

Pension
Protection
Fund

The Consultation on the Future Development of the Pension Protection Levy

August 2007

Foreword

The Board of the Pension Protection Fund has demonstrated its commitment to open and transparent consultation, and this has been evident in driving the development of the pension protection levy. Previous consultations have informed the Board's strategy on the use of contingent assets, the possible inclusion of investment risk as a risk factor in the risk based levy, and adjusting aspects of the application of the D&B methodology. As a result of your responses to previous consultations we have made significant changes to improve the balance between simplicity, fairness and proportionality, and to enhance the appropriateness of the levy calculation for your schemes.

We are consulting on proposals for the development of the levy over a number of years beginning with 2008/09. These proposals are important to the evolution of the levy. You will notice a common thread uniting them – greater stability and certainty for levy payers. The need for stability of the levy estimate over time, and individual scheme bills, is a key stakeholder concern. The ideas in this document are designed to address previous stakeholder feedback while building our strength as a financial institution, and thus safeguarding the security of scheme members.

The commitment of the Board to publicise key areas of policy development is set to continue in support of this consultation. We will be travelling around the country holding interactive regional seminars during the first two weeks of September. I'm excited to be taking part. This is an opportunity for you to engage directly with us in advance of the deadline for submission of responses, and I strongly encourage you to attend.

I look forward to meeting as many of you as possible, and continuing to work closely and constructively with all PPF stakeholders.

Partha Dasgupta
Chief Executive
Board of the Pension Protection Fund

Contents

Chapter 1 – Introduction and Executive Summary	5
1.1 INTRODUCTION	5
1.2 THE BOARD’S PROPOSALS	5
1.3 EVOLUTION OF THE PENSION PROTECTION LEVY.....	6
1.4 MEASUREMENT DATE OF RISK FACTORS	7
1.5 INSOLVENCY RISK.....	8
1.6 UNDERFUNDING RISK.....	8
1.7 LEVY WAIVER AND ELIGIBILITY POLICY	8
1.8 THE TIMETABLE FOR CONSULTATION ON THE BOARD’S PROPOSALS.....	9
Chapter 2 – Evolution of the pension protection levy	10
2.0 CHAPTER SUMMARY	10
2.1 INTRODUCTION	10
2.2 STABILITY OF THE LEVY	11
2.3 REFINING THE BOARD’S APPROACH TO THE LEVY	12
2.4 LONG TERM RISK MODEL	13
2.5 LEVY DISTRIBUTION	15
2.6 USING MULTIPLE SCALING FACTORS	20
2.7 HEDGING/RE-INSURANCE	22
2.8 QUESTIONS ON WHAT YOU HAVE READ IN THIS CHAPTER	23
Chapter 3 – Measurement date of risk factors	25
3.0 CHAPTER SUMMARY	25
3.1 INTRODUCTION	25
3.2 CHANGING THE DATE AT WHICH WE CALCULATE THE LEVY RISK FACTORS AND THE DEADLINE FOR SUBMISSION OF DATA	25
3.3 ADVANTAGES OF CHANGING MEASUREMENT DATES	28
3.4 DISADVANTAGES OF CHANGING MEASUREMENT DATES	29
3.5 ELECTRONIC DATA SUBMISSION	30
3.6 QUESTIONS ON WHAT YOU HAVE READ IN THIS CHAPTER	31
Chapter 4 – Insolvency Risk	32
4.0 CHAPTER SUMMARY.....	32
4.1 INSOLVENCY RISK PROVIDER CONTRACT.....	32
4.2 REVISED D&B FAILURE SCORE METHODOLOGY	34
4.3 CALCULATING THE INSOLVENCY RISK FACTOR	35
4.4 USING LONG TERM PROBABILITIES OF INSOLVENCY IN FUTURE LEVY YEARS.....	35
4.5 QUESTIONS ON WHAT YOU HAVE READ IN THIS CHAPTER	37
Chapter 5 – Underfunding and Contingent Assets	39
5.0 CHAPTER SUMMARY	39
5.1 INTRODUCTION	39
5.2 STATUTORY DEADLINE FOR THE SUBMISSION OF A FIRST SECTION 179 VALUATION	39
5.3 CALCULATING UNDERFUNDING RISK FOR THE 2008/09 AND 2009/10 LEVY YEARS	40
5.4 CONTINGENT ASSETS.....	42
5.5 USING A LONGER TERM MEASURE OF UNDERFUNDING IN FUTURE LEVY YEARS.....	43
5.6 QUESTIONS ON WHAT YOU HAVE READ IN THIS CHAPTER	43
Chapter 6 – Levy Waiver and eligibility policy	45
6.0 CHAPTER SUMMARY	45
6.1 INTRODUCTION	45
6.2 SCHEMES IN ASSESSMENT	45
6.3 TREATMENT OF ANNUITY CONTRACTS.....	46
6.4 QUESTIONS ON WHAT YOU HAVE READ IN THIS CHAPTER	46

Chapter 7 – The Consultation Process	48
7.0 RESPONDING TO THE CONSULTATION	48
7.1 ARRANGEMENTS FOR WRITTEN SUBMISSIONS	48
7.2 PUBLISHING A SUMMARY OF RESPONSES.....	49
Annex A –Revised D&B Failure Score Methodology	50
Annex B – 2008/09 and 2009/10 Insolvency Probability Table	53
Annex C –Old v New Failure Score Probability Mappings	54
Annex D – Suggested Selection Criteria For An Insolvency Risk Provider	55
Annex E - Appealing/reviewing the levy calculation.....	56
E.0 SUMMARY	56
E.1 INTRODUCTION	56
E.2 SEEKING A REVIEW OF THE LEVY AMOUNT.....	57
E.3 APPEALING THE D&B FAILURE SCORE	57
Annex F – Levy formula	60

Chapter 1 – Introduction and Executive Summary

1.1 Introduction

- 1.1.1 The Board of the Pension Protection Fund is a statutory corporation established under the provisions of the Pensions Act 2004, and became operational on 6 April 2005. The Pension Protection Fund (PPF) has been established to pay compensation to members of occupational defined benefit and hybrid pension schemes, following an insolvency event of the sponsoring employer where there are insufficient assets to pay a PPF level of compensation.
- 1.1.2 To date over 7,000 members of 10 schemes have transferred to the PPF. These individuals are either currently receiving compensation payments because they have retired or will do so at a future date. These compensation payments are mainly funded by the assets inherited from schemes for which the PPF has assumed responsibility (often enhanced by recoveries of assets from the insolvent employer), partly by investment income, and partly by an annual levy raised from eligible pension schemes.
- 1.1.3 In the 2006/07 levy year the Board charged the first pension protection levy, which was composed of two parts: a scheme based levy, and a levy based on the risk posed by an eligible scheme to the PPF.
- 1.1.4 The Board consulted on its proposals for calculating the 2006/07 pension protection levy and on the minor changes that were made to that approach for 2007/08.
- 1.1.5 The Board has taken the decision to move away from the approach we have taken to consultation to date (consulting on one year's levy calculation at a time). This document therefore contains the Board's proposed changes to the way the levy is calculated for the next three years, as well as early thoughts on the direction of travel for 2010/11 and beyond.
- 1.1.6 The Board will hold a series of seminars throughout the UK at which stakeholders will have an opportunity to meet with senior PPF staff involved in the development of these proposals. You will find further details, including the dates and locations of these workshops, on the PPF website and in the industry press. We would encourage those of you with views on the contents of this consultation document to attend.

1.2 The Board's proposals

- 1.2.1 When the Board published 'The 2007/08 Pension Protection Levy Consultation document – September 2006', it stated it would undertake a comprehensive review of the levy calculation. This was following an initial period of two years, during which the original approach would be given the opportunity to bed down.

1.2.2 Based on the feedback we had received from levy payers on the introduction and implementation of the levy, we set about reviewing the options for change based on the following objectives:

- Increasing stability and certainty for levy payers;
- Improving the fit between the way the total levy estimate is distributed between all eligible schemes and the theoretical levy produced by our Long Term Risk Model (LTRM);
- Managing cross subsidy;
- Reviewing the effectiveness and the take up of the Board's incentives package, and proposing adjustments;
- Balancing implementation costs and transitional challenges against the benefits of change.

1.2.3 The Board has also continued to assess potential changes using its three core principles for levy calculation of:

- Fairness - Ensuring schemes pay a levy reflecting the level of risk they pose and thereby providing an incentive to reduce that risk;
- Proportionality – Aiming to strike the right balance between affordability for levy payers and security for scheme members;
- Simplicity - Applying tried, simple and effective market solutions to collect the data required to calculate levies

1.2.4 This document sets out the Board's conclusions taken from that review and thus the changes that we propose be made to the way in which the levy is calculated for 2008/09 and years beyond.

1.2.5 In summary, the changes we propose to make are set out under the headings which follow.

1.3 Evolution of the pension protection levy

1.3.1 Stakeholders have emphasised the desire for stability in the levy estimate and their individual bills, as well as the importance of knowing the amount of their individual bills in advance of the start of the levy year.

1.3.2 In response to this the Board is proposing to maintain a stable levy estimate (allowing for indexation) for the next three years, subject to there being no significant change in long-term risk exposure.

1.3.3 While volatility of individual bills is innate to a risk based approach, the Board is proposing a number of actions that should lead to a reduction in the volatility of individual bills in the short term, including:

- Setting a stable levy estimate for the next three levy years;
- Collecting an amount each year that is closer to the levy estimate, and
- Changing the levy distribution parameters to manage the level of cross-subsidy between stronger schemes and weaker schemes.

1.3.4 The Board is keen to share principles and ideas concerning the evolution of the levy, improving the fit between the way the total levy estimate is distributed between all eligible schemes and the theoretical levy produced by the Long Term Risk Model. Such a move should lead to:

- Greater alignment between the levy estimate and levy distribution formula;
- Fairer allocation of levy costs to stronger and weaker credit quality schemes and those with higher or lower asset volatilities relative to liabilities;
- Reduced volatility of individual levies year on year, and
- A more stable scaling factor.

1.3.5 In addition to evolving the levy distribution formula to take into account longer term measures of underfunding and insolvency and to allocate catastrophe risk, a further refinement could be made to the way the scaling factor is calculated, with separate scaling factors calculated for different categories of scheme reflecting their different contributions to the levy estimate and long-term risk, particularly catastrophe risk.

1.3.6 Again, any developments in the medium term are designed to create stability for levy payers, while remaining true to the principles of fairness, proportionality and simplicity outlined above.

1.4 Measurement date of risk factors

1.4.1 To enable schemes to have greater certainty and advance notice of their individual bills it is proposed to bring forward the date of calculation of the risk factors and the deadline by which all data will be collected to a date 12 months before the start of the relevant levy year. As a result, schemes would then know from November, following the publication of the levy estimate and scaling factor, what their individual levy bill would be for the following year, aiding financial planning. It is proposed that this change would take effect from the 2009/10 levy year.

1.5 Insolvency risk

1.5.1 For the 2008/09 and 2009/10 levy years the PPF will adopt the revised failure score methodology currently being rolled out by D&B. The revised methodology addresses many of the issues raised by schemes and employers over the last two years including:

- The failure score is no longer overridden where a company has negative net worth;
- The rulings concerning CCJs have been amended broadly in line with the approach taken by the PPF in 2007/08;
- Separate score cards have been produced for commercial and non-commercial organisations;
- The probabilities of insolvency have been recalibrated to reflect the most recent insolvency experience, and
- Finer grading is applied to those employers that represent the lowest insolvency risk.

1.5.2 For 2010/11 and beyond, in line with EU procurement law, the Board will be undertaking a tender exercise to appoint an insolvency risk provider. As well as seeking views on the possible selection criteria, the Board is also consulting on the possibility of introducing more than one insolvency risk provider, and the use of longer term proposals to align risk measurement with the approach taken in the Long Term Risk Model.

1.6 Underfunding risk

1.6.1 With the Pension Protection Fund (Miscellaneous Amendments) Regulations coming into force on 6 April 2007, all eligible schemes are now required by law to submit their first section 179 valuation to the Board by 31 March 2008. This means that the Board will no longer need to rely on approximations based on the roll forward of historic MFR valuations.

1.7 Levy waiver and eligibility policy

1.7.1 When a scheme in assessment is funded above PPF levels, but is not rescued, paying the pension protection levy will lead to lower annuities for scheme members. Also, when a scheme in assessment is funded close to PPF levels, there is a risk that the extra burden of the levy could lead to its entry into the PPF. The Board does not believe that this is in the interests of scheme members or levy payers, and as such believes that there are convincing arguments to waive all PPF levies for schemes in assessment. However, the Board would look to recover levies waived during assessment where a scheme is ultimately rescued and remains an ongoing risk to the Fund.

1.7.2 The Board is also seeking views on the treatment of annuity contracts in the levy, as schemes with such contracts pose a very low risk to the PPF since the assets and liabilities are matched.

1.8 The timetable for consultation on the Board's proposals

1.8.1 The publication of this consultation document will be followed by an 8 week consultation period ending on **3 October 2007**.

1.8.2 The views of scheme trustees, sponsoring employers and their advisers on the proposals in this consultation document are extremely important to the Board. Details on how to respond can be found in Chapter 7.

1.8.3 The Board intends to publish a summary of consultation responses in autumn 2007 together with the Board's draft Determination under section 175(5) of the Pensions Act 2004 for the 2008/09 levy year.

Chapter 2 – Evolution of the pension protection levy

2.0 Chapter summary

This chapter sets out the Board's broad intention to maintain a stable overall levy estimate over the next three levy years (subject to there being no significant change in risk exposure). It also outlines the Board's initial thoughts as to how the levy calculation can be developed to improve the fit between the way the total levy estimate is distributed between all eligible schemes and the theoretical levy produced by our Long Term Risk Model. These are embryonic proposals, and we are looking forward to your comments on these proposals, and your views on a reasonable timeframe for introduction.

2.1 Introduction

- 2.1.1 In 2005/06 each PPF eligible scheme was charged a levy proportional to its number of members. The total amount and formula for this initial levy was set by the Secretary of State for Work and Pensions.
- 2.1.2 The Board consulted in July 2005 on the introduction of the pension protection levy in 2006/07. Over 220 stakeholders responded to this consultation. Those who responded supported an early introduction of a risk based levy and agreed that the principles of fairness, proportionality and simplicity should underpin the Board's approach to the levy. The Board issued a consultation update in October 2005 indicating that it would refine its proposals to take into account stakeholder feedback on the importance of recognition of contingent assets and deficit reduction contributions.
- 2.1.3 In December 2005 the Board set a 2006/07 pension protection levy estimate of £575m based on its Long Term Risk Model (LTRM). The Board also fixed and published the final scaling factor for the 2006/07 levy year. It charged schemes a levy based on a formula that reflected the mandatory risk factors included in the Pensions Act 2004: risk of insolvency and risk of underfunding (taking into account the impact of deficit reduction contributions), and an additional risk factor: contingent assets. The Board set a deadline for data and the measurement date for the risk factors of 31 March 2006.
- 2.1.4 The Board under-collected the levy in 2006/07 compared to its levy estimate as a result of fixing the levy scaling factor in December 2005 while measuring risk using data at 31 March 2006. A proportion of the under-collection reflected the impact of deficit reduction contributions and contingent assets in response to the Board's incentive programme. However, changes in short term risk (insolvency risk, market movements) and the impact of large volumes of better data from schemes significantly reduced the amount of risk based levy collected.

