

# **Consultation Document**

Consultation on the third PPF Levy  
Triennium – 2018/19 to 2020/21

## Foreword

I am delighted to be setting out, in this consultation, our initial proposals to develop the way we calculate scheme levies for the next three year period (or "triennium") starting in 2018/19.

Much has changed in the wider world since we published our first set of proposals for the previous triennium in May 2014. Heightened political and economic uncertainty and volatility are hallmarks of the current environment. In recent years we've also seen a number of high profile insolvencies and scheme funding has also failed to recover in the way that it did during the first triennium (2012/15). While the Pension Protection Fund (PPF) remains financially robust, and our long term risks haven't substantially increased, our risks have evolved.

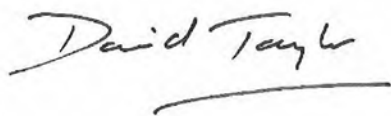
The levy charges schemes for the risk they pose of a claim being made. We've always sought to set levy rules which are transparent and risk-reflective and have developed our rules over time to better reflect the circumstances of the broad range of employers which sponsor schemes. The introduction of the Experian PPF-specific model in the last triennium was a significant step forward in how we assessed insolvency risk. This consultation, while looking at developing the breadth of the levy rules, builds on that innovation to develop the model further. As risk evolves, how we charge for it needs to keep step.

Our proposals represent considerable development work with our partners Experian but, more critically, almost three years of engagement with stakeholders including more recently through our industry steering group. Overall, feedback has continued to be supportive of our current approach. Even so - through our own review and from stakeholder input - we have identified important areas where we can make evidence based improvements.

We believe our proposals lead to a more accurate assessment of insolvency risk. We expect almost two thirds of schemes to see a reduction in levies. Some schemes – particularly some of those with very large employers - would see an increase, but smaller employers would, in aggregate, see reductions in levy

Alongside these proposals we are seeking views to inform our approach in other areas. Most notably, on the Select Committee recommendation that we look to provide a levy discount for good governance, but also our thoughts on how we can adapt our contingent asset and deficit reduction contribution regimes to better address risks and minimise burdens on schemes.

I am looking forward to hearing stakeholder views, in response to this document and at the various events we plan to hold to engage levy payers and their advisers. We will present our conclusions in a second consultation alongside other areas for consideration later in 2017. That consultation will also set out our views on the appropriate level of levy to collect moving into the next triennium.



**David Taylor**  
General Counsel

## CONTENTS

1. Executive Summary .....	4
2. Introduction and context for review .....	13
3. Proposed development of Experian Model .....	15
4. Proposed scorecards .....	25
5. Alternative approaches to assessing insolvency risk .....	29
6. Timing and use of insolvency risk scores.....	37
7. Impact Analysis.....	41
8. Small schemes .....	54
9. Deficit-Reduction Contributions (DRCs) .....	55
10. Parental Guarantees (Type A contingent assets) .....	57
11. Good Scheme Governance .....	65
12. Consultation Arrangements and Key Dates .....	70

# 1. Executive Summary

## 1.1 The context for this consultation

1.1.1 This consultation discusses the basis on which the Levy Rules, which govern how the levy is charged to individual schemes, will be set for the next three years or “triennium” (the period 2018/19 to 2020/21). This is an initial consultation, focusing primarily on our detailed proposals to change the way we assess insolvency risk, alongside a range of other areas where we are seeking stakeholder views on how policy might be developed further.

1.1.2 This consultation will be followed by a second consultation in autumn 2017, setting out our conclusions, with definite proposals in the areas explored in this consultation, alongside a draft set of rules for 2018/19 (the first year of the next triennium). The second consultation will also set out our view on how much overall we will need to raise from the levy and the parameters that deliver that overall quantum. In assessing proposals in this consultation, therefore, we focus not on how much is to be collected, but on the distribution of the levy – ie, how the sum we choose to collect is shared. This is a key distinction to make as, for example, it means that when we assess impacts we consider primarily whether a particular group of schemes pays more or less relative to the current rules.

1.1.3 We have only proposed changes where we believe there is a compelling case to do so. This reflects our view – supported by feedback – that overall the current levy framework is working well. It also reflects the importance we know levy payers attach to stability. Nonetheless, we have conducted our own detailed review of the levy framework, and carefully evaluated all the feedback received from levy payers and other stakeholders, including the important points raised in the recent Work and Pensions Select Committee report. This process has led us to propose a number of changes on which we are keen to receive views from stakeholders.

## 1.2 Review of insolvency risk measurement

### **Background: the PPF-Specific Model**

1.2.1 We developed the PPF-specific insolvency risk model with Experian, to deliver the assessment of insolvency risk used in levy calculations, and launched it for the 2015/16 levy. The model was built based on published financial data and the experience of insolvencies among Defined Benefit (DB) sponsors over the period 2007-2012. A set of eight scorecards were developed for different segments of our population – with separate scorecards for:

- ultimate parent companies (and very large subsidiaries) referred to as the “Large and Complex scorecard”
- three scorecards focused on different sizes of subsidiary company
- a scorecard for stand-alone businesses

- two scorecards for entities filing small companies accounts, depending on whether they were part of a group or stand-alone businesses
  - and a scorecard for not-for-profit entities (NFPs).
- 1.2.2 Each scorecard contained around six variables which were found to be statistically correlated with experience of insolvency amongst the companies on that scorecard. The scorecards were then adjusted (or “calibrated”) so that overall they produced a number of predicted number of insolvencies that was in line with our actual experience. This last step is important because, in addition to each scorecard being predictive – ranking companies accurately in terms of their strength relative to others on the same scorecard, it is important that the scorecards are consistent with each other.
- 1.2.3 The introduction of the model was expected to have substantial benefits for stakeholders, and the PPF:
- It was significantly more predictive than a generic model, such as that used in earlier years – so that levies could be more risk-reflective.
  - Because it was specially constructed for us, the methodology could be published in full. Transparency has meant stakeholders ought to be better able to understand what influences their scores.
  - Because scores are driven by annual accounts data, they should be stable.
- 1.2.4 Any scoring model requires review periodically, to ensure the selection of variables remains predictive and the calibration appropriate. Typically, the expectation would be that a static model would deteriorate over time and would, therefore, benefit from periodic updating. We have chosen to integrate that review with our more general review of the levy, so that any changes would be from 2018/19 onward.

### **Assessment of the current model**

- 1.2.5 Our review found that the model has performed well, bearing out expectations of it. In particular:
- Across our population of employers as a whole, predictiveness has been good.
  - We have seen clear evidence that the transparency of the model means stakeholders understand their scoring better. This is evidenced through declines in the volume of queries, requests for reviews of scoring, and through those challenging a score doing so on an informed basis.
  - Scores have been highly stable.
- 1.2.6 Section 3 sets out the analysis carried out, and the consequent development of the new scorecards. There has been a small decline in overall predictiveness – as we would have expected – over the period the model has been in operation. Assessment of the individual scorecards suggests that most scorecards have been performing well, though

performance for the two “small accounts” scorecards has deteriorated. These scorecards were challenging to construct in the first place due to limited data. This makes only a limited case for rebuilding scorecards, though we have sought to reflect wider stakeholder input, in focusing on where improvements can be made.

- 1.2.7 A more notable feature than the limited change in predictiveness has been that, whilst the actual insolvency rate has fallen in the last three years, the predicted insolvency rate across all employers (particularly for the Large and Complex scorecard) has dropped significantly further. This suggests a need to recalibrate the scorecards that are not otherwise rebuilt, to produce predicted insolvencies in line with experience. We have looked at the reasons for this shift in predicted insolvencies. We concluded that, whilst it did not imply that the models have lost predictiveness (they still rank employers appropriately), in aggregate they are providing scores that understate risk. For the avoidance of doubt, the need to recalibrate does not mean that we are seeing increased levels of insolvency risk in the PPF universe.
- 1.2.8 We also identified that, against the general trend of declining insolvency rates, there has been an increase in insolvencies amongst NFP entities. This means that the NFP scorecard is also no longer generating a level of predicted insolvencies consistent with experience. We also now have access to additional data from the Charity Commission that offers the opportunity to build a model on data unique to employers with DB schemes. (In building the original model we had to draw on wider data sources which weren't specific to the experience of NFP sponsors with DB schemes).
- 1.2.9 We also identified issues that stakeholders have raised, – with few raising general concerns with the model and a number of comments on the detailed design including - in response to the Work and Pensions Select Committee Inquiry on Defined Benefit Pension Schemes:
- the scoring of SMEs, particularly where they are stand-alone businesses or the parent of a small group and were, therefore, on the Large and Complex scorecard;
  - the scope for manipulation through switching scorecards, particularly between stand-alone business and corporate parents through creating/absorbing subsidiaries, and
  - reflection of risk for some non-standard corporate structures (eg, mutual ownership). Concerns centred on a variable focused on secured charges (“mortgage age”).
- 1.2.10 We have also taken advantage of this review to look again at the case for incorporating credit ratings in our scoring methodology – with an analysis set out in Section 5. There is strong evidence on ratings predictiveness, but, when their use was explored for the second triennium, reservations centred on the difficulty of translating ratings into an insolvency probability directly comparable to those generated by the PPF-specific model. We now have a robust, externally generated basis to convert ratings into an insolvency probability comparable to that

produced by the Model - obtained by looking at all defaults of UK rated entities to see how many resulted in an insolvency.

### **Proposed changes to scorecards**

1.2.11 In response to the above, we plan to build on the success of the model, refining our methodology in a number of ways. We are proposing:

- The populations currently scored on the “Large and Complex” and “Independent Full” scorecards are combined, and then divided instead according to size (using a threshold of £30m annual turnover), and scored by two brand new scorecards. This will deliver a range of benefits - most critically, it will allow us to ensure that scorecards are tailored according to employer size so that we can be confident SMEs will pay a levy appropriate to their risk.
- To rebuild the two “small accounts” scorecards where performance is not as good as we would ideally want. The result is new scorecards using different variables and delivering a higher level of predictiveness.
- To re-build the NFP scorecard to ensure it is calibrated to our actual experience of insolvencies, as well as making use of the greater availability of data specific to NFP employers with DB schemes. The result is a more predictive scorecard.
- To use credit ratings, where available, to generate insolvency risk scores, and for un-rated entities regulated by the Financial Conduct Authority (FCA) to use industry specific scorecards - supplied by a credit rating agency (CRA).

1.2.12 We set out the new scorecards and their key features in Section 4. Developments to note include that the proposed scorecards:

- show significantly improved predictiveness for the scorecards rebuilt due to weaker performance and (more limited) improvements for those rebuilt for other reasons;
- have variables which have very high fill rates –ie, that almost all entities assessed on the scorecard have accounts which disclose information on each variable needed for scoring them - reducing the use of default scores;
- favour variables that can take a wide range of values – this has in particular resulted in the elimination of variables based on the age of secured borrowing from the new scorecards. This variable was a particular concern to mutual entities and a specific area the Work and Pensions Select Committee requested we consider further, and
- Have a reduced reliance on trend variables – with only one of the five new scorecards including a trend variable. Whilst in principle trend variables could be expected to be useful in assessing insolvency risk, in practice drawbacks include difficulties where accounting practices alter or a company restructures.

1.2.13 Our review has emphasised how stable scores already are – typically only altering once a year when new accounts are filed (and usually remaining



in the same levy band then). The new scorecards should be even more stable. As a result, we are consulting on whether it still makes sense to calculate the levy by averaging monthly scores (an approach introduced to deal with the far greater variability of the preceding Dun & Bradstreet (D&B) failure score) or simply use scores at 31 March each year - 31 March 2018 for the 2018/19 levy. If we retain monthly averaging we only propose to use scores on the new basis from October 2017 at the earliest.

### **Impact Analysis**

- 1.2.14 We have carried out an analysis of the impact that the proposals will have on the distribution of the levy between schemes. To do this we compared expected collections based on the 2017/18 levy year, using the current scorecards, with levies on the new scorecards, adjusted to collect the same sum in total<sup>1</sup>. This shows the impact of model changes in isolation.
- 1.2.15 A fuller summary is included in Section 7 but, the key finding is that, around two-thirds of schemes would see a reduction in levy with one-fifth seeing an increase in levy. In terms of distribution, looking at each population separately:
- schemes with SME employers and NFP employers would see reduced levies, in aggregate;
  - in aggregate, schemes sponsored by rated companies would pay a similar levy. A small number of schemes sponsored by rated companies with non-investment grade ratings would pay substantially more – but this is balanced by nearly three times as many rated companies seeing a reduction in levy.
  - amongst the schemes on the new scorecard 1 (the scorecard for non-subsidiary entities >£30m and very large subsidiaries), broadly equal numbers see a fall in levy and an increase in levy relative to the existing scorecard for 2017/18. However, in aggregate, companies on this scorecard see their levy rise. This is driven to a significant extent by the improvement in scores over the last couple of years on the preceding scorecard, which will have meant that collectively these schemes paid less than would have been justified by their risk towards the end of the second triennium – so, when the scorecard is recalibrated, these schemes are shifted back down.

## **1.3 Alternative approaches to assessing insolvency risk**

- 1.3.1 The levy has so far operated a single methodology for assessing insolvency risk for all scheme sponsors. As set out earlier, we believe there are significant benefits in using credit ratings and industry scorecards for some of the largest employers in our universe. This will affect a little over five per cent of schemes, though they are typically large levy payers due to their size.
- 1.3.2 We also consider that a more differentiated approach may be appropriate for other small categories of employer in order to ensure that all

---

<sup>1</sup> For the analysis we used an adjustment to the Levy Scaling Factor of just over 40 per cent - ie, reducing levies by just over 40 per cent. See section 7



schemes pay an appropriate levy – avoiding implicit cross subsidy. We have identified a limited group of schemes where the risk of them making a call on the PPF cannot be assessed by looking at their employer's financial variables alone because of its proximity to government (and, indeed, in some cases the entity does not even produce accounts in a conventional sense). We propose an alternate approach, which places those schemes whose employers we are satisfied merit it, in Levy Band 1. We expect this to apply to a small number of employers with an immaterial impact on the overall levies to be collected.

- 1.3.3 A final category of scheme for which we consider a non-standard approach is required is schemes without a substantive sponsor. We set out our plans for a levy rule for 2017/18 on 20 February 2017. We will set out our conclusions shortly. In those conclusions we will flag, regardless of whether we plan any extension in the scope of that rule for 2018/19 (and we are not committing to any extension in scope), we will include the rule in the points on which we seek input in our second triennium consultation. So, if there are respondents who did not choose to comment on the 2017/18 consultation and have views on the approach proposed then, we encourage them to comment now, in order to feed in to our consideration for 2018/19.

## **1.4 Reflecting the risk of small schemes**

- 1.4.1 Experience of operating the levy suggests particular issues for the smallest schemes<sup>2</sup> in engaging with the levy rules. The smallest schemes lack the resources to obtain more than the legal minimum of actuarial support – and so receive no advice on levy issues. Typically, these schemes would not find it economic to take professional advice on the risk reduction measures – Deficit-Reduction Contributions certificates (DRCs), Contingent Assets - utilised by larger schemes and, may in fact, be taking such measures but not reporting this to us.
- 1.4.2 As a result, we are keen to understand whether elements of the system are particularly problematic for small schemes and the appetite for simplification, provided it fits within the legislation governing the levy.

## **1.5 Certifying risk reduction**

- 1.5.1 We set out in Section 9 our review on the reporting of deficit reducing contributions from sponsors, through DRCs. In particular this has involved taking account of feedback from stakeholders, and evidence from the Pension Regulator (TPR) on recovery plans.
- 1.5.2 We recognise that, whilst many schemes take the opportunity to certify DRCs, there are issues of cost and complexity, particularly in respect of some of the scheme costs – for example, investment costs, which must be set against cash paid in to the scheme before the DRC is certified. We would, therefore, be interested in stakeholders' response to our proposed changes, particularly those representing small schemes / employers.

---

<sup>2</sup> There is no simple definition of what constitutes a small scheme – though in our investigations to date we have used £10 million of liabilities or 100 members. This represents around a third of eligible schemes.

These would either simplify the current approach or base certification on recovery plan payments made.

1.5.3 We cover our approach to contingent assets in Sections 10 where we are proposing:

- That in order to certify very high value Type A contingent assets a guarantor strength report must be prepared in advance of certification. The report must demonstrate that the guarantor would be able to meet the terms of the guarantee in the event of insolvency of the employer. This reflects concerns that we continue to reject a sizeable proportion of the Type A guarantees we review in detail.
- Changes to our methodology to make it easier for guarantor-employers to have a guarantee taken into account and to make certification easier for multiple guarantors.
- To conduct a full review of the wording of contingent asset agreements.

## 1.6 A levy discount for good governance

1.6.1 The Work and Pensions Select Committee has recommended that we 're-examine how the levy framework could incentivise schemes to improve scheme governance'. Any such good governance discount would need to be based upon objective and transparent criteria that are demonstrably associated with positive outcomes for members and that complement the levy model's calculation of insolvency risk. Other recent publications – including the Pension and Lifetime Savings Association's (PLSA) DB Taskforce interim report – have identified the importance of good scheme governance in securing positive outcomes for members.

1.6.2 This is clearly an important area and one that we considered in 2011 - though we concluded that there were practical barriers at that time. As set out in Section 11, we are seeking views from stakeholders on whether there is now a case for incorporating a discount for good governance in the levy calculation. Specifically we are keen to receive evidence that might demonstrate how good governance reduces risks to the PPF and the specific elements of governance that are most critical in that context. We are also requesting views on how good governance could be measured for the purposes of recognition in the levy.

## 1.7 Summary of Consultation Questions/Issues

1.7.1 Here is a summary of the questions/issues raised in this consultation:

### Section 2

1. Do you agree with the areas of the levy selected for review in the third triennium?

### Section 3

2. Do you agree with the scope of our review of the PPF-specific model – that that led to us rebuild five scorecards and propose recalibration of the three group scorecards?

#### **Section 4**

3. Do you agree with our conclusion that the re-built scorecards present sufficient benefits that they should replace the existing scorecards?

#### **Section 5**

4. Do you agree with our proposal to use public credit ratings in preference to the PPF-specific model?
5. Do you agree with our proposal to use industry scorecards for regulated financial institutions that are not themselves rated, in preference to the PPF-specific model?
6. Do you agree with our proposed basis of scoring where public credit ratings or industry scorecards are used?
7. Do you agree that we should seek an alternative approach for employers that cannot be assessed by reference to financial information alone? Do you have any comments on our draft rule?

#### **Section 6**

8. Do you think that we should move to a single point calculation of insolvency risk at 31 March? If not do you consider that a change should be made to the number of insolvency risk scores that are averaged?

#### **Section 8**

9. Do you have suggestions of improvements and simplifications that would particularly help smaller schemes?

#### **Section 9**

10. Do you support our proposals to amend the approach for calculating certified DRC amounts? If so, which factors do you consider should be used to allocate schemes between the two options (a) and (b) (which could include applying a single option to all schemes)?

#### **Section 10**

11. Do you have views on the proposed requirement for a guarantor strength report to be held by the trustees at the time of certification of Type A contingent assets? Do you have views on the proposed threshold of £100 million and are there any alternatives we should consider?

12. Do you have suggestions on updates to the contingent asset guidance you would expect from us to help meet the guarantor report requirements?
13. Do you have views on the two proposed options where a guarantor is also a scheme employer?
14. Do you support the proposal to allow trustees to certify different realisable recovery amounts for parental guarantees (Type A contingent assets) which have more than one guarantor?
15. Do you have any suggestions on the drafting of the current standard form Contingent Asset documentation? Do you foresee any practical difficulties in re-executing agreements? Do you have views on issues to consider in setting a timeframe for re-execution?
16. Do you have views on the options we set out on how we might better reflect the level of risk of the structure of loan note ABCs in the levy?

