondent consents to its disclosure and publication.

11.3.5 If this is not the case, the respondent should limit any personal information which is provided, or remove it completely. If a respondent requests that the information given in response to the consultation be kept confidential, this will only be possible if it is consistent with FoIA obligations and general law on this issue. Further information can be found on the website of the Ministry of Justice at:

http://www.justice.gov.uk/guidance/freedom-and-rights/freedom-of-information .

11.3.6 A summary of responses and the Board's final Determination and confirmed policy will be published on the PPF website at:

http://www.pensionprotectionfund.org.uk in Autumn 2014.

11.4 Key Dates

11.4.1 Under the new framework, we will continue to use information from the annual scheme return that is submitted via the Pension Regulator's Exchange system to calculate levies. The deadline for submission is 5pm on Tuesday 31 March 2015, except as detailed below.

Item	Key dates
Monthly Experian Scores	Between 31 October 2014 - 31 March 2015 (Note, deadlines for submission to ensure data is used in the score will be 1 month before the actual month end scoring dates)
Submit scheme returns on Exchange	By 5pm, 31 March 2015
Reference period over which funding is smoothed	5-year period to 31 March 2015
Certification of contingent assets	By 5pm, 31 March 2015
Certification of deficit-reduction contributions	By 5pm, 30 April 2015
Certification of full block transfers	By 5pm, 30 June 2015
Invoicing starts	Autumn 2015

11.5 Comments on the Consultation Arrangements

11.5.1 This consultation is being conducted in line with the Cabinet Office's Consultation Principles that can be found on their website at:

http://www.cabinetoffice.gov.uk/resource-library/consultation-principles- guidance

11.5.2 The Board would welcome feedback on the consultation process. If you have any comments, please contact:

Richard Williams
Head of Corporate Affairs
Pension Protection Fund
Renaissance
12 Dingwall Road
Croydon, Surrey
CR0 2NA

Email: Richard.williams@ppf.gsi.gov.uk