- 2.1.5 In December 2006 the Board set a levy estimate of £675m for 2007/08. The Board decided to increase the levy estimate by £100m to reflect the impact of under-collecting the 2006/07 levy estimate. The Board published a provisional scaling factor in December 2006 and stated that it would publish a final scaling factor in April 2007 for the 2007/08 levy year. The deadline for data was set at 30 March 2007, but the measurement date of underfunding risk was moved to 31 October 2006, while the date of insolvency measurement was kept at 30 March 2007.
- 2.1.6 This change in approach was designed to reduce the likelihood of collecting an amount different from the Board's levy estimate, except for the impact of contingent assets and deficit reduction contributions. However, a consequence of this approach is that it increases uncertainty for levy payers and makes it necessary for schemes to take decisions without knowing fully the consequences of their impact. This is exacerbated by the fact that risk factors are measured so close to the start of the levy year. These issues are addressed in chapter 3.
- 2.1.7 Also in December 2006 the Board published a consultation on the inclusion of investment risk as a factor in the calculation of the risk based levy. The Pensions Act 2004 included this as an optional factor for the Board to take into account when setting an individual scheme's risk based levy. The Board weighed up the arguments for and against and, on balance, recommended that there was not a sufficiently strong argument for making such a change to the levy distribution formula at this point in time. This view was endorsed by a majority of stakeholders who responded to the consultation.

2.2 Stability of the levy

- 2.2.1 Stakeholders have emphasised the desire for stability in the levy estimate and in their individual levy bills, as well as the importance of knowing the amount of their individual bills in advance of the start of the levy year, and for these amounts to be fair and proportionate.
- 2.2.2 Some levy payers have asked why the Board can't provide an indication of the levy estimate for a number of years into the future. Given the complex nature of the risk facing the Board, including a requirement to judge the impact of both qualitative and quantitative factors, it has been difficult to do this with any degree of confidence to date.
- 2.2.3 The Board's view of long term risk has remained fairly stable over the last two years. The data used in the model is now more comprehensive than ever due to the number of schemes that have provided up-to-date valuation information. The Long Term Risk Model used by the Board has evolved significantly since 2005 benefiting from collaboration with external experts in the fields of actuarial science, credit risk modelling and financial modelling. The model has also been subject to external

audit. These factors enable the Board to express its broad intention to maintain a stable levy estimate (allowing for indexation) for the next three years, subject to there being no significant change in long term risk exposure.

- 2.2.4 The volatility of individual bills is innate to a risk based approach, but is compounded by the current approach to levy distribution, based on short term rather than long term risk, and the potential unintended consequences of the incentive scheme, as well as the cap benefiting the weakest schemes. The additional distribution parameters (the risk based levy cap, the upper funding limit above which no risk based levy is payable and the funding level above which the amount of risk based levy payable becomes a set percentage of liabilities) are fixed in advance. This means that we are unable to change these parameters to reflect significant improvements or deteriorations in market conditions, which could lead to a disproportionate re-distribution of significant amounts of levy.
- 2.2.5 The following actions should reduce the amount of volatility in individual bills in the short term:
- Setting a stable levy estimate for the next three levy years;
 - Collecting an amount each year that is close to the levy estimate, and
 - Changing the levy distribution parameters to manage the level of cross subsidy between stronger schemes and weaker schemes (see chapter 5).

2.3 Refining the Board's approach to the levy

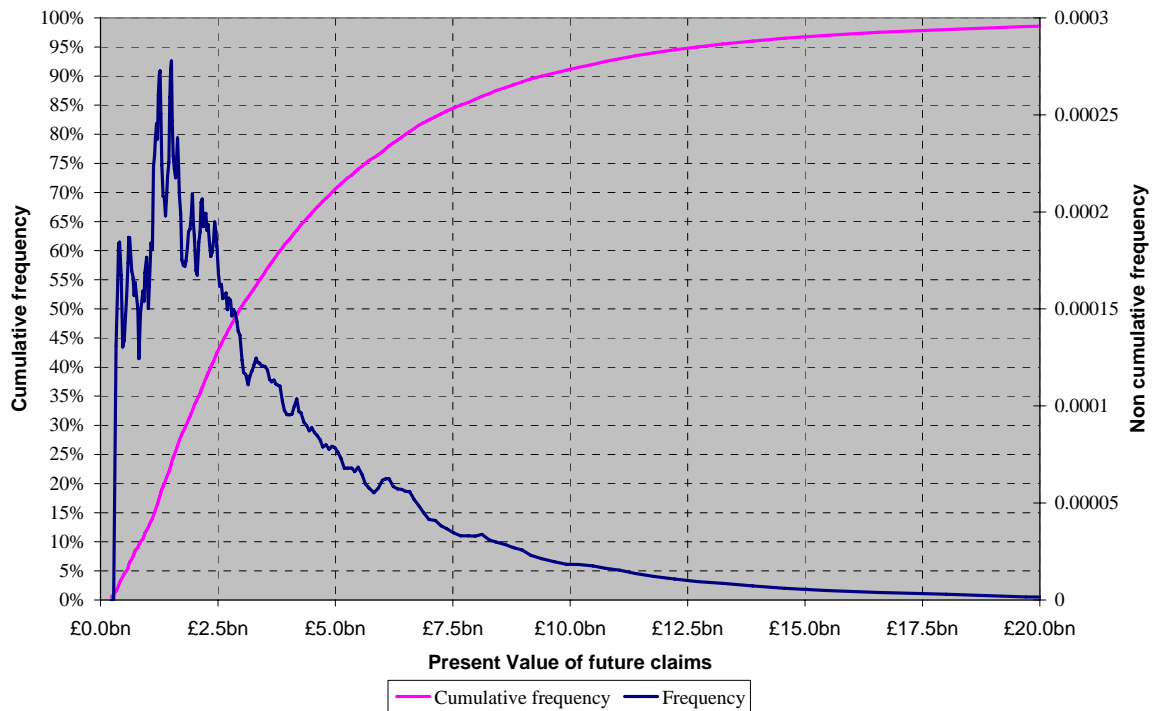
- 2.3.1 The Board has previously communicated its intention to undertake a comprehensive review of the levy calculation following an initial period of two levy years, during which the original proposals for levy calculation would be given the opportunity to bed down.
- 2.3.2 The Board has indicated that any subsequent refinements to the levy would reflect an evolution of ideas, data and views, building upon early years' experience, rather than a wholesale revolution. Implementing a system that is administratively simple and economically fair is challenging and any changes need to result in significant utility for levy payers and provide genuine additional insight on the risks posed to the PPF.
- 2.3.3 It is broadly the case that more minor changes or changes that have already been under consideration for some time will be implemented for the 2008/09 levy year, as outlined in later chapters of this consultation document. As set out above, these include changes to create stability for levy payers in the short term.

- 2.3.4 The Board is keen to share principles and ideas concerning the evolution of the levy that could be considered as “green paper” thinking, but which the Board is keen to solicit views and build on, with the speed of development linked to the appetite of stakeholders. These are designed to create stability for levy payers in the medium term. Our current assumption is that any broad changes could take effect for the 2010/11 levy year, with a proposed measurement date of 31 March 2009. We are mindful that any earlier introduction may pose a significant burden on both stakeholders and the PPF. This timetable also takes into account the possibility that the Board may have appointed an alternative or additional insolvency risk provider. The Board is keen to ensure that changes have sufficient lead time, learning from the experience of the first two years.
- 2.3.5 The objectives we propose for considering options within the review are as follows:
- Improving the fit between the way the total levy estimate is distributed between all eligible schemes and the theoretical levy produced by our Long Term Risk Model (LTRM);
 - Managing cross subsidy;
 - Reviewing the effectiveness and the take up of the Board’s incentives package, and proposing adjustments;
 - Balancing implementation costs and transitional challenges against the benefits of change, and
 - Continue to emphasise the principles of fairness, simplicity and proportionality.

2.4 Long Term Risk Model

- 2.4.1 The PPF is exposed to a unique combination of insolvency risk, market risk and longevity risk. It is not a commercial insurer and so does not have the ability to choose the risks that it does or does not underwrite. This is because eligibility for protection is prescribed by rules in the Pensions Act 2004 and associated regulations.
- 2.4.2 The levy estimate is set using the policy framework described in the 2007/08 Pension Protection Levy Estimate Consultation Document, informed by the results of the PPF’s Long Term Risk Model (LTRM), but is ultimately a matter of judgment for the members of the Board taking into consideration both qualitative and quantitative factors.
- 2.4.3 Some levy payers have expressed an interest in the model used to help set the levy estimate. Therefore, in August 2007 the PPF published “Modelling uncertainty: an introduction to the PPF Long Term Risk Model”. This is an information paper providing background to the modelling approach taken by the PPF to estimate the claims it might experience over the medium term, and the impact on its balance sheet.

- 2.4.4 Exposing the model to public scrutiny in parallel with this consultation process is consistent with the Board's transparent approach to policy development. This could potentially provide the Board with ideas to develop and refine the model, and provides an opportunity to stress test some of the behavioural assumptions (longevity, scheme funding, investment strategy and scheme closure), and influence the choice of base case and key alternatives when setting the levy estimate.
- 2.4.5 This should give our stakeholders a better understanding of our long term approach to measuring risk and aid understanding of the impact and relative contribution of different factors (controllable and non-controllable) on the levy estimate. Most significantly, it allows external professional scrutiny of the assumptions underlying the model, to promote confidence that the long term risk is appropriately assessed.
- 2.4.6 The LTRM estimates the frequency (or likelihood) of different claim sizes over the period being analysed. For example, this allows the Board to estimate what the claims on the PPF might be over the next five years, taking into account the individual risks of pension schemes, together with uncertainty over company failure and financial market returns.
- 2.4.7 The graph below shows the typical output from the model. It illustrates a number of features that are relevant. Firstly, the claims with the greatest frequency have the lowest impact (on the left side of the graph), whilst the claims with the least frequency have the biggest impact (on the right hand side of the graph). Secondly, the graph is not symmetric, meaning that the frequency of claims below the average amount is much more than the frequency of claims above the average amount (i.e. big claims are much less likely but they push the average claim size up).
- 2.4.8 The claims distribution from the LTRM is extremely skewed with a long tail. This reflects the contribution to claims in economic shock scenarios or from large individual company failures. The tail of the distribution can be thought of as the catastrophe risk, low likelihood but with high impact. The rest of the distribution is fairly typical, and could be thought of as similar to the normal risk pooling that insurance companies undertake (except for the fact that some weaker schemes would be declined insurance).



2.5 Levy distribution

2.5.1 The Board's original levy proposals were developed without the benefit of empirical data with which to understand their distributional impact, particularly the degree of polarisation of risk between good schemes and bad schemes later demonstrated by PURPLE. This means that any cross subsidy implicit in the levy has been an outcome of the design rather than an input to the design. The prospect of surpluses for the better funded schemes poses greater risk to the ability of the current distribution approach to be able to generate the income required to be consistent with the Board's principle of fairness, without the perception of a greater burden falling on those better funded and able to pay.

2.5.2 Currently, an individual scheme pays a risk based levy proportional to its short term risk corresponding to the product of its current estimated deficit adjusted for contingent assets and special contributions (U) and the probability that its sponsoring employer(s) will become insolvent (P) over one year. U is calculated at a point in time. However, the Board makes some allowance for future volatility by scaling the liabilities of the scheme by 1.05 to reflect the fact that a scheme's deficit position could change during the levy year. The insolvency probability (P) is a measure of the likelihood of business failure over the next 12 months. Therefore, short term risk (U x P) could be thought of as a proxy for the expected claim value over a one year time horizon, assuming no change in assets and liabilities.

- 2.5.3 In 2006/07 and 2007/08, for schemes that are funded between 104% and 125% on a PPF basis we assumed a notional level of underfunding ranging from 0.75% of liabilities to 0.25% of liabilities. These values do not reflect the risk of the scheme being underfunded on a PPF basis in the subsequent 12 months, which for some schemes may be higher. Chapter 5 sets out our intention to make the values at which the levy becomes a fixed percentage of liabilities and at which no risk based levy is payable floating rather than fixed from the 2008/09 levy year.
- 2.5.4 The current levy formula incorporates long term risk by applying a single scaling factor, *c*. This is the ratio of the levy estimate, itself informed by long term risk, to the amount of short term risk. The Board has so far judged that it should not set a levy estimate much beyond the 75th percentile of long term risk, balancing issues of affordability for levy payers against security for members. This takes into account the quantitative and qualitative factors referred to previously and the impact of the levy ceiling¹. The long term risk model includes an allowance for the uncertainty of future scheme funding levels, driven by the assumptions of volatility of financial variables. It also uses estimates of long term probabilities of insolvency, rather than the probability of insolvency over the next 12 months. For a full explanation see “Modelling uncertainty: an introduction to the PPF Long Term Risk Model”.
- 2.5.5 In effect, the scaling factor transforms each scheme’s short term risk estimate (*U x P*) to account for long term risk, but the same scaling factor is applied to all schemes. The scaling factor of 2.47 for the 2007/08 levy year illustrates that long term risk is on average 2.47 times “notional” short term risk. (It is notional in the sense that we assume a notional deficit for some schemes in surplus.) It aggregates the effects of long term insolvency probabilities, volatility in interest rates and asset markets, and the effects of scheme funding recovery plans – i.e. it contains a significant amount of aggregate information which it averages out to produce a single number. However, this reflects the scaling to the aggregate population of schemes rather than a scaling taking each scheme’s contribution to long term risk into account separately. A full implementation of the latter approach would not be simple or cost effective.
- 2.5.6 Schemes in surplus, measured using a s179 basis, pay a lower risk based levy, although they represent a higher proportion of claims at higher percentiles of risk, in the event of either an economic shock or an individual large company failure (particularly larger schemes). A consequence of this fact, together with the imposition of a cap on the amount of levy payable by weakest 5% of schemes, is that the

¹ The levy ceiling is set by the Secretary of State for Work and Pensions in conjunction with HM Treasury. It sets a limit on the maximum amount of pension protection levy the Board may raise in any levy year.

strongest and weakest schemes benefit at the expense of those in between.

2.5.7 We are currently considering ways to align the calculation of the levy estimate, using the Long Term Risk Model (LTRM), with the approach taken to the calculate individual scheme levies, specifically how we could make the annual levy on each individual scheme more closely related to the theoretical long term risk represented by the scheme (and measured by the LTRM).

2.5.8 If the Board uses long term risk rather than short term risk to distribute individual levies, this should lead to:

- Greater alignment between the levy estimate and levy distribution formula;
- Fairer allocation of levy costs to stronger and weaker credit quality schemes (currently cross-subsidy from weaker credit quality) and those with higher or lower asset volatilities relative to liabilities;
- Reduced volatility of individual levies year to year dealing with a concern of some levy payers, and
- A more stable scaling factor.

2.5.9 The LTRM developed by the PPF allows a more detailed calculation of the contribution to the levy estimate from individual schemes based on their expected contribution to claims and their contribution to claims in scenarios with a lower likelihood of occurrence, but where the size of claim may be considerable. The size of a claim depends on the economic environment during which the claim occurs. For example, during times of economic distress financial markets may also be weak, resulting in claims that are more extreme.

