Pension
Protection
Fund

Update on the Future Development of the Pension Protection Levy

July 2009

Foreword

The level of response we received to the Consultation on the Future Development of the Pensions Protection Levy and the detailed argument in many of those responses is indicative both of the degree of interest stakeholders have in the future development of the levy and of the Pension Protection Fund's desire to engage with and listen to its Stakeholders.

63 organisations or individuals submitted formal responses to our consultation document, while over 500 people attended the series of roadshows which took place in Bristol, Edinburgh, Leeds and London during January. As an attendee at the London event, I have seen first hand the level of involvement and input the industry has had in shaping our thinking.

Our proposals on the levy formula were the result of a long process of research and modelling, which began with the development and introduction of the first risk-based levy in 2006/07. Since that time, we have gained more information on the schemes and employers within our scope and have made significant investment in expanding our modelling capabilities. This has given us a greater understanding of the different risks we face and how these vary across the universe of levy paying schemes.

The Board has reflected on the issues raised in responses to our consultation and remains convinced that the current levy approach raises some real questions on fairness. We recognise however the concerns raised about some of the key elements in our proposed approach, such as the transparency of our long-term risk model and its use in generating long term insolvency probabilities, the balance of "expected" versus "unexpected" risk and the treatment of more sophisticated investment strategies.

Having the advantage of coming to the proposals with a fresh perspective, I am keen that we should develop our approach by working with Stakeholders to address the challenges they have made and to incorporate their insights into our thinking. That is why I am convening a group of senior representatives of our diverse stakeholder base to help us in re-examining the issues and formulating revised proposals. This group will be supported by a group of technical experts, who will help us explore the practical issues of design. We will then consult further with a view to implementing some revised proposals, which we do not expect will be introduced before 2012/13.

This document then is an update in which we summarise your responses and outline the way ahead for the risk-based levy. I would like to thank you for your ongoing support as we continue to develop our proposals on the levy and I look forward to working with you in the future.

Alan Rubenstein
Chief Executive

Contents

Foreword **2**

1. Executive Summary **4**

1.1 Introduction 4

1.2 Responses to the consultation 4

1.3 The consultation in context 5

1.4 The Board's view and intended next steps 6

2. Unexpected Risk **8**

2.1 Introduction 8

2.2 Summary of the November proposals 9

2.4 Responses to the Consultation (specific questions) 11

2.5 Other comments made 14

2.6 Fairness 15

2.7 The Board's response 15

3. Investment Risk **18**

3.1 Introduction 18

3.2 Summary of the November proposals 18

3.3 Answers to specific questions 19

3.4 The Board's response 23

4. Next Steps **25**

4.1 Summary of the Board's initial conclusions 25

4.2 Further engagement with stakeholders 25

4.3 Timing 26

4.4 Comments on this document 26

1. Executive Summary

1.1 Introduction

1.1.1 *The Consultation on the Future Development of the Pension Protection Levy* proposed developments to the formula that allocates the pension protection levy estimate between schemes. This work was part of a process that began in August 2007, when the Board published analysis that demonstrated a mismatch between schemes' allocation of the risk-based levy based on their scaled-up short-term risk and their contribution to the risk schemes pose to the Pension Protection Fund in periods of high, as well as average, claims.

