

Policy Statement

The Pension Protection Levy – A New Framework

Foreword

When we introduced the world's first risk-based pension protection levy in 2006, we were entering uncharted waters. Five years on, a solid bank of data, our experience of how the levy has worked in practice and a wide range of engagement with stakeholders have given us a solid foundation to build a levy which is fit for purpose for the long-term.

In October last year, we proposed a new framework which put levy payers' priorities of stability and predictability at its heart. We considered how to meet these while maintaining progress towards our long-term funding objectives. Our proposal balanced these objectives in a way that was widely welcomed by respondents.

I am encouraged by the level of engagement that the New Levy Framework consultation inspired. We received 45 submissions during the consultation period, as well as numerous questions and comments through industry events and communications such as our webinar in December. I would like to thank all stakeholders who have taken the time to respond through formal and informal channels. And once again, I would like to pay tribute to the members of our Steering Group for all their invaluable guidance and direction over the past 18 months.

We announced in January this year that based on the responses to the consultation, we intended to proceed with the New Levy Framework and I am pleased to share with you the results of the consultation and our final levy design. We received suggestions on the details of how we proposed to measure insolvency and investment risk, and have listened closely to these in finalising the design as described in this Policy Statement. It is clear to me that taking time to understand and consider the breadth and depth of stakeholders' views over the last few months has been time well-spent.

The start of the 2012/13 levy year may seem some time away, but work is already underway to make sure that we will be ready to issue the first invoices calculated under the new levy formula next year. We are also busy preparing the draft 2012/13 Determination so that it is ready for consultation this autumn. This will include the scaling factor which we expect to fix until 2014/15; at this point, we will also publish our estimate of the levy that we will collect in 2012/13.



Alan Rubenstein

Chief Executive

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1. Executive Summary

Introduction and Summary of Responses

- 1.1. The consultation document *The Pension Protection Levy: A New Framework* published in October 2010 was broadly welcomed as taking important steps to deliver stability and predictability for levy payers.
- 1.2. A total of 45 submissions were made by scheme representatives, consultancies, sponsoring employers and collective associations. We also received comments and questions at a range of public speaking events during the consultation period and through the levy webinar held in early December.
- 1.3. Most stakeholders were supportive of the thrust of our proposals and viewed them as a significant improvement on the current levy framework. For this reason, and to provide early notice of our intentions, we announced in January that we would go ahead with the introduction of the new framework from 2012/13, but that there would be further work on the detail. This Policy Statement sets out where that further consideration has led us.
- 1.4. There was overwhelming support for the proposal to seek to fix levy rules for three years and to allow the levy estimate (the total amount the PPF aims to collect each year) to vary along with changes in scheme risk (the “bottom-up” approach). There was also clear support for smoothing underfunding risk. These elements remain unchanged from our consultation proposals.
- 1.5. Our proposal on investment risk attracted significant comments on the details of measurement, which was not surprising since this is a new element of the calculation. A clear majority, however, supported its inclusion in the levy formula.
- 1.6. There were comments on our proposed standard approach to assess investment risk, which will be calculated by the PPF based on data that is currently reported in the Pensions Regulator’s Exchange system (Exchange), asking whether more of the detail could be used. Some responses questioned the capacity of the standard approach to recognise de-risking strategies. We have developed our proposal to meet these points as far as we can without increasing costs to schemes.
- 1.7. There was a desire for more detail on how the bespoke method would apply in practice for those schemes required or choosing to carry out

their own assessment. We have developed draft guidance on carrying out this stress analysis and are providing an opportunity to comment on it before it is published with the draft determination.

- 1.8. A number of changes in relation to measuring insolvency risk received comment: on banding, on the case for transitional protection, on the frequency with which D&B would measure failure scores, and on how scheme structure is reflected. In particular, there was the perception that reducing the number of different insolvency ratings to six would lead to significant cliff-edges, with schemes possibly experiencing large increases in levy because of a small decline in employer strength.
- 1.9. Whilst a system with fewer bands delivers greater predictability, we have listened and have developed a revised 10-band system which reduces the potential for significant changes in levy.
- 1.10. The new levy framework will be in effect from the 2012/13 levy year. Relevant deadlines are highlighted in the "Key Dates" section below.

Key Features of the New Framework

A Fixed Framework

- 1.11. It is intended that the levy parameters will be fixed for three years. This means that factors such as the risk-based levy scaling factor, the cap, and the scheme-based levy multiplier should be constant from 2012/13 until 2014/15. Schemes will be able to plan for their levies in the next few years with greater certainty, as changes in an individual scheme's levy should relate solely to any changes in their risk characteristics.
- 1.12. We will estimate the amount of levy to be raised annually, as required by legislation. For 2012/13, the first levy year under the new framework, we will publish a draft Determination for consultation alongside the levy estimate in the autumn. Levy payers will therefore have sight, later this year, of the levy parameters that we expect to be in place until 2015.
- 1.13. We intend to revise the levy parameters within those three years only if the levy estimate would otherwise:
 - Exceed the levy ceiling for the given year;
 - Result in the scheme-based levy estimate exceeding the statutory maximum of 20 per cent of the total levy; or,
 - Vary from the previous year's estimate by more than 25 per cent.

- 1.14. This limited flexibility will ensure we comply with the law and protect levy payers from the possibility that overall levies rise sharply as well as the PPF from the possibility of a substantial fall. Such a fall might subsequently need to be redressed through higher levies to ensure we remain on track to achieve our long-term funding objective and thereby to meet our commitments to members.

Smoothed Funding

- 1.15. Volatility in asset and liability values caused by market movements has played a large part in the sharp changes in levies that some schemes have experienced in the past few years.
- 1.16. From 2012/13, we will smooth funding levels so that sharp movements in financial markets will have less effect on the measures of liabilities and underfunding risk that are used to calculate the scheme-based and risk-based levies. We will smooth assets and liabilities, as reported on Exchange, through our roll forward mechanism, which we currently use to ensure that funding is measured on a comparable basis between schemes. Instead of index and yield values at a single date (e.g. 31 March), we will use the 5-year average value.¹ This will significantly reduce volatility in asset and liability values; consequently, levies will be more stable.

Investment Risk

- 1.17. The investment risk of a scheme's portfolio will be incorporated into the risk-based levy for the first time, to reflect the differences in risk posed to the PPF by the investment strategies of eligible pension schemes.
- 1.18. There is a wide array of investment strategies that schemes pursue in line with their Statement of Investment Principles, which incorporate their specific risk and return objectives. We recognise that trustees are best placed to set such strategies, and do not seek to influence them; we are solely aiming to reflect more closely, in the share of total levy, the risk to the PPF of the different strategies.
- 1.19. For the vast majority of schemes, there will be no additional reporting requirements. We will apply stresses to the asset and liability values submitted in Exchange to calculate the stressed funding position for levy purposes.

¹ For detail on the smoothing methodology for assets and liabilities, see chapter 3. Annex D provides an example of the calculation.

1.20. The indicative² stresses that we will apply to scheme assets are displayed in table 1 below. This list mirrors the categories of assets into which schemes currently break down their assets for reporting.

Table 1: Indicative asset stresses

Corporate bonds	Nominal gilts	Index-linked bonds	UK Equity	Overseas Equity	Property	Cash	Hedge Funds	Commodities	Insurance Funds ³	Annuities	Other
+1%	+9%	+16%	-22%	-19%	-7%	0%	-9%	-19%	-22%	+12%	-22%

1.21. Table 2 shows the asset stresses we had previously proposed.

Table 2: Proposed asset stresses

Corporate bonds	Nominal gilts	Index-linked bonds	UK Equity	Overseas Equity	Property	Cash	Other
-4.6%	+9.8%	+19.1%	-21.7%	-18.5%	-7.1%	0%	-21.7%

1.22. We will calculate the stressed liabilities on behalf of all schemes by applying the relevant risk factor stresses shown in table 3 to the yields we currently use to calculate s179 liabilities:

Table 3: Stresses on liabilities

Interest rates	Inflation
-67bps	+33bps

1.23. We require schemes with s179 liabilities of £1.5 billion or more, and thereby generally representing the most risk to us in terms of the possible size of claims, to carry out more detailed analysis of their assets and report their results to us in their annual scheme return.

1.24. Other schemes may choose to undertake bespoke stress analysis to submit to us; this will be an optional field in Exchange for schemes that have s179 liabilities of less than £1.5 billion.

1.25. There are two stages in the bespoke calculation. The first stage applies a fuller list of stresses to assets; these capture 20 subclasses, recognising more details of investments than those reported in Exchange, e.g. different durations of fixed income products. The second stage applies to schemes with investments in derivatives, either directly or through a pooled LDI fund. Such schemes will then

² We will update the current stresses with additional years' data to incorporate the five years to March 2011. The final stress values will be published in the levy determination to be released in late 2011.