2.5.10 Some schemes contribute more to claims in such a scenario, or are only forecast to contribute to claims due to a one-off shock event with a low chance of occurrence. The principle of fairness adopted by the Board states that the levy should reflect the risk posed to the PPF. This risk is not evenly distributed, and the Board is keen to ensure that weaker schemes are not required to subsidise the levy costs of catastrophe events. The box below suggests a possible theoretical formula. This formula is complex, and the Board does not intend to charge a levy using the formula as exactly set out because it believes that its approach to the levy should be widely understood. However, it has been included for completeness.

Theoretical levy formula based on Long Term Risk Model

The theoretical contribution from an individual scheme to the levy in our LTRM has been calibrated by splitting the levy between the contributions to claims from the average and from the tail:

$$\textit{Theoretical RBL} = Q \times (W \times \textit{Contribution To Expected Claims} + (1 - W) \times \textit{Contribution To Tail}) \times R$$

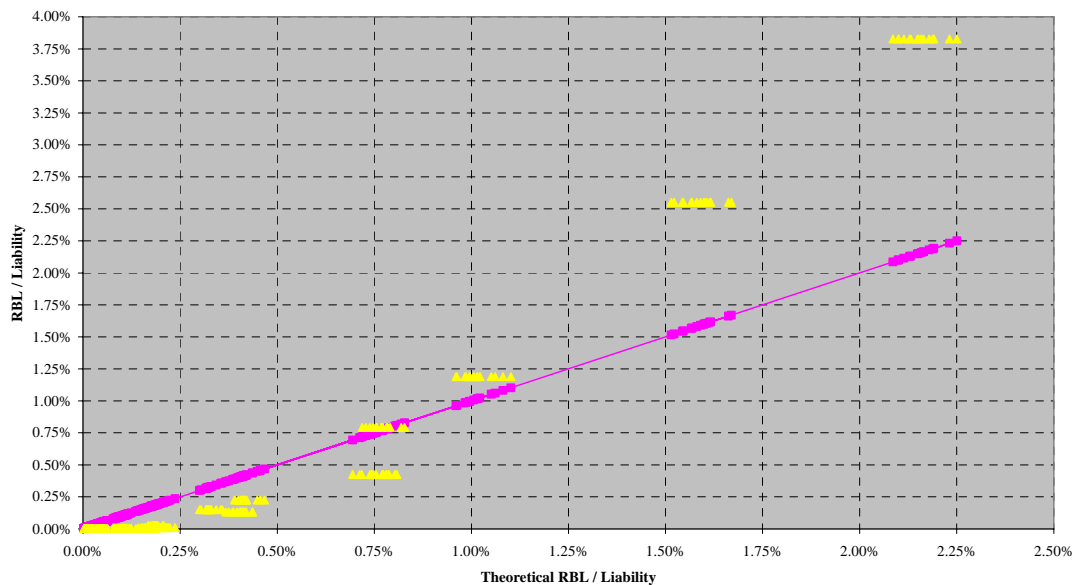
The theoretical risk based levy has been set so as to depend on the average claim and the expected claim in the 5% tail of the claims distribution, with weights (W) depending on market conditions. The formula for calculating the theoretical risk based levy for scheme i is:

$$T_i = Q \left(W \frac{E[C_i]}{\sum_j E[C_j]} + (1-W) \frac{E_{95-100}[C_i]}{\sum_j E_{95-100}[C_j]} \right) \times R \text{ where } Q \text{ is the levy}$$

estimate and R is the proportion that is risk based; $E[C_i]$ is the expected claims of scheme i in all economic and risk-specific scenarios (i.e. average claim of scheme i in the 500,000 scenarios modelled); and $E_{95-100}[C_i]$ is the expected claims of scheme i in the 5% tail of the claims' distribution (i.e. the average claims in claims' distribution between the 95th percentile and the 100th percentile).

2.5.11 The chart below demonstrates the efficiency of the current levy distribution formula to match long term risk. The x-axis plots the theoretical levy as a percentage of liabilities and the y-axis plots the current levy distribution formula as a percentage of liabilities. The closer the yellow triangles are to the straight line the better the fit of the current levy distribution formula. The scatter plot demonstrates that the current formula does a reasonable job of fitting those paying between 0.25% and 1.25% of liabilities as a levy, but does a poorer job for the remaining schemes.

Scatter plot of RBL against theoretical RBL



2.5.12 The theoretical levy formula is quantitatively sound but it does not satisfy the principle of simplicity. There is a trade off between administrative simplicity and economic fairness (or equity). Hence, we have considered how the current levy distribution approach might be adapted to provide a levy distribution formula that is fair and simple,

builds on the current approach, and that provides a good fit to the above formula.

The refinement proposed would be $(\bar{U} \times \bar{P} + L \times T) \times R \times \hat{c}$ where:

\bar{U} is a longer term measure of underfunding taking into account the impact of tail risk (i.e. economic shocks, catastrophe risk), and adjusted for contingent assets and deficit reduction contributions

\bar{P} is a longer term measure of insolvency probability taking into account the empirical effects of changes in credit quality through time (average over 5 years to be consistent with LTRM)

L is estimated section 179 liabilities (as per the current formula)

T is dependent on the insolvency risk of the individual scheme and can be considered as a catastrophe co-efficient that adjusts for tail risk (to provide a better fit between the theoretical levy formula and the simpler version)

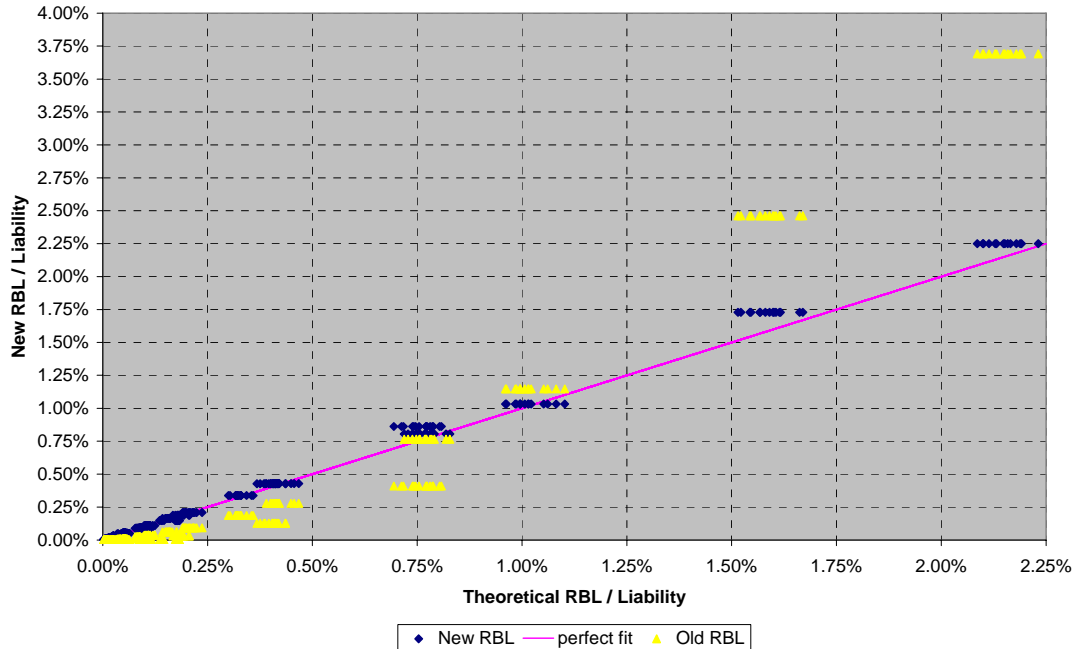
R is the proportion that is risk based. This would be reconsidered given the aim of controlling the element of cross subsidy. The Board is required to set a pension protection levy that is at least 80% risk based. Moving to a higher proportion that is risk based might be possible resulting in a fairer distribution of levy according to risk. This formula would simplify if R , the proportion that is risk based, was set to 1 (i.e. the levy was 100% risk based). This could eliminate the requirement for a scheme based levy.

\hat{c} is the levy scaling factor which may no longer be constant for all schemes (see below), but rather different scaling factors could be calculated for different types of schemes (possibly segmented by size of scheme and scheme status (open, closed) or other factors). This would enable a distribution of levy that avoids implicit cross subsidy of long term risk factors. For example, the size bands used below may be one approach to segment eligible schemes.

2.5.13 For the sake of simplicity both in terms of the data we gather for each scheme and the actual levy formula itself, and to avoid too dramatic a shift from the present system, we will build on the current approach of measuring insolvency risk, and underfunding based on a section 179 valuation.

2.5.14 It can be seen from the scatter plot below that the proposed refinement to the levy distribution formula, and associated fitting of the parameters, demonstrates a better linkage to long term risk across all scheme types than the present formula. The blue triangles overlay the new levy distribution formula on the previous chart comparing the old distribution formula, and demonstrate a consistent match to the theoretical levy.

This reflects the fact that investment grade companies benefit from the current approach and sub-investment grade companies are disadvantaged by the current approach partly due to the use of short term probabilities of insolvency.



2.6 Using multiple scaling factors

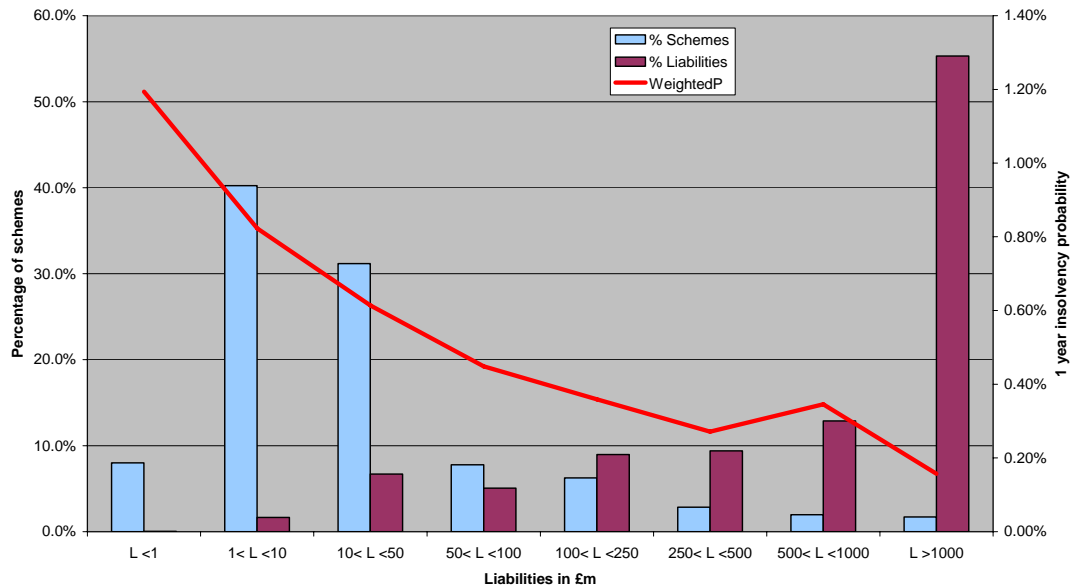
2.6.1 In addition to evolving the levy distribution formula to take into account longer term measures of underfunding and insolvency, and to allocate catastrophe risk, a further refinement could be made to the way the levy scaling factor is calculated.

2.6.2 The current approach to reflecting long term risk in the levy distribution formula is by applying a single scaling factor. This approach was driven by the lack of comprehensive data, a limited understanding of the distribution of risk across the PPF universe of eligible schemes, and the embryonic state of the LTRM in 2005. All these factors have changed significantly over the past two years. The economic context in October 2005 was different, with most schemes being in deficit, so the re-distribution and cross subsidy issues were not as stark as they are currently.

2.6.3 Chart 1 illustrates a segmentation of eligible schemes into those where a claim has a low likelihood but high impact (catastrophe risk) through to those with a high likelihood but low impact (normal risk). Schemes have been categorised into eight groups according to their size, measured by total s179 liabilities. The polarisation of schemes into “good” risks and “bad” risks evidenced below and in PURPLE, and the economic cost of the “catastrophe” premium associated with insuring the very large pension schemes, has resulted in a better appreciation

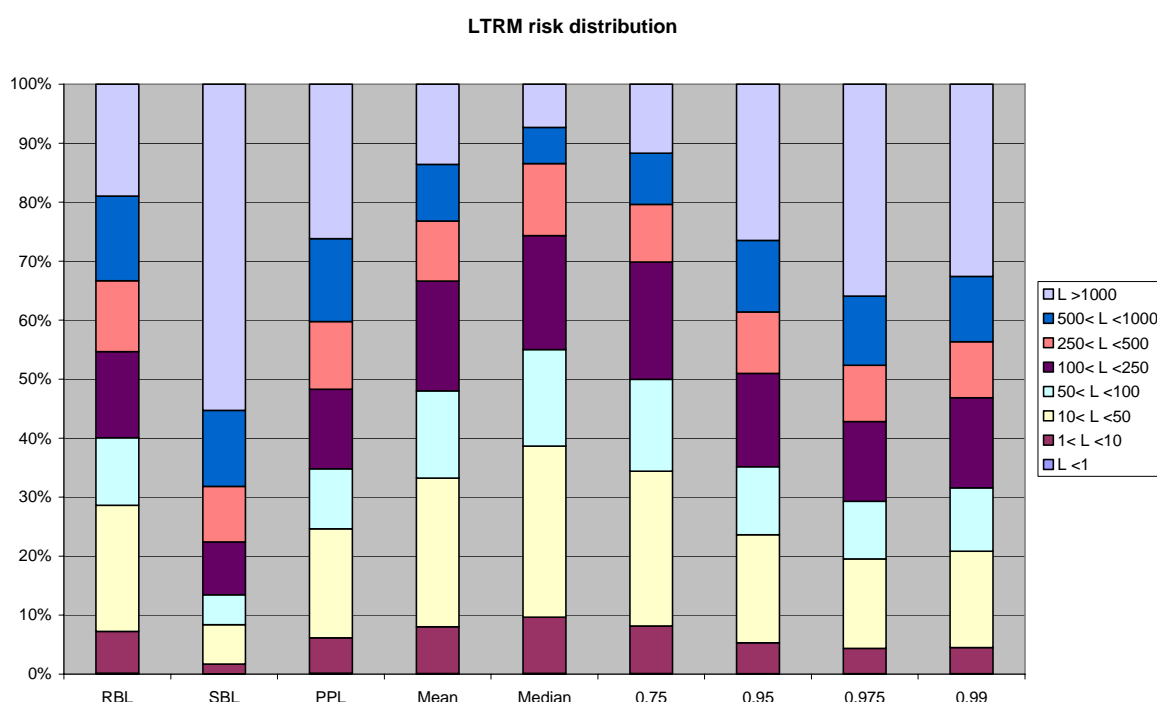
of the nature of cross subsidy. There may be issues of fairness of the allocation of the catastrophe insurance element of the levy, rather than the current perception of a subsidy of the weakest by the strongest.

Chart 1: Demographic map of eligible schemes



2.6.4 Chart 2 compares the allocation of the current risk based levy by size of scheme (using total PPF liabilities) to the contribution to the long term risk at different percentiles of risk. For example, schemes with liabilities greater than £1bn pay 19% of the risk based levy but would be 36% of claims at the 97.5th percentile but contribute 13% to mean expected claims. By contrast schemes with liabilities between £10m and £50m pay 21% of the risk based levy currently but represent 15% of claims at the 97.5th percentile and are 25% of mean expected claims. The higher the percentile of risk, the greater the potential redistribution of catastrophe risk levies. The current formula is a reasonable match to the long term risk when viewed in aggregate across different sizes of scheme.