#### **Section 11**

17. Do you have views and/or evidence on the extent to which good governance leads to a reduction in risk, of one or more of the factors allowed for in legislation, to the PPF? If so are there particular aspects of governance that should be focused on for the purposes of awarding any levy discount?
18. Do you have proposals for the identification and measurement of good governance sufficiently linked to a reduction in risk for the PPF that meet the broad aims of avoiding a tick box approach, avoid administrative burdens and are not designed to be widely available? Do you have suggestions on who should administer such a process and how?

## **2. Introduction and context for review**

### **2.1 Levy development and background to the third triennial approach**

- 2.1.1 Our Levy Framework was established in 2012/13 following discussions over three years, with a range of stakeholders – including a Steering Group representing the full spectrum of levy payers.
- 2.1.2 The biggest change made was that policy governing the formula were designed to be set once every three years – hence the levy triennium. This provides greater certainty for schemes, with changes to an individual scheme's levy bills within that three year period only being driven by changes in the risk the scheme presents to the PPF, not changes in our methodology or in the amount we seek to collect.<sup>3</sup>
- 2.1.3 A further specific change was the introduction of smoothing for the assessment of risks – so that when we adjust each scheme's reported funding to a common basis, we value that funding using average market indices for the five years up to the start of the levy year. This reduced the impact of market movements and places more importance on contributions to a scheme that improve funding.
- 2.1.4 We also introduced the assessment of scheme investment strategies in the levy. For most schemes, we measure investment risk using information about the make-up of the scheme assets supplied through Exchange, and apply a stress to the assets reflecting the volatility of the assets.
- 2.1.5 The most significant change in the second triennium (beginning 2015/16) was the introduction of a new insolvency risk measure - the PPF-specific model - using the evidence of insolvency amongst employers and guarantors of DB pension schemes. By building a model in this way we were able to increase predictiveness. In addition – by publishing the calculation rules in full; providing an online portal and “what if” tool – we were able to provide complete transparency as to how insolvency risk scores were derived.
- 2.1.6 Other changes included new requirements for the appropriate recognition of asset backed funding (ABC) arrangements, the requirement for guarantees (Type A contingent assets) to be certified on a fixed sum ('realisable recovery') basis, and a change to the scheme-structure factor for Last Man Standing schemes.

### **2.2 Identifying areas to be reviewed**

- 2.2.1 Overall we believe this framework has worked well over the last two triennia, and our focus for this review is to build on the foundations of the existing framework. We would expect to make changes only where we are able to make substantial improvements in reflecting the risks we face.

---

<sup>3</sup>Subject to legislative constraints, in particular that the Levy Estimate may not increase by more than 25 per cent a year

- 2.2.2 Within this consultation we are making proposals in the areas of
- Insolvency Risk;
  - Parental Guarantees, and
  - DRCs.
- 2.2.3 We are also inviting views and evidence from stakeholders on the extent to which we could use the levy to incentivise good governance (given the importance of governance in securing positive outcomes for schemes) and whether there are improvements we could make which would particularly assist small schemes.
- 2.2.4 We will bring forward proposals on investment risk in our next consultation. These are likely to involve reviewing the investment risk stresses currently used, but also a wider review of the bespoke investment risk rules.
- 2.2.5 We plan to review Levy Bands and Rates along with the overall quantum for 2018/19 in the second consultation and the basis of the risk-based levy cap.

**Q1: Do you agree with the areas of the levy selected for review in the third triennium?**

### 3. Proposed development of Experian Model

#### 3.1 Process for reviewing the Experian model

3.1.1 We identified the priority areas for review through consideration of model performance and a review of known issues – including those identified by stakeholders during the second triennium.

#### 3.2 Performance of the Experian Model

3.2.1 Our main measure of performance is the Gini coefficient (which measures how well a scorecard distinguishes between those entities that subsequently failed and those that survived). Originally built on insolvency data over the period 2007 to 2012, Experian extended the data set to 2015 and recalculated the Gini coefficients to assess performance over the full period since the scorecard was built.

**Table 3.1: Gini coefficients** <sup>4</sup>

<u>Scorecard</u>	<u>Gini 2nd Triennium Model 2007-2012</u>	<u>Gini 2nd Triennium Model 2007-2015<sup>5</sup></u>
Independent Full Accounts	65.60%	54.00%
Independent Small Accounts	48.70%	34.10%
Group Members Small Accounts	58.20%	42.4%
<£10m t/o Group Member Full Accs	71.70%	60.0%
£10-50m t/o Group Member Full Accs	75.50%	76.3%
>£50m t/o Group Member Full Accs	69.80%	66.3%
Large and Complex	68.20%	59.00%
Not for Profit	57.20%	47.30%
Total	70.70%	63.9%

3.2.2 When the model as a whole is considered the performance has continued to be “good”, although there has been some deterioration from 70.7 per cent (2007-2012) to 63.9 per cent. This is not surprising as one would typically expect the performance of a scorecard to deteriorate over time –and such a process is likely to be accentuated by the measure being used to charge levies (thereby incentivising employers and schemes to ensure their score is maximised).

3.2.3 The Gini coefficients of the individual scorecards also suggest that most scorecards have been performing well. However, in the case of the two “small accounts” scorecards Ginis are now relatively poor - with one falling below the acceptable range. As a result we decided we would investigate rebuilding the two “small accounts” scorecards.

<sup>4</sup> Scores of below 45% would typically be considered weak, 45-55% is average and anything above 55% strong

<sup>5</sup> For subsidiary scorecards Ginis are calculated including the impact of the new scorecards providing group strength and credit ratings. This demonstrates the predictiveness of the existing Group scorecards if the proposal not to rebuild them is confirmed.



3.2.4 The performance of the NFP scorecard has weakened and the insolvency rate for NFPs has risen. This would have made the case for at least recalibrating the existing scorecard adjusting the scores produced so that the overall insolvency rate predicted by the scorecard matches actual experience. However, a drawback with simply recalibrating is that it would result in all scores worsening regardless of whether any individual employer actually did present a more significant risk (some employers may actually present the same or less risk). Rebuilding the scorecard, could help to rank the entities more accurately and lead to a more risk-reflective distribution of the levy. Additionally, the original development of this scorecard was hampered by lack of data. That is no longer such a constraint as we have a significant new source of data available for modelling – accounts from the Charities Commission. This opens up the prospect of building a model based purely on the insolvency experience of NFP employers of DB schemes (previously we had to supplement data with information on non-PPF employers). We, therefore, concluded that we should rebuild the scorecard.

### 3.3 Scorecard Population Movements

3.3.1 An additional factor that we considered in deciding which scorecards might need review was the extent to which the population of employers scored on that particular scorecard had changed since entities were first scored. There are a range of reasons for movements in population – some movements reflect migration of employers over time - the more the population has changed the stronger the case to revisit the scorecard.

**Table 3.2: Movement of entities between scorecards**

Scorecard 2013	Scorecard 2015									
	Large and Complex	>£50m Group Full	£10-50m Group Full	<£10m Group Full	Group Small	Independent Full	Independent Small	Not for Profit	Total	Percentage same
Large and Complex	1,905	172	95	76	7	197	138	74	2,664	72%
>£50m Group Full	51	1,782	87	21	2	27	-	-	1,970	90%
£10-50m Group Full	17	87	1,354	107	3	13	1	1	1,583	86%
<£10m Group Full	3	9	76	1,183	50	25	-	13	1,359	87%
Group Small	1	2	15	31	450	2	3	3	507	89%
Independent Full	29	154	141	148	4	548	35	140	1,199	46%
Independent Small	2	-	2	4	39	25	588	31	691	85%
Not for Profit	7	-	-	1	-	16	5	2,074	2,103	99%
<b>Total</b>	<b>2,015</b>	<b>2,206</b>	<b>1,770</b>	<b>1,571</b>	<b>555</b>	<b>853</b>	<b>770</b>	<b>2,336</b>	<b>12,076</b>	<b>82%</b>
Percentage moving on to scorecard	5%	19%	24%	25%	19%	36%	24%	11%		

3.3.2 Table 3.2 shows the movement of entities in the initial modelling population – since the introduction of the model. Overall, the majority of the population hasn't moved - with more than 80 per cent of employers remaining within the same scorecard. However some substantial changes have occurred within the overall population.

3.3.3 The Large and Complex scorecard saw nearly 30 per cent of its original population move to another scorecard. These movements were most

significantly to group scorecards - for example, where an ultimate parent was identified, and independent scorecards - where it was determined that any subsidiaries were dormant. At the same time, some companies transferred on to the scorecard. In addition, as shown in Table 3 below there have been a significant number of companies we have been able to include in the modelling of this population that were not part of the first modelling exercise.

- 3.3.4 Likewise the Independent Full, saw over 50 per cent of the original scorecard population moving to other scorecards. Most moved to a group scorecard as more information has been gathered about the group (and in particular the identity of ultimate parents). There is also a notable move of entities onto the NFP scorecard.
- 3.3.5 Other scorecards typically saw less change – though unsurprisingly there has been movement across the Group subsidiary scorecards as companies grow or contract in size.
- 3.3.6 Although there has been little movement off the NFP scorecard, there has been movement onto it and most significantly a large number of additional entities available for modelling, primarily due to additional data being available from the Charities Commission (this is also reflected in Table 3.3 below). This has supported the case for a re-build of the NFP Scorecard.
- 3.3.7 Experian have more generally expanded the number of organisations they collect accounts from and full details of the split of additional employers can be seen below.

**Table 3.3 Additional employers included in the new model**

<b><u>Scorecard</u></b>	<b><u># Employers</u></b>
Large and Complex	686
>£50m t/o Group Member Full Accs	144
£10-50m t/o Group Member Full Accs	150
<£10m t/o Group Member Full Accs	154
Group Members Small Accounts	55
Independent Full Accounts	252
Independent Small Accounts	256
Not for Profit	1,271
<b>Total</b>	<b>2,968</b>

### **3.4 Known Issues**

#### **Scoring for very large entities**

- 3.4.1 In addition to these scorecard-specific issues, there is also evidence that the model does not discriminate as well as it could at the very large end of the universe of PPF employers, as the Gini for the very largest employers is lower. As there are very few insolvencies within this population any Gini measurement is also of limited robustness. The Ginis

achieved by CRA ratings for these entities are higher and more robust. We also found the PPF - specific model ranks credit rated entities (in terms of their relative risk of insolvency) differently to the ranking implied by their rating. Together this suggests that using a CRA based score could result in an improved ranking of CRA rated companies, (which are typically larger) and, therefore, an improved distribution of the levy.

- 3.4.2 We have, therefore, developed proposals for scoring based on credit ratings, for those with a rating (398 sponsors), and using industry specific scorecards (derived from public credit ratings) for entities that are regulated by the FCA but not rated (78 sponsors)<sup>6</sup>.

### **Vulnerability of large and complex and independent full scorecards to manipulation / concerns regarding SME scoring**

- 3.4.3 Finally, we noted there were particular issues with the Large and Complex scorecard (ultimate parent companies and very large subsidiaries) and the Independent Full scorecard (for stand-alone companies). Entities on these two scorecards are distinguished from each other primarily by corporate structure – whether they have a subsidiary or not. Stakeholders noted that corporate structure was not an ideal basis for segregating entities – as it could be altered without altering risk.

- 3.4.4 In addition there was concern that these two scorecards saw SME entities (including some very small) assessed on the same scorecard as very large entities. This meant scorecards incorporated groups of employers with very different characteristics in terms of probability of insolvency. By comparison, group companies are currently divided by size – on a turnover basis – allowing scorecards to focus on those factors most relevant to that size of business. This was not an option for the Large and Complex or Independent Full scorecards individually – as the populations modelled would then be too small. However, it becomes an option if the populations are first combined. In practice, as we explain later in the document, we identified a suitable point at which differing insolvency experience could be identified as a basis for a split of this combined population.

## **3.5 Trends in insolvency rates**

- 3.5.1 Table 3.4 shows that a total of 212 insolvencies have occurred since April 2012. Whilst in isolation, the limited number of additional insolvencies would be insufficient to support a case for automatically rebuilding all scorecards it offers the opportunity for building more robust scorecards where we feel other factors make this appropriate. In the case of the NFP population it does make a substantial difference to our evidence base

---

<sup>6</sup> In principle, the arguments for using industry based scorecards are similar to those for using ratings. They will allow a better assessment of entities in the regulated sectors (those sectors where it is not possible to simply shift industrial category), where responses to our previous consultations have emphasised that a generic scoring model – heavily influenced by manufacturing businesses – does not necessarily measure the most meaningful variables. We have identified models that could be used for banks and for insurance companies. By comparison, we have less information in relation to the energy sector – and we understand that there are a range of different kinds of licensed entity, which may make it more difficult to extend the sector specific model here.

supporting the case for rebuilding that scorecard. As insolvency rates for different scorecards have moved to a different extent this also makes a case for recalibrating scorecards that are not rebuilt (recalibration leaves the variables unaltered but adjusts insolvencies produced so that predicted insolvencies are aligned to actual experience).

**Table 3.4 New Insolvencies since April 2012**

Scorecard	Insolvencies from April 2007 to March 2012	New Insolvencies from April 2012 to March 2015	TOTAL
Large & Complex	108	15	123
Independent Full Accounts	82	17	99
Group <£10m	111	21	132
Group £10-50m	89	27	116
Group >£50m	45	16	61
Group Small Accounts	75	28	103
Independent Small Accounts	121	49	170
NFP	39	39	78
TOTAL	670	212	882

### 3.6 The scope of rebuilding

- 3.6.1 In summary our review of the model, on a scorecard by scorecard basis, found that most scorecards remain highly predictive, in some cases predictiveness has improved. There have, however, been significant changes to the population that certain scorecards were originally modelled on and improvements in the data available for modelling (in particular, for the NFP population). Finally, there are limited areas where weaknesses had been identified – such as the potential for entities to change scorecard through altering corporate structure without an impact on risk.
- 3.6.2 Actual insolvency rates have been typically somewhat lower than for the period on which the model was originally built. The exception to this being the NFP scorecard, where experience has moved in the opposite direction to the rest of the population and the effect is material.

**Table 3.5: Basis for re-building**

Issue	Scorecard							
	L&C	Ind Full	Ind small	Group <10m	Group 10-50m	Group >50m	Group small	NFP
Population movement	High	High	Limited	Limited	Limited	Limited	Limited	Significant movement on and new data
Homogeneous <sup>7</sup>	No	No	Broadly	Broadly	Broadly	Broadly	Broadly	Some differences
Gini for 2007 - 2015	Down 9% to 59%	Down 11% to 54%	Down 14% to 34%	Down 11% to 60%	Slight improvement 76%	Down 3% to 66%	Down 16% to 42%	Down 10% to 47%
Impact of accounting standards changes	Limited	Limited	n/a	Limited	Limited	Limited	n/a	Limited
<b>Conclusion</b>	Built combined models – with split based on turnover.		Model due to low Gini	Not re-built but to be re-calibrated	Not re-built but to be re-calibrated	Not re-built but to be re-calibrated	Worse Gini makes case for re-build	Worse Gini and large rise in insolvency rate makes case for re-build

3.6.3 Taken together, we concluded that there was a case for rebuilding five scorecards. We have therefore:

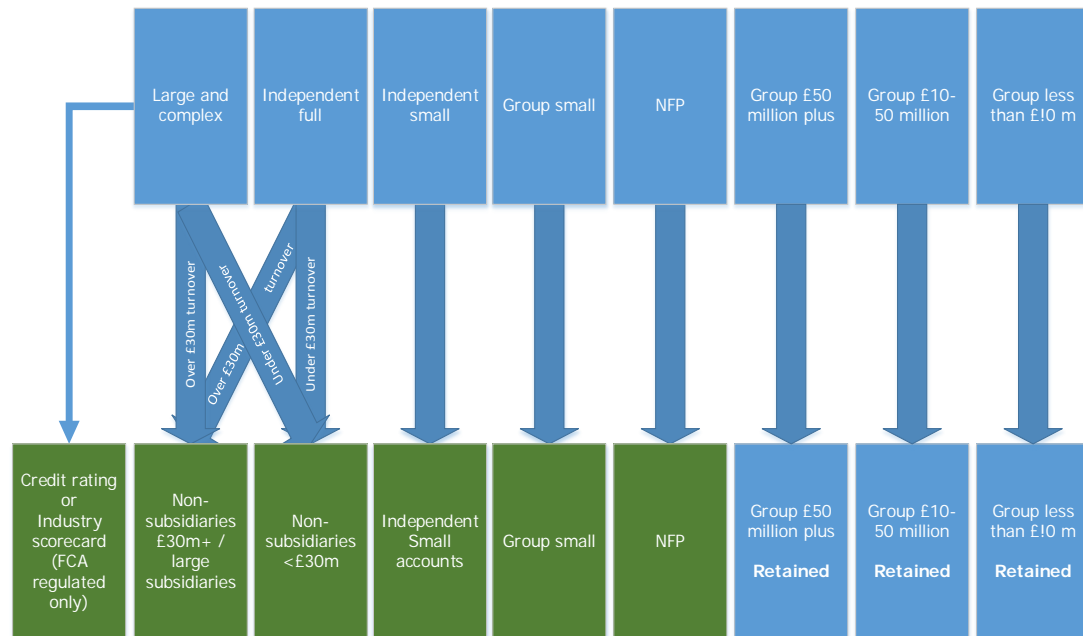
- Rebuilt the Group Small and Independent Small scorecards to seek to improve predictiveness as this is currently lower than for other scorecards.
- Rebuilt the NFP scorecard, aiming to improve predictiveness and taking advantage of increased insolvency data now available. It was possible to rebuild the scorecard using only NFP data, unlike the first modelling exercise.
- Combined the Large and Complex and Independent Full scorecard populations and considered the possibility of splitting this population at a suitable turnover level. This was due to population changes since the original modelling and to avoid insolvency scores being managed via a group restructuring. We modelled these two populations together, and also as two separate populations separated into larger and smaller entities.

**Q2: Do you agree with the scope of our review of the PPF-specific model – that that led to us rebuild five scorecards and propose recalibration of the three group scorecards?**

<sup>7</sup> In order to maximise model predictiveness the populations each scorecard should present as similar as possible risk profile, one factor we therefore looked at was the extent to which this remains the case.

3.6.4 Alongside this work we have developed proposals for the use of credit ratings and industry specific scorecards for the largest entities in our universe given the poor performance of the model for these employers. These are set out in Section 5.

**Diagram 3 1: Comparison of existing and proposed model**



3.6.5 For the scorecards not directly rebuilt, there are two indirect effects of the work we have done. Firstly, the creation of new scorecards for ultimate parents would mean that some group companies see a change to the group strength component of their score. Secondly, we have also taken the view it would be appropriate to recalibrate the group company scorecards so that they continue to predict an overall rate of insolvencies in line with the level of insolvencies that has actually occurred over the last ten years – this will be carried out once scorecards are confirmed following consultation.

### 3.7 How we carried out the modelling process

3.7.1 Where we propose the use of new scorecards, they continue to be largely based on financial information, because that is what has proved most predictive amongst the PPF’s universe of employers. Experian captured the financial information from a range of sources including Companies House, the Charity Commissions and voluntary filings.

3.7.2 We have taken the opportunity to implement various recommendations made by PriceWaterhouseCoopers (PwC) when performing an independent review of the second triennial process representing industry best practice, including the use of continuous variables, the development of alternative candidate models, and the employment of a model hierarchy (which would allow for the prioritisation of superior data ie, credit rating data where available).