³ While insurance funds are identified as a separate asset class in Exchange, we expect schemes to allocate these assets according to the asset class breakdown that should be available from providers, i.e. typically a combination of equity and fixed income. Only the remaining unallocated assets should be entered as insurance funds.

be able to reflect the risk-reducing qualities of these investments in the bespoke stress.⁴

- 1.26. For schemes that do not have derivative strategies, we have set the standard and bespoke stresses so as to provide broadly consistent results. We expect that, generally, only schemes that have implemented risk-reducing derivative strategies will find that there is advantage in the bespoke approach, in terms of a levy reduction. We advise such schemes to consider the impact of their investment strategy on the levy in deciding whether the bespoke approach is appropriate for their circumstances.
- 1.27. Alongside this Policy Statement, we are publishing for consultation the draft guidance for carrying out bespoke analysis of investment risk. This provides the formulae for the required calculations and a number of detailed examples. Interested stakeholders are invited to submit any comments by 24 June.

Insolvency Risk

- 1.28. Assessing an employer's probability of insolvency over a year is a challenge for all systems of monitoring and rating. Based on our analysis of historical default rates and Moody's credit ratings, shown in chapter 4, there is little statistical evidence to support more than six levels of risk. This conclusion is supported by our experience, albeit limited, of D&B Failure Scores, and claims to date.
- 1.29. As noted in section 1.9 above, however, in response to stakeholders' concerns about cliff-edges between bands, we have decided to use D&B's Failure Scores to place employers into 10 different levels of insolvency risk. Given most stakeholders' preference for an increase in the number of bands instead of the implementation of transitional protection, transitional protection will not be a feature of the new system.
- 1.30. To reduce the effect of temporary fluctuations in an employer's Failure Score, the insolvency risk of employers will be based on the average Failure Score over 12 months.⁵ For the 2012/13 levy year, these will be the Failure Scores from the period April 2011 to March 2012, measured on the last working day each month. We will use the average Failure Score to place each employer in a PPF levy band for the year.

⁴ See chapter 3 and the draft guidance for details on the bespoke stresses.

⁵ We will calculate the average by taking the equally weighted mean of the 12 monthly Failure Scores.

1.31. Table 4 below shows how employers will be allocated to PPF levy bands based on their average Failure Score, and the levy rates that will be charged for each band. These rates will be adjusted by the risk-based levy scaling factor, which is estimated to be lower than that for 2011/12.

1.32. Table 4: PPF levy bands

Levy Band	1	2	3	4	5	6	7	8	9	10*
D&B Failure Score	100-99	98-96	95-92	91-87	86-73	72-66	65-46	45-38	37-30	29-1
Levy Rate	0.18%	0.28%	0.44%	0.69%	1.10%	1.60%	2.01%	2.60%	3.06%	4.00%

*capped

1.33. Where a scheme has more than one employer, each employer will be placed in a band and a weighted average⁶ of the applicable levy rates will then be assigned to the scheme.

1.34. We will continue to apply a factor to the risk-based levy of last man standing schemes to recognise the lower risk that their scheme structure entails.⁷ This factor will be applied to the scheme's weighted-average levy rate.

1.35. For those last man standing schemes where the employers are of the same group ("associated"), this factor will remain 0.9. We have limited experience of insolvency events involving last man standing schemes with employers from the same group. Based on this experience and our analysis of correlation between related employers, however, we believe that a factor of 0.9 remains an appropriate reflection of their risk.

1.36. The factor for non-associated last man standing schemes will reflect the concentration of all employers within the scheme, rather than (as in the current formula) just that of the largest.⁸

Contingent assets

1.37. Our contingent asset regime provides for an immediate reduction in levy, on the basis that a contingent asset reduces the scheme's long-term risk to us. We consider that our current requirements for the

⁶ Weighted by members, as in the current levy formula.

⁷ "Last man standing" here refers to schemes defined as a "Last Man Standing Scheme" by Rule E4.2(2) or a "Centralised Scheme" by Rule E4.2(4) in the 2011/12 Determination.

⁸ To do this, we will take the sum of the squares of the proportion of each employer in terms of members. This is derived from the Herfindahl index, which is commonly used to measure industry concentration. Chapter 4 provides details of the formula.

recognition of contingent assets are reasonable given the levy benefits which are available and the feedback received as part of the consultation. We will continue to recognise the existing range of contingent assets types, as long as they are properly certified, although their impact on the levy will be adjusted to reflect the new framework.

Governance

- 1.38. The Board has considered carefully the implications of recognising good governance to allow for a discount in the risk-based levy. While we believe that good governance should be encouraged, we do not believe that the levy is the appropriate mechanism by which to do so, and the majority of stakeholders agreed with us. We therefore will not be developing this idea further.

What will the impact on schemes be?

- 1.39. We have modelled how the new formula would have affected schemes as characterised by their funding levels and insolvency risk. This analysis, shown in figures 1 and 2, compares levies under the current and new formulae for both 2010/11 and 2011/12.⁹ A full impact analysis is available in annex A.
- 1.40. Schemes that are well-funded, on a smoothed and stressed funding basis, will generally pay less in the new framework. This reflects our aim of shifting the emphasis of the risk-based levy to funding risk. The funding categories have been set so that there are 20 per cent of schemes in each; schemes with funding levels that are in the highest 40 per cent tend to pay less.
- 1.41. As the new measure of insolvency provides for a risk margin that charges relatively more to employers with low expected risk, schemes that are in bands 1-6 (corresponding to Failure Scores of 100-66) will tend to pay more, except generally for those with high and very high funding.

⁹ In our modelling we use the following parameters:

- 2010/11: Levy estimate of £720m and RBL cap of 0.5 per cent, and for the new framework, a risk-based levy scaling factor of 0.65 and a scheme-based multiplier of 0.0001012
- 2011/12: Levy estimate of £600m and RBL cap of 0.75 per cent, and for the new framework, a risk-based levy scaling factor of 0.69 and a scheme-based multiplier of 0.0000677

Schemes have been placed in the band with the levy rate closest to their applied rate.

Figure 1: Change in Levy by Funding and Levy Band, for 2010/11 (£million)

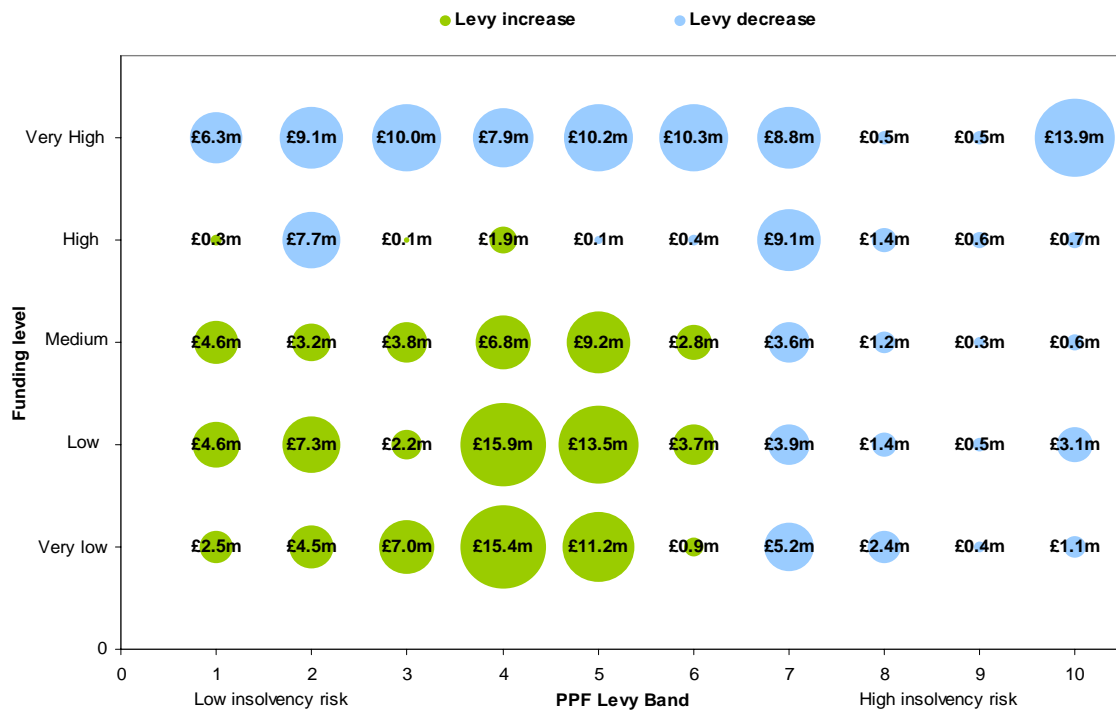
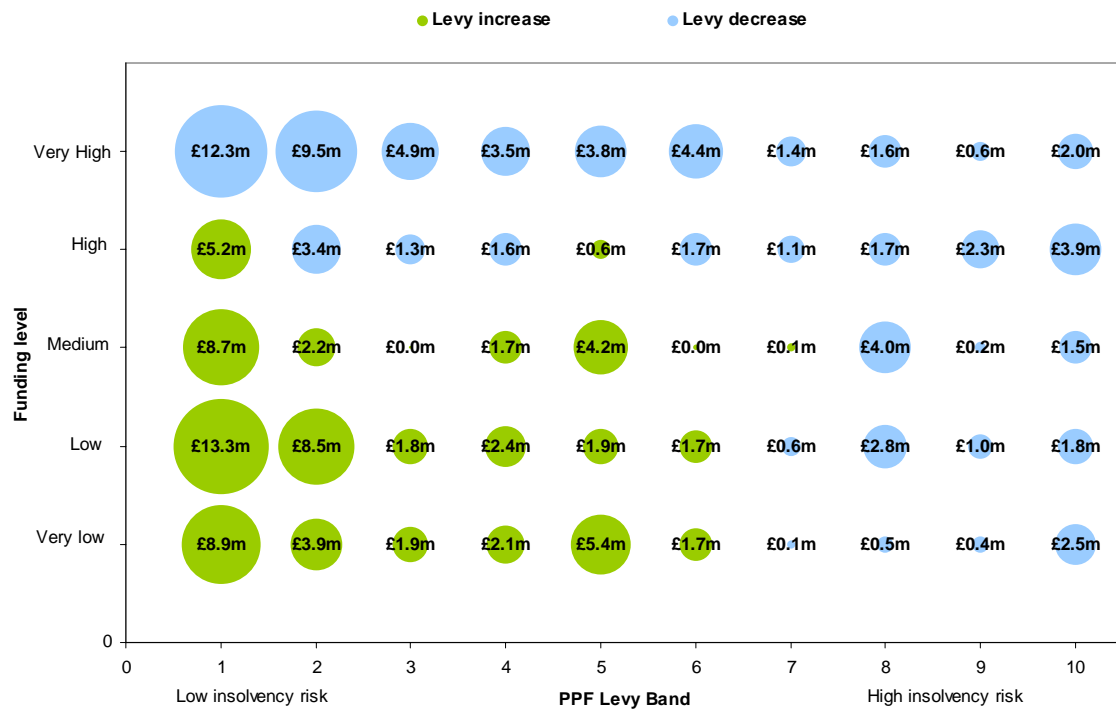