Chart 2: LTRM Risk distribution²



2.6.5 Instead of applying a single scaling factor, it is proposed that a separate scaling factor could be calculated for different categories of scheme, reflecting their different contributions to the levy estimate and long term risk, particularly catastrophe risk.

2.6.6 The net result is a redistribution of levy to those schemes that pose the greatest catastrophe or tail risk. In an environment of improving funding, consideration needs to be given to refining the incentives programme to credit long term risk reduction.

2.6.7 Smaller schemes are likely to benefit from this approach through two mechanisms. Firstly, their levies are likely to reflect their normal risk (rather than including a loading for others' catastrophe risk) and secondly if the biggest schemes (by exposure) take steps to reduce their risks, then this should feed back through a reduction in the levy estimate, resulting in lower levies (for all).

2.7 Hedging/re-insurance

2.7.1 The Board is pricing residual risk (i.e. pricing the likelihood and size of a claim after all other hedges, reinsurance, contingent assets and covenants have been taken into consideration) but is potentially hampered by the degree to which information on risk reduction activities by schemes and employers is current, accurate and timely. Any risk reduction activity by schemes may have a significant impact on the quantum of long term risk and consequently the levy estimate.

² RBL = Risk Based Levy, SBL = Scheme Based Levy, PPL = Pension Protection Levy, 0.75 = 75th percentile, 0.95 = 95th percentile etc.

Hence, understanding the hedging strategies of schemes is an important aspect of changing our approach to risk measurement to ensure that this is reflected in the risk assessment. Therefore, the Board needs to consider how it might adapt its current contingent asset regime to encourage greater risk reduction, particularly by the largest schemes, which represent over one-third of aggregate PPF liabilities and the largest contribution to tail (or catastrophe) risk, to mitigate the effects of the move to long term risk factors.

- 2.7.2 The Board also has the ability to hedge risk directly using the capital and insurance markets. The PPF is exposed to insolvency risk, market risk and longevity risk. The PPF's investment strategy uses interest rate swaps and inflation swaps to manage its balance sheet effectively, taking into account future liability cash flows in the design of the portfolio benchmark. The Board also takes into account the investment strategies of schemes in an assessment period, since it is obliged to provision for these as potential entrants to the fund, and therefore has a material financial interest in the way these funds are invested, and the amount of risk being taken.
- 2.7.3 Although a market for hedging longevity risk has yet to develop, markets for hedging market risk and insolvency risk/default risk do exist currently. The capital and insurance markets offer the potential to allocate a proportion of levy income to protect against adverse scenarios, leading to a proportion of PPF claims being underwritten by the market. The use of credit derivatives, option markets and re-insurance arrangements provides the PPF with an opportunity to stabilise levy estimates through time, to avoid significant volatility in levies after an economic shock or sizable claim. These are risk management techniques used by many commercial insurance companies.
- 2.7.4 The risk appetite of the PPF is influenced by the risk appetite of those that fund the compensation. Hence, the views of levy payers on the use of financial market techniques would be welcome. These issues influence the funding level of the PPF and drive long term confidence in the Board's ability to fulfil its objectives. The balance between security for members and affordability for scheme and employers is a critical factor in considering these issues.

2.8 Questions on what you have read in this chapter

- 2.8.1 The following questions are designed to elicit your views on areas where your comments are of particular interest to the Board. They are far from exhaustive, and the Board welcomes your views on any element(s) of the proposals outlined above.
- 2.8.2 Should the PPF seek to stabilise the levy estimate over the next three years?**

- 2.8.3 Do you agree that the Board should move to a levy distribution formula based on long term (5 year) rather than short term (1 year) risk?**
- 2.8.4 Do you agree with the approach used to determine the theoretical levy and allocation between average and catastrophe risk?**
- 2.8.5 Do you believe the Board should use a simple formula to allocate the levy rather than the theoretical formula?**
- 2.8.6 We would welcome your views on the proposal to create multiple scaling factors to redistribute the levy so that those schemes that pose the greatest catastrophe or tail risk pay a fairer share**
- 2.8.7 We would welcome your views on whether the PPF should increase the levy estimate to include the cost of hedging market risk and insolvency risk or whether this premium should be paid out of existing funds, including assets transferred from failed schemes?**
- 2.8.8 Should the Board target a specific funding level for those liabilities and provisions it inherits? Should the PPF target an implied credit rating in a similar way to insurance companies? What time horizon should it adopt when considering these issues?**

Chapter 3 – Measurement date of risk factors

3.0 Chapter summary

This chapter sets out the Board's proposals to enable schemes to be given significant advanced notice of their individual bills before the start of the levy year, and for giving the Board greater flexibility over the way levies are distributed between schemes. To enable this to happen, the Board proposes to bring forward the date of calculation of the risk factors and the deadline by which all data will be collected to a date 12 months before the start of the relevant levy year. This change will take effect from the 2009/10 levy year. The approach taken for 2007/08 will again be adopted for 2008/09.

3.1 Introduction

3.1.1 The Board has sought to address levy payers' desire to know their individual levy bills in advance. Under the approach used to date, the full set of underfunding and insolvency risk data used in levy calculations is only available at 31 March immediately prior to the relevant levy year. This is 3 months after the date (December) at which the levy estimate and provisional scaling factor are published and 6 months after the date (October) used to calculate them. We are able to delay calculation of the final scaling factor (which ensures that the total amount collected closely matches the Board's levy estimate) until after that date to ensure that changes in the risk factors are taken into account.

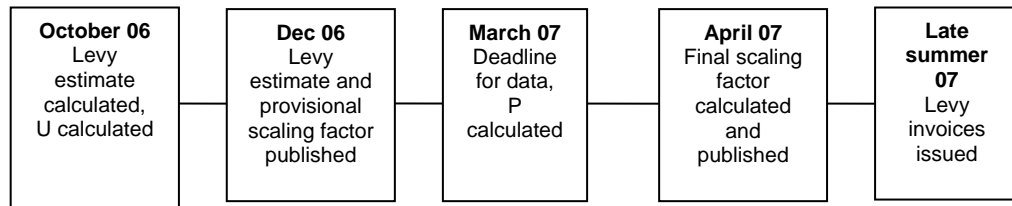
3.1.2 However, this means that schemes cannot calculate their individual bills until at least a month after the start of the levy year in question, and also means that the provisional scaling factor may not be an accurate indication of the final scaling factor. This was the case in 2007/08 since a large number of schemes provided a s179 valuation between the date of calculating the provisional scaling factor and the date of calculating the actual scaling factor. The remainder of this chapter sets out a way to achieve greater certainty and advance notice of the amount of individual levy bills.

3.2 Changing the date at which we calculate the levy risk factors and the deadline for submission of data

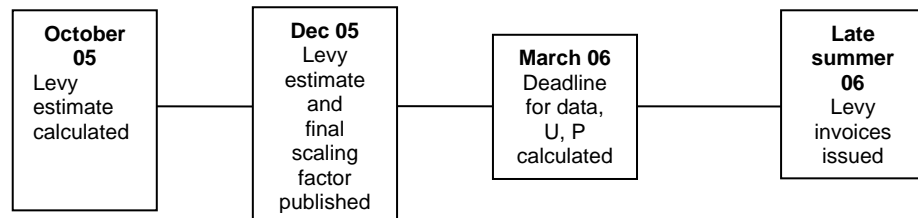
Increasing the alignment between measurement dates

3.2.1 There is currently an inherent mismatch between the data used in the levy calculations for individual schemes and the data used to set the levy estimate and levy cap. This is because to date we have set the levy estimate prior to the start of the relevant levy year, based on indicative information at that date, but have then collected additional information via scheme returns and the Board's voluntary certificates.

We have also assessed scheme insolvency risk at the end of March. This approach taken for the 2007/08 levy year is illustrated in the diagram below:



3.2.2 Our approach for the 2006/07 levy year followed a similar timetable, except we calculated the levy scaling factor and levy estimate using end October 2005 data and published these in December 2005. The final amount collected was subject to movements in underfunding and insolvency risk. As a result we under-collected compared to our levy estimate of £575million.



3.2.3 For the 2007/08 levy year we waited until the end of April 2007 before setting the levy scaling factor. This ensured that the scaling factor calculation used, so far as possible, the actual data that will be used for individual 2007/08 levy bills, meaning that the total amount we collect for 2007/08 should no longer be subject to the same movements in risk factors as was the case for 2006/07.

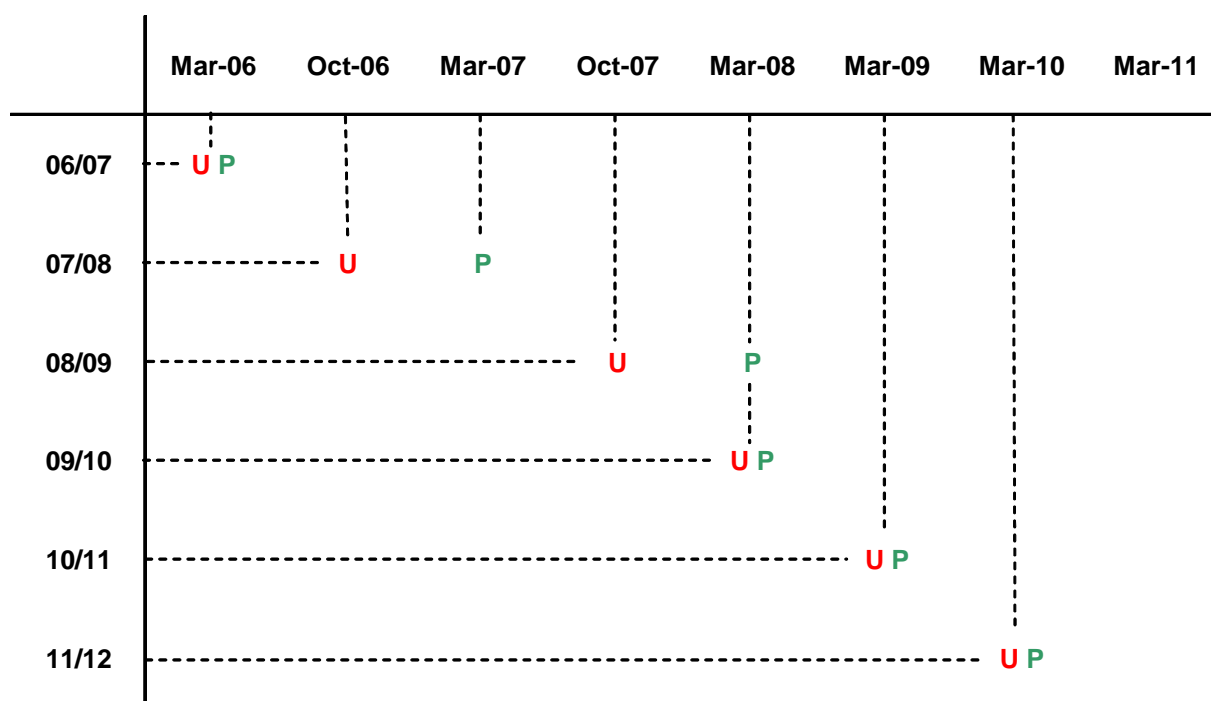
3.2.4 Whilst the approach taken for 2007/08 enables us to set the levy estimate in advance and take account of changes in risk factors between that date and the end of March, it has the following consequences:

1. To ensure its accuracy, the levy scaling factor cannot be calculated until the actual data used for levy calculations has been provided to the Board. Even if schemes know their U and P values at the end of March, this crucial element of the calculation is unknown until after the start of the levy year. This makes the accurate prediction of levy bills in advance impossible.
2. Due to the need to calculate the levy scaling factor after the deadlines have passed and the need to cleanse data provided to ensure it meets satisfactory quality standards, we are not in a position to invoice until months into the levy year.
3. There is a mismatch between the data set used to calculate the levy estimate, provisional scaling factor and final scaling factor.

Setting the deadline for measurement of risk and submission of data 12 months prior to the start of the levy year

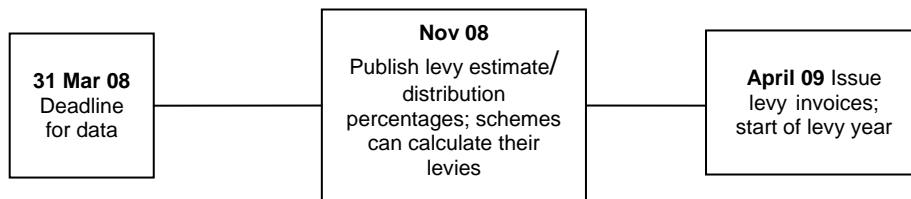
- 3.2.5 Our proposed solution is to move to a position whereby we set the date at which the risk factors are measured, and by which all data must be supplied to the Board, 12 months in advance of the start of the levy year.
- 3.2.6 This is illustrated in the following table and in diagrammatic form below (where U represents underfunding and P insolvency risk). To give levy payers time to adjust, we do not propose to implement this approach until the 2009/10 levy year. For 2008/09 an approach consistent with that taken for 2007/08 will be adopted.

Levy year	Data deadline	Underfunding measured	Insolvency measured
2006/07	31 March 2006	31 March 2006	31 March 2006
2007/08	31 March 2007	31 Oct 2006	31 March 2007
2008/09	31 March 2008	31 Oct 2007	31 March 2008
2009/10	31 March 2008	31 March 2008	31 March 2008
2010/11	31 March 2009	31 March 2009	31 March 2009
2011/12	31 March 2010	31 March 2010	31 March 2010



- 3.2.7 Adopting this approach would then mean that we would have further time to scrutinise the data held prior to calculating the levy estimate, whilst also bringing forward the dates at which we calculate the

scaling factor and commence invoicing, and critically, the date at which schemes can calculate their individual bills. This is illustrated for 2009/10 in the diagram below.



The trade off is between the amount of notice schemes receive and the up-to-date nature of the data on which the levy is calculated.

Alternative approaches considered

- 3.2.8 The Board considered the possibility of introducing an interim step, whereby the risk factors would be aligned at an earlier date than set out above: underfunding and insolvency risk would be measured at 31 October 2007 for 2008/09, and at 31 March 2008 for 2009/10. The Board concluded that this interim step could create confusion, and that schemes would have insufficient time to engage with D&B regarding their scores ahead of a 31 October measurement date, especially since D&B are introducing a revised methodology (see chapter 4). Additionally, it was thought that requesting schemes and employers to be mindful of two separate measurement dates for insolvency risk within a five month period would be unnecessarily confusing.
- 3.2.9 Alternatively, the levy measurement date and data deadline could be set to 31 October prior to the start of the levy year from 2008/09 onwards. However, given the time necessary to scrutinise the data before publishing the levy estimate and scaling factor this would not give schemes a great deal of warning regarding their individual bills – a key objective of any change, given levy payers’ desire for this outcome.
- 3.2.10 The following sections represent the key advantages and disadvantages of the proposed timing change for scheme trustees, sponsoring employers and their advisers as well as for the Board itself.