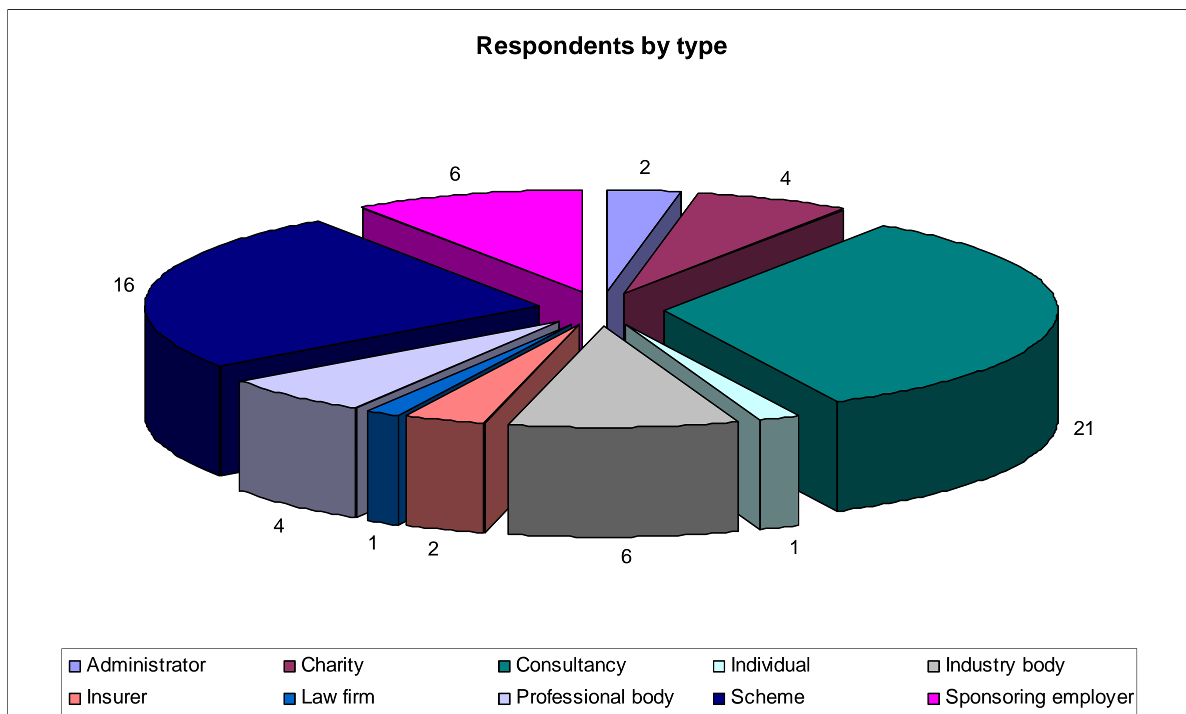
1.1.2 This document serves as an update to the consultation process, confirming that the Board remains of the view that taking account of schemes' potential contribution to high claims would distribute the levy more fairly — a view supported by the majority of respondents. At the same time, the Board recognises the widely differing views on key aspects of the proposals and considers that further work will be required to develop the proposals before they can be implemented (which would be no earlier than 2012/13).

1.2 Responses to the consultation

1.2.1 The Board would like to thank the 63 pension schemes, employers, professional bodies, consultancies, industry bodies and individuals that formally responded to the consultation in writing.[1] Additionally the Board greatly appreciated feedback from the 500 delegates who attended the five roadshows that supported the consultation, and those who provided feedback in the course of their regular communication with the Pension Protection Fund.

---

[1] The consultation period lasted 12 weeks, from 18 November 2008 to 13 February 2009.



1.2.2 Overall, the proposal to incorporate unexpected risk in the levy formula received broad support at the level of principle, with consensus that a fairer levy is desirable. There were, however, some concerns about key details, particularly the transparency of the LTRM and consequently the derivation of long-term insolvency risk from short-term insolvency risk and the proportion of the levy related to long-term risk and the balance between simplicity and accuracy in the investment risk factor.

1.2.3 These have informed the Board in deciding that the principle behind the proposals should be pursued, but that it should aim to make refinements to be consulted upon at a later date, with implementation being deferred until at least 2012/13.

1.3 The consultation in context

1.3.1 A number of respondents drew attention to the economic environment in which the proposals were made. Some questioned whether now is the time for the Board to review the method of calculating the levy when insolvencies are high and the population of levy paying schemes is potentially shrinking and argued that the sustainability of the Pension Protection Fund should be the Board's focus during difficult financial times.