Figure 2: Change in Levy by Funding and Levy Band, for 2011/12 (£million)



Key Dates

1.42. The Board will introduce the new levy framework for the levy year starting 1 April 2012. The 2012/13 levy determination, related appendices and guidance will be published for consultation this autumn. We aim to finalise these by the end of the year.

1.43. The key dates for data and certification are set out in the table below:

Table 5: Key dates

Item	Key dates
Monthly D&B Failure Scores	Between 28 April 2011 – 30 March 2012
Consultation on investment risk guidance	16 May – 24 June
Consultation on draft determination, including levy parameters	Autumn 2011
The Exchange system opens for submission of scheme returns	November 2011
Final 2012/13 determination published	By December 2011
Submit scheme returns on Exchange	By 5pm, 30 March 2012
Reference period over which funding is smoothed	5-year period to 30 March 2012
Certification of contingent assets	By 5pm, 30 March 2012
Certification of deficit reduction contributions	By 5pm, 10 April 2012
Certification of full block transfers	By 5pm, 29 June 2012
Invoicing starts	Autumn 2012

2. A New Framework

2.1 Introduction

- 2.1.1 This chapter describes the “bottom-up” approach that we proposed in the October consultation document, whereby the scaling factor and other levy rules are intended to be fixed for three years so that individual levies would only change within this period if a scheme’s risk characteristics changed. Such an approach will mark a significant change from the current cycle of setting the levy parameters annually. This proposal attracted widespread support, with some respondents considering its implications in the wider context of PPF funding.
- 2.1.2 Whilst we are making fundamental changes to the measurement of funding and insolvency, discussed in chapters 3 and 4, the basic structure of the levy calculation will remain the same. The total levy will, as required by legislation, comprise the risk-based and scheme-based components. They will not have fixed proportions as in the current framework, so the scheme-based levy portion could be up to 20 per cent of the total, but is likely to be significantly less than that, at least for the initial three year review period.

2.2 Summary of the proposal

A bottom-up approach

- 2.2.1 The Steering Group supported an approach with a clear link between the risk a scheme poses to the PPF and the levy it pays. To meet this objective, we proposed a bottom-up approach that provides for individual levies to be independent from changes in other schemes’ risk profiles, and for levies to rise or fall in line with increases and decreases in individual scheme risk.
- 2.2.2 This was a departure from the current “top-down” approach, which adjusts the levy scaling factor and other parameters each year to reach the desired levy estimate. In our proposal, the total levy collected would be the sum of individual bills calculated according to levy parameters that are intended to be constant over a three-year review period.
- 2.2.3 We noted that a “pure” bottom-up approach, i.e. fixed parameters with no room for revision, would potentially breach statutory requirements and would expose the PPF to excessive uncertainty in its levy collection. This would make it difficult to maintain a steady path towards our long-term funding targets and could lead to highly variable levy collection.

- 2.2.4 The Board proposed to set the levy parameters, e.g. the scaling factor, levy caps and scheme-based multiplier, for three years, as long as the levy estimate was not expected to move outside set thresholds. A review of these parameters would be carried out every three years, parallel to our assessment of our funding requirements with reference to the long-term Funding Strategy.
- 2.2.5 For the three-year fixed period, the amount of levy to be raised would continue to be estimated annually, as required by legislation, and the Board's determination of the levy rules would continue to be an annual determination, but total levy collected would be based on the bottom-up approach as long as the levy estimate was not expected to:
- exceed the levy ceiling set by legislation; or
 - vary from the previous year's levy estimate by more than 25 per cent in either direction; or,
 - result in an estimate of the scheme-based levy that exceeds 20 per cent of the total expected levy.
- 2.2.6 These conditions were derived from our legislative responsibilities and our view of an acceptable level of risk to take on.

The role of the scheme-based levy

- 2.2.7 Under the current system, the degree of cross-subsidy in the levy is not easy to identify. A key consideration for the Steering Group was that, although some cross-subsidy appeared inevitable, the extent of this should be transparent.
- 2.2.8 To meet this challenge, we proposed that the scheme-based levy would play a more defined and limited role. To date, the contribution of the scheme-based levy as a proportion of the total levy has been set to equal 20 per cent, the legislative maximum. In the new framework, it would instead be explicitly set so as to cover the approximate cost of cross-subsidy.
- 2.2.9 There would be two potential roles for the scheme-based levy to fill:
- a) to cover the cross-subsidy introduced by capping; and,
 - b) to potentially recover any deficit in circumstances where we need to improve our funding position should adverse claims shift us materially away from our long-term funding trajectory.¹⁰

¹⁰ For the avoidance of doubt, the scheme-based levy multiplier is a levy parameter, and so will be fixed for three years unless the thresholds set out in 1.13 would be breached. Any decision to

2.2.10 We proposed to maintain a degree of cross-subsidy in the new framework, with caps on insolvency rate and the risk-based levy similar to those of the current system. At least in the early years of the new approach, covering the costs of these would be the sole purpose of the scheme-based levy.

2.3 Summary of responses

A bottom-up approach

- 2.3.1 There was widespread support for the bottom-up proposition, with respondents welcoming it as a significant step towards delivering a closer link between a scheme's risk and the levy it pays.
- 2.3.2 The majority of respondents felt the objectives of stability and predictability were generally met and that the new framework offered a clear improvement compared to the current process. A few respondents noted that stability was short-term and that schemes could still face substantial increases, albeit at the end of three years rather than annually. Some felt it preferable to see gradual changes in the levy parameters within the fixed period rather than sharp moves between periods.
- 2.3.3 There were also a few concerns expressed that the PPF should avoid effectively charging a premium for stability by using overly prudent assumptions in setting the fixed levy parameters.
- 2.3.4 We received a number of submissions on the limited criteria we proposed that would trigger a review of the scaling factor within the three-year period. The vast majority agreed with the conditions we identified. A couple of respondents believed we should allow for greater flexibility to reflect external events, citing as an example the recent shift from the Retail Prices Index (RPI) to the Consumer Prices Index (CPI) in the revaluation and indexation of PPF compensation.
- 2.3.5 A number of comments raised the wider context of PPF funding and suggested that the levy estimate be discussed in as much detail as the levy distribution. These submissions referred to our long-term Funding Strategy and noted that the assumptions and targets driving the strategy play a critical part in setting the levy quantum, which could affect levy bills at least as much as the method for levy distribution.¹¹

increase the proportion of scheme-based levy to help cover a deficit would be taken at the same time as all levy parameters were being reviewed.

¹¹ The PPF published its Long-Term Funding Strategy in August 2010. It is available at:

http://www.pensionprotectionfund.org.uk/DocumentLibrary/Documents/PPF_Funding_Strategy_Document.pdf

The role of the scheme-based levy

- 2.3.6 Those who commented generally supported the proposal to increase the risk-based proportion of the levy and to allocate the cost of cross-subsidy to the scheme-based levy. The greater transparency and lower level of cross-subsidy was welcomed.
- 2.3.7 A few respondents nevertheless felt that the remaining elements of cross-subsidy should be reviewed, and that any form of capping should be extremely limited.