3.3 Advantages of changing measurement dates

Increased certainty for schemes and employers

- 3.3.1 The Pension Protection Fund Miscellaneous Amendment Regulations (SI 2007/782) came into effect in March 2007. These regulations set 31 March 2008 as the mandatory date for the submission of all schemes’ first section 179 valuations. Aligning this deadline with the date at which we collect all voluntary information in respect of both the 2008/09 and 2009/10 levy years will set a single deadline to be targeted by all schemes wishing to take steps to reduce the amount of levy payable for both levy years. In 2007/08, for practical convenience, we set the

data deadline as 5.00pm on the last working prior to the year end. However, given that the statutory s179 deadline does not specify a time of day, the deadline for 2008/09 and 2009/10 will be midnight on 31 March 2008.

- 3.3.2 An additional benefit of aligning the data deadline with the levy measurement date is setting a single, consistent date in respect of data provision and the finalisation of engagement with D&B regarding the D&B score. The D&B score for both 2008/09 and 2009/10 would be measured as at 31 March 2008. This should reduce the time and effort spent by sponsoring employers and their advisers on monitoring D&B scores.
- 3.3.3 If we adopt the timetable set out above, schemes would then know from November (following the publication of the levy estimate and scaling factor) their amounts for the following year. This should make financial planning far easier.

Increased certainty for PPF in terms of financial planning

- 3.3.4 Collecting all scheme and employer data and scrutinising that data in advance of finalising the Levy Estimate would enable us to use the actual data that will be used in the levy calculations, including all Contingent Assets and Deficit Reduction Contributions certified by the relevant deadline.
- 3.3.5 The objective is that the total amount of levy collected should match the levy estimate set by the Board in respect of a particular year, and should prevent changes to the levy scaling factor in future years as a result of previous over/under-collection.
- 3.3.6 The Board would also be able to monitor fairness in the distribution of the levy across different groups of levy payers. The benefits of additional time spent cleansing and analysing data would also be realised in the ability of the Pension Protection Fund to assess the distributional effects of the levy to a far more sophisticated degree.

More efficient invoicing processes

- 3.3.7 The Board would be in a position to issue invoices from the start of the levy year, and to issue all invoices within a shorter time period, given that we would complete any data cleansing activity (to ensure data meets appropriate quality standards) in advance of the point we calculate the levy estimate.

3.4 Disadvantages of changing measurement dates

- 3.4.1 From 2009/10, it is proposed that the underfunding and insolvency risk factors will be calculated 12 months prior to the start of the levy year, and so risk reduction steps must be taken 12 months in advance of the first levy year in which they will affect a scheme's bill. In other words,

there will be a 12 month delay between certifying a risk reduction action to the Board, and first receiving credit for it in a levy calculation.

- 3.4.2 Schemes should particularly note that adopting this approach would mean that all information supplied by schemes of which they wish the PPF to take account in calculating their levy for the 2009/10 levy year would have to be supplied by 31 March 2008. This includes schemes wishing to certify contingent assets and deficit reduction contributions for which they seek credit for the 2009/10 levy year, which they would have to do by 31 March 2008. In particular, a contingent asset agreement would have to come into effect no later than 1 April 2008 to have any effect on the 2009/10 levy.
- 3.4.3 As the failure scores assigned to sponsoring employers as at 31 March 2008 will form the basis of the insolvency risk calculation for both 2008/09 and 2009/10, it is also vital that schemes engage with D&B well in advance of March 2008 to ascertain their failure score, and to ensure that it is based on the fullest, most accurate and up to date information available.

3.5 Electronic data submission

- 3.5.1 Accurate and complete data is critical to ensuring that an appropriate levy estimate and scaling factor are set, and that individual levy amounts are correct. So far the PPF has had to perform an extensive range of data checks to ensure it meets quality standards, contacting schemes where it does not, thus adding a further layer of administrative complexity to the levy process for schemes, their advisers and the PPF. For 2008/09 and beyond, both we and the Pensions Regulator are changing our processes so that it should be significantly easier for schemes to provide accurate, complete data first time round, and there should be no need for additional checks after data is submitted.
- 3.5.2 With regard to our main source of data, the Pensions Regulator's scheme returns, significant improvements have already been made, so that data is now submitted electronically in the vast majority of cases. From the end of this year, the position will be even better, in that schemes will be able to gain secure electronic access to their own scheme data at any time, so that schemes can ensure that their data is complete, accurate and up-to-date at the levy measurement dates.
- 3.5.3 In terms of voluntary certificates that can be provided to the PPF in respect of deficit reduction contributions, block transfers and contingent assets, these certificates will be able to be submitted via a web portal for the first time for 2008/09. The web portal will go live for submission of voluntary certificates in respect of the 2008/09 levy calculation from early November 2007. Some certificates will become available at the beginning of November and all voluntary certificates will be available for submission via the web portal before the end of 2007. The longer term aim is that they will be incorporated as part of the Pensions Regulator's system, so that there will be a single point of contact for

schemes seeking to provide data to both the Pensions Regulator and the PPF.

3.6 Questions on what you have read in this chapter

3.6.1 The following questions are designed to elicit your views on areas where your comments are of particular interest to the Board. They are far from exhaustive, and the Board welcomes your views on any element(s) of the proposals outlined above.

3.6.2 We would welcome your views on our proposals for aligning the date at which the risk factors are measured and by which all data must be supplied to the PPF.

3.6.3 We would welcome your views on our proposals for setting this date 12 months in advance of the start of the levy year.

3.6.4 What is your view on the importance of being able to calculate an individual scheme's levy bill in advance of the start of the levy year?

3.6.5 Do you support the creation of a single point of contact for schemes to provide data upon which the levy is based to both the Pensions Regulator and the PPF?

Chapter 4 – Insolvency Risk

4.0 Chapter Summary

This chapter sets out how we propose scheme insolvency risk will be calculated in respect of single and multi-employer schemes for both the 2008/09 and 2009/10 levy years. It also explains the process for appointing an insolvency risk provider for 2010/11 and 2011/12. These proposals assume that levy payers support bringing forward the date of measurement of the risk factor set out in chapter 3.

4.1 Insolvency risk provider contract

- 4.1.1 In 2005 the Board conducted an EU procurement exercise for an insolvency risk provider. As a result D&B (www.dnb.co.uk), a global provider of business information, was appointed in August 2005 for two years with an option to extend for a further two years. D&B has been the Board's sole insolvency risk provider for the 2006/07 and 2007/08 levy years. The Board has exercised its option to extend the contract with D&B to September 2009 which covers the 2008/09 and 2009/10 levy years. This is based on the fact that D&B has revised its failure score methodology and in doing so has addressed many of the issues raised by schemes and their sponsoring employers during 2006. It also reflects the fact that D&B implemented an effective appeals process to deal with queries and has set up a dedicated PPF helpline.
- 4.1.2 The Board is required under EU Procurement Regulations to conduct an open tender once the appointed provider, D&B, has completed a four year term. We currently expect to appoint an insolvency risk provider in spring 2008 to cover the 2010/11 and 2011/12 levy years. This re-tendering exercise will commence in autumn 2007 following feedback from this consultation. This timetable will give the Board, schemes and employers a period of 12 months to ensure that scheme insolvency risk is calculated on a consistent and accurate basis; given that, following the timetable set out in Chapter 3, insolvency risk for the levy year 2010/11 will be calculated as at 31 March 2009.
- 4.1.3 The measurement of insolvency risk for 40,000 participating employers is a complex task. Based on individual schemes', participating employers' and the Board's experience in 2006/07 it will take at least 12 months for any new system to be effectively implemented. This includes sharing details about the methodology with stakeholders, allowing time for schemes and employers to engage with the provider(s), tailoring the customer service to meet stakeholder demands, implementing and structuring an appeals process, and building the necessary infrastructure to support PPF operational processes.

- 4.1.4 The Board acknowledges that any changes to the existing arrangements would require an appropriate transitional period and that levy payers require as much advance notice as possible. It notes that there are both implicit and explicit costs associated with the introduction of any revised approach to the measurement of insolvency risk. A transitional period would not be required should D&B be re-appointed as sole provider for 2010/11 and 2011/12.
- 4.1.5 We are consulting on whether we should appoint more than one provider. In considering this possibility, questions are raised as to the correct balance between proportionality and simplicity. There are issues of equity that will need to be considered should there be more than one insolvency risk provider. To the extent that different methodologies were used by these providers, issues of unfairness might be raised. The Board would need to have confidence that there was an effective mechanism available to translate the results to a common basis. In the event of multiple probabilities being available from more than one provider, should the Board adopt a prudent approach and accept only the lower of the probabilities across providers, or average the results?
- 4.1.6 Should a credit rating agency be appointed, and should D&B be re-appointed, there may be equity issues between those schemes that could appeal their D&B score and influence their insolvency probability and those that might not be able to appeal their credit rating. In any event, an appeals process applied by an additional or alternative insolvency risk provider would need to be broadly equivalent to that currently operated by D&B. Further, if an additional provider supplied the Board with credit ratings, it would need to ensure that there was sufficient time for those companies that were not currently rated to secure a rating. This would deal with issues of a two tier system by providing the option of being rated to those who currently are not. However, it is unlikely that many companies would consider the expense of obtaining the rating worthwhile unless they believed that the difference between their D&B score and credit rating increased their levy by an amount significantly greater than the cost of obtaining a rating. If a credit rating approach were adopted using multiple providers, there may be considerable cost involved contracting with multiple providers rather than adopting an approach that appointed an exclusive provider.
- 4.1.7 Competitive tenders will be sought from a series of providers. These will be assessed against a set of stringent criteria. A rigorous set of selection criteria were used at the time D&B were appointed, and it is intended that the criteria used to select a subsequent provider, or providers, are equally stringent, building on stakeholder feedback during the 2006/07 levy year.
- 4.1.8 Some respondents to the Board's July 2005 consultation believed that

stakeholders should have been given a greater opportunity to comment on the initial appointment process. We welcome your comment on the criteria currently under consideration, and any suggestions for their relative weightings. These are attached as Annex D.

4.2 Revised D&B Failure Score Methodology

4.2.1 During summer 2007 D&B is rolling out a revised failure score methodology across its entire UK employer database. The Board supports the use of the revised methodology for the PPF universe. This reflects the fact that many of the changes address issues raised by schemes and employers. Changes include:

- The failure score is no longer overridden where a company has negative net worth;
- The rules concerning County Court Judgements have been amended broadly as per the approach taken by the PPF in 2007/08;
- Separate scorecards are produced for commercial and non-commercial organisations;
- The probabilities of insolvency have been recalibrated to reflect the most recent insolvency experience, and
- Finer grading is applied to those employers that represent the lowest insolvency risk, with new lower probabilities of insolvency of 0.01%, 0.03% and 0.05% for failure scores 100 – 98.

The Board remains engaged with D&B to ensure the methodology is fit for purpose for the PPF. Further detail of the revisions including an impact analysis of the new methodology is provided in Annex A.

4.2.2 International probabilities of insolvency are not affected by this revised methodology. The insolvency probabilities for a small number of countries have also been separately amended. The associated probabilities of insolvency for particular failure scores or equivalents in all countries are available, where applicable, from the PPF Stakeholder Support Team on 0845 600 2541 or information@ppf.gsi.gov.uk .

4.2.3 The Board encourages all schemes and employers to engage with D&B far in advance of the 31 March 2008 deadline. This will allow the insolvency risk assessment made by D&B to be based on the most accurate and up-to-date information available. Please note that for the 2007/08 levy year, failure scores were frozen at 30 March 2007 and therefore the revised methodology has no impact on the 2007/08 levy year.

4.2.4 Failure scores for participating employers are available free of charge directly from D&B by phone, and we would encourage all schemes to obtain their participating employers' failure scores and associated probabilities of insolvency based on the revised methodology as soon as practicable.

4.3 Calculating the insolvency risk factor

- 4.3.1 The Board will calculate the insolvency risk factor for each scheme using the same approach as was taken for the 2007/08 levy year. The insolvency risk for single employer schemes will be based on the failure score and associated probability of insolvency of the single sponsoring employer and the insolvency risk of multi-employer schemes will be based on a weighted average probability of insolvency taking account of the insolvency risk of every participating employer, weighted by the number of members for each employer and multiplied by the appropriate scaling factor depending on the type of multi-employer scheme.
- 4.3.2 For the 2008/09 and 2009/10 levy years the insolvency probability for each participating employer will be measured by taking the insolvency probability associated with the standard D&B 1 to 100 failure scores as at 31 March 2008, except that the Board has instructed D&B to disregard the “severe parent risk” override. The override for accounts filed in foreign currencies is no longer part of the methodology and so the Board does not need to instruct D&B to disregard the associated rule.
- 4.3.3 D&B has produced a revised probability of insolvency table for the PPF which maps each of the 1 to 100 failure scores to an appropriate probability of insolvency which will be used in the 2008/09 calculations. This table will also apply for the 2009/10 levy year, assuming that levy payers support the changes to measurement dates for risk factors. The revised methodology and associated probabilities of insolvency are not relevant for the 2007/08 levy year.
- 4.3.4 This revised table of failure score mapping to insolvency probabilities is included as Annex B to this document. Since it is the probability of insolvency, not the failure score that will be used in the levy calculation, it is worth finding out what the revised table means for the participating employers of your scheme.

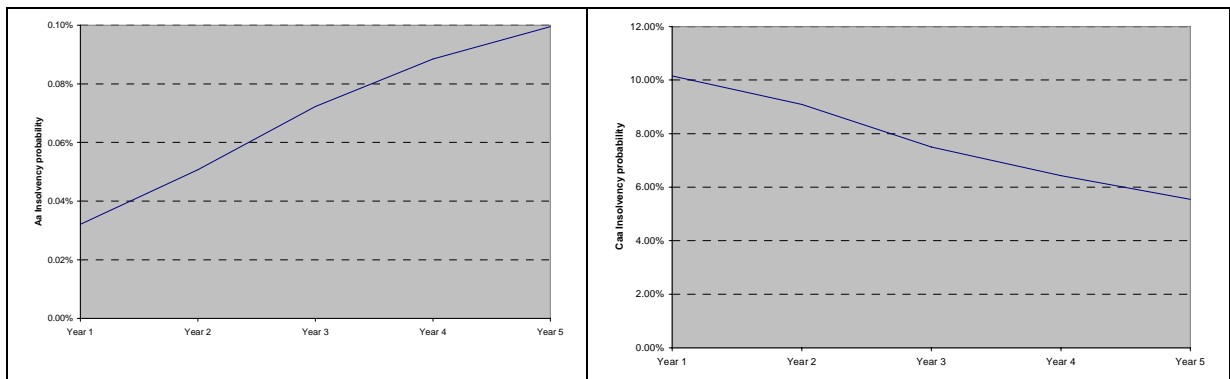
4.4 Using long term probabilities of insolvency in future levy years

- 4.4.1 In order to implement, in the early years, a risk based levy that balanced consistency across schemes and employers with simplicity and transparency, the Board used one year insolvency probabilities in the calculation of individual scheme levies in 2006/07 and 2007/08. As set out above, it currently proposes to adopt this approach for the 2008/09 and 2009/10 levy years. However, as part of the insolvency risk provider procurement process, the Board will evaluate the capability of providers to calculate insolvency probabilities over time horizons longer than one year ahead. This is consistent with the

Board’s proposals that seek to use longer term probabilities to align individual bills with its long term risk model.

4.4.2 For example, this would provide the Board with the option of segmenting the universe of PPF eligible schemes into two groups: those with a credit rating or an implied credit rating (perhaps based on a quantitative credit model), and those without. The LTRM currently adopts this approach when projecting future insolvencies: individual D&B scores are calibrated to implicit long term probabilities whenever there is no credit rating. For more details see “Modelling uncertainty: an introduction to the PPF Long Term Risk Model”. The Board is building in this flexibility to the tendering process to allow the option of using this approach in future for the calculation of individual levies.