## Continuous Variables

- 3.7.3 During the previous review it was noted, in training models, Experian had first split financial variables into discrete buckets to discern the relationship between the variable concerned and observed insolvencies, and then subsequently transformed those variables into continuous variables. For this modelling exercise, algorithms for all individual factors in the model have been derived on a continuous basis where necessary employing a logarithmic-transformation to the variable.
- 3.7.4 Where the data for a variable we modelled using a logarithmic transformation contains negative values, we have considered whether it makes sense to create an adjustment to the variable to allow that information to be used. A simple example of this is profit. This can clearly be negative (though we tend to refer to it as a loss). In this case, rather than simply treat all losses as if they were zero, we have extrapolated the relationship for a profit to cover negative values – calculating a log of the absolute value of the loss and then altering the sign of the calculated value<sup>8</sup>. This allows us to recognise that just as large profits are more positive for a company than small profits, a large loss is a worse sign than either a small loss or a profit.

## Employment of a model hierarchy

- 3.7.5 We have also undertaken research to facilitate the potential use of Rating Agency ratings in preference to the Experian model results for rated entities. In particular we have developed ratings-specific insolvency risk rates that would be analytically consistent with Experian model results.
- 3.7.6 Additionally, we are proposing the use of third-party models for deriving estimates of ratings for regulated financial institutions.

## Combining the Large and Complex with the Independent Full Scorecard

- 3.7.7 The Large and Complex scorecard was originally defined as:
- the ultimate parent within a group;
  - a business filing accounts showing turnover to be greater than £50m and total assets greater than £500m, and
  - any non-UK accounts not filing at Companies House whose accounts are therefore sourced from the relevant country.
- 3.7.8 The Independent Full scorecard was originally defined as:
- an independent business, not part of a group, that files full accounts.
- 3.7.9 On the basis of the evidence available, a £30 million turnover has been identified as the most appropriate threshold to divide a combined population. Therefore, three models have been built – one for entities

---

<sup>8</sup> For example the log of £10 million is 7, so in calculating the score for a loss of £10million we apply -7 to the coefficient used in the score. Accounts Profit £10 million = 7 x coefficient(-0.14253423300834) = -0.99773963105838. So then £10m Loss = -7 x coefficient(-0.14253423300834) = 0.99773963105838



with a turnover below £30 million, one for entities with a turnover above £30 million, and one for the undivided population. When we investigated splitting this combined scorecard by turnover we found this substantially improved predictiveness. We are, therefore, proposing the use of two new scorecards with a £30 million threshold.

### 3.8 New Financial Reporting Standards including FRS 101/102

- 3.8.1 Alongside developing new models we have considered whether the introduction of new accounting reporting standards – ie, FRS 101/102 - result in material changes to the calculation of insolvency risk scores for both retained and new scorecards.
- 3.8.2 We start from the position that FRS 101/102 offers a better view of a company's financial health and renders different companies' accounts more comparable. It would, therefore, make sense to use the better and more comparable view for scoring a company.
- 3.8.3 A substantial majority of employers (nearly 85 per cent) were found to see no substantive impact from the change in standards – with limited numbers seeing an improvement or worsening of score, typically by one band. Of those seeing a change, there was found to be a good balance between those seeing a negative impact (most commonly falling a single band) and those being positively affected.

The sample analysis provides support for previous analysis that the introduction of the new accounting standards are unlikely to materially affect scores generated by the model. We did not identify any particular scorecards which were heavily affected by changes due to FRS 101/ 102 and concluded it was not necessary to extend the scope of work to rebuild additional scorecards.

### 3.9 Independent validation of the model

- 3.9.1 We engaged Paul Waterhouse of The Analytical Cooperative ("TAC") to perform an independent review of the process applied when reviewing and (where appropriate) altering the PPF-specific model.

#### **About our independent reviewer**

**Paul Waterhouse** has a combination of rating agency experience (he is the former Global Head of Analytics and Innovation at Standard & Poor's Risk Solutions), financial institutions experience (eg senior positions at GE Frankona Re, ELMAC, and Colonial Life) and experience in developing and implementing best-practice, regulatory-compliant risk methodologies and processes for various institutions.

- 3.9.2 One lesson learned from the second triennium is it can be beneficial for an independent reviewer to sit at the table at the time the model is being altered. Recommendations from the independent reviewer regarding

industry best practice can then be taken into account while still in the process of altering the model.

- 3.9.3 A report from TAC on the third triennium methodology is available on our website. The summary opinion reads that “the model construction approach adopted for the current review is appropriate for the PPF’s objectives of estimating entity-specific insolvency risk / ranking taking into consideration the nature of the data available and other practical constraints. The approach is also analytically consistent with that deployed at the previous review and performance of the existing models (as gauged primarily by the Gini measure) has generally been good to strong”.
- 3.9.4 Furthermore, the report concludes that “construction and review process have been enhanced (relative to the previous review) and many of the existing methodology’s (previously identified) shortcomings have been significantly addressed”, and “The updated methodology is therefore regarded as “fit for purpose” and the methodology maintenance and review process is consistent with good practice (judged within the context of the PPF’s objectives, success criteria and practical constraints)”.
- 3.9.5 The report also identifies further areas which could be enhanced in the modelling approach, in particular around the treatment of “outlier” financial profiles and the incorporation of group support / burden, in the event that the PPF specific model is reviewed again.

## 4. Proposed scorecards

### 4.1 Conclusions of modelling

- 4.1.1 As a result of the modelling described in the previous chapter, Experian have developed five new scorecards with us.
- 4.1.2 We consider these scorecards represent a significant improvement on the scorecards that they are replacing:
- The new scorecards are generally more predictive – and so the associated Gini coefficient is higher. There is also a lower risk that scorecards are over-fitted<sup>9</sup>, because modelling has been on a continuous basis, so scorecards are more likely to remain robust.
  - The variables selected are ones that are available for a very high proportion of employers on the scorecard in question (in modelling jargon they have a high “fill rate”). This limits the need to apply “default” scores for missing data – a particular issue for stakeholders not reporting data through Companies House.
  - In light of changes in accounting standard, such as the move to FRS 101/102, and other practical difficulties, the use of trend variables has been kept to a minimum. They feature only once, on the Independent Small scorecard. Due to the relative lack of information that can be used to score these employers the use of the trend variable “Change in Total Assets” could not be avoided for scoring purposes.
  - None of the remodelled scorecards contain “mortgage age” as a variable. A significant concern, raised by stakeholders, has been that UK non-corporates which are not required to register mortgages with Companies House and foreign companies are unable to demonstrate the absence of secured charges and have therefore been receiving a “Neutral” score.
  - Administrative burdens on schemes and employers should be lower. The need to provide additional information to Experian will be reduced by the removal or more limited use of a range of variables which have required certifications: trend variables (reporting of accounting standards changes), mortgage age (certifying immaterial etc. mortgages) and employee based variables (certifications relating to employing temporary / part time staff).
  - Scores should be even more stable – as there are no non-accounts based measures in the new scorecards. Payment performance – also referred to as “days beyond terms” (and collected from utilities and the like by Experian) has been eliminated from the Independent Small scorecard. Along with mortgage age, this used to lead to scores altering at times other than the annual submission of new accounts. This also has the merit of meaning that all of the data used in scores can now be verified (payment performance data was also disliked by

---

<sup>9</sup> Ones trained on specific past experience

stakeholders because it was obtained on an anonymous basis and therefore could not be easily challenged).

- 4.1.3 We also consider that the division of parent companies and stand-alone businesses by turnover (into the new Scorecard 1 – Non-subsidiaries £30m+ and large subsidiaries and Scorecard 2 – Non-subsidiaries <£30m) addresses the question of whether SMEs are fairly assessed by the model. By having a scorecard tailored to corporate parents with turnover less than £30 million, we can ensure that these businesses are not scored on the same scorecard as a large multinational. And because each scorecard is calibrated to predict a number of insolvencies in line with our experience of actual insolvency rates over the last decade, SMEs can have confidence that the risks they pose are being assessed equitably by comparison with larger entities. Inevitably, the introduction of a threshold means that there are entities that would achieve a different score if they were the other side of the dividing line, but there is a significant commonality in variables which should reduce the impact of this.
- 4.1.4 The concern from stakeholders that variables on the scorecards are less suited for financial institutions has been substantially addressed with the introduction of a model separately trained for banks and insurance companies. We chose these sectors for industry scorecards in part as scorecards are well-developed, but also because it is possible to robustly identify industry sector for these entities.
- 4.1.5 The performance of the new scorecards is summarised below:

**Table 4.1 Gini of new scorecards**

<b>Scorecard</b>	<b><u>Gini</u> <u>2nd Triennium</u> <u>Model</u> <u>2007-2015</u><sup>10</sup></b>	<b><u>Gini</u> <u>3rd Triennium</u> <u>Model</u> <u>2007-2015</u></b>
Independent Full Accounts	54.00%	NA
Independent Small Accounts	34.10%	55.8%
Group Members Small Accounts	42.4%	55.0%
Large and Complex	59.00%	NA
Not for Profit	47.30%	51.3%
Non-subsidiaries £30m+ / large subsidiaries	NA	57.8%
Non-subsidiaries <£30m	NA	59.7%

## 4.2 The new scorecards

- 4.2.1 Details on each of the new scorecards are provided below. This includes an explanation of the variables used, their weighting and the fill rate (the per cent of entities for which the necessary information is available in their accounts). Within Appendix 4 there is additional information including the weighting of particular variables and the extent to which variables are statistically significant individually. We are also providing

two key measures of scorecard quality – the Gini coefficient and a cumulative lift chart for each of the new scorecards.

- 4.2.2 A number of the variables are calculated using the log function and where this is the case they are starred (\*) below.

#### **Scorecard 1 – Non-subsidiaries over £30 million and large subsidiaries**

- 4.2.3 This scorecard covers larger parent and stand-alone companies (those with over £30 million turnover and very large subsidiaries (£500+m total assets and £50m turnover).

- 4.2.4 The variables on the scorecard are:

- Net Worth\*;
- Creditor Days Sales Based\* ( $365 \times \text{Trade Creditors} / ((52 / \text{Accounting Period}) \times \text{Turnover})$ );
- Total Assets\*;
- Cash by Liabilities, and
- Profit\*.

- 4.2.5 This scorecard has very good fill rates, with four out of the five at 99 or 100 per cent. The Gini on this scorecard is 57.8 per cent (similar to the past Large and Complex).

#### **Scorecard 2 – Non-subsidiaries below £30 million**

- 4.2.6 This scorecard covers larger parent and stand-alone companies (with turnover below £30 million turnover)

- 4.2.7 The variables on this scorecard are

- Capital Employed;
- Pre-Tax Profit\*;
- Creditor Days Sales Based\*'
- Cash\*, and
- Current Liabilities\*.

- 4.2.8 This scorecard has very good fill rates, with all but one of the five between 92 and 100 per cent. The Gini on this scorecard is 59.7 per cent.

#### **Scorecard 6 – Group Small**

- 4.2.9 This scorecard covers subsidiary companies that file SME accounts

- 4.2.10 The variables on this scorecard are

- Parent Strength;
- Current Liabilities\*;
- Cash;
- Retained earnings\*;
- Debtors\*, and

- Net Worth\*.

4.2.11 This scorecard has 100% fill rate on all variables. The Gini on this scorecard is 55%.

#### **Scorecard 7 – Independent small**

4.2.12 This scorecard covers independent companies that file SME accounts

4.2.13 The variables on this scorecard are

- Retained earnings\*;
- Cash;
- Total Assets;
- Change in Total Assets, and
- Total Liabilities\*.

4.2.14 This scorecard has high fill rate on all variables except the change in total assets (but we believe this is due to the absence of data for modelling purposes only – ie, in the earliest years). The Gini on this scorecard is 55.8 per cent.

#### **Scorecard 8 – Not For Profit**

4.2.15 This scorecard covers entities meeting the NFP criteria.

4.2.16 The variables on this scorecard are

- Current Assets\*;
- Equity Gearing;
- Log Profit or Surplus;
- Total Assets, and
- Total Liabilities\*.

4.2.17 This scorecard has fill rates between 93 and 99 per cent. The Gini on this scorecard is 51.3 per cent.

**Q4: Do you agree with our conclusion that the re-built scorecards present sufficient benefits that they should replace the existing scorecards?**

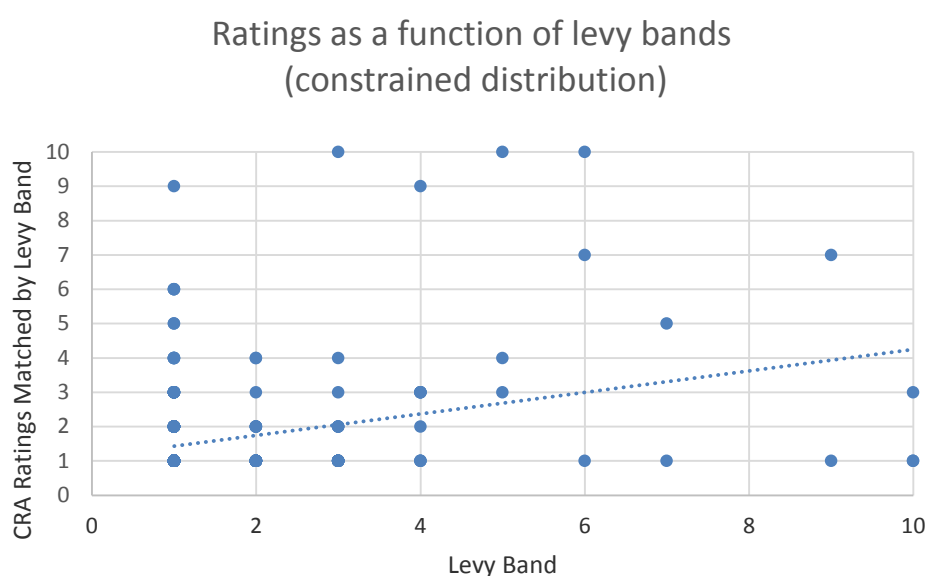
## 5. Alternative approaches to assessing insolvency risk

### 5.1 Proposal for the Use of Public Credit Ratings

#### Challenges in assessing insolvency risks for large employers

- 5.1.1 The largest employers in the PPF universe are, generally speaking, associated with large schemes. This means that it is particularly important, despite their limited number, to score this group of employers (and ultimate parent companies) as accurately as possible - in order to ensure that the PPF levy is appropriately distributed<sup>11</sup>.
- 5.1.2 As part of our work to review insolvency risk scoring, we looked specifically at the scoring of employers with turnover of £1 billion or more. There are very few insolvencies within this population, making it difficult to measure the effectiveness of scoring directly<sup>12</sup>. However, an indirect analysis is possible by using CRA ratings<sup>13</sup>. We ranked CRA ratings and compared these to the ranking of PPF specific model scores – so that we could see if for rated entities the two approaches produced the same order of employers from strong to weak. We observed a low level of correlation, as illustrated in the chart below, which suggests room for improvement.

Chart 5.1: Comparison of rank of CRA ratings and rank of Model scores



<sup>11</sup> For example the population we propose to use public credit ratings/industry scorecards for represent 3 per cent of employers but they pay almost 70 per cent of the levy.

<sup>12</sup> For example, Ginis are highly variable over time – varying from very low in the years to 2012, to very high 2012-2015, a period when there were no insolvencies in the population of £1 billion plus companies.

<sup>13</sup> Credit ratings have been developed over a much larger population, over many years, and show high, stable Gini coefficients. They, therefore, are an appropriate comparator – where they are available.



## **The case for using Ratings directly in scoring**

- 5.1.3 CRA Ratings are supported by a large degree of analysis undertaken by the rating agency when assigning long term issuer ratings. It would be excessively costly to adopt a similar approach in assessing all employers in the PPF universe but, where such measures are already in existence, we have considered whether they should be used in the assessment of insolvency risk.
- 5.1.4 The Gini coefficient of CRA Ratings is better than that of the PPF-specific model scorecards that rated employers are currently scored on, both on an annual and longer term basis. The average annual Gini coefficient is 84 per cent for Moody's (1983-2014), 84.9 per cent for S&P<sup>14</sup> (1981-2014) and 82.2 per cent for Fitch (1999-2007) which is better than for the PPF - specific model and also better than the CRA Ratings' Gini coefficient over the medium / long-term.
- 5.1.5 Looking at how rated employers are currently scored by the PPF-specific model, quite reasonably many are assessed as in the lowest insolvency risk bands, but there are a limited number of entities in this group where their CRA Rating (sub-investment grade) does not justify that position. Because these companies sponsor large DB schemes, this has the potential to have a significant effect on the distribution of the levy.
- 5.1.6 When consulting on the adoption of the PPF-specific model developed with Experian for the second triennium, we considered using CRA Ratings, where available, in preference to the model. At that time a majority of stakeholders responding opposed the use of CRA Ratings for reasons which chimed with reservations we then had about the use of ratings. In particular they cited complexity, inconsistency of treatment, subjectivity in mapping from a default risk to an insolvency risk, the longer horizon outlook built into the credit rating, and the lack of any right to appeal.
- 5.1.7 While we accept that the introduction of an alternative measurement basis does introduce some additional complexity and treats CRA rated employers differently we believe this can be justified by the importance of having a more robust model for scoring larger companies and the substantial levies paid. We also take the view that the large entities concerned are likely already to monitor their rating – and so the additional complexity is limited.
- 5.1.8 Previously expressed concerns around consistency and the subjectivity of translation turn on the basis used for converting a rating, based on default risk (and typically not over one year) into a one year insolvency probability. So, for the purposes of this review, the PPF commissioned a third party to collect empirical evidence from rated UK companies that defaulted and establish the proportion which then went insolvent. This analysis was backed up by evidence from a UK financial institution. The evidence collected and additional analysis performed gives us a great degree of confidence that a company assigned a particular levy band on the basis of its CRA Rating poses the same level of insolvency risk to the

---

<sup>14</sup> Please see statement at the end of this document concerning use of S&P information, models etc.

PPF as a company assigned the same levy band on the basis of the PPF-specific model scorecards.

- 5.1.9 Details of the translation from default rates into insolvency rates are discussed in greater detail later in this section but, in summary, the longer horizon outlook built into the credit rating has been catered for by only counting insolvencies occurring within 12-months of having defaulted.
- 5.1.10 Given the better Gini performance; the significance of the levy charged to this part of our population, and the additional work done to satisfy ourselves of an appropriate basis for converting CRA Ratings to a score that can be mapped to Levy Bands, we consider CRA Ratings should be used to calculate insolvency risks scores for those that have them.
- 5.1.11 Employers may have more than one CRA rating and we set out a proposed approach. This is set out in detail the draft Insolvency Risk Appendix which we are also publishing today. But broadly this requires a publicly available long term unsecured issuer rating from one of the main three CRAs – and where multiple ratings are available, we will use the second best rating. As we look to the main three CRAs we also used the CRAs weighted average annual default rates to arrive at the appropriate levy band.
- 5.1.12 We would expect the right to appeal against an insolvency risk score calculated using credit ratings would be limited to challenges over the calculation of the conversion or the appropriate use of data (ie, that the rating captured for a given date was the publicly available rating for the entity on that date).

## **5.2 Proposal to use Industry Specific Scorecards**

- 5.2.1 During the course of the second triennium we received several requests to develop industry based scorecards. As employer characteristics can and do differ between different industries there is a potential case for industry specific scoring models to be preferred over the more generic PPF-specific model scorecards.
- 5.2.2 A significant barrier to the use of industry specific scoring models is that a basis for identifying the sector an employer is in would be needed. The basis we use in some instances (for example, for calculating industry average scores) is the Standard Industry Code (SIC code). However experience has shown us that employers may be inappropriately classified on this basis. It would not be feasible (on practical grounds) to independently validate individual entity's actual activities. Additionally, multi-activity entities would require a more complex assessment.
- 5.2.3 The PPF believes the above concerns can be overcome for some regulated financial services businesses. Banks, building societies, and insurance companies which are required to apply to the Prudential Regulation Authority (PRA) for authorisation to carry on PRA regulated activities and are on a public list from the Bank of England<sup>15</sup>.