2.4 The Board's response

A bottom-up approach

- 2.4.1 We intend to review continuously our progress towards our long-term funding objective, and to publish an annual review of the Funding Strategy. As an important source of funding, we will closely monitor the levy's role. We will set the levy parameters and associated levy estimate in the context of the funding strategy and the Board's view of the long-term risks faced by PPF.
- 2.4.2 We believe that seeking to re-open the scaling factor and other parameters only in limited circumstances will protect the PPF and levy payers from the possibility that levies fall significantly within the review period only to rise sharply afterwards, whilst allowing adequate flexibility to react to changes in the risk environment.

The role of the scheme-based levy

- 2.4.3 The affordability of the levy is an ongoing concern, and we think that caps should be retained. If there were no caps in effect, the schemes that are least able to pay would be charged the most. Putting the bulk of the burden of financing the PPF on the very weakest schemes could bring about failures that could otherwise have been prevented, without providing the resources we need.

2.5 The Board's confirmed policy

A bottom-up approach

- 2.5.1 We confirm that we will introduce a bottom-up approach, with fixed levy parameters for three years. It is intended that these will be revised only if the levy estimate would otherwise:
- exceed the levy ceiling set by legislation; or
 - vary from the previous year's levy estimate by more than 25 per cent in either direction; or,
 - result in an estimate of the scheme-based levy that exceeds 20 per cent of the total expected levy.

- 2.5.2 This will improve the ability of schemes to plan for their levies, as changes in an individual scheme's levy will relate only to any changes in its own risk characteristics.

The role of the scheme-based levy

- 2.5.3 We will set the scheme-based levy so that it provides levy payers with a transparent indicator of the degree of cross-subsidy in the levy. Initially it will cover the cost of capping only but following subsequent funding reviews it may be appropriate to change the scheme-based levy proportion to help cover a deficit that would otherwise shift us materially away from our long-term funding trajectory.
- 2.5.4 The levy parameters that will apply for three years from 2012/13, such as the scaling factor, scheme-based multiplier and the level of the cap, will be published with the draft determination for consultation in autumn 2011.

3. Funding and Investment Risk

3.1 Introduction

- 3.1.1 This chapter discusses how underfunding risk will be assessed in the new levy framework. As noted earlier, a priority in our proposal was to introduce greater stability in levies, and to help achieve this we proposed that underfunding be adjusted to reduce volatility. To do this, we proposed to apply a smoothed approach using the roll forward mechanism, using five year averages of relevant indices and yields. A number of comments were received on the objective and methodology we outlined.
- 3.1.2 The consultation also set out how we intended to incorporate investment risk in the funding calculation. As a new factor in the risk-based levy, this attracted a large number of comments relating to both the standard stresses, which we would apply on behalf of most schemes, and the bespoke stress analysis that some schemes would do themselves. These comments, and the development of our proposals in response, are discussed below.

3.2 Summary of the proposals

- 3.2.1 A key feature that we proposed in October was to adjust the roll forward process that we currently apply to the s179 valuations submitted by schemes. Instead of bringing them to the common date of 31 March by using the level of the relevant indices and yields as at that single date, we would use the five-year daily average (arithmetic mean). This would reduce the effect of temporary market movements on funding valuations, which can play a large part in levy fluctuations.
- 3.2.2 We also proposed that our measure of funding would include an allowance for investment risk. This was based on our assessment of the improved accuracy this would bring to our measurement of funding risk. We engaged external advisors, Redington, to develop options that would be relatively simple and cost-effective to apply in a consistent way across our universe of schemes.
- 3.2.3 We chose to measure investment risk by looking at the level of scheme underfunding after applying stresses to the assets and liabilities of the schemes. As detailed in the report by Redington that we published with the consultation, this reflects an immediate one standard deviation fall in funding (or asset value) calibrated over a one year period. This roughly translates to a one in six probability that scheme funding would be lower than estimated using our stresses.

- 3.2.4 Redington followed a two stage method to develop stresses to apply to the investment risk factors (i.e. equity, property, interest rate, credit and inflation). Firstly, they estimated the undiversified stresses for each risk factor to reflect its volatility. Then, they scaled down all factor stresses uniformly to replicate the volatility of the funding level for a majority of pension schemes in a sample of 5,728 pension schemes. The stresses we proposed to apply allowed for diversification benefits, albeit for an “average” investment strategy as derived from finding the closest fit with actual asset allocations across the PPF universe.
- 3.2.5 Two approaches with different requirements were outlined: a standard approach and a bespoke approach. In both approaches, the PPF would calculate stressed liabilities by applying, as appropriate, higher inflation and lower interest rate scenarios to s179 valuations.
- 3.2.6 In order to minimise additional costs and reporting requirements, for the vast majority of schemes the PPF would use information on asset allocation that is currently reported as part of the annual scheme return to calculate stressed assets. This “standard” approach applies the stresses shown in table 6 to the rolled forward and smoothed value of assets in order to produce a stressed asset value to use in the underfunding component of the risk-based levy.

Table 6: Proposed asset stresses (October 2010 consultation)

Corporate bonds	Nominal gilts	Index-linked bonds	UK Equity	Overseas Equity	Property	Cash	Other
-4.6%	+9.8%	+19.1%	-21.7%	-18.5%	-7.1%	0%	-21.7%

- 3.2.7 For schemes posing the largest risk to us, we proposed that they should be required to complete additional analysis using a bespoke approach. We suggested that schemes with protected liabilities of £1.5 billion or more (broadly the largest 100 schemes) should be subject to this requirement. All other schemes, however, would have the option to submit their results under the bespoke approach.
- 3.2.8 For the bespoke calculation, table 7 below shows the indicative risk factor stresses we originally proposed that schemes apply to their portfolio. We published, in the report by Redington, examples of how these would be applied and expected to provide further guidance at a later stage.
- 3.2.9 We proposed that schemes use their portfolio information as at their latest annual accounts date to apply the risk factor stresses, and report the effect on their assets on this basis. We would then apply

this impact to the smoothed assets calculated from the latest s179 valuation.

Table 7: Proposed risk factor stresses (October 2010 consultation)

Credit	Interest rates	Inflation	UK Equity	Overseas Equity	Property	Cash
+120 basis points	-66 basis points	+60 basis points	-21.7%	-18.5%	-7.1%	0%

3.3 Summary of responses

Smoothing of Funding

- 3.3.1 Most submissions agreed with the principle of smoothing funding in order to reduce volatility. The five-year period over which we proposed to do so was supported as a reasonable approximation of the business cycle.
- 3.3.2 There were some comments on the methodology by which we proposed to calculate an average level of funding. While the benefit of simplicity in the proposed approach was acknowledged, a few respondents raised the prospect of a significant divergence between actual values and smoothed values using the proposed roll forward process, as it assumed that the asset allocation had been in place for the past five years. It was also noted that the roll forward process did not recognise active strategies. Although this limitation is present currently, the new five-year time horizon could cause a greater divergence between actual and smoothed values.
- 3.3.3 A few submissions suggested that this concern could be addressed by taking the five-year average of asset valuations. It was suggested that this would have the advantage of capturing a more precise measure of dynamic portfolio values over this period.
- 3.3.4 Several submissions also suggested that the combination of smoothing and stressing could result in a degree of “double-counting” of the same risk, as the same market movements could feed into the derivation of stresses and the roll forward. A couple of respondents suggested that the reference period over which the smoothing values were drawn should end in December so that schemes would be able to measure their funding levels for risk reduction purposes before March.

Incorporation of investment risk

- 3.3.5 The inclusion of investment risk as a new risk factor was accepted by most respondents as appropriate and an improvement to the assessment of scheme risk, given the wide range of different

investment strategies that may be pursued. Most respondents also felt that applying stresses was a reasonable method to measure this. A few comments felt that adding investment risk as a factor created undue complexity in the calculation.

- 3.3.6 We received a handful of submissions that our proposed approach had the effect of disadvantaging schemes that might have a relatively high equity allocation due to the long-term profile of their liabilities. In addition, some respondents questioned the strength at which the stresses had been set and whether one standard deviation was the appropriate level of confidence.

Standard approach

- 3.3.7 Some of those who commented suggested that the asset breakdown categories on Exchange be expanded so that more detailed investment information could be used for the standard stresses. It was also suggested that we should clarify the definitions of the asset categories so that Exchange offered more guidance on how to complete these fields accurately, particularly in the light of the increased importance of this data in the levy.
- 3.3.8 A number of respondents questioned whether the table of asset stresses we published reflected the degrees of correlation – positive and negative – between asset classes. As portfolio decisions are often influenced by diversification considerations, it was felt that there should be recognition of these relationships.
- 3.3.9 Many submissions highlighted the wide range of commonly-held investments that did not have specific asset stresses under the standard approach and that would presumably be treated as equivalent in risk to UK equity, i.e. as “other”. Some of the examples mentioned were annuities, insurance funds, hedge funds and commodities.

Bespoke approach

- 3.3.10 A number of respondents requested further detail on the calculations that would be expected under the bespoke approach. This sentiment was echoed in comments on the estimated costs of the additional analysis, with many noting that more information on the expected calculation would be needed.
- 3.3.11 There was widespread agreement with the £1.5 billion threshold at which bespoke results would be mandatory, with respondents accepting that this would broadly distinguish the largest funding risks to us.