1.3.2 The Board recognises that in unprecedented economic times, businesses are experiencing difficulties in meeting their various obligations. As a result, the PPF has been preparing for an increase in the number of schemes entering assessment and potentially transferring to the PPF subsequently; the Board's commitment to paying compensation to scheme members remains its priority.

1.3.3 The PPF is currently paying compensation to 13,000 members of transferred pension schemes, with a further 17,000 guaranteed security in retirement. £4 million in compensation is paid monthly from a fund of approximately £3 billion. Clearly, the aggregate compensation will increase in the years to come, but the absence of short-term and medium-term liquidity issues affords the Board time to assess the true extent of the recession and make the necessary decisions.

1.3.4 In the meantime, the PPF can operate with a deficit for a long period, even decades. The Board has in recent months indicated its desire to operate the levy with a degree of counter-cyclicality. If, as is expected new claims reduce in the future, our levy income will increasingly act to reduce the deficit.

1.3.5 Everyone has a part to play in making sure the pensions system is sustainable, notably the Government, the Pensions Regulator and the industry, as well as the PPF. Government's policies including support for the banking sector and fiscal stimulus measures and the Regulator's flexible approach to scheme recovery plans can benefit employers and schemes.

1.3.6 The PPF is planning for the long-term and part of that plan is to put in place a mechanism that distributes the levy according to the long-term risks the Board faces.

1.3.7 The consultation document openly referred to the fact that the PPF's ability to fund compensation payments depends partly on levy payers' ability to pay, and continue to pay, the levy. The Board appreciates that stability is currently a pressing need for many levy payers and a redistribution of the levy estimate is one potential source of imbalance. Striking a balance between affordability for levy payers and security for scheme members has often been identified as a primary goal for the PPF. This is one of the reasons why the Board committed to maintaining a stable levy estimate of £675 million, indexed to earnings, for the three levy years beginning in 2008/09 — a policy confirmed for 2009/10 and now 2010/11.

1.4 The Board's view and intended next steps

1.4.1 The Board is encouraged that the majority of stakeholders supported the proposal that a scheme's contribution to costs in a period of high claims should feature in the levy formula alongside its contribution to average claims. On the whole, respondents agree that this would distribute the levy quantum according to a fairer reflection of risk. Fairness of the levy is clearly of particular importance to stakeholders and the proposals published in November were aimed primarily towards this levy principle. In light of the support received, the Board confirms its intention to take forward further work to develop the risk-based levy to take account of some form of unexpected risk — including investment risk — in the levy.

1.4.2 However, the Board appreciates that the proposed new levy formula would also introduce complexity into the levy system and that respondents had

concerns about key details. Accordingly, it would not be appropriate to introduce a new levy formula for 2011/12 on the basis proposed. Instead, the Board intends to develop the proposal further, which will involve collaborative work with stakeholders. This would be with a view to publishing revised proposals, with implementation of a new levy formula in the 2012/13 levy year at the earliest.

1.4.3 The objective of the additional work with stakeholders will be to assist in developing an improved proposal. The areas for consideration could include:

- The principles of a new levy formula that charges for unexpected risk.
- What the balance should be between short-term (expected) and long-term (unexpected) risk.
- Options for the measurement of long-term insolvency risk.
- The use of the PPF's long-term risk model in the development of proposals.
- Options for the measurement of investment risk, particularly in relation to the more sophisticated investment strategies.