---

<sup>15</sup> Available on the Bank of England website

- 5.2.4 We have identified an off-the-shelf model that can produce a letter grade score trained on S&P Ratings, which we can then map to a Levy Band in the same way as the CRA Ratings. We are recommending this is used to assess insolvency risk for those employers we identify as regulated financial services businesses (which do not have a CRA Rating – which would take priority under the proposed model hierarchy explained later in this section). Appendix 5.3 of the Combined Appendices document provides full details of the Industry Specific Scorecards.

### 5.3 Translating credit ratings into levy bands

- 5.3.1 We asked Paul Waterhouse of The Analytical Cooperative (“TAC”) to undertake a study to advise how annual default rates associated with public credit ratings can be translated into insolvency rates. Below we have provided a high level summary of the study performed.
- 5.3.2 As part of the study an analysis was completed on the post-default experience of UK entities classified as "having defaulted" by one of the main three CRAs between January 2000 and May 2016. The analysis found the proportion of defaults entering into insolvency within 12 months of defaults was 36.79 per cent. The total of all cases over the full length of the study was 68 defaults and 33 insolvencies.

**Table 5.1 Ratio of insolvency to default**

	Ratio of insolvency to Default	Lower Bound (95%)	Upper Bound (95%)
6 months	32.35%	22.06%	44.12%
12months	36.79%	25.12%	47.29%
All	49.57%	35.92%	62.86%

- 5.3.3 The study also considered data (involving approximately 5,900 borrower-years and circa 530 defaults) of a UK Financial Institution. This identified for 2012/2013, what proportion of cases classified as having defaulted by a Rating Agency recover (without economic loss to the Institution) in the period that follows their failure to meet financial obligations in a timely manner. The analysis showed that after 180 days 37 per cent had not yet recovered on an Institution Issuer Weighted basis.
- 5.3.4 We, therefore, concluded that an aggregate assumption of 37 per cent for the ratio of insolvencies to defaults would be appropriate. Therefore, the next consideration was whether those ratios should be the same for all prior-year ratings or whether ratios materially vary by prior-year rating.
- 5.3.5 Evidence from the sample of UK defaults, evidence from the financial institution comparison of internal default rates, and analysis using rating agency migrations suggested that the ratio of insolvency to default increases somewhat as the prior-year rating becomes worse. In other words, a greater proportion of those with sub-investment grade ratings that default then proceed to insolvency than for better rated entities.

- 5.3.6 The derived ratios of insolvency to default were then used to scale down the default rate<sup>16</sup> for each rating to arrive at an insolvency probability – and mapped to the levy band associated with that probability.
- 5.3.7 The table below summarises the basis on which external ratings are mapped to a particular levy band. (The full conversion table for all the relevant ratings agencies is included in the Appendix 5.1 being published alongside this consultation document).

**Table 5.2: summary table showing conversion of ratings to levy bands**

Credit Rating	Levy Band
AAA to A-	1
BBB+	2
BBB	3
BBB-	4
BB+	5
BB	6
BB- to B+	7
B	8
B-	9
CCC+ to D	10

## 5.4 Translating industry specific scores into levy bands

- 5.4.1 Various off the shelf models are available to score financial institutions. Consistent with our proposal to use CRA Ratings the industry model we are proposing to use is one which is trained on CRA Ratings using company financials, macroeconomic and industry-specific factors to generate a letter-grade credit score which we can then map to a Levy Band in the same way as the CRA Ratings. In order to achieve optimal model performance and stability of the results, the model features separate scorecards for different types of bank and insurance company, and an additional regional segmentation.
- 5.4.2 As the scores represent a purely statistical view of the credit strength of a financial institution they are not the same as actual CRA Ratings where a wider range of analysis is undertaken by the rating agency when assigning a rating. We, therefore, propose only to use an industry score where a credit rating is not available.
- 5.4.3 Appendix 5.3 sets out the types of financial institutions that would be scored and what factors are considered under the proposed industry specific model.
- 5.4.4 The models are populated using company financials by a specialist provider (an S&P subsidiary) to ensure letter-grade credit scores are

<sup>16</sup> We used an average of annual default rates for Fitch, Moody's, and S&P

calculated in a consistent manner. Letter-grade credit scores are then translated into levy bands using the same table as used for CRA Ratings.

- 5.4.5 The scorecards were developed by S&P using the credit rated population, with the objective of achieving as close an alignment between the industry scorecards and ratings as possible. By holding back 20 per cent of ratings from the sample used to build the model, S&P were able to test whether the scorecard worked effectively. As the tables below show the majority of rated entities would be given an industry scorecard score within +/- 1 rating notch of their actual rating (ie, an entity with rating BBB, would receive a score between BBB+ and BBB-) and the overwhelming majority three notches.

**Table 5.3 Rated entities and their industry scorecard score**

<i>Banks</i>					
	Sub-Model	Exact Match	+1 Notch	+2 Notches	+3 Notches
<i>Panel A: In-Sample [2001-2012]</i>	EU & NA	22.08%	60.92%	84.21%	93.79%
<i>Panel B: Out-of-Sample [2001-2012]</i>	EU & NA	21.50%	60.48%	84.01%	93.48%
<i>Panel C: Out-of-Date [2013]</i>	EU & NA	19.44%	49.54%	75.00%	88.89%
<i>Insurers</i>					
	Sub-Model	Exact Match	+1 Notch	+2 Notches	+3 Notches
<i>Panel A: In-Sample [2005-2012]</i>	NA EU	25.86%	63.31%	84.02%	91.90%
<i>Panel B: Out-of-Sample [2005-2012]</i>	NA EU	25.05%	61.33%	82.93%	91.25%
<i>Panel C: Out-of-Date [2013]</i>	NA EU	31.40%	74.38%	90.91%	96.69%

**Q4: Do you agree with our proposal to use public credit ratings in preference to the PPF-specific model?**

**Q5: Do you agree with our proposal to use industry scorecards for regulated financial institutions, that are not themselves rated, in preference to the PPF-specific model?**

**Q6: Do you agree with our proposed basis of scoring where public credit ratings or industry scorecards are used?**

## 5.5 Employers who cannot be assessed by reference to financial information

- 5.5.1 We have identified a relatively small group of schemes where the risk of them making a call on the PPF cannot be assessed by looking at their employer's financial variables alone (and indeed in some cases the entity does not even produce accounts in a conventional sense) or where, because of some other feature of their corporate structure or governance, its risk of insolvency is not appropriately reflected in a financial model.

## **Example cases**

### **Financial Conduct Authority (FCA)**

- The FCA is a regulatory body set up by the Government to regulate financial services firms in the United Kingdom.
- The FCA powers and objectives were given to it by the Financial Services and Markets Act 2000 (FSMA). Under FSMA the FCA has a statutory right to raise periodic fees on the firms it regulates in order for it to meet its expenses to carry out its regulatory activities.
- The FCA is currently in Levy Band 5.
- The Experian methodology for calculating insolvency risk looks at financial information from financial accounts. The unique status of the FCA, the manner in which its statutory power to levy fees operates, without consultation if needed, and how it accounts for this means there are elements of their accounts which do not “translate” or have the same significance as they would for a commercial organisation.

### **The Pension Scheme for the Nursing & Midwifery Council and Associated Employers**

- The Nursing and Midwifery Council is a Regulator primarily funded by registration fees but historically funded by the Department of Health when required.
- They were established by the Nursing and Midwifery Order 2001 (SI 2002/253).
- They are currently in Levy Band 2.
- The Department of Health is also a participating employer and has been placed in Levy Band 3.
- There is an obvious Government connection for the Nursing and Midwifery Council and the Department of Health, which may justify placing them in the levy band with the lowest likelihood of insolvency to recognise the unlikelihood that they will make a claim on the PPF. There are also particular “translation” issues that arise when applying the Department of Health accounts to the Experian model – i.e. untypical terminology used raising questions of how to attribute types of assets/liabilities etc. meaning that their financial statements do not have the same significance as they would for a commercial organisation.

5.5.2 In some of these cases the entity in question can only be wound up by Act of Parliament; in others, whilst in principle a conventional insolvency is possible, the particular features of the entity's structure/governance means the likelihood is argued to be remote. This has meant that, in some instances, the existing insolvency risk model generates scores out of step with the reality of the risk posed, and in some cases produces no score at all in which case we use scheme or industry averages for the levy calculation. The Financial Conduct Authority, for example, has been

scored in band 5 – implying that the organisation is an above average risk to us.

- 5.5.3 We have developed an alternate approach which allows us to place an entity in Levy Band 1 (ie, alongside the 20 per cent of entities in our universe rated in this band) where the entity is established by statute or wholly or directly owned by the Crown or central government or a statutory authority; in our view the entity cannot be assessed appropriately through the Experian model, and in our opinion Levy Band 1 is the most appropriate levy band. We consider the approach we are taking is in line with that used by CRAs for entities of this type - where ratings are typically set no more than two to three notches below the sovereign rating (which in the case of the UK is rated high investment grade).
- 5.5.4 We expect this to apply to a small number of employers with an immaterial impact on the overall levies to be collected. We are conscious of the need to define such a rule appropriately and for the methodology to be robust and workable, not least because there will always be some employers who feel that the rules as constructed operate harshly for them. It may be that the practical difficulties of designing a rule that captures those employers that truly pose a low risk to the PPF and excluding those whose risk is fairly captured is too difficult to be done in a fair and reasonable way. However, we believe that the issue is one we should explore. We welcome views on whether the position of these employers should be addressed and, if so, whether the rule we have proposed in Appendix is appropriate and practical.

**Q7: Do you agree that we should seek an alternative approach for employers that cannot be assessed by reference to financial information alone? Do you have any comments on our draft rule?**



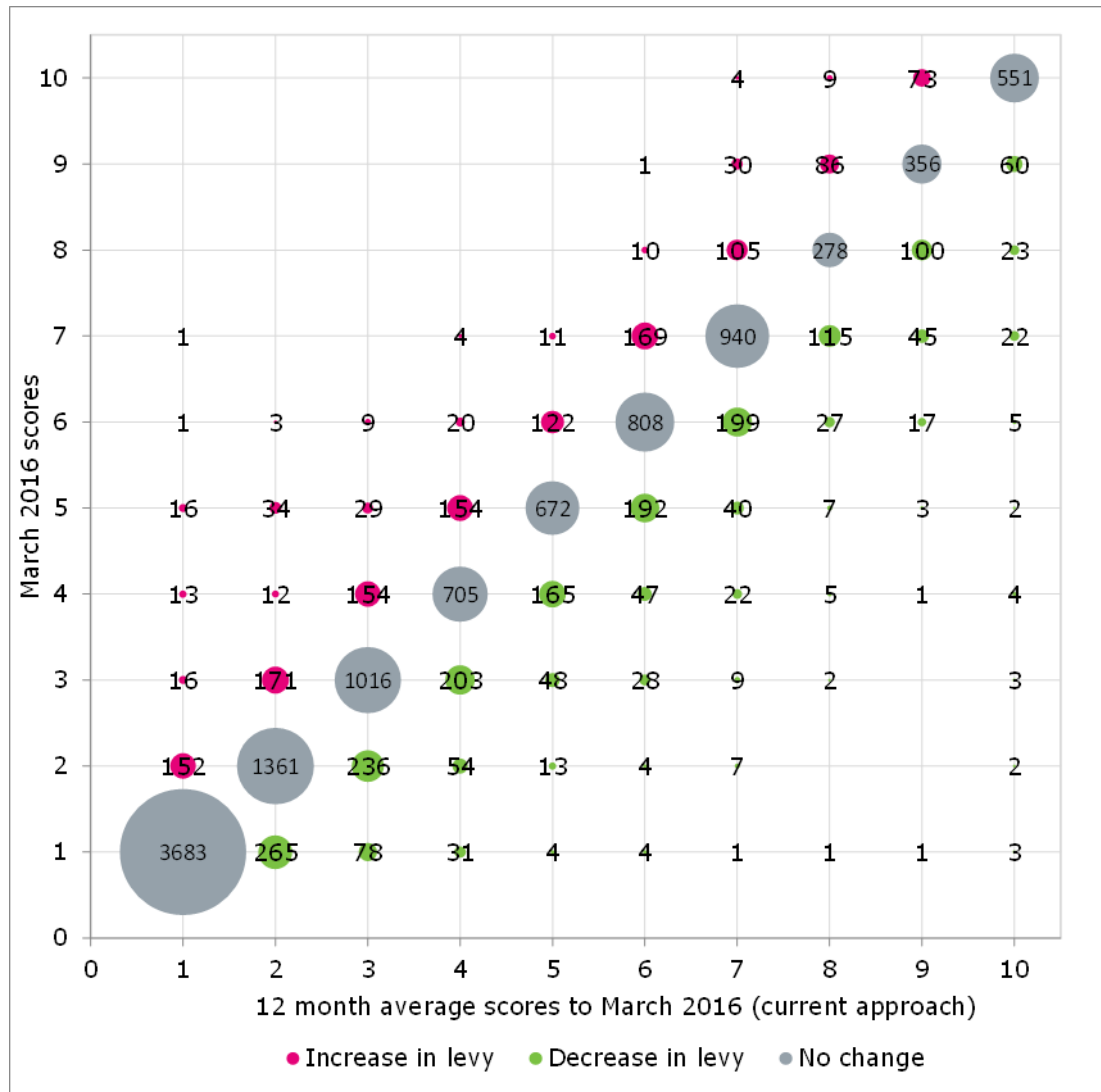
## **6. Timing and use of insolvency risk scores**

### **6.1 Averaging of insolvency risk score**

- 6.1.1 Prior to 2012/13 the insolvency risk score used in risk-based levy calculations was a single score as at 31 March (a year prior to the last day of the preceding levy year – so for 2010/11 the single failure score was as at 31 March 2009).
- 6.1.2 We first averaged monthly insolvency risk scores in 2012/13 (the start of the first triennium). This was accompanied by the use of more current data (the averaging being calculated on the 12 monthly failure scores up to 31 March immediately preceding the levy year in which the average was used).
- 6.1.3 D&B were providing insolvency risk scores for the PPF in 2012/13 and their model, included greater use of non-accounts data than the current model meaning there were more factors (than the filing of new accounts or registering of charges) that could lead to a change in score. It was thought that the use of averaging would limit the circumstances in which scores changed throughout the year.
- 6.1.4 Averaging of, firstly, Failure Scores and, since 2015/16, insolvency probabilities has continued. In 2015/16 a shorter period of averaging (six months) was used, to allow schemes and advisors time to become familiar with the Experian model before scores counted, and to ensure the right data was being collected on scheme employers. We reverted to a 12 month average in 2016/17 and 2017/18.
- 6.1.5 The third triennium offers an opportunity to review whether averaging should be retained and, if it is, the basis on which it is conducted.



**Chart 6.1: Extent of volatility of Experian insolvency scores – 12 month average scores of employers to March 2016 compared with March 2016 scores only**



6.1.6 We have examined the extent to which changing the methodology from using 12 month average scores to March 2016 (used for calculating 2016/17 Mean Scores) to using March 2016 scores only would have resulted in a change in levy band. A significant degree of stability can be seen above<sup>17</sup>. In overall levy terms we have estimated that only using the score at 31 March 2016 would not have had a measurable impact on the estimated total amount collected.

6.1.7 We have identified three potential approaches to averaging Experian insolvency scores:

- i. **No change.** It may be considered the benefits of stability outweigh any others that might result from using fewer data points and that there are benefits from an element of smoothing where two sets of accounts are likely to count for different parts of the year - ie, the

<sup>17</sup> The chart above excludes employers where an Experian insolvency score did not exist for any of the 12 months to March 2016.

latest filed accounts in April 2016 may be different to the latest filed in March 2017 – though the evidence of changes across the year suggests this is limited.

- ii. **Use last six months (October to March preceding the levy year).** This would mean most emphasis would be placed on the more recent data and could mean that only a single set of accounts data is used within the averaging calculation. Later in this section we provide information about the concentration of year ends that suggests that the two biggest concentrations of year ends and filing deadlines would be treated differently. Those with a year ends of 31 December (and filing deadline of 30 September) would under this approach be assessed on a single set of accounts, whereas those with a year end of 31 March would expect to be assessed on two sets of accounts.
  - iii. **Only use score at 31 March.** The analysis above suggests that this approach would not be expected to lead to significant volatility in scores. Additionally it has the advantage of using only the most up to date data and is the most straightforward and simple approach.
- 6.1.8 **We propose that whatever approach is used for Experian scores would also apply to credit ratings and industry specific scorecards.**
- 6.1.9 One particular concern that has been considered is that only using the 31 March score might offer opportunities for gaming – eg, by delaying the filing of accounts that are expected to lead to a worsened score. As part of the work Experian has been doing for us on assessing the impact of FRS 101/102 they looked at the concentration of year end dates and hence the due dates for filing. They found that 72 per cent of scheme employers that file at Companies House had a year end of 31 December or 31 March (meaning their deadlines for filing were 30 September or 31 December<sup>18</sup>).
- 6.1.10 Those with the most scope for delaying the filing of accounts (with year ends between July and October) amount to around 14 per cent of those that file with Companies House. The analysis showed that on average less than 10 per cent of employers saw a significant change from filing new accounts and those that did were evenly split between a result that improved or worsened their score. It appears, therefore, that a reduction in the number of months used for scoring would only raise a limited risk of such gaming and would have the advantage of using only the most recent data.
- 6.1.11 As our consultation on the new scorecards is taking place during the first few months that would be included if we retained a 12 month average calculation, we propose that a maximum of the last six months (from October 2017 to March 2018) are used for Levy Year 2018/19. If we decided to simply use the 31 March score of the relevant year we would apply this to all three years of the third triennium.

---

<sup>18</sup> Quoted companies are subject to more stringent requirements

**Q8: Do you think that we should move to a single point calculation of insolvency risk at 31 March? If not do you consider that a change should be made to the number of insolvency risk scores that are averaged?**

## **6.2 PPF/Experian Portal**

- 6.2.1 We continue to receive positive feedback in relation to the PPF/Experian web portal, but remain committed to reviewing it on a regular basis. Accordingly, we recently met with a group of portal users to explore possible future developments. Users expressed significant support for a range of changes in relation to email alert functionality, incorporating the addition of an 'event log' to allow users to understand how data changes drive insolvency scores, and aid the identification of possible errors in data. We have discussed these suggestions with Experian, and are now working with them in order to develop this new functionality. Sample screenshots can be found at Appendix 6.2.
- 6.2.2 This group also discussed potential changes to other portal functionality, including employer selection and insolvency score reports, as well as further simplification to the log in process. Again, we are now working on making changes in this respect. We would welcome any comments from stakeholders on these, or other, changes to the web portal.
- 6.2.3 We are changing the portal layout so both models can be seen side by side during the consultation period. The proposed next triennium model score is coloured in orange and referred to as the 'Proposed Model'. If you would prefer to see scores on the second triennium (current) basis there is a tick box to remove the proposed model scores.

## **7. Impact Analysis**

### **7.1 Introduction**

7.1.1 As indicated in the introduction and executive summary, the purpose of this consultation is to set out propositions on how the methodology that will be used to calculate the levy will be designed. This consultation does not consider the levy scaling factor, which for a given set of rules, decides how much will be collected – since the Board will consider the amount it wishes to collect in aggregate in the summer. The levy scaling factor will also depend on data collected to 31 March 2017 (and beyond for certain data items), and our conclusions on changes to the insolvency risk model in the light of responses to this consultation.