3.4 The Board's response

Smoothing of funding

- 3.4.1 We considered the proposal to use the average asset values rather than our roll forward to smooth funding. While we accepted that this could produce a smoothed value that is more directly related to observed portfolio values for some schemes, we felt that moving away from smoothing using the roll forward would introduce additional complexity without any compelling advantages over using the most recent valuation. We would need to compile historical information that may not be directly comparable with the most recent valuation information. For example, it would throw into question our proposal to give full credit for risk reduction measures such as deficit reduction contributions and contingent assets. It would also be difficult to develop an equitable approach to transfers.
- 3.4.2 Stressing and smoothing have distinct objectives in the risk-based levy. Smoothing uses historic market information as a relatively simple way to introduce greater stability in the measurement of underfunding risk. The process of stressing is forward-looking and looks at the potential performance of a scheme's investments over the next year.

Incorporation of investment risk

- 3.4.3 There is considerable diversity of investment strategies in place across the PPF universe, reflecting the range of risk-return profiles adopted by trustees and those to whom investment management has been delegated. Trustees and their investment advisors are responsible for assessing the nature of the scheme's liabilities, and managing assets appropriately. We do not seek to influence these decisions.
- 3.4.4 However, the financial products and strategies chosen do have implications for the risk that a scheme poses to the PPF. By reflecting the risk that particular assets will decline in value, we gain a more accurate picture of funding risk.
- 3.4.5 In the current formula, we scale up liabilities (by 36 per cent in 2011/12) partly to reflect the potential funding volatility. This is a simple and approximate approach that does not discriminate between varying levels of investment risk and their impact on the volatility of funding.
- 3.4.6 With the introduction of investment risk as a risk factor, the margin applied to liabilities becomes specific to each scheme. For schemes pursuing a very conservative investment strategy, it becomes negligible or even non-existent. This new feature of the levy formula refines the calculation of underfunding risk.

- 3.4.7 As noted at 3.2.4, the methodology by which the stresses have been calculated does reflect the impact of diversification; the average observed correlations across asset classes over a three-year period have been taken into account. We will update these to include five years of data in the final stresses. This approach can under- or over-state the impact of diversification for individual schemes if their investments vary significantly from that of a typical portfolio.
- 3.4.8 The credit stress and inflation stress have been revised since our October proposal to reflect our response to concerns that the original stresses were overly influenced by the somewhat extreme market conditions in early 2009, and that combining the interest rate and inflation stresses led to a disproportionately large downward stress on real rates when these were already very low.

Standard approach

- 3.4.9 As was acknowledged by some submissions, the balance between simplicity and accuracy is a fine one. In considering comments, we felt that it was important to minimise any disproportionately complex or costly reporting and calculation requirements.
- 3.4.10 For example, while some schemes may find that adding more fields to Exchange would allow for a better reflection of their own investment risk, this would create an extra administrative burden for other schemes.
- 3.4.11 We agree that it will be important to highlight the new implications of the asset breakdown information and have been working with the Pensions Regulator to develop Exchange help files to assist users in appropriately categorising their assets.¹² For example, we expect that schemes should be able to obtain and report the underlying allocation of insurance funds, i.e. typically fixed income and equity. Only the remainder that cannot be allocated in this way should be entered as insurance funds.
- 3.4.12 We considered and decided against calculating undiversified stresses and then applying a correlation matrix to these results, on the grounds of increased cost and complexity.
- 3.4.13 We have revised the table of asset stresses to be applied in the standard approach (at 3.5.8 below) so that all categories available on Exchange have a corresponding stress. We consider that the level of granularity currently available in Exchange provides sufficient detail for

¹² A draft of the proposed Exchange help file for asset breakdown information is attached to the investment risk guidance on which we are consulting.

an approximate assessment of investment risk, and identifies a significant proportion of financial products that schemes are currently invested in.

- 3.4.14 In considering the appropriate level of granularity, we looked at the number of categories provided for by other organisations that have an interest in measuring risk of different assets. For example, in the proposed Solvency II framework, the Standard Model approach distinguishes only between global and other equities as growth assets.¹³ This treats as equivalent in the “other” category classes such as hedge funds, private equity and commodities, while all developed market equity is categorised as “global”. Such an approach forms the basis for a full risk-based supervisory framework, compared to the relatively limited role that our measurement of investment risk plays.
- 3.4.15 One category of investments that comprises a growing proportion of total assets in our universe is liability-driven investment (LDI). These strategies are designed to immunise scheme funding to changes in interest rates and inflation and are typically implemented using a mixture of derivative and fixed income products. These have traditionally required specialist in-house investment resources and a large up-front cash commitment. However, there are now pooled LDI products that make it easier for schemes to access relatively sophisticated strategies.
- 3.4.16 We considered in depth whether we should attempt to capture pooled LDI funds as an asset class in Exchange and what additional information would be necessary for the PPF to be able to apply an appropriate stress to assets reported as such. At the simplest level, we would need data on the overall notional exposure to LDI, which would require specific fund manager input. Moreover, as no data on LDI is currently captured on Exchange, we would initially not be able to calibrate an asset stress on a basis comparable to those for the existing stresses.
- 3.4.17 Allocations to LDI are often constructed with reference to an individual scheme’s specific liability characteristics (e.g. maturity, exposure to inflation). We believe that the risk reduction of these investments is appropriately reported using the bespoke calculations. We will keep this treatment of pooled LDI under review.

¹³ This is the approach set out by the Committee of European Insurance and Occupational Pensions Supervisors in Consultation Paper 69.

Bespoke approach

3.4.18 We are publishing for consultation a draft of the guidance for the bespoke calculation of investment risk. In particular, we are interested to hear views on the extent to which it fulfils the following roles:

- Whether it is accessible to trustees in understanding why, how to and, if optional, whether to submit bespoke results; and
- Whether it contains the necessary formulae for trustees and investment advisors to calculate a stressed asset value for submission in the annual scheme return.

3.4.19 The covering statement to the draft guidance discusses details of the bespoke calculations and lists further questions for consideration. We encourage interested stakeholders to review these questions on the guidance and provide their comments by 24 June.

3.5 The Board's confirmed policy

Smoothing of Funding

3.5.1 As now, schemes will report their assets and s179 liabilities on the Exchange system in their annual return; no additional information will be required for the smoothing calculation. We will use five-year daily averages of financial indices and yields to produce smoothed asset and liability values through the roll forward methodology. This will limit the degree of funding volatility so that sharp movements in financial markets will have a lower impact on the measure of underfunding that is used in the levy calculation.¹⁴

3.5.2 As now, we will give immediate credit in funding for deficit reduction contributions and type B and C contingent assets that are appropriately certified by the relevant deadlines. Deficit reduction contributions and charges over cash (type B(i)) will be treated as cash, without smoothing or stressing. Chapter 5 contains further details on adjustments to contingent assets.

3.5.3 We will publish full details of the smoothing mechanism in the Transformation Appendix to the determination, to be released with the draft determination later this year. An example of this calculation is available at annex D.

¹⁴ Assets will be smoothed by rolling forward the asset breakdowns using the five year daily arithmetic mean of the relevant total return index. Liabilities will be rolled forward/back to the midpoint of the 5 year averaging period in order to achieve consistent effective valuation timings between assets and liabilities. An illustrative example of this calculation is available in annex D.

Partial transfers

3.5.4 With the shift of the measurement period to immediately before the levy year, it is more likely that valuations will reflect recent transfers between schemes. Accordingly, we expect that there will be less need for partial transfers to be certified. From 2012/13, there will be no reporting process for partial transfers.

Investment risk

3.5.5 The investment risk of a scheme's portfolio will be incorporated into the risk-based levy to reflect the differences in risk to the PPF posed by the investment strategies of eligible pension schemes.

3.5.6 We will update all the stresses below with additional years' data to incorporate the five years to March 2011. The final asset and risk factor stress values will be published in the levy determination to be released in late 2011.

3.5.7 We will calculate stressed liabilities for all schemes by applying the following indicative stresses to the yields we currently use to calculate s179 liabilities.

Table 8: Stresses on liabilities

Interest rates	Inflation
-67bps	+33bps

3.5.8 In the standard approach that we will apply on behalf of schemes, the asset allocation submitted on Exchange will be used to assess the effect of stress scenarios on a scheme's portfolio. The indicative stresses, to be updated as per 3.5.6 above, are displayed in table 9 below.

Table 9: Indicative asset stresses for standard approach¹⁵

Corporate bonds	Nominal gilts	Index-linked bonds	UK Equity	Overseas Equity	Property	Cash	Hedge Funds	Commodities	Insurance Funds ¹⁶	Annuities	Other
+1%	+9%	+16%	-22%	-19%	-7%	0%	-9%	-19%	-22%	+12%	-22%

3.5.9 Schemes with s179 liabilities of £1.5 billion or more will be required to carry out detailed analysis of their investments for submission into

¹⁵ Details of the Exchange categories and definitions are available in the help file that we are publishing separately with the investment risk guidance

¹⁶ While insurance funds are identified as a separate asset class in Exchange, we expect schemes to allocate these assets according to the asset class breakdown that should be available from providers, i.e. typically a combination of equity and fixed income. Only the remaining unallocated assets should be entered as insurance funds.