2. Unexpected Risk

2.1 Introduction

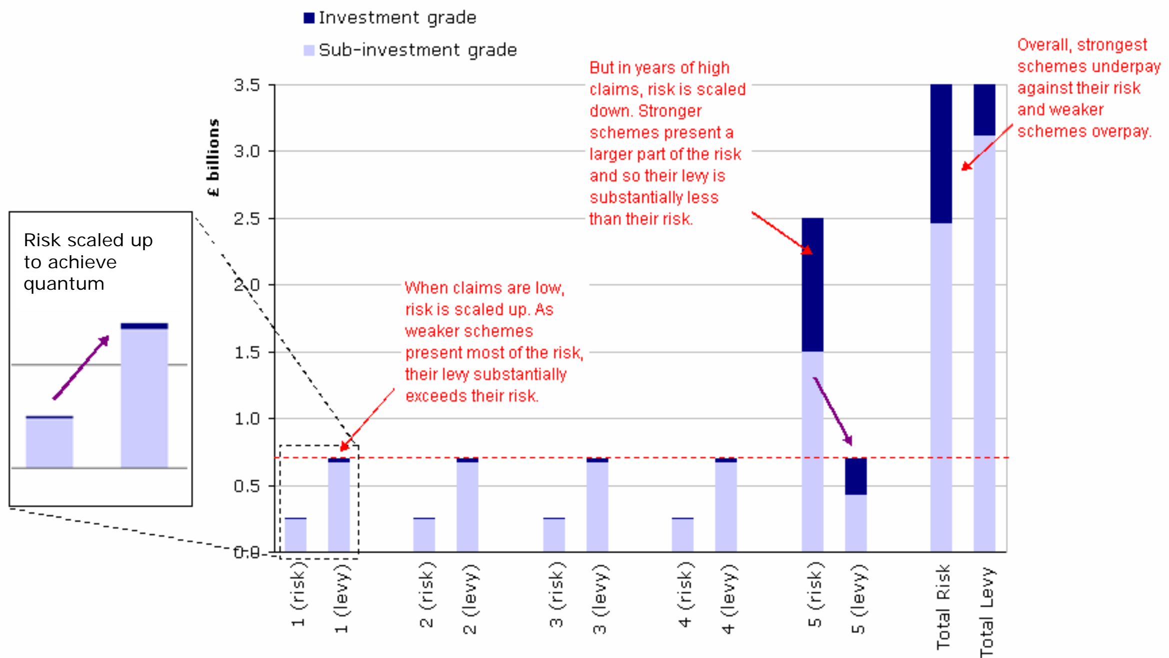
2.1.1 The proposal for the risk-based levy formula to incorporate an element that charges for unexpected risk was explained in detail in Chapters 3 and 4 of last November's consultation document.

2.1.2 In particular, Chapter 3 explained the nature of the risks faced by the PPF and how they are measured. Notably, there is a considerable difference in the distribution of the claims that the Board would normally expect to be made on the PPF in the year ahead and the claims that could be made in an adverse economic situation.

2.1.3 To allow for a period of high claims, the levy quantum has to be fixed with the long-term in mind (i.e. looking across the economic cycle) because the amount that can be raised when risk is high is constrained.[2] However, distribution is based on short-term risk, resulting in an over-allocation of levy to those schemes with high short-term risk. This is because those with good short-term risk characteristics generally only suffer in a downturn, when they make up a large proportion of claims. In that scenario, total risk to the PPF is high, requiring bills to be scaled down to collect a stable quantum. In more benevolent times, however, the contribution of the good risks to total risk is low and bills are scaled up. The effects are significant, making a case for changing the formula to take account of long-term risk.

2.1.4 This means that the quantum is not distributed proportionately according to which schemes represent more or less of each type of risk. The proposal for a new formula was designed to address this problem by charging for both these types of risk in individual levy bills. Below is a graphical illustration of the problem.

[2] The levy estimate is subject to an overall ceiling, set annually by the Secretary of State, and an increase of 25 per cent between years.



2.2 Summary of the November proposals

2.2.1 The principal proposal in the consultation was the introduction of an additional component to the risk-based levy that charges schemes for their potential contribution to claims when claims are at above expected levels. The approach the Board has used to this type of high-impact, low-likelihood risk, termed *unexpected risk*, has been to use the Long Term Risk Model (LTRM) outputs for the worst one in 40 five-year periods to measure exposure.