7.1.2 This impact analysis therefore focuses on the effect proposals described in chapters 4 and 5 will have on the distribution of the levy between schemes. To do this we compared expected collections based on the 2017/18 levy estimate using the current scorecards with levies on the new scorecards, using an adjusted levy scaling factor so that the same sum is collected in total. This allows stakeholders to see the impact of model changes in isolation.

7.1.3 It should be noted that there are a number of reasons why it would not be appropriate to assume that the scaling factor used to achieve this will be the levy scaling factor the Board proposes in the next consultation:

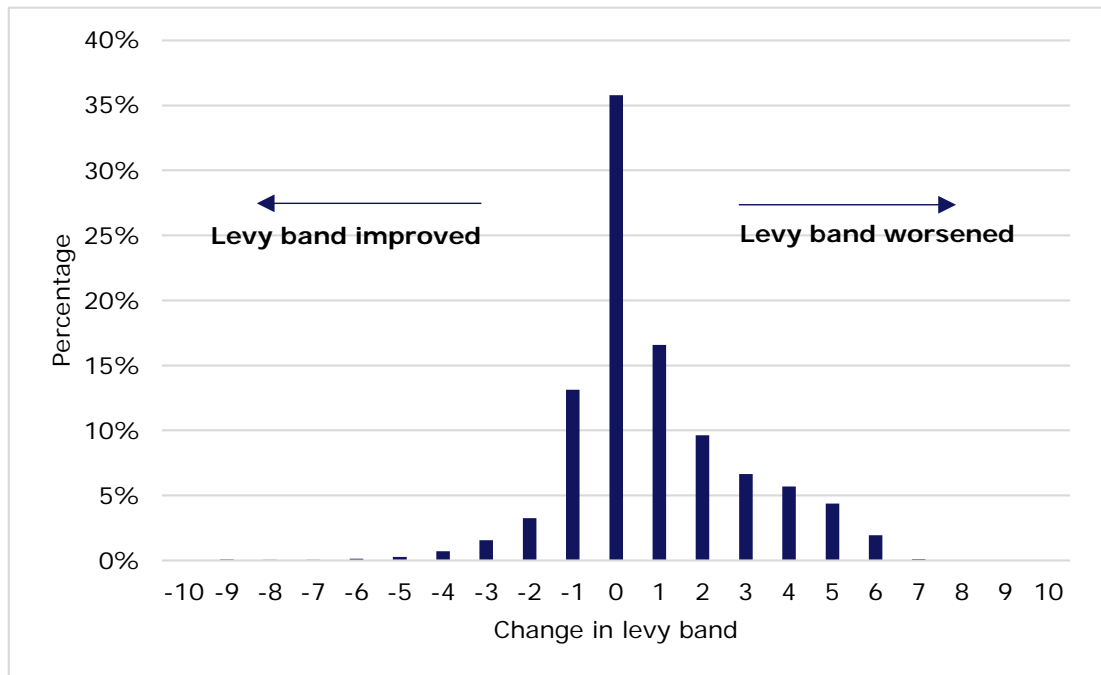
- We will review levy bands and rates for the next consultation. In the meantime, we have taken a neutral assumption that the levy bands and the range of insolvency probabilities for each band are not changed;
- New scheme and sponsor data will be available, from 31 March 2017;
- The 2018/19 levy estimate will depend on market conditions up to summer 2017;
- The Board may choose to target a different levy quantum; and
- There may be other changes to the levy methodology.

7.1.4 A fuller impact analysis is included at Appendix 7.1, this chapter focuses on key themes. The key finding is that nearly two thirds of levy payers would see a reduction in levy either because their score has improved, or because the scaling factor required to raise the same levy as we expect to collect in 2017/18 falls, as is shown at section 7.7.

### **7.2 Impact on Pension Protection Scores**

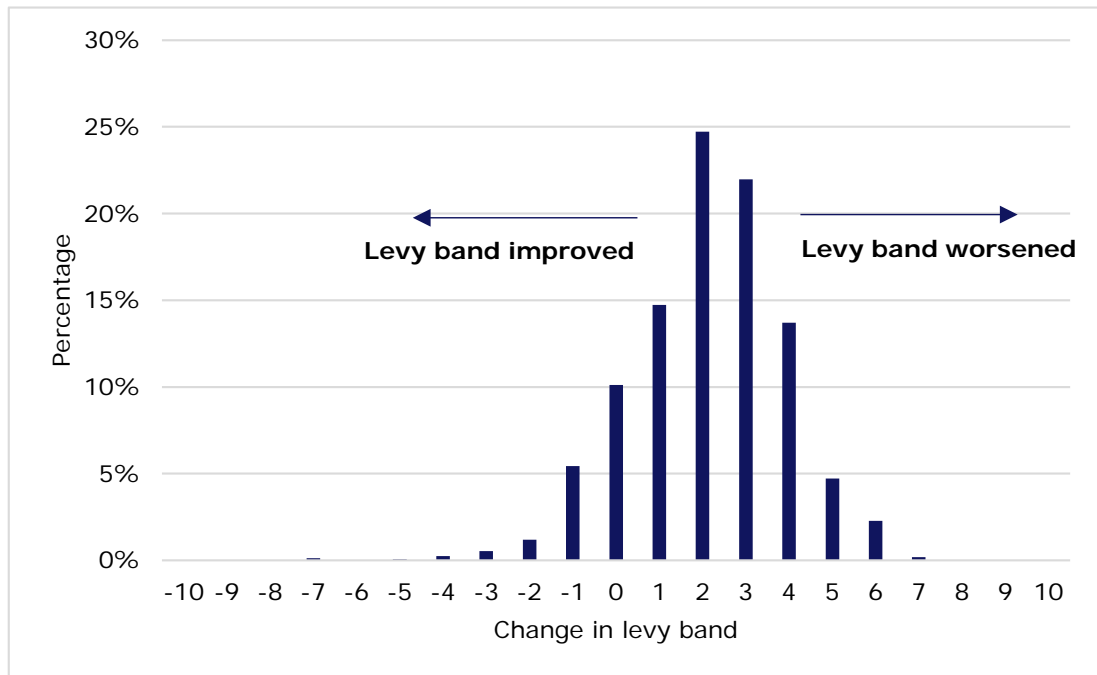
7.2.1 The following charts show the effect on employer bands of moving to the new scorecards. In each case the chart shows the difference between the new and old band – so a negative number is an improvement in band.

**Chart 7.1: Change in levy bands - all employers**



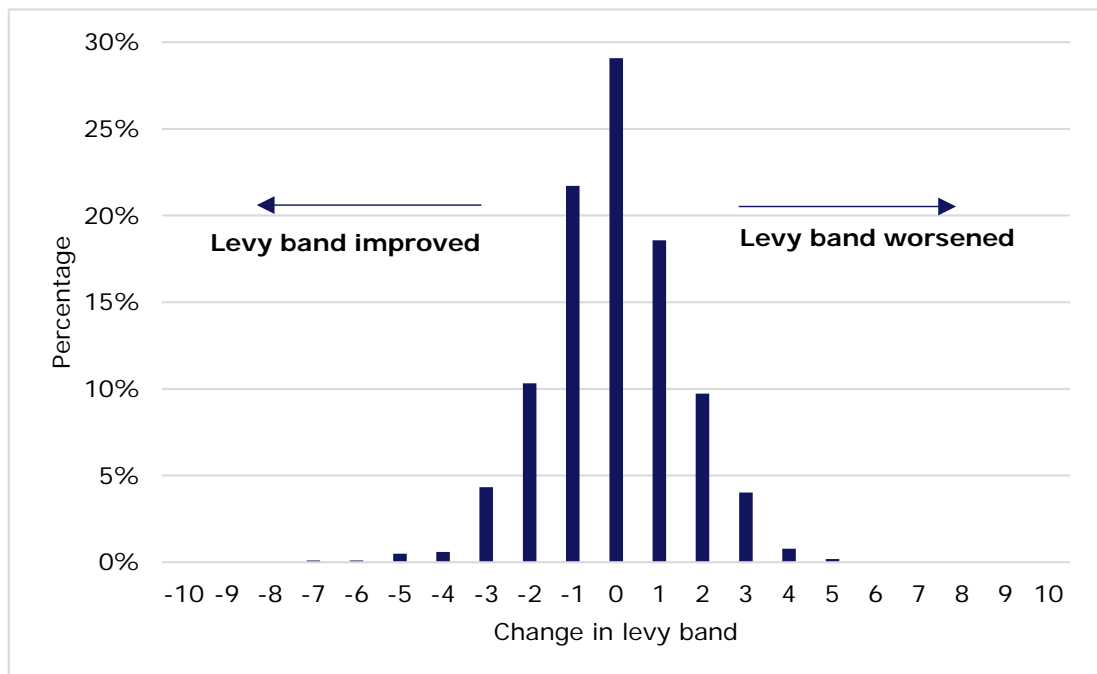
7.2.2 The first point to note is that, assessed across all scorecards, more employers are seeing a worsening in score than an improvement, on our analysis of scores. This may seem a counterintuitive result given that – overall – insolvency rates have been low in recent years and the new scorecards take account of that experience through being calibrated to insolvencies over the whole period 2007-2015 rather than just 2007-2012. The phenomenon is shown most strongly for the new Scorecard 1, used for larger parent and stand-alone businesses (and very large subsidiaries).

**Chart 7.2: Change in levy bands - non-subsubsidiaries >£30m and large subsidiaries**



By comparison, on other scorecards the effect is more muted. Here are the corresponding results for scorecard 2, the scorecard for parent company and stand-alone entities with below £30 million turnover.

**Chart 7.3: Change in levy bands - non-subsubsidiaries <£30m**



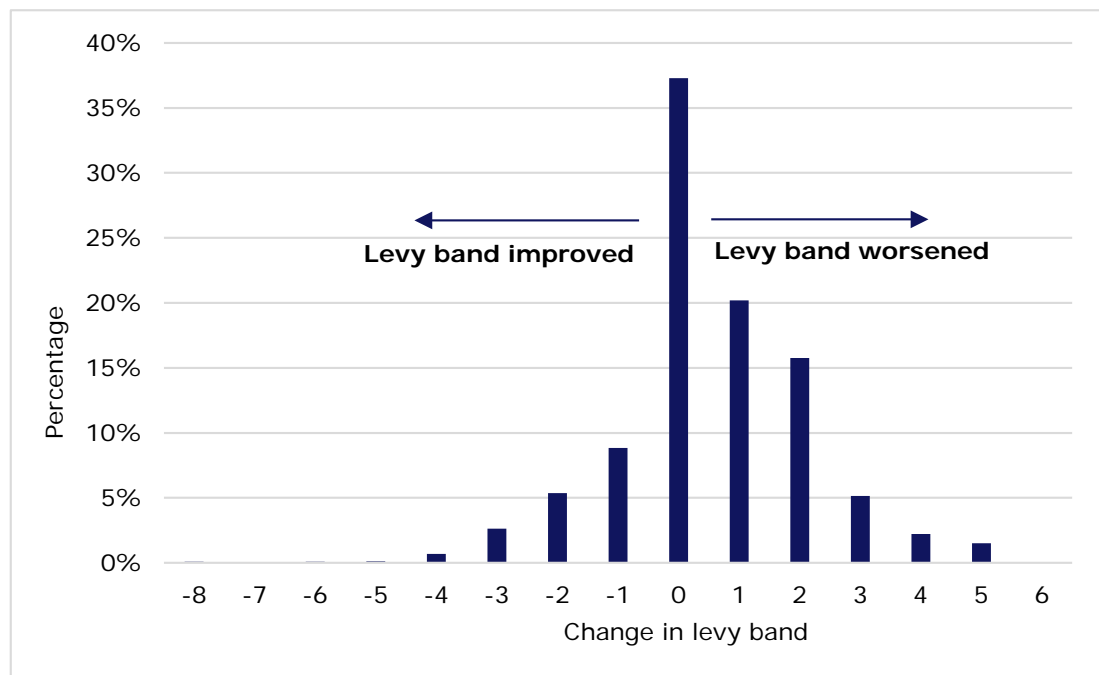
7.2.3 This effect is a result of a trend for the existing scorecards to predict a lower number of insolvencies than they were originally designed to. It has been particularly noticeable in the last year and for the large and complex scorecard, originally calibrated to produce an insolvency rate of 0.38 per cent and is now predicting only 0.1 per cent. When scores for this scorecard are compared to a new scorecard calibrated to produce an

insolvency rate of 0.26 per cent – in line with the actual insolvency experience of that population over the period – the result is that scores on the new scorecard will tend to be worse.

7.2.4 The investigation Experian have carried out to understand this effect suggests that this is likely to be largely a result of companies seeking to reduce their levy through, for example: providing parent company information previously absent to move to a new scorecard or seeking to transfer to the not-for-profit scorecard if they are eligible for that scorecard<sup>19</sup> or through other measures such as certifying mortgages for exclusion.

7.2.5 To test that this is an issue of calibration – which we would need to address even if scorecards were not rebuilt - we have compared scores using a version of the existing large and complex scorecard calibrated to produce the same level of insolvencies as is expected for the new scorecard 1 - an insolvency rate of 0.26% - i.e. a level in line with actual experience. It will be seen, from chart 7.4, that there is a much more symmetric pattern of changes in scores in this case.

**Chart 7.4: Change in levy bands between recalibrated large and complex scorecard and new scorecard - non-subidiaries >£30m and large subsidiaries**



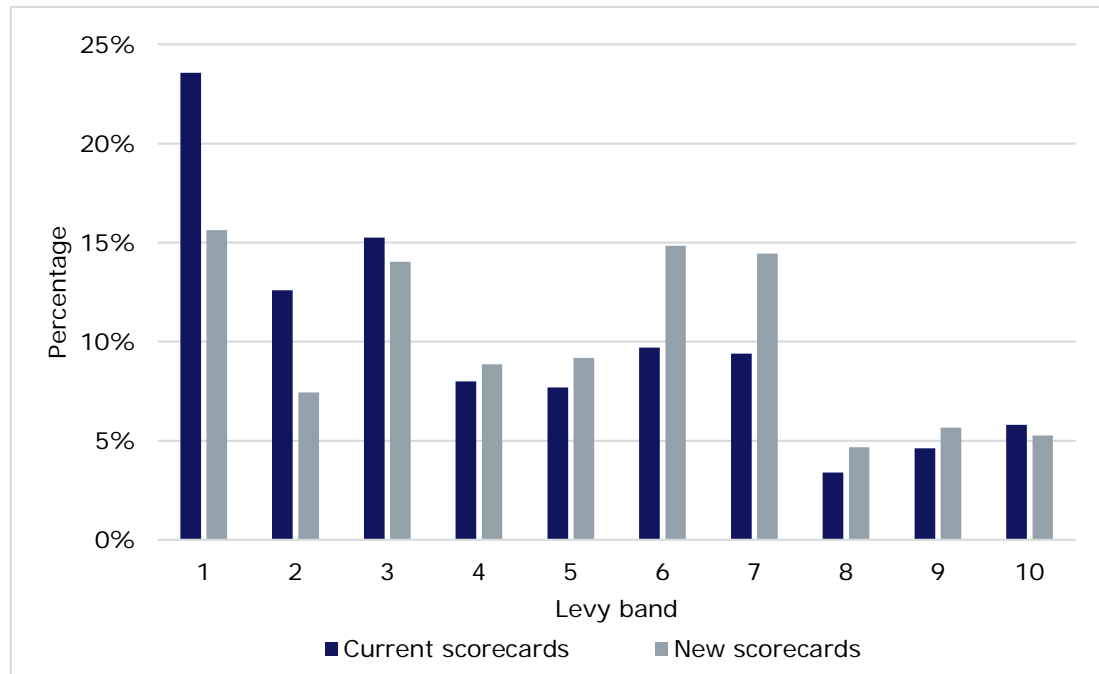
### 7.3 Distribution of levy bands

7.3.1 Based on the current pattern of levy bands and rates, the chart below shows the proportion of employers placed in each levy band. There is a

<sup>19</sup> The phenomenon of schemes and employers seeking to improve their score is not a new one – insolvency probabilities improved each year prior to 2015/16, even though the D&B scoring system changed little from year to year.

reduction in the proportion of the population scored in band 1-2 and a somewhat higher proportion scored in bands 6-10.

**Chart 7.5: Proportion of employers by levy band - all employers**



7.3.2 This reflects changes on individual scorecards (which can be seen in the charts following in Appendix 7.1):

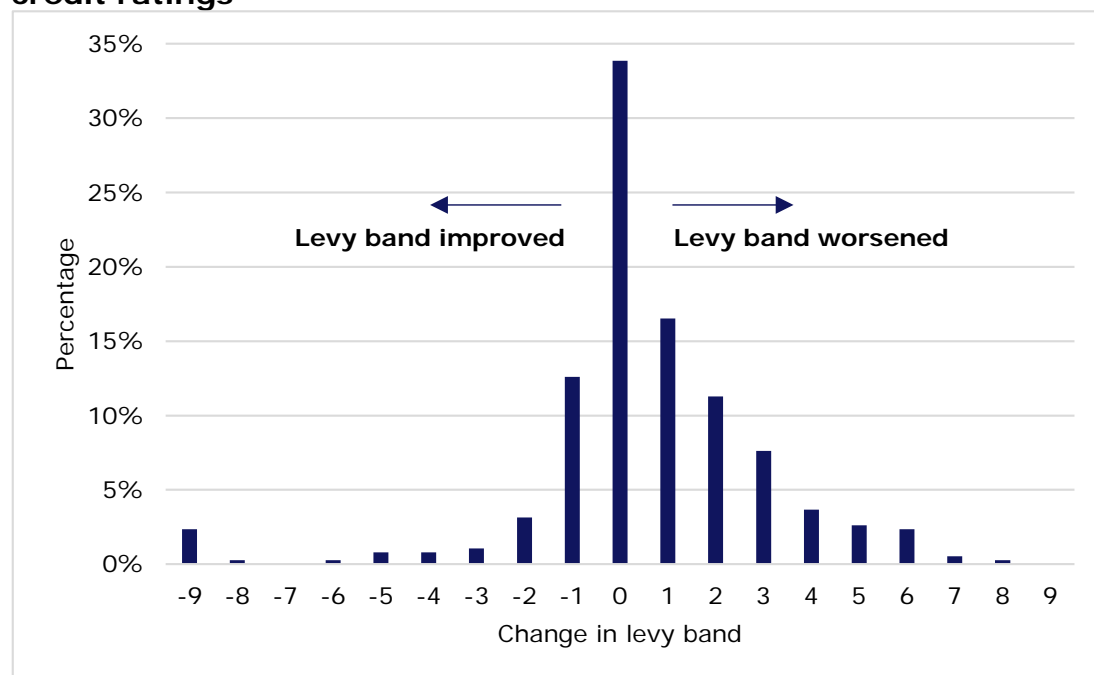
- Scorecard 1 (for non-subidiaries >£30m and large subsidiaries) sees a particularly substantial fall in the proportion in band 1 – with increased numbers in bands 3-10.
- Scorecard 2 (for non-subidiaries with below £30 million turnover) sees an increase in the proportion in band 1, a fall in bands 2 to 4 and an increase in bands 5 to 7.
- Scorecards 6 and 7 (for group companies and independent companies filing small accounts) see an increase in entities scored in band 1. Indeed it is a feature of the new scorecards that they allow a wider range of scores than was possible under their predecessors (which effectively prevented an independent company filing small accounts from scoring better than band 2); and
- Scorecard 8 for not-for-profit (NFP) entities sees a small reduction in the proportion in band 1 and a significant increase in employers in bands 6-8. This reflects the scorecard distinguishing more sharply between strong and weak sponsors. Whilst numbers are not large, there are now some NFPs scored in bands 9-10, whereas the previous scorecards scored all NFPs in band 8 or better.