Exchange. Other schemes may elect to undertake this additional calculation to include in their scheme return information.

- 3.5.10 There are two stages in the bespoke calculation. The first stage applies a fuller list of stresses to assets; these capture 20 subclasses, recognising more details of investments than those reported in Exchange, e.g. different durations of fixed income products. The second stage applies to schemes with investments in derivatives either directly or through a pooled LDI fund. Such schemes will then be able to reflect the risk-reducing qualities of these investments in the bespoke stress.¹⁷
- 3.5.11 The standard and bespoke stresses provide broadly consistent results for schemes that do not have derivative strategies. We expect that the bespoke approach will be of benefit, in terms of reduced levy, primarily for schemes which have implemented risk-reducing derivative strategies. We advise such schemes to consider the impact of their investment strategy on the levy in deciding whether the bespoke approach is appropriate for their circumstances.
- 3.5.12 As noted above, alongside this Policy Statement we are publishing for consultation the draft guidance for carrying out bespoke analysis of investment risk. This provides the formulae for the required calculations and a number of detailed examples. Interested stakeholders are invited to submit any comments by 24 June. A revised version will then be published alongside the draft determination in the autumn.

¹⁷ See the draft guidance for details on the bespoke stresses.

4. Insolvency Risk

4.1 Introduction

4.1.1 This chapter sets out the PPF's proposals for the measurement of insolvency risk in the new levy framework, summarises responses received which focused most strongly on our proposal in relation to the banding of Failure Scores into fewer bands, and indicates where changes to the proposal have been made. The main changes relate to the design of the bands, the method for placing employers into bands, and the account taken of scheme structure from 2012/13.

4.2 Summary of the proposals

4.2.1 The approach to measuring insolvency risk proposed in our consultation was to replace the current table of insolvency probabilities, based on D&B Failure Scores of 1 to 100, with six bands. The indicative rates proposed were:

Table 10: Indicative levy rates

PPF Band	1	2	3	4	5	6*
D&B Failure Score	100-97	96-90	89-69	68-42	41-6	5-1
Levy Rate	0.20%	0.50%	1.10%	1.60%	4.00%	4.00%

* Capped rate

4.2.2 The new levy rates included a risk margin to reflect the need to provide for worse than expected outcomes and were consequently more in line with what financial market participants would charge to cover insolvency risk. To derive these, we estimated our theoretical cost of capital and used the standardised risk weights for senior unsecured corporate debt from the Basel 2 framework. The range of rates (from highest to lowest) would be significantly narrower than the current table of insolvency probabilities. Incidentally, these rates would also be closer to the PPF's actual claims experience, albeit limited, over the past five years.

4.2.3 The measurement of insolvency probability would be smoothed, by taking account of the circumstances of scheme sponsors over the year leading up to the start of the levy year, rather than using a 31 March figure in isolation.

4.2.4 To do this, we proposed that D&B place employers into bands on a monthly basis and then average the band at the end of the year. For multi-employer schemes a weighted average would be calculated, as now, and then we would re-band multi-employer schemes at the end

of the process. The result would have been to assess the insolvency risk of all schemes as being one of five possible values.

- 4.2.5 Recognising that for some schemes minor changes in their underlying risk could push them down to the next band and result in a significant increase in levy, the possibility of transitional relief was floated, if stakeholders clearly favoured such an approach. The cost of this relief would be recovered either through a higher scaling factor or a higher scheme-based levy.

4.3 Summary of responses

- 4.3.1 The aspect of our proposals on insolvency risk that drew by far the most comment was the change from using a 1-100 Failure Score scale to banding into a small number of bands. In a minority of cases the evidence we used to support our proposal was questioned, but most frequently responses focused on the extent of change from the current system, the relative impact on those with the strongest Failure Scores, and in particular the large changes in levy rate between successive bands (or “cliff-edges”) that may result.
- 4.3.2 A number of responses suggested that we should have more bands – generally without specifying a number or design – though there was often explicit recognition that the existing highly granular system was difficult to justify objectively. A typical response argued: “If a larger number of bands were used the cliff-edges would be less severe and therefore there would be less need for transitional protection” and went on to note that whilst 100 risk bands may be spurious, credit rating agencies are able to distinguish more than just six bands, at least for some products, and that we had not made the case clearly enough for the very small number of bands.
- 4.3.3 There were also a number of comments on the method of producing the levy rate to apply. A number of responses suggested that banding twice for multi-employer schemes (at employer and scheme levels) was unnecessary. There was support for smoothing insolvency risk measurement, but no consensus on whether a monthly or quarterly average was preferable.
- 4.3.4 Overall, transitional protection was not particularly popular; it was seen as overly complex, and introducing unwelcome cross-subsidy. Some, however, thought it would be necessary unless we increased the number of bands, which was their preferred solution in most cases.
- 4.3.5 The message that banding was the aspect of the proposals on which the PPF should focus its efforts in terms of additional analysis, and potentially developing the proposal, was reinforced in informal stakeholder contact following the consultation period.

- 4.3.6 A number of respondents argued that the shift of emphasis from covenant to funding was too significant. Their argument was not generally that we have misjudged what a commercial equivalent is, but that either the commercial comparator is not entirely appropriate, or what we proposed to charge is too different from what has been charged in the past.
- 4.3.7 There were a few responses that specifically challenged the principle of incorporating a risk margin – arguing the margin is in essence a capital charge and that the PPF has no cost of capital and could, in principle, meet extreme claims through charging surviving schemes in arrears or reducing compensation. A small minority also argued that, as PPF compensation can be reduced, the PPF's protection is less strong than an insurer's promise, so a lower margin would be appropriate.
- 4.3.8 A specific area of concern from a number of schemes and advisors was that the consultation document did not deal in sufficient detail with how scheme structure is reflected in the levy. A number of respondents requested assurance that the use of scheme structure factors for last man standing schemes would be maintained. A few respondents felt that the current approach to non-associated schemes is unfair and suggested alternative approaches. In addition, stakeholders requested clarity on how multi-employer schemes would be banded.
- 4.3.9 Finally, for some, discussion of insolvency risks was coloured by concerns around the measurement of insolvency risk by D&B, though there was also recognition that there is no readily available superior solution for our purposes in the marketplace. As a result, there were a number of calls for a general review of the D&B approach as part of a future tendering exercise.

4.4 The Board's response

Banding

- 4.4.1 The principal reason for proposing broad bands in the new framework consultation was that all systems of measuring insolvency risk struggle to justify fine distinctions between different levels of risk. As a result, separating employers into a large number of bands and charging differential levies tends to result in a less good fit with actual experience of insolvency, rather than improving accuracy as one might expect. An additional benefit of moving to broad bands and reducing our overall range of insolvency probabilities is that it should reduce the focus on managing scores, which arguably does little to reduce real risk.
- 4.4.2 In the light of the considerable comment on the number of bands we proposed, we have looked further at the evidence on the appropriate level of granularity for insolvency risk by comparing two different approaches:
- the original proposal for six bands; or,
 - an increase to 10 bands.
- 4.4.3 In the original proposal, there were effectively five applicable levy rates as bands 5 and 6 had the same applied levy rates owing to capping. All bands have different rates in the 10-band scenario, so the number of possible rates has doubled.
- 4.4.4 The new 10-band alternative was guided by the following principles:
- A lower levy rate for band 1, our lowest risks;
 - Relatively smooth changes in levy rates and risk margins;
 - The range of the risk margin values would reflect the minimum and maximum Basel rates of 0.16 per cent and 1.2 per cent; and
 - As far as possible, no more than 50 per cent change between bands.

Table 11: 10-band alternative

Levy Band	1	2	3	4	5	6	7	8	9	10*
Levy Rate	0.18%	0.28%	0.44%	0.69%	1.10%	1.60%	2.01%	2.60%	3.06%	4.00%
D&B Failure Scores	100-99	98-96	95-92	91-87	86-73	72-66	65-46	45-38	37-30	29-1
Risk Margin	0.16%	0.21%	0.33%	0.52 %	0.80%	1.14%	1.20%	1.20%	1.20%	1.20%
Average D&B probabilities	0.02%	0.07%	0.11%	0.17%	0.30%	0.46%	0.81%	1.40%	1.86%	5.05%

* capped

4.4.5 This revised banding would reduce the scale of cliff-edges between each band. The maximum relative increase of 59 per cent is that between bands 4 and 5. This compares to the maximum relative increase of 150 per cent that occurred between bands 1 and 2 and bands 4 and 5 in the original six bands.

4.4.6 We have compared the performance of these options in terms of their impact on volatility of levy – the critical issue for those concerned about cliff-edges.