2.2.2 We proposed in November that this additional component would have incorporated a conversion of the current measures of insolvency risk and underfunding risk to measure the likelihood of a sponsoring employer insolvency and the potential cost of a resulting claim, should claims on the PPF be higher than expected over a five-year period. The measure of underfunding risk would be augmented by a scheme-specific investment risk factor, taking into account the contribution a scheme's investment strategy, compared to the nature of its liabilities, makes to its underfunding risk.

2.2.3 The proposed new levy structure was:

Risk-based levy | **Scheme-based levy**

Short-term risk component + Long-term risk component + Percentage of scheme liabilities

- Reflects the scheme's contribution to one year ahead expected claims
- Reflects the scheme's contribution to the PPF unexpected risk over five years
- Component to include redistributing capped risk-based levies; amortise shortfalls in the current funding level if required

2.2.4 The proposed new risk-based levy formula was:

$$(c \times U \times P) + (w \times V \times Q)$$

Where:

c is the rate for short-term risk	w is the rate for long-term risk
U is short-term underfunding risk	V is long-term underfunding risk
P is short-term insolvency risk	Q is long-term insolvency risk

2.2.5 The short-term component was to include a scheme-specific measure of investment risk replacing the current method of multiplying the liability figure by 1.21 in the underfunding risk calculation. We indicated that for a scheme with average investment risk this would reduce the assets figure by around 10 per cent.

2.2.6 The levy scaling factor would be replaced by a rate for short-term risk, which would adjust the total short-term component of the levy to ensure the amount raised is consistent with the Board's view of short-term risk and the need for fairness, stability and affordability. The insolvency risk factor would remain the same as now (subject to D&B's own modifications of methodology or changes to probabilities of insolvency).

2.2.7 The new component would measure the same risk factors, but accounting for how the PPF's risk exposure changes in adverse economic conditions over a longer period — we proposed five years in November. The long-term insolvency risk measure was derived from the short-term one, plus additional economic data and assumptions, using information generated by the LTRM. As proposed, the long-term underfunding measure looked at changes in scheme funding in a period of high claims and so was more sensitive to the measure of investment risk.

2.2.8 A weighting factor, called the rate for long-term risk, would perform the same function as the rate for short-term risk, ensuring the levy raised from this component matches the Board's view of unexpected risk, balanced against short-term risk. The analysis in the consultation document demonstrated that the unexpected risk element would have had more weight than the short term component had it been introduced in 2008/09, but this would not necessarily be the case in future years.

2.2.9 The fair distribution of the levy formula was central to the proposals in the consultation document. The Board identified two types of fairness therein:

- Fairness over time, so that different generations of levy payers do not subsidise each other.
- Fairness at a point in time, so that different groups of contemporary levy payers do not subsidise each other.

2.2.10 Charging for unexpected risk in advance reduces the unfairness experienced by the schemes that survive the period in which that risk crystallises, as the schemes that fail will already have paid towards the compensation of their members. In addition, achieving the right balance between the short-term and long-term components through the rates for risk, c and w, will keep the levy fair at a particular point in time, based on the Board's view of the nature of those risks in the years ahead — the proposal would be to keep the rates fairly constant so that the rate for short-term risk recovers the expected cost of claims over a period while the rate for long-term risk replaces the current levy scaling factor in adjusting for unexpected risk.

2.4 Responses to the Consultation (specific questions)

2.4.1 Comments on the general approach taken in the consultation are recorded in the executive summary. In addition, most responses provided answers to all or most of the specific questions asked throughout the document. This section (and a similar section in Chapter 3) summarises those answers.

Should the PPF now move to include unexpected risk in the risk-based levy on the basis proposed? (Q.3)

2.4.2 The majority are in favour of the inclusion of a new levy component for unexpected risk, with agreement being based on the expectation that the levy estimate will be much more fairly distributed and individual bills potentially more stable. A range of areas were covered in answers to this question, which are covered by the subheadings below.

The Levy Principles

2.4.3 There is frequent mention of the three levy principles themselves in respondents' answers to this question. Below are some of their positions.