4.4.3 Long term probabilities of default and insolvency display stable empirical relationships over longer time periods. Stronger companies’ probabilities increase with the passage of time and (surviving) weaker companies’ probabilities strengthen with the passage of time (the so called “credit migration” effect). The graphs below illustrate this for an Aa rated and Caa rated entity respectively.



Source: Moody’s KMV

4.4.4 This implies that the current pension protection levy may under-weight the risk based levy charged to investment grade companies since the one year probability of insolvency is lower than the geometric average of longer term probabilities, and vice versa for sub-investment grade companies.

4.4.5 The proposed evolution of the present levy formula is to substitute the one year probability of insolvency with a measure of the long term probability of insolvency. The Board uses a five year time horizon when running the LTRM. The Board would need to publish the long term insolvency probabilities (possibly segmented by industry) and credit ratings. The table below provides some indication as to how such a mapping might calibrate to current D&B scores and credit ratings.

5 Year	Mapping		Transition								Annualised insolvency rate
	Min D&B IP	Max D&B IP	AA	A	Baa	Ba	B	Caa	Ca	Insolvency	
AA	0.00%	0.08%	50.9%	16.7%	18.4%	8.5%	4.1%	0.9%	0.2%	0.3%	0.07%
A	0.08%	0.17%	20.2%	19.2%	29.8%	17.6%	9.5%	2.3%	0.6%	0.8%	0.16%
Baa	0.17%	0.47%	11.6%	14.2%	28.2%	22.0%	15.6%	5.1%	1.7%	1.7%	0.34%
Ba	0.47%	1.45%	5.3%	8.0%	21.1%	23.0%	23.0%	10.9%	5.1%	3.7%	0.75%
B	1.45%	6.44%	2.0%	3.4%	11.3%	16.7%	23.6%	16.3%	13.4%	13.3%	2.82%
Caa	6.44%	18.95%	0.5%	0.9%	3.8%	7.3%	14.0%	13.2%	21.6%	38.7%	9.33%
Ca	18.95%	38.00%	0.2%	0.3%	1.4%	3.1%	7.3%	9.0%	25.7%	52.9%	13.98%
Insolvency			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.00%

Advantages and disadvantages

- 4.4.6 Some companies have argued that they are unfairly treated by the current approach to measuring insolvency for the risk based levy and that credit ratings are a much better indicator of their long term credit quality. By moving to a long term measurement of insolvency, the Board believes that it should consider how it can best implement a risk assessment across a disparate population in a fair way.
- 4.4.7 Some companies may criticise any change given the investment made to understand D&B's approach, especially since the CCJ factor has now been excised from the assessment. However, the use of credit ratings would allow non UK companies to be rated on a consistent basis to UK companies, eliminating another source of perceived inequity (different granularity applied in different markets by D&B).
- 4.4.8 The timing of any change needs to be carefully considered. The information paper on the long term risk model provides the first opportunity for stakeholders to understand our approach to long term risk. Bringing forward the measurement date of risk factors to 31 March 2008 for the 2009/10 levy year means that there will be limited time for schemes to evaluate the impact of introducing such a significant change any earlier. As a result, our proposal is to consult broadly on any significant change and allow sufficient lead time for implementation depending on the outcome of the consultation. This suggests that the 2010/11 levy year (with data deadline of 31 March 2009) is the earliest date that would provide levy payers with sufficient advance notice.

4.5 Questions on what you have read in this chapter

- 4.5.1 The following questions are designed to elicit your views on areas where your comments are of particular interest to the Board. They are

far from exhaustive, and the Board welcomes your views on any element(s) of the proposals outlined above.

- 4.5.2 What is your view on the possibility of appointing different providers to provide a measure of insolvency risk for different populations? If you support this view, which populations do you think would be best served by which methods?**

- 4.5.3 What are your views on the proposed selection criteria for the appointment of a provider for the measurement of insolvency risk in 2010/11?**

- 4.5.4 We would welcome your views on whether the Board should move towards measuring the long term probability of insolvency.**

Chapter 5 – Underfunding and Contingent Assets

5.0 Chapter Summary

This chapter sets out the changes that we propose to make to the way in which the underfunding risk element of the levy calculation is determined for the 2008/09 and 2009/10 levy years, including how we will monitor and respond to the changes in the distribution of the total levy that we have seen in 2007/08 as compared to 2006/07. The possibility of further developments to our approach to contingent assets from 2010/11 is also raised in this chapter.

5.1 Introduction

- 5.1.1 For the purposes of the risk based levy, underfunding is calculated for all schemes using an estimate of scheme assets and liabilities on a section 179 basis (the approximate cost of buying out PPF level benefits) as at a common date prior to the start of the levy year.
- 5.1.2 For the 2006/07 and 2007/08 levy years the Board collected valuation information on either a section 179 or a Minimum Funding Requirement (MFR) basis. These valuations were converted to a section 179 basis and the results rolled forward/backward to estimate assets and liabilities as at that common date.
- 5.1.3 Any deficit reduction contributions and type B and C contingent assets certified to the Board by the relevant deadline were added to the scheme estimated scheme asset value in the assessment of scheme underfunding.

5.2 Statutory deadline for the submission of a first section 179 valuation

- 5.2.1 The Pension Protection Fund (Miscellaneous Amendments) Regulations 2007 (SI 2007/782) came into force on 6 April 2007. These regulations require all eligible schemes to submit their first section 179 valuation to the Board by 31 March 2008. We are using a number of communication channels to ensure that schemes are aware of this legislative requirement in time to meet it.
- 5.2.2 Approximately two thirds of pension schemes have already submitted their first s179 valuation to the Board. We would encourage any schemes that have not yet commissioned their initial s179 valuation to do so as soon as possible, given the time it can take to perform and sign off a valuation.
- 5.2.3 In March 2007 the Board published revised section 179 guidance. This should be used for all valuations with an effective date on or after 6 April 2007, or for valuations signed on or after 1 October 2007 but with

an effective date prior to 6 April 2007. The earliest date at which the Board is likely to revise the current s179 valuation guidance is 6 April 2008.

- 5.2.4 A series of Frequently Asked Questions (FAQs) to support completion of section 179 valuations together with the associated guidance are available on the Pension Protection Fund website at http://www.pensionprotectionfund.org.uk/index/other_guidance/valuation_guidance.htm.
- 5.2.5 Those schemes that have not already provided the Board with a s179 valuation should ensure they do so by 31 March 2008 since:
- the absence of an initial section 179 valuation by that date will mean non-compliance with this legislative requirement; and
 - the most recent section 179 valuation submitted by that date will be used for both the 2008/09 and 2009/10 levy years.
- 5.2.6 The Pensions Regulator has statutory sanctions which could be used where the deadline is not met, and we are currently working with the Regulator to establish the steps it will take in any such cases.
- 5.2.7 The Board recognises that some schemes who have already submitted their first section 179 valuation have suffered an additional administrative burden in order to comply with the legislative requirements. It believes that a sufficiently strong disincentive should be applied to those schemes that fail to comply with the statutory deadline. The draft Determination, to be published in the autumn, will set out the Board's proposed treatment of such schemes.

5.3 Calculating underfunding risk for the 2008/09 and 2009/10 levy years

- 5.3.1 The Board will no longer need to apply the methodology for converting MFR valuations to a section 179 basis prior to calculation of underfunding risk from the 2008/09 levy year onwards. We will simply need to roll forward or back, as appropriate, all section 179 valuations submitted by 31 March 2008, to 31 October 2007 for the 2008/09 levy year and to 31 March 2008 for the 2009/10 levy year.
- 5.3.2 Section 179 valuation guidance and assumptions are changed periodically to keep them broadly consistent with the buy-out market. If the Board were to change s179 valuation assumptions on or after 6 April 2008 then these would be applied to the roll forward calculation to 31 March 2008 in respect of the 2009/10 levy year only.
- 5.3.3 The underfunding formula used in the 2007/08 levy is shown in the table below. There are currently five categories of funding and a different assumed level of underfunding applies to each (expressed as

a percentage of liabilities). The boundaries between these categories have remained the same for the first two years of the pension protection levy. In 2007/08, a greater percentage of schemes are falling into categories B-E, leading to a redistribution of levy to schemes falling into category A. In a climate of improving market conditions, and so reduced underfunding, fewer and fewer schemes may fall into category A. The re-distribution of the levy to those remaining schemes may lead to disproportionate increases in the amount payable, given that we believe the long term risk of schemes in the B-E categories is materially higher than represented by the assumed level of underfunding at present.

Underfunding category	Funding level (F)%	Underfunding (U) as a % of liabilities	% of schemes in 07/08	% of liabilities
A	$F \leq 104$	$105 - F$	79.7%	64.7%
B	$104 < F \leq 111$	0.75	5.9%	11.2%
C	$111 < F \leq 118$	0.50	4.2%	9.1%
D	$118 < F \leq 125$	0.25	2.7%	2.9%
E	$F > 125$	0.00	7.6%	12.1%

5.3.4 From levy year 2008/09, we will assess the distributional effects of the current boundaries at the time we consider the levy estimate. This is consistent with the approach taken to determine the risk based levy cap for 2007/08. This would amend:

- The funding limit above which the assumed level of underfunding becomes a fixed percentage of liabilities (currently 104% on a section 179 basis);
- The intermediate funding levels forming the boundaries for categories B, C and D (currently 111%, 118%);
- The upper funding limit above which no risk based levy is payable (currently 125% on a section 179 basis), and;
- The risk based levy cap, which was amended between 2006/07 and 2007/08 (currently 1.25% of liabilities).

5.3.5 Both the funding limit above which the assumed level of underfunding becomes a fixed percentage of liabilities and the upper funding limit above which no risk based levy is payable are likely to increase for two reasons:

- To ensure that schemes that are funded below the level at which the assumed level of underfunding is a fixed proportion of liabilities do not experience disproportionate increases in their bills, given that we assert that the long term risk of schemes in the B-E categories is materially higher than represented by the assumed level of underfunding at present, and
- To reflect possible increases in the cost of buying out full scheme benefits (since this was the benchmark used for setting the upper

funding limit in the first place).

- 5.3.6 We propose that for the 2008/09 levy year all the parameters set out above would be finalised when we publish the draft determination for 2008/09 in autumn 2007. For 2009/10, these values would be published at the same time as the levy estimate and the levy scaling factor. This would ensure that schemes would be able to work out their bills for the 2009/10 levy year well in advance of the start of the levy year contrasting with the current approach that means schemes do not know their bills until after the start of the levy year. It would also allow the Board to bill schemes earlier in the levy year.

5.4 Contingent Assets

- 5.4.1 Since December 2005 over 250 contingent asset arrangements have been put in place using the Board's standard form documentation – mainly type A – group company guarantees. The Board would be interested in views on any barriers to the take-up of the current arrangements, particularly type B and C.
- 5.4.2 We do not propose to add any further types of contingent asset to the suite we have had in place since 2007/08, for 2008/09 and 2009/10. However, we are monitoring market developments in this area, and in future would seek to recognise any new products that offer the Board and schemes the same degree of certainty and enforceability in terms of value and duration as existing acceptable contingent assets.
- 5.4.3 Amendments to the distribution parameters as set out above will impact contingent assets which target a particular funding level, particularly those targeting 104% and 125%. Schemes wishing to put in place a new contingent asset prior to the 31 March 2008 deadline may therefore wish to wait until the new parameters are set in autumn 2007 before deciding on the liability caps and finalising the new agreement.
- 5.4.4 Where contingent assets are already in place, the provider and the scheme may also wish to consider changing the level of cover once the new parameters are set. However, parties are of course under no obligation to amend contingent asset agreements once they are in place, and the levy formula for future years will continue to give appropriate credit for the cover provided by existing contingent assets. The Board will also review the amendment and replacement rules embedded in the standard form documents and set out in Annex G to the Board's Determination to ensure consistency.

5.5 Using a longer term measure of underfunding in future levy years

- 5.5.1 The current approach to measuring underfunding in the calculation of an individual scheme's risk based levy uses the most recent value of a scheme's assets and liabilities rolled forward to a common valuation date and using a common set of actuarial assumptions concerning mortality, expenses and discount rates. The PPF takes into account deficit reduction contributions made by the sponsor since the last valuation date, and the economic impact of any contingent asset arrangements that comply with the PPF's standard documentation and other requirements. This allows the Board to measure the residual economic exposure in the event of insolvency of the sponsor. This approximates the likely net impact on the PPF's balance sheet of a claim in the event of sponsoring employer insolvency and pension scheme underfunding.
- 5.5.2 The LTRM models the evolution of the value of assets and liabilities under each different economic and credit scenario modelled, allowing also for the impact of scheme funding plans as they mature. This is necessary to estimate the impact of future funding failure on the PPF in each scenario. Further details on how the PPF projects assets and liabilities in the LTRM can be found in "Modelling uncertainty: an introduction to the PPF Long Term Risk Model".
- 5.5.3 The Board consulted on the incorporation of asset allocation (or investment risk) as a factor in December 2006. The views of the PPF and a majority of stakeholders were aligned to the conclusion that the PPF should not include this as an additional risk factor in the calculation of individual risk based levies at the current time. However, the volatility of interest rates and investment market returns is an important contributor to the projected level of deficits/surpluses calculated by LTRM in determining the levy estimate. One option to adjust the underfunding risk formula is by rescaling the 1.05 parameter applied to the estimated value of section 179 liabilities in the levy distribution formula by fitting this parameter to ensure that the simple formula was a good fit to the theoretical levy formula outlined in chapter 2.

5.6 Questions on what you have read in this chapter

- 5.6.1 The following questions are designed to elicit your views on areas where your comments are of particular interest to the Board. They are far from exhaustive, and the Board welcomes your views on any element(s) of the proposals outlined above.

- 5.6.2 Do you support the Board's proposed approach to allowing the funding limits and RBL cap to remain floating until the proposed levy estimate and draft determination are published in Autumn 2007?**
- 5.6.3 Do you agree that a sufficiently strong levy disincentive should be applied to those schemes that do not submit a s179 valuation by 31 March 2008?**
- 5.6.4 Are there ways the Board could reduce the barriers to the use of contingent assets, particularly of Type B and C contingent assets?**
- 5.6.5 The Board would welcome comments on the use of new or additional products to reduce risk, and their potential impact on the levy.**
- 5.6.6 How do you think the Board should calculate a long term measure of underfunding?**

Chapter 6 – Levy Waiver and eligibility policy

6.0 Chapter Summary

This chapter proposes that schemes in assessment that are not rescued should benefit from a levy waiver. It also asks for views on whether schemes that purchase annuity contracts in the trustees' name covering full scheme benefits should remain eligible for PPF.

6.1 Introduction

6.1.1 The Pension Protection Fund (Waiver of Pension Protection Levy and Consequential Amendments) Regulations 2007 (SI 2007/771) came into force on 30 March 2007. These provide the Board with the discretion to waive the pension protection levy in respect of an eligible scheme for a particular year. The set of circumstances under which the Board can exercise this discretion is very limited, and is set out in the Regulations.

6.2 Schemes in assessment

6.2.1 Currently, schemes in assessment remain eligible to pay both the scheme and risk based elements of the pension protection levy, as there is no certainty when a scheme enters an assessment period that it will not be rescued, and pose an ongoing risk to the Fund.