4.4.7 In summary, the 10-band approach appears to offer benefits in terms of volatility relative both to the six-band option and the current formula. Taking account also of informal reaction from stakeholders, who largely favoured the 10-band approach, the Board has concluded that this option should be implemented.

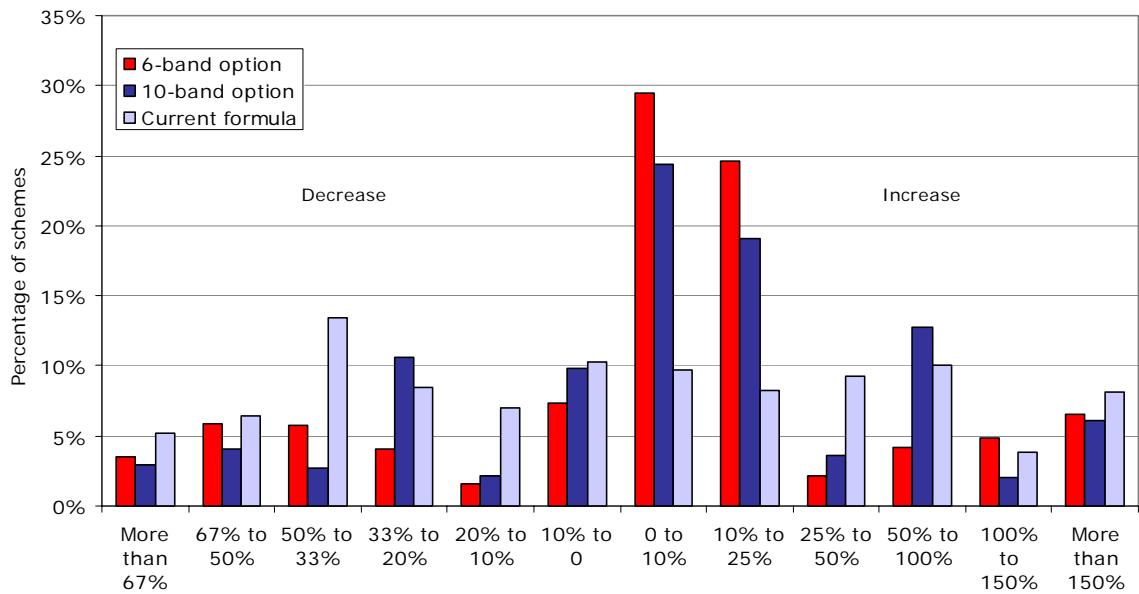
Individual levy volatility

4.4.8 Analysis of the stability of individual levies between 2009/10 and 2010/11 suggests that the 10-band option results in a lower proportion of large levy changes, i.e. doubling or halving, than either the six band option or the existing formula.¹⁸ Given the concerns raised by stakeholders about cliff-edges, this is clearly a major advantage.

4.4.9 The 10-band option also results in more schemes experiencing stability in their levy bills than the current formula does , i.e. changes of between 10 per cent decrease and 10 per cent increase, although it does not achieve quite as high a proportion with stable levies as the 6-band option.

¹⁸ More details of analysis are available in annex A.

Chart 1: Proportion of schemes by individual levy movement (2009/10 - 2010/11)



Accuracy

- 4.4.10 In the consultation document we asserted that our proposed six bands would give a better reflection of insolvency risk than the current system.
- 4.4.11 To take account of points made in relation to the limited experience we have of the D&B scoring system, we have used information on credit ratings published by Moody's Investor Services, which is available over a longer period.
- 4.4.12 The following tables show rates for broad credit ratings (from 1920) and more detailed alphanumeric ratings (only available from 1983 onward). Experience at broad credit rating level shows average default rates increasing smoothly.

Table 12: Historical mean default rates

Moody's rating	Mean default rates	
	1920-2008	1983-2008
Aaa	0.00%	0.00%
Aa	0.06%	0.02%
A	0.09%	0.03%
Baa	0.27%	0.17%
Ba	1.06%	1.19%
B	3.39%	4.66%
Caa	13.10%	15.05%

4.4.13 By comparison, an examination of the table for alphanumeric ratings shows that at this more detailed level there is not a smooth pattern of increasing default rates.

Table 13: Historical mean default rates, by alphanumeric rating

Moody's rating (Alphanumeric)	Mean default rate 1983 – 2008
Aaa	0.00%
Aa1	0.00%
Aa2	0.00%
Aa3	0.11%
A1	0.04%
A2	0.02%
A3	0.02%
Baa1	0.11%
Baa2	0.12%
Baa3	0.40%
Ba1	0.63%
Ba2	0.60%
Ba3	1.94%
B1	2.70%
B2	5.96%
B3	10.30%
Caa1	7.90%
Caa2	21.65%
Caa3	14.37%
Ca-C	30.30%

4.4.14 Taken together, the comparison of the performance of broad credit ratings versus more detailed alphanumeric ratings suggests that less granularity supports a more consistent progression of default probabilities.

Transitional Relief

4.4.15 As noted in the summary of responses, stakeholders saw a clear link between the issue of the number of bands and the provision of transitional relief for schemes that drop into a lower band between levy years. Most stakeholders favoured increasing the number of bands as an alternative to transitional relief, and there were a number of responses that argued strongly against transitional relief and the increased cross-subsidy it implied.

4.4.16 In the light of the decision to increase the number of bands we do not propose to introduce this mechanism. The increases between bands are now of a similar size to what they would have been with six bands and transitional relief.

Approach to averaging and banding of multi-employer schemes

- 4.4.17 Views were divided on whether a monthly or quarterly frequency for averaging was preferable, although there was more support for monthly than quarterly measurement. We have therefore retained the monthly approach proposed in the consultation. We have, however, simplified the approach, by asking D&B to average using an employer's Failure Score, and then to place the employer in a band once the annual average has been calculated. This was in response to stakeholder comment.
- 4.4.18 We have reconsidered our approach to banding of multi-employer schemes. We recognise the benefit of simplicity and believe it would be appropriate to band once at employer level, and then to apply the current method of weighted averaging to derive a scheme levy rate. This would allow for a fuller spectrum of insolvency probabilities, while preserving the logic of banding employers' D&B scores.

Scheme structure

- 4.4.19 In response to stakeholder comments, we have also reassessed the best way to reflect scheme structure in the new levy formula. For last man standing associated schemes, we have limited experience of insolvency events. For the sake of simplicity and familiarity, we propose to maintain the current 10 per cent discount for these schemes.
- 4.4.20 However, for last man standing non-associated schemes, the current method of using the ratio of the number of members of the biggest employer to the total number of members tends to overestimate risk. It would be more accurate to reflect the relative sizes of all employers within the scheme, not just the largest one, to better understand how concentrated (or alternately how well dispersed) the risk of the scheme is.
- 4.4.21 To do this, we will multiply the weighted average levy rate by a concentration index, the sum of each employer's share of total members squared¹⁹. For example, a two-employer scheme with members shared equally between both employers would see its weighted average levy rate multiplied by a half. A scheme with ten employers, one employer with half the members and the rest evenly spread, would see its weighted average levy rate multiplied by just over a quarter.

¹⁹ This is derived from an approach often used to measure concentration in markets, when considering whether there is market dominance. The "Herfindahl" index is calculated in this way, though we refer to this as the concentration index, since what is measured (concentration of employers in a scheme rather than participants in a market) is different.

Other points raised: Levy rates etc.

- 4.4.22 We consider that the inclusion of a risk margin is core to the objectives of the new levy framework, in that it links to our funding strategy, and achieves the distribution of insolvency risk in line with how markets would assess risk. Whilst the PPF does not itself have a cost of capital, to understate the risks of worse than expected outcomes in pricing risk would be to place an undue share of the burden of meeting the cost of the PPF on schemes with relatively high expected risk of insolvency. This means that we would undercharge those with low expected risk.
- 4.4.23 In relation to the strength of the risk premium, the approach that has been taken is to benchmark this to a market level. To the extent that the PPF needs to charge less than commercial entities would charge, because of differences in funding basis, this will be reflected through the scaling factor.
- 4.4.24 Whilst we recognise that there is an increase in cost to some schemes (as well as a reduction for others), we do not consider that this is a disproportionately large change to introduce. As noted in the consultation document, the number of schemes that experience a large change in levy as a result of the change in methodology is no greater than the number that has experienced large changes between different years using the current formula.

D&B methodology

- 4.4.25 D&B advises that it periodically makes changes to its methodology to improve the predictive power of Failure Scores. With reference to specific factors D&B maintain, for example, that trends in trade payments are a consistently successful predictive indicator. There may be an opportunity in the future, when D&B updates its scoring methodology, to ensure that this approach better reflects risks to our universe, if D&B are still the insolvency risk provider.
- 4.4.26 We recognise that a bespoke measure for insolvency risk could be developed specifically for the PPF universe, with D&B or an alternative provider. There are drawbacks to such an approach, however. For example, it would be harder for employers and schemes to keep track of changes in the measure. It could also have a significant cost, which would ultimately fall to levy payers through the administration levy, as it would involve significant development work.