Fairness:

- It is unfair to test the hypothesis of using unexpected risk against the same information we used to formulate it.
- It is unfair to charge the strongest schemes more for very unlikely events, which may never be realised or will be realised and charged for as expected risk.

Simplicity:

- The new formula introduces more complexity, which may be difficult for trustees to understand without advice.
- Some of this complexity sits uneasily on simplistic assumptions (the calculation of Q is difficult to understand, but makes the simple assumption that all companies with the same P will have the same Q).
- Alternatively, some say the new formula appears simple, but relies on opaque, complex models.

Proportionality:

- The proposed distribution focuses disproportionately on unlikely events. Consequently, the impact on larger schemes' bills will be disproportionate.

The type of scenario measured

2.4.4 There is a small amount of support for the use of long-term expected risk rather than, or in addition to unexpected risk. A number of responses argue that the combination of expected and unexpected risk would result in double-charging for unexpected risk that is realised as expected risk within five-years. To a limited extent, in respect of credit migration, this may be the case. One solution offered is that a five-year measure of expected risk would allow us to charge for a high level of risk as it materialises.

Additionally, some would like to see more information on our selection of a one in 40 scenario as the most appropriate, though few alternatives are offered.

Insolvency Risk

2.4.5 The aspect of the proposal that gains most attention is the derivation of the proposed new long-term insolvency risk measure, Q, from the existing short-term measure, P. Minor issues include the current insolvency risk measure's impact on levy stability and some questioning whether their own scores are accurate. However, the three main points were that any unreliability in P will be multiplied in Q, the extrapolation lacks transparency and, that we assume

all companies with the same p[3] will have the same q, whereas different companies/sectors may have different long-term risk profiles.

2.4.6 Some argue that there would be employer and sector characteristics pertinent to a long-term assessment of risk that are not taken account of in the short-term assessment, or vice-versa, and these would be ignored in the long-term calculation. One respondent contends that P should be derived from Q, if the long-term component of the levy collects the larger part of the estimate.

The rates for short-term and long-term risk

2.4.7 The proposed rates for short-term risk, c, and long-term risk, w, are not referred to directly by most respondents. However, there is a desire for more clarity on their calculation and quite a few respondents would like an explanation of the related issue of why long-term risk is the larger element of the levy in the consultation.

If so, on what timescale should it be introduced – in 2011/12 as suggested, or in an alternative levy year? (Q.4)

2.4.8 Relatively few respondents offered an opinion on the possible year of introduction. Those that unequivocally support the proposals generally agree that 2011/12 is realistically the earliest year of introduction, though a couple of respondents would like to see the changes made as soon as possible.

2.4.9 Those who disagree with the proposals overall would like to see their concerns addressed, issues rectified and/or firm proposals tested before the year of introduction can be set.

Do you agree that the PPF should keep the two caps on the risk-based levy under review to seek to maintain the affordability of the levy? (Question 1)

2.4.10 Many respondents interpret this question as "should there be caps on the risk-based levy?" with "should the caps be reviewed?" a secondary question. The vast majority consider the caps central to maintaining the affordability of the levy because, although there is some cross-subsidy involved, they protect the weakest schemes and help to limit employer failure, particularly during the recession.

2.4.11 Dealing more specifically with reviewing the caps, respondents say that any review should avoid making changes to the detriment of schemes already capped at a time when affordability is an issue. Answers that recognise the potential benefit to weaker schemes of the new levy formula believe some review would be necessary if their bills change, but there is a desire to

---

[3] P is the insolvency risk measurement for the scheme, whereas p is the individual employer probability of insolvency; so multi-employer schemes have a P determined from several ps.

balance the needs of capped and uncapped schemes, and avoid larger levies for stronger companies as a result.

2.4.12 A handful of respondents believe caps to be contrary to the principle of fairness and not representative of a pure risk-based approach.