## 7.4 Public Credit Ratings

- 7.4.1 Within the PPF universe there are a few hundred companies which are rated by at least one of the Rating Agencies. Reviewing the country of domicile for most of these companies (ie, 364 companies) showed that the vast majority are domiciled in the UK (59.6 per cent), more than four times as many companies as are domiciled in the United States (14.8 per cent) which in turn has more than four times as many companies as are domiciled in Germany (3.6 per cent). Under the proposed model hierarchy their levy would be calculated on the basis of their CRA Rating using a ratio of insolvency to default derived for the UK (thus independent of geographic location).
- 7.4.2 In the first quarter of 2016 we received a bulk download of companies and their public credit ratings from the Rating Agencies. We have matched this against the employers in the PPF universe and calculated the change in levy band resulting from using CRA ratings instead of the current PPF scorecards. This was calculated by subtracting the levy band associated with an employer's average score over April 2015 to March 2016 from the levy band associated with an employer's public credit rating as at March 2016. A negative number resulting from this calculation would thus represent a more favourable levy band. Where there is more than one public credit rating we propose using the second best rating.
- 7.4.3 Approximately 34 per cent of the CRA Rated employers experienced no change in levy band, 21 per cent experienced an improvement in levy band and 45 per cent experienced a worsening in levy band.

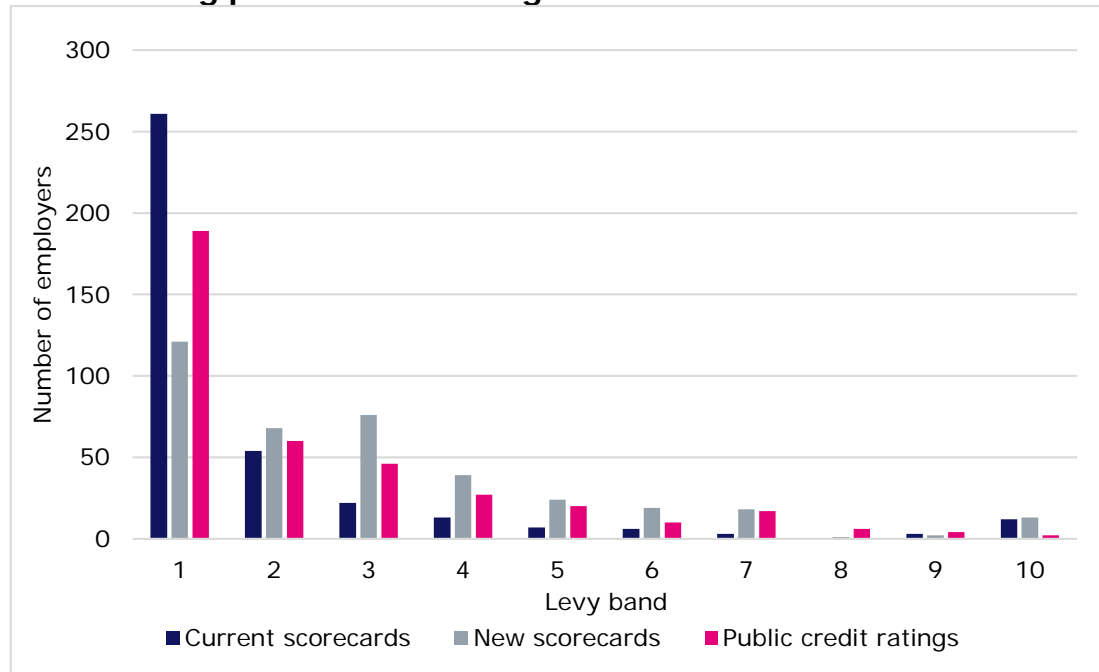
**Chart 7.6: Change in levy bands - employers scored using public credit ratings**



- 7.4.4 If, following consultation, we decide not to use CRA Ratings most CRA Rated employers would be expected to be scored on one of the newly developed PPF Scorecards. In such a scenario we would expect fewer CRA

Rated employers to be assigned the most favourable levy band (ie, levy band 1) and more CRA Rated employers to be assigned to the least favourable levy band (ie, levy band 10), compared to the proposal put forward to use CRA ratings where available.

**Chart 7.7: Number of employers by levy band – employers scored using public credit ratings**

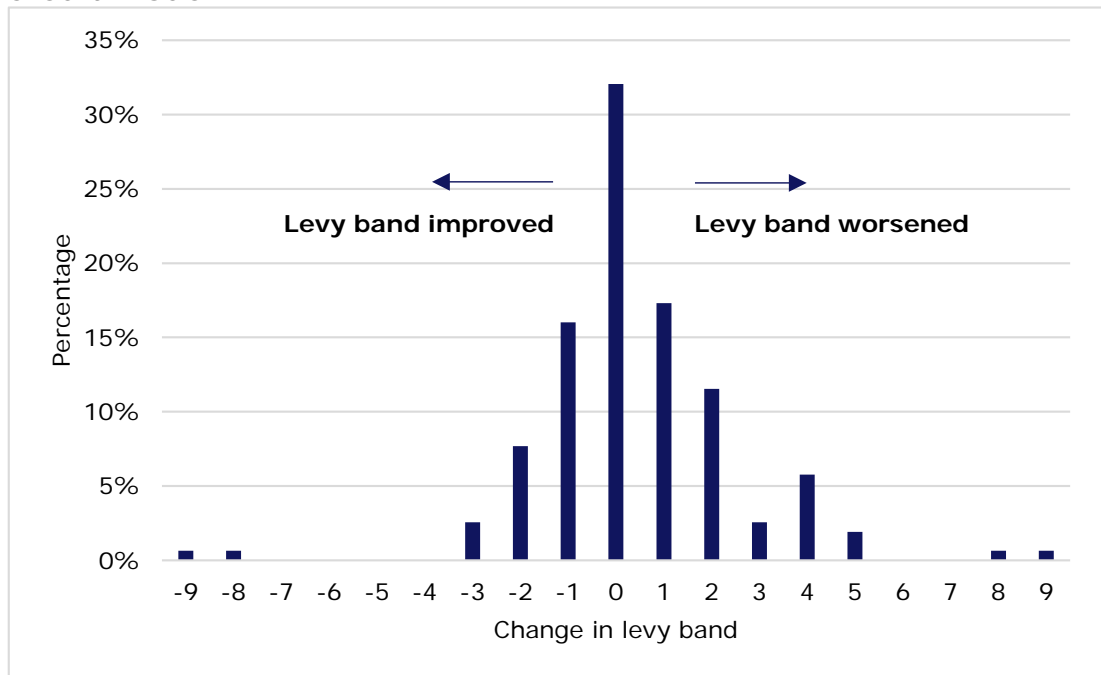


## 7.5 Industry Specific Models

7.5.1 Within the PPF employer universe there are around 150 banks/building societies and around 60 insurance companies which are recorded on the Bank of England’s list of financial institutions. For most companies a letter grade score could be generated using the industry specific model. A change in levy band was then calculated resulting from using the industry specific model instead of the current PPF scorecards. This was calculated by subtracting the levy band associated with an employer’s average score over April 2015 to March 2016 from the levy band associated with an employer’s letter grade score based on its latest financials. A negative number resulting from this calculation would thus represent a more favourable levy band.

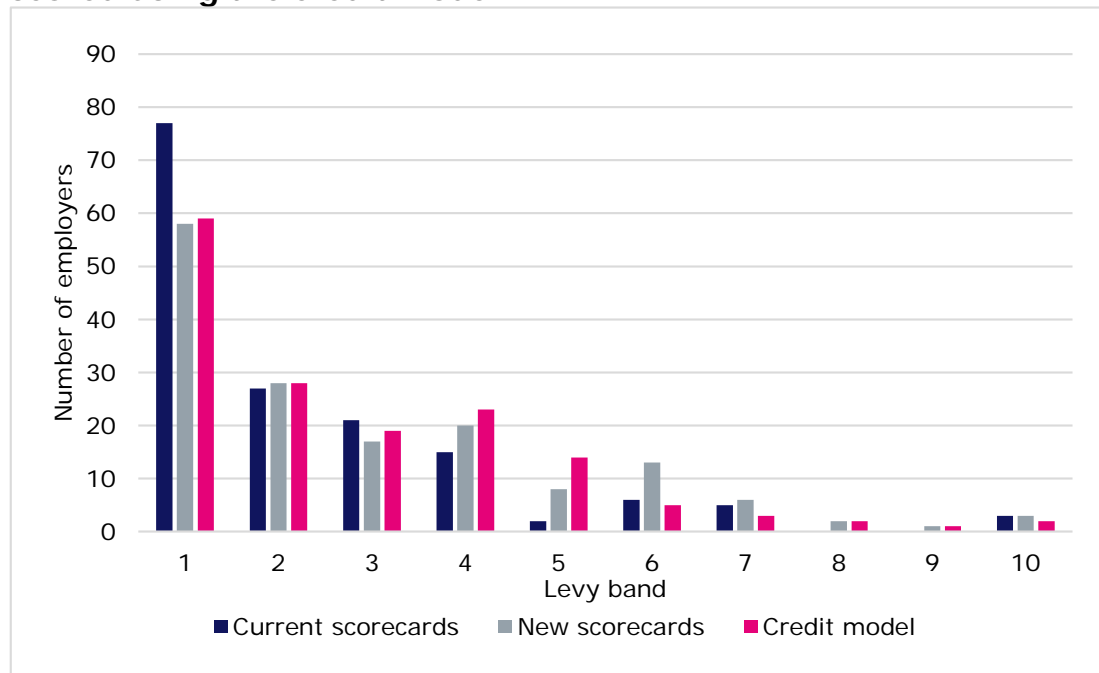
7.5.2 Around 32 per cent of the financial institution employers experienced no change in levy band, 28 per cent experienced an improvement in levy band and 40 per cent experienced a worsening in levy band.

**Chart 7.8: Change in levy bands - employers scored using the credit model**



7.5.3 If, following consultation, we decided not to proceed with using the financial institution model, the relevant employers would be expected to be scored on one of the newly developed PPF scorecards. In such a scenario, we would expect fewer of these employers to be assigned to the most favourable five levy bands (1 to 5) and more to be assigned to least favourable five levy band (6-10), compared to the proposal to use industry specific models.

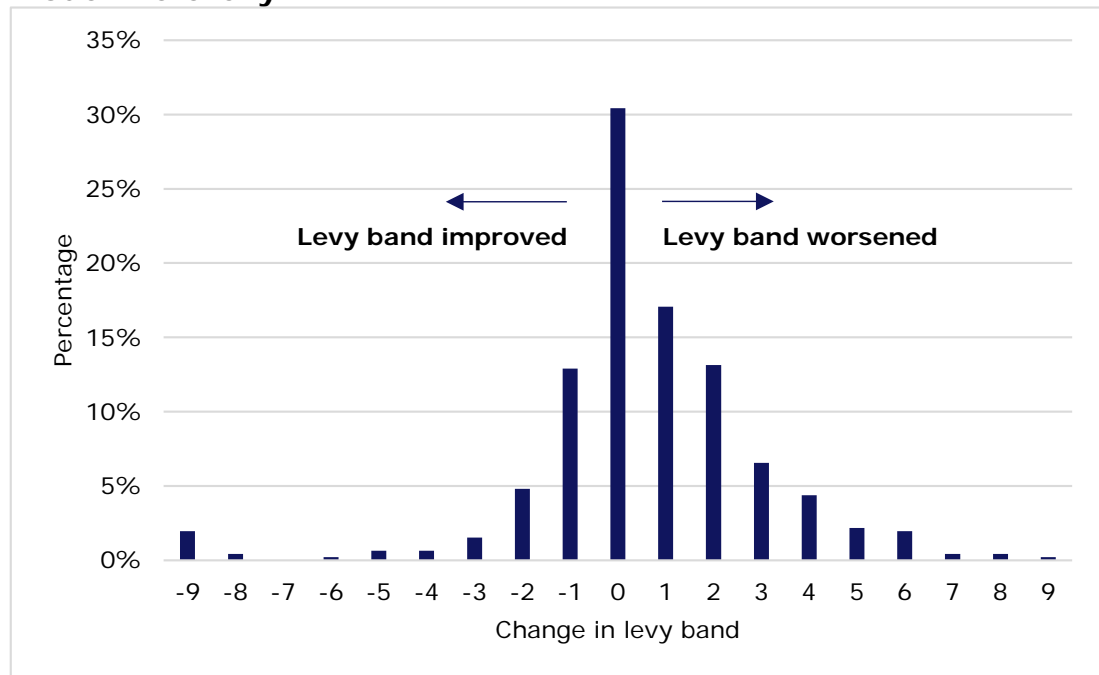
**Chart 7.9: Number of employers by levy band – employers scored using the credit model**



## 7.6 Proposed Model Hierarchy

- 7.6.1 Our proposed hierarchy to establish the basis scoring is to first consider an employer’s CRA rating. For employers without a credit rating they would be scored using an industry specific model if they are on the Bank of England’s list. If neither of these basis of scoring applied an employer would be scored using a PPF-specific model scorecard.
- 7.6.2 A change in levy band was calculated resulting from using the proposed model hierarchy instead of the current PPF scorecards. This was calculated by subtracting the levy band associated with an employer’s average score over April 2015 to March 2016 from the levy band associated with an employer when applying the proposed model hierarchy. A negative number resulting from this calculation would thus represent a more favourable levy band. Where there is more than one public credit rating we looked to the second best rating.
- 7.6.3 As shown in chart 7.10, around 30 per cent of the CRA rated/financial institution employers experienced no change in levy band, 23 per cent experienced an improvement in levy band and 47 per cent experienced a worsening in levy band.

**Chart 7.10: Change in levy bands - employers scored using the model hierarchy**



## 7.7 Shift in the distribution of levy

7.7.1 With a worsening in scores for some sponsors to large schemes, adjusting the levy scaling factor to collect the same levy in total<sup>20</sup> means the majority of schemes see a benefit from the lower levy scaling factor. Overall, the proportion of schemes seeing a reduction in levy is almost two thirds, with just under a fifth of schemes seeing no change in levy, and just under a fifth paying a higher levy.

In broad terms the adjustment we have made to the scaling factor<sup>21</sup> equates to a one band improvement in score for most levy bands, and a two band improvement for bands 1-3. As a result a single employer scheme whose employer moved from band 1 to band 2 would pay a reduced levy.

**Table 7.1: Number of schemes that would see increases / decreases / no change in levy**

	Increase in levy	Decrease in levy	Unchanged	Total
Number of schemes	1,033	3,614	992	5,639
Percentage	18.3%	64.1%	17.6%	100.0%

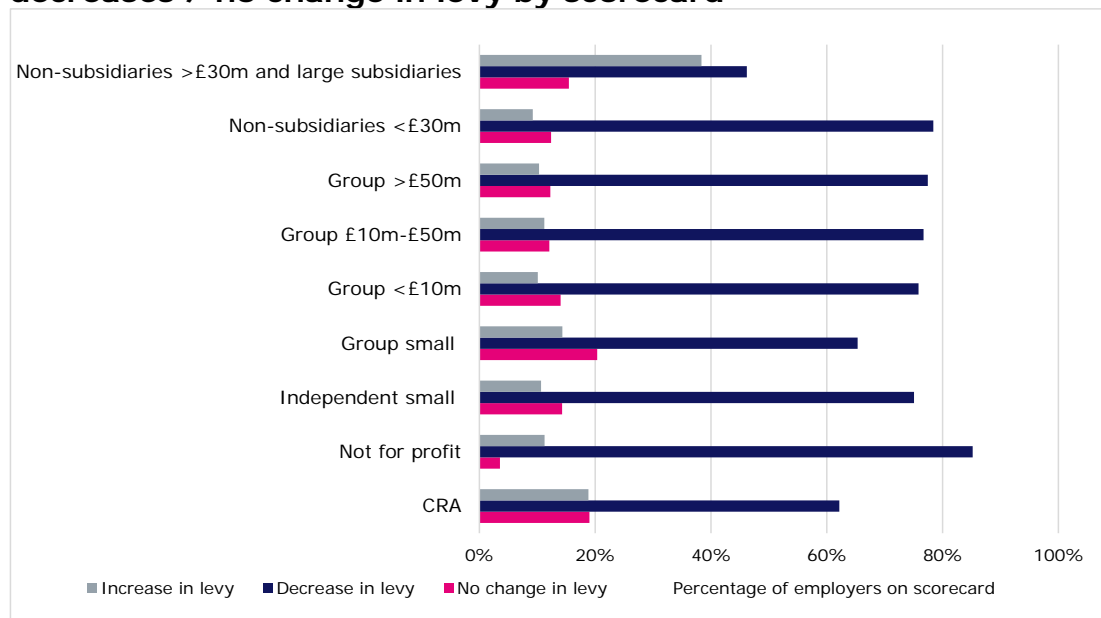
<sup>20</sup> As described in section 7.1

<sup>21</sup> We replaced the actual levy scaling factor used for 2017/18, of 0.65, with a levy scaling factor of 0.37.

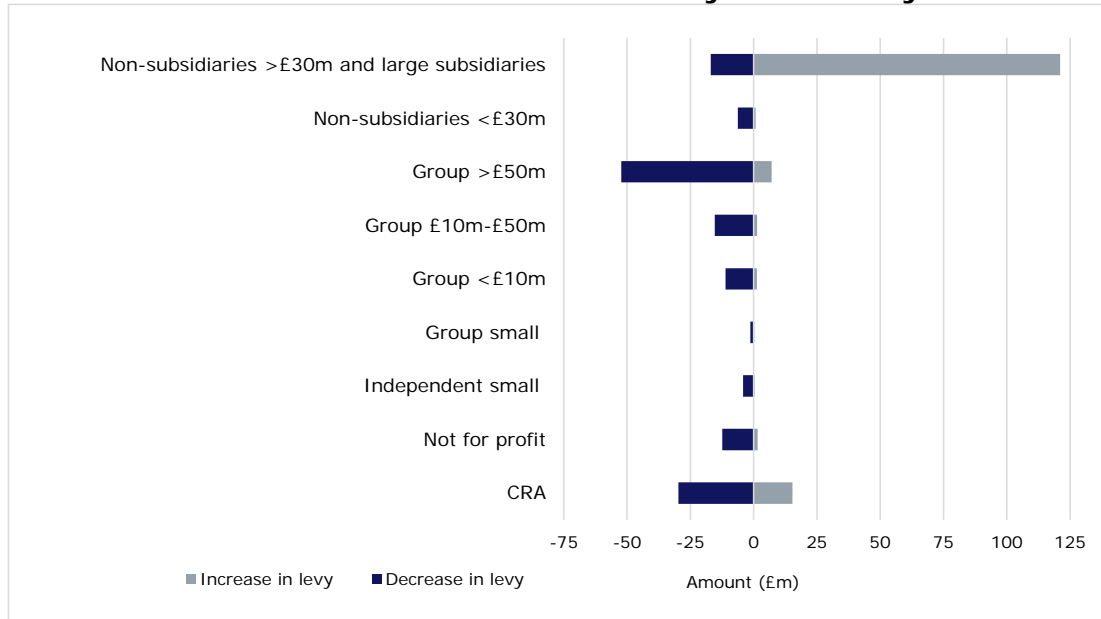
7.7.2 The most notable effects, as shown in charts 7.11 and 7.12, when looking at each scorecard separately, are:

- A small number of schemes sponsored by rated companies with non-investment grade ratings pay substantially more - though nearly three times as many rated companies see a reduction in levy. In aggregate, there is little change in levy collection from this group.
- There are a number of large schemes whose employers are on scorecard 1, the non-subidiaries >£30m and large subsidiaries scorecard, that see an increase in levy relative to the existing scorecard for 2017/18 – though a larger number of large entities see a decline in levy. This is driven to a significant extent by the improvement in scores on the preceding scorecard, which will have meant that collectively these schemes paid less than would have been justified by their risk towards the end of the second triennium, coupled with significant changes in score for a smaller number of schemes.
- The vast majority of entities scored on other scorecards see a reduction in levy, and the total levy collected from these schemes falls. This includes those scorecards most associated with SME employers, and not for profit entities.