6.2.2 The Board believes that there are convincing arguments to waive all PPF levies for schemes in an assessment period. Such schemes are already excluded from the long term risk model and from the calculation of the levy scaling factors, so there would be no impact on the Board's ability to collect the levy estimate in full.

6.2.3 When a scheme in assessment is funded above PPF levels, but is not rescued, paying the pension protection levy during the assessment period simply leads to lower annuities for scheme members. When a scheme in assessment is funded close to PPF levels, there is a risk that the extra burden of the levy could lead to its entry into the PPF. We believe that both scheme members' and levy payers' interests are better served in the longer term by schemes not entering the PPF.

6.2.4 The primary source of PPF funding is assets transferred from eligible schemes entering the PPF. In most cases charging a levy to schemes in assessment that transfer into the PPF is counter-productive in that any levy payable only serves to reduce assets that would come into the PPF. However, where a scheme is ultimately rescued, the Board would recover any levies waived during the assessment period, since such a scheme remains an ongoing risk to the Fund. This would treat all schemes that could be a future claim on the PPF in a consistent manner and have no economic impact on the PPF's financial position.

- 6.2.5 The current waiver regulations do not allow levies to be waived for schemes in assessment. Therefore, the Board would need to make application to the Department for Work and Pensions (DWP) that they consider amending the waiver regulations to allow the levy for schemes in assessment to be waived. Whether the Board's application is accepted or not is, of course, a matter for DWP.
- 6.2.6 If the application were to be successful, achieving a change to DWP regulations requires that DWP conduct a consultation exercise. You would have the ability to respond to this consultation. The PPF would publish details of the DWP consultation on the Pension Protection Fund website at the appropriate time.

6.3 Treatment of annuity contracts

- 6.3.1 The legislation governing section 179 valuations requires that all annuity contracts held by the scheme in the name of scheme trustees should be valued as assets as part of the s179 valuation, since the benefits they are covering remain liabilities of the scheme, and should be valued accordingly. This remains the case even where all scheme benefits have been bought out in the name of the trustees.
- 6.3.2 However, the Board has discretion to waive the levy where immediately before 6 April 2006, the scheme was a former approved superannuation fund within the meaning of paragraph 1(1)(b) of Schedule 36 to the Finance Act 2004 and the proposed waiver relates to the amount payable by way of any pension protection levy which was imposed for the financial year beginning on 1 April 2006. This is because schemes in this position pose a very low risk to the PPF, since the assets and liabilities are matched, and even the insolvency of the insurance company would present little risk, given the capital adequacy requirements for insurance companies.
- 6.3.3 In the light of this, the Board would be interested in views on whether schemes that have bought out all benefits in the name of the trustees should remain eligible for the PPF. Any change in this area would require DWP to amend regulations.

6.4 Questions on what you have read in this chapter

- 6.4.1 The following questions are designed to elicit your views on areas where your comments are of particular interest to the Board. They are far from exhaustive, and the Board welcomes your views on any element(s) of the proposals outlined above.

6.4.2 We would welcome your views on whether the levy should be waived for schemes in assessment.

6.4.3 We would welcome your views on whether schemes that have bought out all benefits in the name of the trustees should remain eligible for the PPF.

Chapter 7 – The Consultation Process

7.0 Responding to the consultation

The Board of the Pension Protection Fund welcomes your views on the proposals included in this consultation document.

A summary of responses and the Board's draft Determination under section 175(5) of the Pensions Act 2004 for the 2008/09 levy year will be published during autumn 2007.

7.1 Arrangements for Written Submissions

- 7.1.1 The consultation period begins on **8 August 2007** and will end on **3 October 2007**. Please ensure that your response reaches us by that date. If you would like further copies of this document it can be found at the Pension Protection Levy section of the Pension Protection Fund website at www.pensionprotectionfund.org.uk.

Please address all hardcopy responses to:

Rachel Altmann
Head of Levy Policy
Pension Protection Fund
9th Floor Knollys House
17 Addiscombe Road
Croydon
CR0 6SR

Please e-mail all electronic responses to consultation@ppf.gsi.gov.uk.

- 7.1.2 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.
- 7.1.3 The requirements of the Freedom of Information Act (2000) state that 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. 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 the Freedom of Information Act (2000) obligations and general law on this issue. Queries should be sent to Paul Reynolds.

Further information about the Freedom of Information Act (2000) can be found on the website of the Ministry of Justice.

7.2 Publishing a summary of responses

7.2.1 The Board will publish a summary of responses on the PPF website at www.pensionprotectionfund.org.uk during autumn 2007, together with a draft 2008/09 Levy Determination.

7.2.2 This consultation is being conducted in line with the Code of Practice on Consultation. The code can be accessed at <http://www.cabinetoffice.gov.uk/regulation/consultation/>

7.3.2 The Board would value any feedback on the effectiveness of this consultation process. If you have any comments then please contact:

Paul Reynolds

Director of Communications

Pension Protection Fund

9th Floor Knollys House

17 Addiscombe Road

Croydon

CR0 6SR

Tel: 020 8633 4968

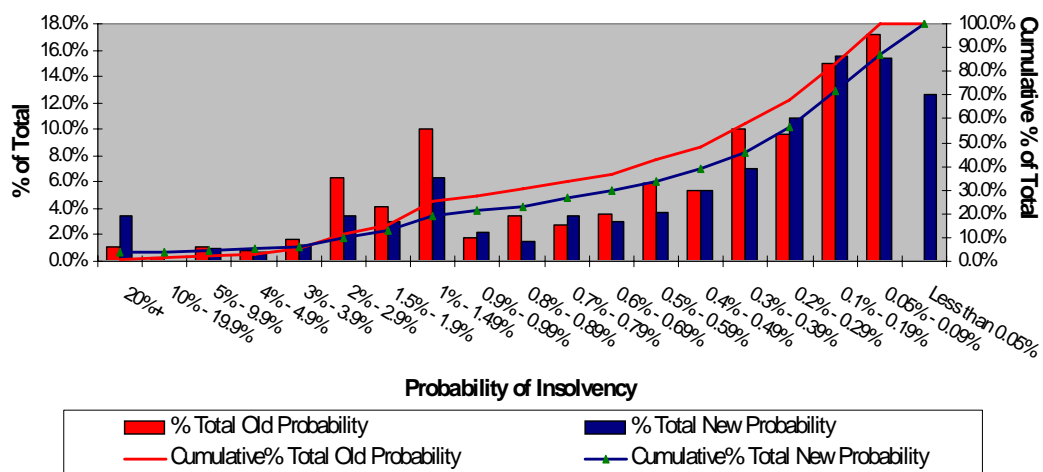
Email: paul.reynolds@ppf.gsi.gov.uk

Annex A – Revised D&B Failure Score Methodology

A.1 Summary

- A.1.1 In June 2007, D&B commenced the roll out of a revised methodology for assessing the insolvency risk of UK employers. The vast majority of participating employers of eligible schemes have now been re-scored in accordance with this revised methodology. The approach continues to be based on the 1 to 100 failure score scale. However, a number of changes have been made to the D&B scorecards to make sure that the assessment of insolvency risk reflects recent experience of employer insolvency and takes a more sector and size specific approach.
- A.1.2 Most of the changes to the failure score that were included in the PPF specific score for 2007/08 have been incorporated into the revised D&B methodology (e.g. the failure score is no longer overridden where a company has negative net worth, and the rules concerning County Court Judgements have been amended broadly as per the approach taken by the PPF).
- A.1.3 A new scorecard has been created for not-for-profit employers to take account of the particular features of that sector. Not-for-profit organisations that are not required to file accounts with Companies House will now be scored to more accurately reflect their true level of risk, although employers may still see additional benefits of filing their accounts with D&B.
- A.1.4 The Board is satisfied that the revised methodology is of no detriment to the PPF universe, and, in many cases, represents increased accuracy, transparency and appropriateness. This directly addresses many of the concerns previously voiced by schemes.

PPF - New UK Score Migration Analysis July 2007
Distribution of Old vs New Probability of Insolvency



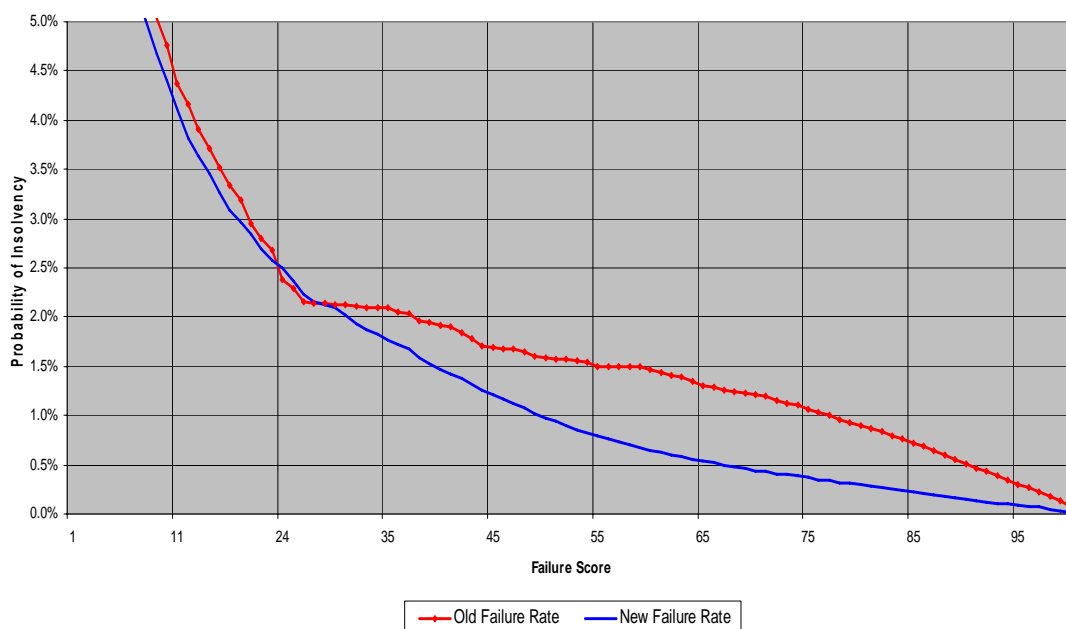
A.2 Mapping failure scores to probabilities of insolvency

A.2.1 D&B have also produced a revised insolvency probability table for the PPF which maps each of the 1 to 100 failure scores to a probability of insolvency which will then be used in the 2008/09 and 2009/10 levy calculations. The revised methodology and associated probabilities of insolvency are not relevant for the 2007/08 levy year.

A.2.2 This revised table is included as Annex B to this consultation document. Since it is the insolvency probability that will be used in the levy calculation, rather than the failure score, it is worth finding out what the revised table implies for the sponsoring employers of your scheme.

A.2.3 For failure scores 30 and above, the revised insolvency probabilities are universally lower than the insolvency probabilities used in the 2006/07 and 2007/08 levy years in respect of any particular failure score. Annex C sets out a table comparing the new and old failure scores to insolvency probabilities. The revised methodology enables a greater degree of granularity in terms of probabilities of insolvency for very low risk employers, with scores at the upper end of the percentile distribution. For example, the new failure scores 96-100 all have probabilities of insolvency lower than that associated with a failure score of 100 in levy years 2006/07 and 2007/08.

Distribution of Probability of Insolvency (Old vs. New) by Failure Score



A.2.4 For individual employers (except those in the not-for-profit and financial sectors), failure scores will generally be lower than they were previously. However, the underlying insolvency probability for a particular employer (used in the levy calculation) will tend to remain much the same.

A.2.5 For example, a new failure score of 50 has an associated probability of insolvency akin to an old failure score of 78. This means that an employer whose failure score was 78 at 30 March 2007 might have a failure score of 50 at 31 March 2008, yet an almost identical probability of insolvency, which would mean that the scheme's risk based levy would not change, assuming other factors remained constant.

Annex B – 2008/09 and 2009/10 Insolvency Probability Table

D&B Failure Score	Probability of Insolvency	D&B Failure Score	Probability of Insolvency	D&B Failure Score	Probability of Insolvency	D&B Failure Score	Probability of Insolvency
100	0.0001	75	0.0037	50	0.0098	25	0.0237
99	0.0003	74	0.0039	49	0.0102	24	0.0250
98	0.0005	73	0.0040	48	0.0108	23	0.0252
97	0.0007	72	0.0041	47	0.0112	22	0.0254
96	0.0008	71	0.0043	46	0.0117	21	0.0257
95	0.0009	70	0.0044	45	0.0122	20	0.0269
94	0.0010	69	0.0046	44	0.0126	19	0.0284
93	0.0011	68	0.0048	43	0.0132	18	0.0290
92	0.0012	67	0.0050	42	0.0138	17	0.0297
91	0.0013	66	0.0052	41	0.0142	16	0.0309
90	0.0015	65	0.0054	40	0.0147	15	0.0326
89	0.0017	64	0.0056	39	0.0153	14	0.0346
88	0.0018	63	0.0058	38	0.0159	13	0.0364
87	0.0020	62	0.0060	37	0.0167	12	0.0381
86	0.0021	61	0.0063	36	0.0172	11	0.0411
85	0.0023	60	0.0065	35	0.0176	10	0.0440
84	0.0024	59	0.0067	34	0.0182	9	0.0467
83	0.0025	58	0.0070	33	0.0187	8	0.0501
82	0.0027	57	0.0073	32	0.0193	7	0.0535
81	0.0028	56	0.0076	31	0.0202	6	0.0589
80	0.0030	55	0.0079	30	0.0209	5	0.0663
79	0.0031	54	0.0082	29	0.0213	4	0.0774
78	0.0032	53	0.0086	28	0.0216	3	0.0971
77	0.0034	52	0.0090	27	0.0223	2	0.1379
76	0.0035	51	0.0094	26	0.0230	1	0.2926

Annex C –Old v New Failure Score Probability Mappings

New Failure Score	Probability of Insolvency	Previous Failure Score
1	0.2926	1
2	0.1379	3
3	0.0971	4
4	0.0774	5
5	0.0663	7
6	0.0589	8
7	0.0535	8
8	0.0501	9
9	0.0467	10
10	0.0440	11
11	0.0411	12
12	0.0381	13
13	0.0364	14
14	0.0346	15
15	0.0326	16
16	0.0309	17
17	0.0297	19
18	0.0290	20
19	0.0284	20
20	0.0269	21
21	0.0257	21
22	0.0254	21
23	0.0252	21
24	0.0250	21
25	0.0237	24
26	0.0230	25
27	0.0223	25
28	0.0216	27
29	0.0213	29
30	0.0209	34
31	0.0202	37
32	0.0193	40
33	0.0187	41
34	0.0182	42
35	0.0176	43
36	0.0172	44
37	0.0167	47
38	0.0159	49
39	0.0153	54
40	0.0147	60
41	0.0142	62
42	0.0138	63
43	0.0132	65
44	0.0126	67
45	0.0122	70
46	0.0117	72
47	0.0112	74
48	0.0108	75
49	0.0102	76
50	0.0098	78

New Failure Score	Probability of Insolvency	Previous Failure Score
51	0.0094	79
52	0.0090	80
53	0.0086	81
54	0.0082	82
55	0.0079	83
56	0.0076	84
57	0.0073	85
58	0.0070	86
59	0.0067	86
60	0.0065	87
61	0.0063	87
62	0.0060	88
63	0.0058	88
64	0.0056	89
65	0.0054	89
66	0.0052	90
67	0.0050	90
68	0.0048	91
69	0.0046	91
70	0.0044	92
71	0.0043	92
72	0.0041	92
73	0.0040	93
74	0.0039	93
75	0.0037	93
76	0.0035	94
77	0.0034	94
78	0.0032	94
79	0.0031	95
80	0.0030	95
81	0.0028	95
82	0.0027	96
83	0.0025	96
84	0.0024	96
85	0.0023	97
86	0.0021	97
87	0.0020	97
88	0.0018	98
89	0.0017	98
90	0.0015	98
91	0.0013	99
92	0.0012	99
93	0.0011	99
94	0.0010	99
95	0.0009	99
96	0.0008	100
97	0.0007	100
98	0.0005	100
99	0.0003	100
100	0.0001	100

Annex D – Suggested Selection Criteria For An Insolvency Risk Provider

Criteria	What This Could Cover
Customer Service	<p>Measurable service standards</p> <p>Rigorous, transparent and accessible appeals process compliant with industry best practise complaints management</p> <p>Willingness to perform representational duties as appropriate and applicable to a high profile Government sector contract</p>
Methodology	<p>Transparency of methodology</p> <p>Preparedness to establish, or use an existing, customer appeals process which adheres to best practise principles and processes customer appeals within agreed timescales</p> <p>Ability to determine suitable insolvency probabilities where no existing measure can be applied</p> <p>Ability to freeze insolvency risk measures and associated data at a fixed date each year</p>
Data	<p>The applicant should be able to demonstrate the ability to gather data from an appropriate range of sources for all employers, including charities</p>
Coverage & Ability to Deliver Against Legislative Requirements	<p>Ability to provide a measure of insolvency risk by March 2009 for all schemes within the universe covered by their contract (total universe across all lots now anticipated to be approximately 40,000), and in compliance with all terms and conditions of proposed contract</p>
Value for Money	<p>The expectation will be that while value for money is a significant consideration, it will be secondary to suitability of methodology and provision of customer support</p>

Annex E - Appealing/reviewing the levy calculation

E.0 Summary

This annex sets out the process by which a scheme can seek a review of a levy invoice. It also discusses the means by which an appeal can be made to D&B regarding a company's failure score.