Do you consider that the scheme-based levy should be reduced when the PPF is no longer in deficit, or alternatively at some other point? (Q.2)

2.4.13 Again, interpretation of this question differs, as do the responses. There is a lot of support for the reduction of the scheme-based levy from respondents of several types. Less than half of the 26 expressing a firm view in favour here are pro-unexpected risk. This suggests a desire for a reduction in the scheme-based levy regardless of the rest of the proposals.

2.4.14 Those considering the deficit specifically believe in general that it shouldn't be the key reason for a change in the scheme-based levy. For some, the fairness of the risk-based levy, rather than the deficit, should be the key factor in determining the future of the scheme-based levy; a fairer reflection of risk would reduce the need for a scheme-based levy. This includes some respondents speaking for or on behalf of larger schemes.

2.4.15 Others believe that a PPF in surplus is undesirable so the recovery of the deficit should be the trigger, or one of the triggers, for the reduction or removal of the scheme-based levy.

2.4.16 According to some, the scheme-based levy should be set at a level that covers the fixed and administrative costs of compensation only.

2.5 Other comments made

The Long-Term Risk Model

2.5.1 A number of responses draw specific attention to the LTRM's role in the analysis. Some argue that our reasoning is circular: fairness is being measured against the Board's definition of what is fair, based on the PPF's own model — i.e. the fairness of the combined risk measure is assumed. Others believe that the proposals are too heavily-dependent on calculations made by the LTRM.

2.5.2 Consistent with views expressed in previous consultation exercises, transparency remains important to levy-payers. Many would like the validity of the LTRM to be demonstrated before the fairness of the levy can be demonstrated.

2.5.3 One aspect of this is the current economic environment. Respondents noted that models need to be recalibrated as their context changed and they would like more assurance that the model's calibration remains valid in the current economic situation and into the future.

2.6 Fairness

2.6.1 The final question in the consultation document asked if consultees agreed with the method of measuring fairness identified, the calculation of the Lorenz curves and Gini coefficients against the perfect distribution measured by the economic levy.

Do you agree with the PPF's preferred approach to measuring the fairness of the levy? (Q.13)

2.6.2 Of those that gave a clear answer, two-thirds agree with the proposed approach. The remaining respondents answered a number of different questions: Is the LTRM fair? Is a Lorenz curve the best tool to measure fairness of the distribution? Is unexpected risk fair? Are the economic and theoretical levies fair?

2.6.3 Often the answers are linked to the general comments about the LTRM above; for example, one states that, while Lorenz curves are well recognised for measuring fairness, the result depends on the LTRM, whereas different results could be achieved with other models. Another is concerned that the definition of fairness is determined through the LTRM, but stakeholders don't know much about how it operates.

2.6.4 Similar to views summarised in paragraph 2.5.1 above, it is also argued that the difference between the Lorenz curves only measures the difference between PPF's view of risk and the allocation of that same risk. Therefore, it may be more appropriate to ensure that the combined risk measure is the correct tool to measure distribution before the relative fairness of different approaches to distributing the levy can be assessed correctly.

2.7 The Board's response

2.7.1 The Board recognises that the fairness of the levy is important to stakeholders. The proposals for the new formula were developed with this levy principle at the forefront and the Board is encouraged that the majority of stakeholders agree that a levy which incorporates an element of unexpected risk would distribute the levy quantum according to a fairer reflection of risk. For this reason, the Board confirms its intention to introduce in the future a new levy formula that takes account of unexpected risk.

2.7.2 At the same time, the Board appreciates that these proposals also introduce new complexity into the levy system and that levy payers need assurance that the right calculations are being made and that the basis of these calculations is valid.

2.7.3 With this in mind, the Board proposes to work with stakeholders both to increase the transparency of the calculation and to look at ways to ensure that the best measurement of unexpected risk is adopted and can be

validated. The Board's approach has been to measure a period long enough to capture the full impact of a serious economic downturn and reflects the likelihood of stronger schemes and employers suffering in a recession, described earlier in this chapter. The Board recognises that alternative durations and tests of adverse events have merit and will discuss alternatives with stakeholders.