4.5 The Board's confirmed Policy

4.5.1 There will be ten insolvency risk bands, with levy rates as follows:

Table 14: PPF levy bands

Levy Band	1	2	3	4	5	6	7	8	9	10*
Levy Rate	0.18%	0.28%	0.44%	0.69%	1.10%	1.60%	2.01%	2.60%	3.06%	4.00%
D&B Failure Scores	100-99	98-96	95-92	91-87	86-73	72-66	65-46	45-38	37-30	29-1
Risk Margin	0.16%	0.21%	0.33%	0.52 %	0.80%	1.14%	1.20%	1.20%	1.20%	1.20%
Average D&B probabilities	0.02%	0.07%	0.11%	0.17%	0.30%	0.46%	0.81%	1.40%	1.86%	5.05%

4.5.2 Employers will be assessed on a monthly basis for the year to 30 March 2012, i.e. using the Failure Score as at the last working day of each month, and will be placed in a band reflecting the arithmetic average of the monthly Failure Scores. Where the annual average is exactly mid-way between two bands, D&B will select the PPF levy band with the lower levy rate. For example, if the annual mean score is 65.5, the Employer would be placed in levy band 6, with a levy rate of 1.6 per cent; if the annual mean score is 65.4, the employer would be placed in levy band 7, with a levy rate of 2.01 per cent.

4.5.3 Guarantors providing a type A contingent asset will be assessed in the same way as employers, i.e. their monthly Failure Scores over April-March will be averaged and placed into a band, with the resulting levy rate substituting for that of the guaranteed employer, in full or in part.

4.5.4 Where no UK Failure Score exists, the approach taken will be:

- If there is a foreign Failure Score, it will be converted to a UK equivalent Failure Score on a monthly basis (if available), then treated as a UK Failure Score.
- If there is only a foreign risk rating, the associated foreign D&B probability will be mapped to the most appropriate band, by comparing the probability to the probabilities underlying the Failure Scores that map to each band.

4.5.5 Where sponsoring employers cannot be matched, D&B will apply, as now:

- A scheme average levy rate calculated as at the last working day of March, as the mean levy rate for those employers that have been matched, without rounding to a band; or
- An industry average levy rate based upon the Standard Industrial Classification (SIC) code, again as at the last working day of March.

This will be calculated as the median levy rate for employers having that SIC code, similarly without rounding to a band; or,

- A blended average calculated as the median levy rate for all UK employers receiving a Failure Score, again without rounding to a band.

4.5.6 Where a new sponsoring employer or guarantor is identified part way through the year and for which 12 months data is available, this will be used. Where less than 12 months data is available, D&B should use data for the part of the year that is available.

4.5.7 As now, once a levy rate has been calculated for each employer, a weighted average calculation will be carried out to produce a weighted average levy rate for the scheme. The individual employer levy rates will be weighted by the proportion of the scheme's members that employer represents to produce the weighted average.

4.5.8 For schemes with a structure defined as:

- Last man standing associated – a factor of 0.9 will be applied to the weighted average levy rate.
- Last man standing centralised non-associated - the weighted average levy rate is multiplied by a concentration index (calculated as the sum of squares of the proportions of scheme members for each employer).

4.5.9 A formal right to appeal the D&B Failure Score will be available once the average Failure Score is calculated, i.e. from May each year, though informal contact with D&B will be possible in advance, as now.

4.5.10 D&B will continue to be responsible for supporting appeals in relation to the measurement of insolvency risk. Moving to a monthly average should make the precise timing of individual data items less critical to the measurement of insolvency risk. However, D&B will ensure data is taken account of on a timely basis, so all data supplied by employers to relevant third parties, or directly to D&B, by month end will be reflected in the D&B Failure Score by the following month end at the latest.

5. Other Consultation Issues

5.1 Introduction

- 5.1.1 In the October consultation, we took the opportunity to solicit feedback on broader aspects of the levy framework. These reflected areas that stakeholders have raised with us in the course of policy development on which we felt further comment would be helpful to inform discussion. This chapter discusses the comments we received and the Board's response to these.
- 5.1.2 We asked for broad comment on the contingent asset regime. We were interested in views on: whether the types of contingent assets we recognise are still appropriate; whether the requirements in terms of the current types of contingent assets are fit for purpose; and, whether changes to the current regime should be considered in the light of our proposals on funding and insolvency risk.
- 5.1.3 We also commissioned and published a report by Mercer to assess the principle and practicality of allowing for a discount in the risk-based levy where there was evidence of good governance.

5.2 Summary of responses

- 5.2.1 Of those who responded to these questions on contingent assets, around half did not recommend significant change and felt that the current range remained appropriate. Others suggested that we recognise a wider variety of assets and funding arrangements, some of which reflected industry-specific practice.
- 5.2.2 A few respondents submitted that if contingent assets were recognised by the Pensions Regulator for recovery plan purposes, they should also be recognised for levy purposes. The consideration of funding arrangements backed by assets in the event of insolvency was also proposed. Specific assets mentioned included credit default swaps, special purpose vehicles and insolvency insurance.
- 5.2.3 Some respondents commented generally that the current rules were too restrictive and that they discouraged schemes from entering into PPF compliant contingent assets. Reference was made, for example, to our requirements for standard form documentation. These were balanced by submissions that our current requirements are fit for purpose, with some respondents suggesting that the relatively low number of type B compared to type A contingent assets should be seen as indicative of economic conditions rather than the difficulty of our requirements.
- 5.2.4 We also received several comments highlighting that there should be smoothing or stressing of type B contingent assets.

5.2.5 A fair degree of comment was received on the issue of governance, and whether this should be reflected in some way in the levy. There was support for the proposition that the quality of a scheme's governance affected its risk to the PPF in some way. This was tempered, however, by doubts expressed as to the precise nature of this relationship, i.e. whether it was already reflected in the existing risk factors, and how this could be objectively quantified.

5.3 The Board's response

5.3.1 The consultation responses did not indicate sufficient support for a wholesale review of contingent assets at this stage, or for the widening of contingent asset classes. The Board recognises a need for caution and analysis of the effects of the new levy framework on scheme funding and scheme behaviours, before making widespread changes to the contingent asset regime.

5.3.2 There was very limited support for additional asset classes; we feel that extending the contingent asset regime would be disproportionate in terms of the resources required of the PPF to ensure due diligence relative to the utility of such an extension for all levy payers.

5.3.3 Whilst we seek to ensure that our approach to contingent assets is aligned with the Pensions Regulator's approach, there are key differences between the objectives of the respective regimes.

5.3.4 The Pensions Regulator recognises certain contingent assets as part of the package of evidence that a scheme has a robust recovery plan in place. We provide schemes with a potentially significant levy reduction by recognising the risk reduction represented by contingent assets, and by treating contingent assets as if they are of equivalent value to actual scheme assets that would be available to the PPF in the event of insolvency. We need to ensure that we only give credit for assets of consistent strength. It is therefore appropriate that we require that contingent assets be entered into a standard form in order for them to be recognised in a standard quantitative way in the levy calculation.

5.3.5 Standards of governance are important in the effective administration of schemes; good governance clearly delivers qualitative benefits for members. It was less clear, however, whether it would be appropriate to recognise this relationship in the risk-based levy. The Board agreed with the majority of comments that suggested that governance would be better promoted within the regulatory framework.

5.4 The Board's confirmed policy

- 5.4.1 We will not make any changes to the types of contingent assets that are recognised for levy purposes. We will, though, keep contingent assets under review during the first three-year period of the new framework to ensure that the regime continues to represent appropriate risk reduction. We are prepared to work with any interested parties over the first three-year period of the new framework to explore extending the assets we recognise, although we expect that those who would stand to gain should undertake much of the necessary work to make this possible.
- 5.4.2 In order to maintain consistency in how contingent assets are treated relative to assets held by the scheme, we will apply the following:
- Charges over property (type B (ii)) will be stressed using the property asset stress; and,
 - Charges over securities (type B(iii)) will be smoothed and stressed as "other" assets.
- 5.4.3 There will be no reflection of scheme governance in the risk-based levy, due to the impracticality of measuring standards of governance in a consistent and meaningful way.

6. Implementation

6.1 Key Dates

6.1.1 The Board will introduce the new levy framework for the levy year starting 1 April 2012. The 2012/13 levy determination, related appendices and guidance will be published for consultation this autumn. These will be finalised as far in advance of the levy year as possible.

6.1.2 The key dates for certification and data are set out in the table below.

Table 15: Implementation dates

Item	Key dates
Monthly D&B Failure Scores	Between 28 April 2011 – 30 March 2012
Consultation on investment risk guidance	16 May – 24 June
Consultation on draft determination, including levy parameters	Autumn 2011
The Exchange system opens for submission of scheme returns	November 2011
Final 2012/13 determination published	By December 2011
Submission of scheme returns on Exchange	By 5pm, 30 March 2012
Reference period over which funding is smoothed	5-year period to 30 March 2012
Certification of contingent assets	By 5pm, 30 March 2012
Certification of deficit reduction contributions	By 5pm, 10 April 2012
Certification of full block transfers	By 5pm, 29 June 2012
Invoicing starts	Autumn 2012