**Chart 7.11: Proportion of employers that would see increases / decreases / no change in levy by scorecard**



**Chart 7.12: Increases / decreases in levy amount by scorecard**



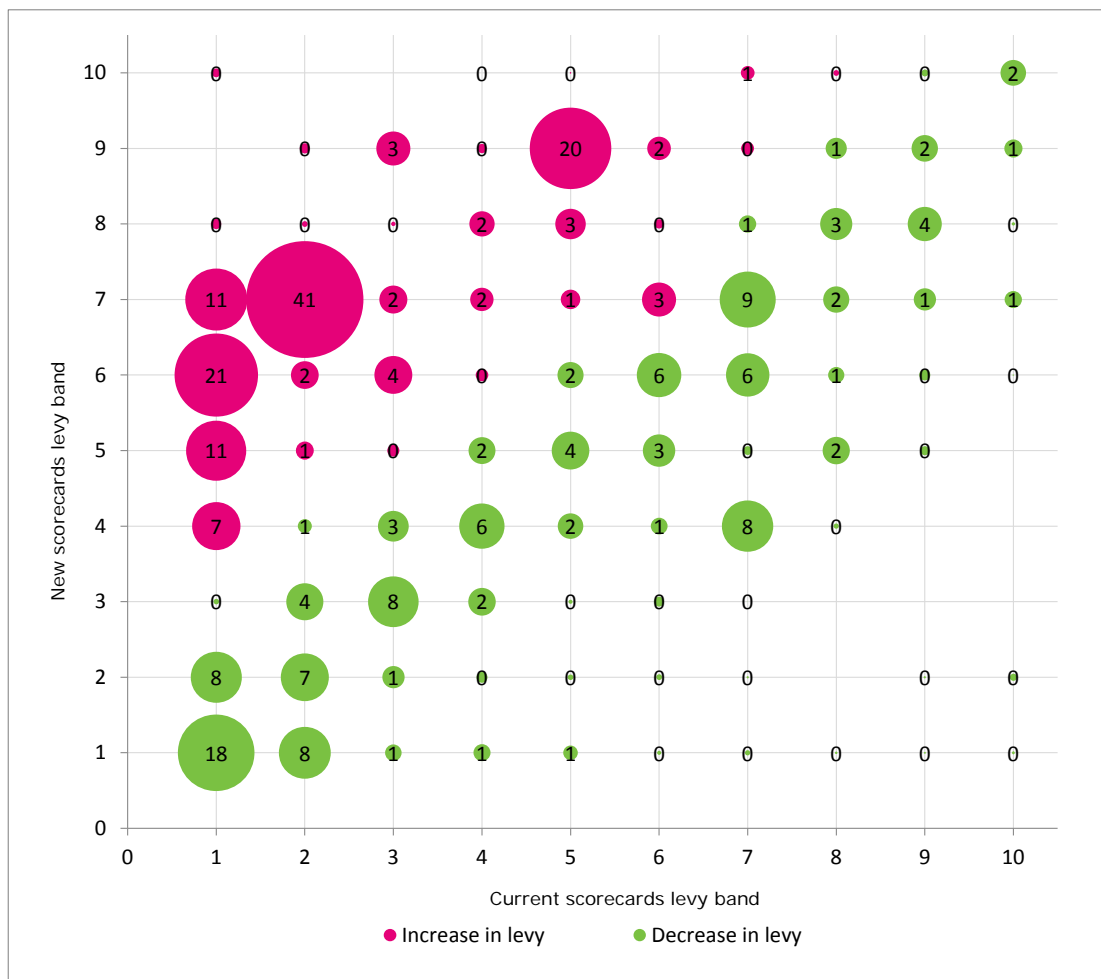
It is worth noting that scorecard 1 includes a disproportionately high number of employers which sponsor large schemes. Therefore, the increase we are seeing in levies for scorecard 1 are in the context of a large base. Table 7.2 below shows the percentage change in levy. It is also notable that there are large percentage reductions in levy for the large group companies. So for some corporate groups, an increase in levy for a parent company may be offset by a reduction for its subsidiaries.

**Table 7.2: Percentage change in levy by scorecard**

Scorecard	% increase / decrease in levy collections
Non-subsidiaries >£30m and large subsidiaries	47.2%
Non-subsidiaries <£30m	-34.1%
Group >£50m	-26.4%
Group £10m-£50m	-31.8%
Group <£10m	-29.4%
Group small	-20.7%
Independent small	-46.4%
Not for profit	-35.6%
CRA	-11.5%

7.7.3 The bubble chart in chart 7.13 below sums the change in levy within each levy band movement and shows two distinct patterns. First, 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 high. This is due to the adjustment made so that expected levy collections overall are unchanged between the current and new scorecards. Second, there are large bubbles either side of the diagonal of bubbles from bottom left to top right. These mainly represent large increases and decreases in levy amounts for particular individual large schemes.

**Chart 7.13: Aggregate change in levy by levy bands (£m)**





## 8. Small schemes

- 8.1.1 Experience of operating the levy suggests particular issues exist for the smallest schemes<sup>22</sup> in engaging with the levy rules. The smallest schemes may lack the resources to obtain more than the legal minimum of actuarial support – and so receive no advice on levy issues.
- 8.1.2 When considering these schemes the options are limited by the legislation governing the levy. In particular, we cannot simply cease to charge a risk-based levy or charge on a different basis unless we believe the risk posed by small schemes merits that treatment. There are, however, some possibilities within the legislative framework, although they have clear drawbacks. In principle it would be possible to:
- Alter the proportion of the levy charged to small schemes that is raised by the scheme based and risk-based components of the levy (using different scaling factors from those applied for larger schemes). This would reduce the need to engage with the complexity of the risk-based levy whilst maintaining a risk-based element, but it would create a significant number of losers. This approach would need a clear justification for treating small schemes in this way.
  - Allocate small schemes to a levy band that reflects the average insolvency risk they pose, if we felt there was a risk-based justification for classifying small schemes together in this way (apart from purely size). Again this is likely to create a significant number of losers but would retain a risk based focus, including varying the levy in line with levels of underfunding.
  - As an addition to either of the above, allow an opt out for schemes that would prefer to remain in the current system – this would remove the issue of losers but would add complexity and would mean, in the latter option, the remainder being allocated to a worse levy band than would otherwise be the case (on the basis that those choosing to remain out of the risk based system are our worse risks).
- 8.1.3 We set out in the next section one area where we have developed options in relation to deficit-reduction contributions, which would ease administrative burdens for all schemes. However we would welcome suggestions of improvements and simplifications in other areas that would particularly help smaller schemes – though as explained above we may be limited in some areas by our legal requirements

### **Q9: Do you have suggestions of improvements and simplifications that would particularly help smaller schemes?**

---

<sup>22</sup> There is no simple definition of what constitutes a small scheme – though in our investigations to date we have used £10 million of liabilities or 100 members. This represents around a third of eligible schemes.

## 9. Deficit-Reduction Contributions (DRCs)

### 9.1 Certification of DRCs

#### The current approach and drivers for change

- 9.1.1 The DRC regime has been in place since the introduction of the risk-based levy in levy year 2006/07. It provides a voluntary mechanism for schemes to gain credit in their levy invoice for contributions paid to improve the s179 funding position since the date of the last s179 valuation.
- 9.1.2 The DRC Appendix sets out the methodology for the calculation of the DRC amount that may be certified, broadly determined as all contributions received by the scheme over the relevant period (item 'a'), less any contributions which were required to meet certain obligations and which therefore do not improve the funding position, eg,:
- new benefit accrual (item 'b');
  - expenses (item 'c'); and
  - benefit augmentations (item 'd')
- 9.1.3 The DRC Appendix and associated Guidance have evolved organically over the years to reflect stakeholder input, in particular, queries concerning the appropriate treatment of investment expenses and scheme exercises such as enhanced transfer values, pension increase exchange and partial buy-outs.
- 9.1.4 However, it has become apparent that what began as a relatively simple regime to enable schemes to gain annual credit for additional contributions has become increasingly complex in the face of scheme circumstances such as de-risking measures and opaque investment charging structures. In particular, industry feedback is that our guidance on implicit investment expenses gives rise to complex calculations which can be impractical and disproportionate to the exercise as a whole.
- 9.1.5 These concerns might suggest that cost implications would deter many schemes (particular smaller ones) from certifying DRCs, and therefore means that these risk-reduction measures are not being reflected in the levy calculations for such schemes. The data available to us suggests that the profile of schemes certifying DRCs is broadly similar to that of the levyable universe as a whole, but that there is a significant proportion of recovery plan contributions (estimated to be around 20 per cent) which is not being certified as DRCs for levy purposes.
- 9.1.6 We have set out for consultation two options ((a) and (b)) for the DRC regime in the third levy triennium, each designed to simplify of the current approach. We would welcome stakeholders' views on the relative merits and potential drawbacks of each option. Details on the options (including worked examples of option b) are included as an appendix, but in summary:
- Option (a) is for a simplification of the existing calculation methodology. This includes simply ignoring investment expenses (perhaps the element of the calculation that receives the most

criticism), removing the requirement for them to be deducted from DRCs.

- Option (b) is for a more radical change and would allow schemes to certify the contributions paid under a scheme's recovery plan as the corresponding DRC to be certified for levy reduction purposes.

9.1.7 The two options are not necessarily mutually exclusive at the global level – though within a limited development window we might prioritise the option that appears more promising. It would be possible to construct a certification regime where the applicable option is determined on a scheme-specific basis, for example by reference to the scheme's characteristics (e.g. scheme size, open or closed to future accrual) or by reference to the DRC amount to be certified.

9.1.8 We would welcome stakeholders' views on such an approach, on the factors which should be used to determine the appropriate option for each scheme (particularly in light of the considerations set out under options (a) and (b) in Appendix X), and on whether there are circumstances where the existing model remains the most appropriate.

**Q10: Do you support our proposals to amend the approach for calculating certified DRC amounts? If so, which factors do you consider should be used to allocate schemes between the two options (a) and (b) (which could include applying a single option to all schemes)?**

## 10. Parental Guarantees (Type A contingent assets)

### 10.1 Type A contingent assets – guarantor strength reporting requirement

- 10.1.1 For a number of years we have recognised parental guarantees (referred to as Type A contingent assets) as a risk reduction measure. Providing the guarantee meets certain legal requirements, is in a standard form, and is certified by 31 March of the relevant year it may result in a reduction of the levy for the scheme.
- 10.1.2 If a guarantee has been certified and accepted it can reduce the levy payable where the guarantor's Levy Band would result in a lower levy if substituted for one or more of the scheme's employers. In order to fully benefit from the switching of the guarantor's score for the employer(s)' the guarantee will need to fully match the scheme underfunding (after s179 assets and liabilities have been stressed).
- 10.1.3 From 2012/13 onward the Levy Rules have required that for a parental guarantee to be recognised for levy purposes the reduction in levy that would apply must be consistent with the reduction in risk offered. This has been reflected in the certification requirements for trustees and the need for them to satisfy themselves that the guarantors would be able to meet the amount guaranteed in an insolvency situation by certifying the 'realisable recovery' under the contingent asset. This realisable recovery may be lower than the full liability in relation to the guarantee – in which case there may be a reduction in the levy recognition given<sup>23</sup>.
- 10.1.4 Each year we have tested a sample of contingent assets. Disappointingly, a significant number of Type A contingent assets have been rejected on the basis of insufficient evidence of the guarantor's ability to meet the certified amount ( 'the realisable recovery'). The rate of rejection is striking when compared with that for certified asset-backed contributions. We continue to see cases where the guarantor's position appears to only seriously be considered once selected for review through our assessment process, rather than prior to certification.
- 10.1.5 We therefore propose, from the 2018/19 levy year, to introduce a new requirement that a guarantor strength report, prepared by a professional adviser, is obtained by scheme trustees *prior to* certification, where the proposed reporting threshold applies. The report would specify a realisable recovery that could be appropriately certified. Whilst we recognise that this would lead to an increase in costs for some schemes (but not all - in some cases it is clear that a report of this kind is already prepared for the trustees), we believe there would be a significant benefit in terms of making the regime more risk-reflective. It would also enhance the assessment process by delivering increased certainty for trustees on what is expected of them when assessing the guarantor's position.

---

<sup>23</sup> For example, a guarantee for £100 million may have been given in relation to a scheme, but the Trustees may only be confident that the guarantor could pay £50 million on insolvency of the employer.

- 10.1.6 Submitted reports would then be reviewed by us on a straight pass/fail basis, looking at whether the report had been prepared by the certification deadline and whether it addressed the required issues and gave the required duty of care.

### **Reporting threshold**

- 10.1.7 We recognise that a requirement to base certification on a report would create additional administration for schemes. We therefore propose requiring this only where the realisable recovery is certified at £100 million or higher.
- 10.1.8 In principle, there is a case for the threshold to be more directly linked to the levy benefit secured. However, schemes would need certainty about whether or not there is a need to seek a report in advance of knowing the precise impact of certifying in levy terms (since underfunding or the relative scores of guarantor and employer could change up to 31 March each year). We are happy to consider stakeholder suggestions on any alternative approaches that would allow us capture this aspect.
- 10.1.9 Given the high value placed on these contingent assets certified at the realisable recovery threshold outlined above, it is reasonable to expect to see detailed evidence that the guarantor is sufficiently robust to justify certification at this level. This would also deliver fairness for other levy payers by ensuring that other schemes do not pay an increased levy through recognition of financially weak contingent assets.
- 10.1.10 Contingent assets falling outside the reporting threshold will continue to be assessed in the same way as in previous years ie, by considering the evidence provided by the trustees which they consider demonstrates that the guarantor can meet the realisable recovery in full. However it would be open to trustees to voluntarily obtain a report for consideration if they wish.
- 10.1.11 We would also look closely at contingent assets certified just below the £100 million threshold in the first year of a new reporting requirement, to ensure that schemes are not certifying financially questionable guarantees at just below the threshold.

**Q11: Do you have views on the proposed requirement for a guarantor strength report to be held by the trustees at the time of certification of Type A contingent assets? Do you have views on the proposed threshold of £100 million and are any alternatives we should consider?**

### **Issues to be covered in the guarantor strength report**

- 10.1.12 The overarching aim of the report would be to demonstrate how, in the event of employer insolvency, funds within the guarantor's group would flow back to the guarantor to enable it to meet the Realisable Recovery. We will update the Contingent Asset Guidance to reflect our intentions in this regard but a (non-exhaustive) list of issues we would expect to see addressed in the report include:
- (i) details of scheme structure (eg, is it sectionalised?) and how (if at all) this may impact on the guarantor's ability to meet the Realisable

Recovery;

- (ii) details of any other Type A contingent assets provided by the guarantor;
  - (iii) where inter-company amounts are to be relied on, details of how these funds would flow back to the guarantor in the event of employer insolvency;
  - (iv) details of any group debt facility or cash pool arrangement and how, on employer insolvency, these funds could be made available to the guarantor, together with details of the extent to which the guarantor would be competing with other entities for this resource on employer insolvency;
  - (v) a future forecast detailing planned activities/restructurings and how they may impact on the guarantor's position over the coming levy year or, if no impact is expected, an explanation why this is the case;
  - (vi) an assessment of the impact of employer insolvency on each asset which the guarantor would be reliant upon (eg, property, a cash pool, trade); and
  - (vii) details of the basis on which a valuation of assets to be relied on by the guarantor has been carried out.
- 10.1.13 If the adviser believed any of these issues were not relevant in the circumstances, they would explain why this is the case. Equally, there might well be other case-specific factors which would need addressing in the report.
- 10.1.14 The adviser would also be asked to declare that they have read our Contingent Asset Guidance and taken it into account in preparing the report. We would also require the adviser to provide a duty of care covering the levy reduction that would result from recognition of the contingent asset. The adviser would also be asked to confirm that they have professional indemnity cover in place, at a level comparable with that of advisers in the market in which they operate.
- 10.1.15 The proposed wording that would be included in the report would be as set out below:

*"Our advice is given for the purposes of informing the guarantor strength report to be provided by X adviser to the PPF Board and for the benefit of the XYZ trustee. It may be provided to and relied upon by the XYZ trustee. We also acknowledge that our advice will or may affect the amount of the PPF Levy which is collected by the PPF Board, and we accept a duty of care to the PPF Board in giving that advice, and further acknowledge that it may be relied upon for the purposes of calculating the PPF Levy (subject to the limits on liability set out at paragraph [X]). For the avoidance of doubt, we do not purport to exclude liability to the PPF Board, whether arising pursuant to the Pensions Act 2004 or otherwise."*

## **Contingent Asset Guidance**

- 10.1.16 We would update our Contingent Asset Guidance, to include details of the issues that we would expect to see covered in the report.

**Q12: Do you have suggestions on what updates to the contingent asset guidance you would expect from us to help them to meet the guarantor report requirements?**

### **Recertification of Type A contingent assets**

- 10.1.17 Trustees certifying within the reporting threshold would be required to complete a report with each recertification. This is on the basis that a guarantor's financial circumstances may fluctuate with time. Ultimately it would be the adviser's responsibility to consider the extent of change since the previous certification.

## **10.2 Levy benefit when a guarantor is also a scheme employer**

- 10.2.1 In response to feedback we have received from stakeholders, we are also considering changing the way in which we recognise Type A contingent assets where the guarantor is also a scheme employer.
- 10.2.2 Currently, guarantor-employers (as with other guarantors) are required to certify a Realisable Recovery covering the whole of the underfunding in order to achieve a full risk switch for the other employers. This in effect requires them to demonstrate that they can pay their own share of the liabilities on demand in addition to those of the other employers, at the point of another employers' insolvency. Whereas, to honour the guarantee they would only need to be able to cover the liability of the other employers and their ongoing contributions. An exception to this would be where the employer(s) failure implies failure of the guarantee.
- 10.2.3 We are therefore proposing a change to the existing formulae in paragraph 21 of the Contingent Asset Appendix, introducing a new component and drawing on data already provided for the levy calculation. Our proposed approach would calculate the guarantor-employer's share of the underfunding as an employer, using this as a new component in the calculation. The guarantor would therefore have two associated insolvency risks – one as an employer, and one as a guarantor. We would then:
- (a) order the guarantors in decreasing order of strength (as in the current formulae);
  - (b) for each guarantor, apply the new component relating to its capacity as an employer first, followed by the existing guarantor component; and
  - (c) apply each component against the underfunding until it is used up to the extent of the Realisable Recovery
- 10.2.4 A second option which we have considered is to simply divide up the underfunding in equal shares between all of the employers prior to the levy calculation. This would be conceptually simpler, and would provide the same outcome as the current approach of applying a weighted average levy rate to the whole of the underfunding.



- 10.2.5 Where a scheme had multiple guarantors, this second option would involve applying them in decreasing order of strength, with each individual guarantor being applied to each portion of the underfunding in the existing order of strongest to weakest guarantor.
- 10.2.6 However, the first option above is our preferred approach. This is on the basis that the second option would involve changing the calculation process for all schemes, irrespective of whether they had a Type A contingent asset or not, which may create uncertainty for schemes in how their invoice has been calculated.