E.1 Introduction

- E.1.1 The Board believes it to be essential that a robust, consistent, transparent process is in place for schemes to query the information used in the levy calculation. Such a process has been in place since the 2006/07 levy year. However, we felt it was important to set it out in full, including in particular all relevant deadlines for querying the invoice or raising a review, since the Board's firm intention will be to apply these deadlines strictly for levy years 2007/08 and beyond, except in exceptional circumstances. Schemes were in many cases allowed some extra time to appeal in the first year of the risk based levy, to give time for the levy process to bed down. However, since this has now happened, it is important to ensure that payment of levies is not unduly delayed in the future, for the benefit of levy payers as a whole.
- E.1.2 Most levy invoice queries, except those specifically querying a D&B failure score, can be dealt with quickly and efficiently by contacting the Stakeholder Support Team at the Pension Protection Fund on 0845 600 2541 or at levyinvoice@ppf.gsi.gov.uk.
- E.1.3 If a scheme receives an invoice for the pension protection levy and believes that the calculation is incorrect (in terms of incorrect data used to determine a scheme's underfunding risk or erroneous calculations on the part of the Pension Protection Fund), it may seek a formal review of the amount of its levy as a "reviewable matter" under section 206 of and schedule 9 to the Pensions Act 2004. In most, if not all, cases it will be appropriate to raise a query with the Stakeholder Support Team in the first instance, and only to raise a formal review if you are dissatisfied with the outcome of your query.
- E.1.4 If an employer wishes to appeal against its failure score, the employer should approach D&B, whose appeals process is set out in section E.3. An employer's failure score is not determined by the Board, but is an independently existing piece of data which the Board obtains for the purposes of the levy calculation. As such, the failure score is not itself a "reviewable matter" and any failure score upheld by D&B will not be amended by the Board.
- E.1.5 The Board's Determination is also not a "reviewable matter". This means that whilst schemes can query the data used in the levy

calculation, the actual rules for levy calculation, as set out in that Determination, are not subject to review.

E.2 Seeking a review of the levy amount

- E.2.1 If you wish to raise a formal review, information on how to do so can be found in the booklet which will be included with all levy invoices, and in “How we deal with your concerns”, which can be found in the guidance section of the Pension Protection Fund website.
- E.2.2 An electronic ‘Application for Levy Review Form’ will be made available on the PPF website before invoicing of the pension protection levy commences. Use of the form is not mandatory, but it is designed to assist schemes who wish to request a formal review of the calculation of the levy to do so in a way that satisfies the relevant regulations.
- E.2.3 The regulations include specific requirements as to who can seek a review, and the time by which they must do so. A request for a review will also only be considered if that request has been made:
- By a trustee of an eligible pension scheme or their representative formally appointed for the purpose, and
 - Except in exceptional circumstances, within the later of 28 days of the date at which the Board issued the invoice, and 28 days of the date at which informal review discussions with the PPF Stakeholder Support Team have been concluded (provided that those informal discussions commenced within 28 days of the date at which the Board issued the invoice).
- E.2.4 Once a request for a review has been received, the Pension Protection Fund will review the information used to calculate the levy. If an error is identified, a credit note followed by a revised levy invoice will be issued. In every instance the Pension Protection Fund will aim to respond within 28 days.
- E.2.5 If the response received from the Pension Protection Fund to a formal review does not satisfy the concern, the issue can be raised with the Pension Protection Fund Reconsideration Committee.
- E.2.6 If the response of the Pension Protection Fund Reconsideration Committee is deemed unsatisfactory, the issue may be considered by the Pension Protection Fund Ombudsman. At all stages of the levy review process there is no discretion to depart from the terms of the Board’s Determination for the relevant levy year.

E.3 Appealing the D&B Failure Score

- E.3.1 The insolvency risk element of both the 2008/09 and 2009/10 levy calculations will be based on the failure scores and associated

probabilities of insolvency assigned to the sponsoring employers by D&B, as at 31 March 2008. These failure scores will be calculated on the basis of the revised D&B methodology which is being rolled out across the whole UK employer universe during summer 2007. This new methodology is discussed in Annex A.

- E.3.2 The Board would strongly encourage employers to obtain their D&B failure scores in advance of 31 March 2008, and to engage with D&B to ensure that their insolvency risk calculation is based on the fullest, most up-to-date and accurate data available. Additional data provided to D&B after 31 March 2008 will not be taken into account in any appeal. However, having received an invoice a scheme may still query that failure score if it fails to take account of data that should have been available to D&B in the normal course of its business by contacting the dedicated D&B helpline for Pension Protection Fund related queries on 0870 850 6209 or by emailing customerhelp@dnb.com. That appeal will only be considered if it is made within 28 days of the issue of the invoice.
- E.3.3 D&B failure scores for all participating employers are available over the phone from D&B without charge, and we strongly encourage schemes to engage with D&B to ascertain and understand their score as early as possible.
- E.3.4 Typical grounds for appeal of the D&B failure score would include where the scheme considers that the data used by D&B was incorrect as at 31 March 2008, or where the employer has taken steps to amend their failure score such as filing new accounts with Companies House prior to 31 March 2008 and there has been a delay in processing of that information through Companies House or D&B.
- E.3.5 D&B will then undertake a robust appeals process in every case which encompasses the following stages:

Stage 1: Data validation

The customer service team will check that the data in the D&B report (on which the failure score is based) is accurate and up-to-date. If the data is found to be incorrect, additional information will be requested from the most appropriate source. If the data is correct, but the company still disagrees with the score, the query moves to stage 2.

Stage 2 - Score explanation

The customer service team will then provide a generic explanation of how the score is calculated based on the data included in the D&B report and the key components of the scoring algorithm.

Stage 3 – Escalation process

Customer service manager review

If a company still wishes to appeal against its failure score following a discussion of how that score is calculated, its appeal will be escalated to the customer service manager. The customer service manager will then review the failure score and speak to the customer service team involved to ascertain that the correct process has been followed, and to ensure all the relevant information has been provided. Once this review is complete, the customer service manager will call the customer back to talk through the score again and discuss any specific concerns still remaining.

Scoring specialist review

If concerns are still apparent, the appeal will be escalated to a scoring specialist who will review the technical aspects of the score, and will be able to discuss those aspects in greater detail.

D&B director review

The final stage in the process is for the appeal to be passed to a D&B director for review. The director will gather all the relevant information, speak to the parties involved, and confirm that the processes have been followed correctly.

The director will then respond in writing.

- E.3.6 The validation of data should take no longer than 28 days in the case of UK failure score queries. Where an overseas failure score is queried, D&B UK Customer Services would aim to complete the validation of data within 28 days. In all cases, a regular update will be provided to parties concerned.
- E.3.7 The final outcome of the appeal will be communicated to all the relevant parties, including the Pension Protection Fund.
- E.3.8 At all stages of an appeal, D&B will keep all parties informed and, if a call back or response in writing is required, will provide an indication of when a response should be expected.
- E.3.9 If the appeal results in an adjustment to the failure score, the Pension Protection Fund will recalculate the levies and re-invoice as appropriate. As stated above, if the appeal does not result in an adjustment, no further appeal will be considered by the Board of the PPF as the Failure Score is not a “reviewable matter”.

Annex F – Levy formula

F.1. Calculation of insolvency risk factor (P)

$$P = M \times \sum_{i=1}^K w_i p_i$$

$$w_i = \frac{E_i}{E}$$

$$E = \sum_{i=1}^K E_i$$

P = insolvency risk factor used in levy calculation for scheme/section

K = number of sponsoring employers in the scheme/section

E_i = number of members of the i th sponsoring employer in the scheme/section

E = total number of members for all sponsoring employers in the scheme/section

w_i = weighting applied to the insolvency probability of the i th sponsoring employer in the scheme/section

p_i = implied probability of insolvency for i th employer corresponding to failure score (or equivalent) based on 2008/9 levy determination country mapping table from failure scores (or equivalent) to probabilities

M = factor dependent on type of multi-employer scheme (see table)

E_L = number of members for employer L with the largest number of scheme/section members (only relevant for non associated last man standing schemes)

Multi-employer scheme/section type	Factor (M)
Single employer	1
Option or requirement to segregate upon cessation of participation of an employer	1
Associated Last Man Standing	0.9
Non Associated Last Man Standing	$\frac{E_L}{E}$

F.2. Calculation of underfunding risk factor including contingent assets (U)

$$A' = S + C + N_b + N_c$$

S = estimated scheme assets at levy calculation date based on roll forward/backward s179 valuation formula

C = certified deficit reduction contributions between date of last valuation and levy calculation date

N_b = certified value of type B contingent assets

N_c = certified value of type C contingent assets

L = estimated s179 liabilities at levy calculation date based on roll forward/backward s179 valuation formula

$f = \frac{A'}{L}$ = assumed funding level taking into account deficit reduction contributions, type B and type C contingent assets

N_a = certified value of type A contingent asset

$$z = 1 - \frac{P_g}{P}$$

P_g = implied probability of insolvency for guarantor corresponding to failure score (or equivalent) based on 2008/9 levy determination country mapping table from failure scores (or equivalent) to probabilities

P = insolvency risk factor calculation

$$U = \lambda L - \alpha z$$

$$\lambda = \begin{cases} W - f & f \leq b_0 \\ 0.0075 & b_0 < f \leq b_1 \\ 0.005 & b_1 < f \leq b_2 \\ 0.0025 & b_2 < f \leq b_3 \\ 0 & f > b_3 \end{cases}$$

$$\alpha = \begin{cases} \min(N_a, \max((W - f)L, 0)) & f \leq b_0 \\ \min(N_a, 0.0075L) & b_0 < f \leq b_1 \\ \min(N_a, 0.005L) & b_1 < f \leq b_2 \\ \min(N_a, 0.0025L) & b_2 < f \leq b_3 \\ 0 & f > b_3 \end{cases}$$

W is our funding benchmark for levy distribution purposes. For the 2006/07 and 2007/08 levy years, W was 105%. For 2008/09 it is likely to be higher.

b_0 , b_1 , b_2 and b_3 are the cut-off points at which the deemed underfunding level changes. For the 2006/07 and 2007/08 levy years, the relevant values were $b_0 = 104\%$, $b_1 = 111\%$, $b_2 = 118\%$, $b_3 = 125\%$. For 2008/09 these boundaries are

likely to change and may not continue to be evenly spaced. The Board may also decide to increase the number of steps which would of course impact the deemed underfunding percentages at each level as well as b_0 , b_1 , b_2 and b_3 .

W and b_0 are related as follows: $b_0 = W - 1\%$.

b_3 is the percentage funding level above which no risk based levy is payable.

F.3 Risk based Levy (RBL) formula

F.3.1 The risk based levy charged to a scheme/section is calculated using the formula:

$$RBL = \min(U \times P \times R \times c, K \times L)$$

U = underfunding risk factor (including contingent assets)

P = insolvency risk factor

R = proportion of the pension protection levy that is risk based

c = levy scaling factor

K = risk based levy cap, expressed as a decimal

L = estimated s179 liabilities

F.3.2 The draft Determination will incorporate the Board's proposed treatment for schemes that have not submitted a s179 valuation by the statutory deadline of 31 March 2008.

F.4 Scheme based levy (SBL) formula

F.4.1 The scheme based levy charged to a scheme/section is calculated using the formula:

$$SBL = hL$$

h = scheme based levy multiplier

L = estimated s179 liabilities

F.5 Risk based levy scaling factor

T = number of eligible schemes/sections (excluding schemes in assessment)

$\sum_{i=1}^T \min(\hat{U}_i \times P_i \times R \times c, K \times L_i)$ is the total risk exposure

\hat{U}_i = underfunding risk factor (excluding contingent assets and deficit-reduction contributions) of the i th scheme/section

P_i = insolvency risk factor for the i th scheme/section

L_i = estimated s179 liabilities of i th scheme/section

Q = pension protection levy estimate

K = levy cap, expressed as a decimal

The levy scaling factor is the solution, c , to the non-linear equation

$$\sum_{i=1}^T \min(\hat{U}_i \times P_i \times R \times c, K \times L_i) = Q \times R$$

F.6 Scheme based multiplier

T = number of eligible schemes/sections (excluding schemes in assessment)

L_i = estimated s179 liabilities of i th scheme/section

R = proportion of the pension protection levy that is risk based

Q = pension protection levy estimate

$$\sum_{i=1}^T L_i = \text{sum of estimated s179 liabilities over all eligible scheme}$$

The scheme based multiplier is the solution, h , to the linear equation

$$h \sum_{i=1}^T L_i = (1 - R) \times Q$$

$$h = \frac{(1 - R) \times Q}{\sum_{i=1}^T L_i}$$

Note that the formulae in F.5 and F.6 are slightly simplified and do not take account of, among other things, the need to scale up for schemes in respect of which the Board does not have adequate data when it is calculating the scaling factor and multiplier. The detailed formulae will be included in the draft 2008/09 Levy Determination.

Pension Protection Fund

If you would like more copies of this document,
you can order these by phone or email.

Please quote reference PPF0705.

Telephone: 020 8867 3297

Email: pensionprotectionfund@ecgroup.uk.com

www.pensionprotectionfund.org.uk