**Q13: Do you have views on the two proposed options where a guarantor is also a scheme employer?**

**10.3 Guarantees with multiple guarantors**

- 10.3.1 Where more than one guarantor is a party to a single guarantee, our rules require that liability be joint and several, so that if one guarantor were in practice unable to meet all of the sum guaranteed, other guarantors are obliged to meet the obligation. This remains a fundamental element of our proposed levy rules.
- 10.3.2 However in certifying that the guarantors could meet the realisable recovery, the combination of a single realisable recovery and joint and several liability meant that the certification had to be limited by reference to the level of support that the weakest guarantor can provide. As a result, it has been suggested that schemes are receiving a lesser level of financial support from the guarantee.
- 10.3.3 We are considering therefore allowing trustees to certify a separate level of realisable recovery for each guarantor. For example a guarantee for £100 million could be certified in respect of three guarantors for realisable recovery amounts of £50 million for one and £25 million for two others. In the event of the guarantee being called on each guarantor would remain liable for the full amount guaranteed, capped by reference to the overall liability cap within the agreement. Schemes could continue to use a single agreement covering all of the guarantors, with each guarantor then being certified separately on the Pension Regulator's Exchange system for individual amounts under the agreement.
- 10.3.4 The levy benefit in respect of each guarantor would be based upon the realisable recovery amount certified.

**Q14: Do you support the proposal to allow trustees to certify different realisable recovery amounts for parental guarantees (Type A contingent assets) which have more than one guarantor?**

**10.4 Contingent Asset standard form agreements**

- 10.4.1 Now that our Contingent Assets have been in place for ten years, we are undertaking a comprehensive review of the drafting to ensure that they remain fit for purpose and that the wording of the agreements is as robust as possible. We have, for example, identified that in the case of Type A and Type B Contingent Assets, it might be argued that the wording of the cap on a guarantor/chargor's obligations could be interpreted in a way that limits those obligations in a manner that was not the original intention. Whilst we do not think this interpretation is the



correct one, we consider it appropriate to update the drafting as a matter of good order and for clarity.

- 10.4.2 We are expecting this review to result in updated standard forms of some, if not all, of the Contingent Assets, with the new forms being issued for the start of the Third Triennium. We expect that we will require any newly-certified Contingent Asset for the 2018/19 Levy Year to be in the new standard form (which is a change to our current requirement that a newly-certified Contingent Asset must be on the PPF standard form that was "live" at the point of the agreement being entered into).
- 10.4.3 We are also intending to require that existing Contingent Assets are amended or re-executed so that they are on the new standard terms, to ensure consistency across all Contingent Asset documents both existing and new. It is our expectation that agreements that are not re-executed/amended will not receive levy recognition.
- 10.4.4 This is a departure from our normal approach when updating standard form Contingent Asset documentation, but we are conscious that some Contingent Assets are still on standard forms that date from 2006 and that the suite of documents needs to be updated, and see this as an opportunity to take stock of our Contingent Assets and ensure that all Contingent Assets of the same type are agreed on the same terms.
- 10.4.5 We welcome views from stakeholders on:
- Their experiences of using the existing agreements, including enforcement of the agreements.
  - Any points in relating to the drafting of the agreements that we ought to consider within our review.
  - Any practical difficulties they may face around re-executing agreements, given that our intention is that Contingent Assets in the old standard forms will not be recognised for the 2018/19 Levy Year, and any suggestions on how these might be alleviated (in this regard, we recognise that the existing Contingent Asset standard forms may be used for purposes other than for PPF levy certification and that there may be wider considerations in play for schemes).
  - Whether a flexible timeframe would be appropriate for requiring re-execution – for example, whether recently-executed contingent assets should be given more time to move across to a new standard form.
  - Any issues that they envisage facing in terms of the Board's existing amendment/replacement criteria for putting in place new Contingent Asset arrangements – both in terms of the criteria in the standard forms themselves, and in terms of the Levy Rules.
  - Any comments on the manner of re-execution, including whether it would be preferable for existing Contingent Assets to be brought into line with the new standard forms by amendment and restatement of existing Contingent Asset documentation, or by entering into new Contingent Asset documentation in the new standard form. We expect this consideration to be particularly relevant for Type B(ii) Contingent

Assets (charges over property), where preserving first priority of the charge may mean that amendment of the existing agreement is appropriate.

**Q15: Do you have any suggestions on the drafting of the current standard form Contingent Asset documentation? Do you foresee any practical difficulties in re-executing agreements? Do you have views on issues to consider in setting a timeframe for re-execution?**

## **10.5 ABCs based on loan notes – treatment in future years**

- 10.5.1 In our 2016/17 levy consultation document, we stated that our review of ABCs for that levy year had highlighted the position of ABCs based on unsecured loan notes which, as a financial promise to the scheme, were closer in nature to a Type A contingent asset than to other ABC arrangements. We indicated that, although the number of certified ABCs based on loan notes was small, we would keep the position under review and, in particular, would consider bringing their treatment more closely into line with that of Type A contingent assets in future levy years.
- 10.5.2 We have undertaken an analysis of loan note ABCs certified for the 2016/17 levy year, and compared the levy reduction received through recognition as an ABC with the reduction had they been certified as a Type A contingent asset instead, with the certified ABC Value taken as a proxy for the Realisable Recovery. In all cases certifying as an ABC provided a greater discount, considerably so in several cases, even with a notional allocation of the guarantor/loan note provider to levy band 1.
- 10.5.3 Given our view that the risk profile of these arrangements is closer in nature to a Type A contingent asset than to other ABC arrangements, we consider that the current treatment of these arrangements in our levy rules is overly generous, and that there is justification for considering a change of treatment.
- 10.5.4 Currently, the recognised ABC Value is simply deducted from a scheme's underfunding when calculating its levy. We are considering whether this approach should be modified for loan note ABCs so that the ABC Value is reduced by an adjustment factor.
- 10.5.5 One option for setting the ABC adjustment factor would be to compare the levy discount which would result from recognition as an ABC with that which would result if we were to treat the ABC in the same way as a Type A contingent asset, with the ABC Value treated as being the notional Realisable Recovery. For administrative convenience and to minimise the impact of such an approach, one model could be to notionally assign the loan note provider to Levy Band 1 for the purposes of running the hypothetical Type A contingent asset calculation. Certified ABC Payments would be excluded from this comparison and would continue to be deducted from the underfunding without adjustment as currently. We would then compare the levy that would result through this treatment with the actual levy resulting from recognition as an ABC.
- 10.5.6 This approach would be expected to produce a smaller levy discount than treatment as an ABC.

- 10.5.7 Alternatively, we could consider introducing a requirement for loan note ABCs to be valued in a way which reflects the additional level of risk which they pose compared to other types of ABC arrangements.

**Q16: Do you have views on the options we set out on how we might better reflect the level of risk of the structure of loan note ABCs in the levy?**

## 11. Good Scheme Governance

### Scheme Governance

#### Work and Pensions Select Committee

- 11.1.1 The Work and Pensions Select Committee report on defined benefit pension schemes, published in December 2016, made specific recommendations with regard to the Pension Protection Levy and we report elsewhere on how we have addressed concerns about the insolvency risk assessment of SMEs and mutual entities (in sections 3 and 4 where we describe the review of the Experian model).
- 11.1.2 The report also recommended that ‘the PPF re-examine how the levy framework could incentivise schemes to improve scheme governance. Any such good governance discount would need to be based upon objective and transparent criteria that are demonstrably associated with positive outcomes for members and that complement the levy model’s calculation of insolvency risk’.
- 11.1.3 The Select Committee report identified a number of issues:
- Concern that retired members’ interests may not be appropriately protected if current employees dominate trustee positions.
  - Potential conflicts of interest for employer nominated trustees (one stakeholder suggested at least 50 per cent member representation).
  - It noted TPR powers to remove and replace trustees with independent trustees or to add independent trustees to Pension Scheme Boards.
  - It noted considerable improvement in pension fund governance in past decade but that many remain poorly governed. This could impact on the speed of decision making in areas such as investment opportunities.
  - PLSA had reported research which shows that good governance can increase a fund’s value by up to 1 per cent a year – and fulfilling best practice could improve performance margins by 2 per cent or more over benchmarks.
- 11.1.4 The report stated that “As well run pension schemes represent a lower risk, the PPF levy provides one possible lever to incentivise schemes and their sponsors to adopt best practice”.
- 11.1.5 The report recognised that there were considerable challenges to incentivising good governance behaviour but suggested that an option might be to offer a small levy discount for large schemes that met a good governance standard.
- 11.1.6 The Work and Pensions Select Committee has also published its response to the Government’s consultation on corporate governance. Its key recommendations focus on employer governance but there is some read across to scheme governance. Their recommendations are:
- The Financial Reporting Council Corporate Governance Code should be extended to large private companies and those with responsibility for over 5,000 defined benefit pension scheme members

- Pension scheme trustees should be amongst the stakeholders that company directors must have regard for in the course of their duties
- Future Insolvency Service reports should be published when there is significant public interest.

## 11.2 Our earlier review of good governance

- 11.2.1 As part of the preliminary work on developing the New Levy Framework (covering the first levy triennium from 2012/13 to 2014/15), we examined with the Industry Steering Group of stakeholders whether good governance should be recognised in the levy.
- 11.2.2 We commissioned Mercer Consulting in 2010 to produce a report evaluating options. Mercer examined the wider experience of recognising good governance across similar organisations to PPF, regulators and voluntary self-governance arrangements, such as the NAPF (now PLSA) Quality Mark.
- 11.2.3 The report found that trustees were able to do little about the risk of scheme sponsor insolvency (though they would want to understand and monitor the strength of their employer covenant) and so focussed on the extent to which good governance reduced funding and investment risks. Risk mitigating actions and activities in these areas could be identified (such as regular trustee meetings and discussions of these risks) and further evidence of good governance could be taken from an assessment of trustee competence, investment knowledge, and monitoring and adherence to TPR codes of practice. However, it is clearly difficult to assess these areas without detailed disclosure and scrutiny. For example it is difficult to measure the quality of discussion, management of conflicts of interest and extent to which advice was taken, understood and challenged.
- 11.2.4 In assessing whether any discount is merited the report noted, however, that the outcomes of good governance in the areas of funding and investment (eg, an improved scheme funding position) are already reflected and rewarded in the levy calculation through the assessment of underfunding and the investment risk calculation.
- 11.2.5 More generally, the report found that providing financial rewards for good governance was not a common approach. The nearest equivalent they could identify was that the FSA (with respect to the ARROW framework and Pillar 2 assessment) had a model that included a qualitative assessment of governance in setting capital requirements<sup>24</sup> - but this was with a much smaller group of institutions assessed and with significant monitoring resources employed.
- 11.2.6 The report also noted that Australia had strict trustee certification requirements but if the UK wanted to move to a similar model it would need legislation and regulation.
- 11.2.7 A number of other stakeholders in the defined benefit pensions area have also been considering the issue of scheme governance. The Pensions and Lifetime Savings Association (PLSA) has established the Defined Benefit

---

<sup>24</sup> The FSA were able to either reduce the requirement for capital holdings by 10% if a regulated firm was considered low-risk, or increase it by up to 50% if high risk.

(DB) Taskforce which has considered governance as one of a number of important issues for DB schemes. In their interim report they identified that a beneficial side effect of increased scheme consolidation was likely to be improved governance. One of the reasons for this was that consolidated schemes were better able to leverage high quality advice in areas including investment.

### **Identifying and measuring good governance**

- 11.2.8 In addition to establishing clear evidence that good governance reduces risk to the PPF (and being clear which aspects of governance are most critical for those purposes), we would also need to establish an effective mechanism for “measuring” good governance, and identifying those schemes that have strong governance systems in place meriting a levy discount.
- 11.2.9 In their report Mercer explored three potential approaches:
- a) a simple checklist arrangement that could be provided through Exchange;
  - b) detailed disclosure and certification on a voluntary basis, or
  - c) developing the existing regulatory framework further first, rather than recognising governance through the levy immediately.
- 11.2.10 A number of complicating factors were identified. Trustees have a fiduciary responsibility but the sponsor has the money and power. Effective governance is not solely the responsibility of the trustees. And, critically, effective governance was as much about behaviours as process. This made simple approaches to measurement unreliable. And more complex assessment would be expensive to implement, including for those assessed.
- 11.2.11 The report recommended that (c) above was the best option which would need PPF to work with TPR, who would own any regulation around governance, if there was a desire to implement it in the longer term.
- 11.2.12 We set out the three options above in a consultation exercise in October 2010. We indicated that while we believed that good governance should be encouraged, we were not at that time persuaded that the levy was the appropriate mechanism by which to do so, and so would not explore the matter further unless there was strong support from stakeholders. The majority of stakeholders agreed and we concluded there was no case for developing this idea further at that time.

### **Developments in good scheme governance since 2010**

- 11.2.13 Last year TPR focussed on the issue of scheme governance in their consultation on a 21st Century Trustee, publishing their response in December. They reported that while good governance was seen as essential to delivering good member outcomes and there was support for improved standards, stakeholders were concerned that unnecessary regulation might be introduced impacting well run schemes. TPR were asked to focus on supporting schemes that needed it through education and targeting the use of enforcement powers on poorly run schemes.

11.2.14 TPR's response to the consultation highlighted that many respondents to their consultation felt that there should be an alignment of the requirement to report on compliance with governance requirements across trustees of DC and DB schemes, but that,

*"It should fit within existing reporting frameworks, be designed so that it adds value, should not end up as a box-ticking exercise, and should be tailored to the specific nature of DB schemes."*

11.2.15 Looking forward TPR set out their intentions to drive up standards of governance and administration by:

- *"more targeted education and tools to raise the standards of poor trustees*
- *setting out clearly what we mean in practice by the higher standards we already expect of professional trustees and the specific qualities and skills we expect chairs to bring to trustee boards*
- *tougher enforcement against trustees who fail to meet the required standards".*

11.2.16 TPR also explained in their response to the consultation that they were considering the best framework for reporting on standards of governance, either through scheme return reporting or formal governance statements. One option could be the development of Chair's statements for DB schemes (referred to in the recent DWP Green Paper<sup>25</sup>) which are already required for DC schemes and include details of the scheme's investment strategy, how trustees have met the legislative requirements for trustee knowledge and understanding and prompt and efficient processing of financial decisions. TPR's work in this area is designed to improve scheme governance broadly and is not focussed on developing a single measure of governance and nor one that is specific to areas of governance that may reduce risks to the PPF.

11.2.17 Some accredited standards do already exist for schemes. The PLSA's Pension Quality Mark (PQM) includes standards of good governance and the Pensions Administration Standards Association (PASA) are reviewing the scope of their accreditation which currently focusses on good quality administration. While a range of approaches can help to improve scheme governance, it's not clear that the type of standards developed so far have a sufficiently clear and measurable link to risk reduction for the PPF to justify a reduction in the risk-based levy as a result.

### **Good Governance and the Levy**

11.2.18 We agree that good scheme governance, which balances the interests of different groups of members, holds employers to account and effectively manages scheme investment strategy, is of critical importance to delivering positive outcomes for pension scheme members. And we are supportive of the initiatives a range of organisations are taking to looking at ways to encourage and promote good and best practice. There appear to be significant difficulties at present with incorporating governance into the levy framework. We are therefore keen to hear if stakeholders can

---

<sup>25</sup> Security and Sustainability in Defined Benefit Pension Schemes



suggest a basis on which to link recognition of good governance to reduced risk in one or more of the levy factors.

- 11.2.19 The risk-based levy seeks to assess the risks posed by schemes to the PPF and we are constrained by legislation in terms of what can be taken into account. Good governance itself is not currently one of the factors set out in legislation on which the PPF is able to base the rules for the risk based levy. As a result, in order to provide any recognition for good governance in the levy we would need to have clear evidence that it contributes to one of the risk factors already set out in legislation. Specifically we would need to be able to show that good governance led to :
- (i) a demonstrable reduction in scheme sponsors' insolvency risk,
  - (ii) a reduction in the size of the funding shortfall in the event of an employer insolvency event; or
  - (iii) a reduction in the risks associated with the nature of a scheme's investments when compared with the nature of its liabilities.
- 11.2.20 If good governance cannot be said to fit into one of the above categories, a new factor for setting the levy would require legislation before we could incorporate it into our levy framework.
- 11.2.21 We are therefore seeking stakeholder suggestions as to how we could measure good governance that is linked to a reduction in risk in such a way and
- does not create unintended incentives, i.e. avoids encouraging a tick box approach but focusses on behaviours that make a substantive difference;
  - does not create administrative burdens for schemes to prove they are meeting required standards and is easy to administer/verify, or
  - is not so widely available that it does not differentiate between schemes with different governance standards (ie, if the majority of schemes qualify for a discount it would be counteracted by an increased levy scaling factor to ensure the required levy estimate is raised).

### Consultation Questions

**Q17: Do you have views and/or evidence on the extent to which good governance leads to a reduction in risk, of one or more of the factors allowed for in legislation, to the PPF? If so are there particular aspects of governance that should be focused on for the purposes of awarding any levy discount?**

**Q18: Do you have proposals for the identification and measurement of good governance sufficiently linked to a reduction in risk for the PPF that meet the broad aims of avoiding a tick box approach, avoid administrative burdens and are not designed to be widely available? Do you have suggestions on who should administer such a process and how?**



## 12. Consultation Arrangements and Key Dates

### 1.2 Third Triennium Consultation

- 1.2.1 The consultation on the Third Triennium runs from 23 March 2017 to 5pm on 15 May 2017. 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](mailto:consultation@ppf.gsi.gov.uk)

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

- 1.2.2 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.
- 1.2.3 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.
- 1.2.4 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:  
<https://www.gov.uk/make-a-freedom-of-information-request/the-freedom-of-information-act>
- 1.2.5 A summary of responses and the Board's final Determination and confirmed policy are planned to be published on the PPF website at:  
<http://www.pensionprotectionfund.org.uk> in due course.

### 1.3 Comments on the Consultation Arrangements

- 1.3.1 Where the principles are appropriate to our status as a Public Corporation, we aim to conduct our consultations 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>
- 1.3.2 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](mailto:Richard.williams@ppf.gsi.gov.uk)

**Deadline for consultation responses is 17:00 on  
15 May 2017.**

## Legal notice - CreditModel™ Financial Institutions

Copyright © 2017 by S&P Global Market Intelligence, a division of S&P Global Inc. All rights reserved.

These materials have been prepared solely for information purposes based upon information generally available to the public and from sources believed to be reliable. No content (including index data, ratings, credit-related analyses and data, research, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P Global Market Intelligence or its affiliates (collectively, S&P Global). The Content shall not be used for any unlawful or unauthorized purposes. S&P Global and any third-party providers, (collectively S&P Global Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Global Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON "AS IS" BASIS. S&P GLOBAL PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Global Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

S&P Global Market Intelligence's opinions, quotes and credit-related and other analyses are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Global Market Intelligence assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P Global Market Intelligence does not act as a fiduciary or an investment advisor except where registered as such. S&P Global keeps certain activities of its divisions separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions of S&P Global may have information that is not available to other S&P Global divisions. S&P Global has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P Global Ratings does not contribute to or participate in the creation of credit scores generated by S&P Global Market Intelligence. Lowercase nomenclature is used to differentiate S&P Global Market Intelligence PD credit model scores from the credit ratings issued by S&P Global Ratings.

S&P Global may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P Global reserves the right to disseminate its opinions and analyses. S&P Global's public ratings and analyses are made available on its Web sites, [www.standardandpoors.com](http://www.standardandpoors.com) (free of charge), and [www.ratingsdirect.com](http://www.ratingsdirect.com) and [www.globalcreditportal.com](http://www.globalcreditportal.com) (subscription), and may be distributed through other means, including via S&P Global publications and third-party redistributors. Additional information about our ratings fees is available at [www.standardandpoors.com/usratingsfees](http://www.standardandpoors.com/usratingsfees).