2.7.4 If there is interest from stakeholders, we could also consider other ideas, such as whether it is necessary to have two separate components to the formula at all. Alternatively it may be that a simpler approach which seeks to build an element of unexpected risk into a single measure of funding risk and of insolvency risk might suffice. While this might mean some reduction in fairness (as measured by the Board) it would retain more of the simplicity of the current formula.

2.7.5 Such an approach would still mean taking account of the key drivers of unexpected risk — the differences between schemes (and their employers) in terms of insolvency risk and funding positions in adverse scenarios.

Combined risk measure

2.7.6 Work with stakeholders will also look at the combined risk measure and assess whether the detailed approach for its calculation could be improved, taking into account the issue of the period of risk measured and the level at which the risk is calculated, as mentioned above. The Board does not, however, believe it to be circular to assess the fairness of the levy using the combined risk measure calculated by the LTRM. The combined risk measure represents the real risks that the Board considers the PPF to face and so it is reasonable to measure how the cost of those risks is distributed..

Rates for risk

2.7.7 The calculation of and balance between the rates for short-term and long-term risk is something that can also be taken forward with stakeholders. The examples given in the consultation document were calculated using the 2008/09 levy data available at the time. At that stage in the economic cycle unexpected risk was a particularly large proportion of the total risk to the PPF, but the average rate of expected claims over time is likely to be different. The Board expects the actual parameters for levies charged with the new formula to form part of the determination[4] each year.

2.7.8 There is a case — alluded to in the consultation document and which we will consider further — for seeking to ensure that the proportions of the levy raised from the short-term risk and long-term risk components remain stable

---

[4] The Board's *Determination Under Section 175(5) of the Pensions Act 2004* is published annually and contains the rules for calculating the levy.

over time. Indeed, as noted above it may be possible to combine the two components.

Insolvency risk

2.7.9 The Board considers a measurement of insolvency risk in adverse economic scenarios to remain important to the development of a fairer levy. While nearly every employer's risk of insolvency will rise in a recession, the proportionate increases are highest among employers who initially have very low risks of insolvency. This prediction of the LTRM was supported by published data on default rates for 2008, which show an eightfold increase in defaults for Aa rated companies, but only a ten per cent increase for Caa-C rated companies (which are, of course, still much more likely to have failed than Aa rated businesses).[5]

2.7.10 The Board will engage with stakeholders to address concerns raised regarding the derivation of the long-term insolvency risk measure, Q, from the short-term one, P, and to look at alternative methods for the detailed derivation.

2.7.11 One of respondents' specific issues with insolvency risk measurement was that any perceived unreliability in the short-term measure would be significantly amplified in the long-term one. The Board does not share that view, since Q has a narrower range than P and hence variations in Q have less effect on levy bills.

2.7.12 Issues like this one demonstrate a need to raise stakeholder understanding, so the calculation of Q will be an element of work aimed at making the LTRM more visible and transparent to stakeholders where it is relevant to further proposals and the analysis that they are based on.

2.7.13 In addition to sharing more of the existing model with stakeholders, the Board itself has identified the distinct risk characteristics of different industry sectors or company types over time as an area of the model to explore further. The ability of the LTRM to take these into account is an area for future consideration, particularly in relation to employer types such as not-for-profit organisations and regulated utility companies.

2.7.14 In the meantime, the Board is assessing the opportunities for refining the existing short-term insolvency risk measurement to ensure it is fit for purpose in an economic environment much changed since the last such exercise two years ago, as well as to look at refinements in relation to specific groups. D&B recently announced further refinements to its methodology to take into account changes in the economy since the last such exercise was conducted in summer 2007. The PPF will be working with D&B over the coming months to consider the impact of these changes on levy bills.

---

[5] Moody's Default Statistics 2008

3. Investment Risk

3.1 Introduction

3.1.1 In 2006, the Board consulted on whether it was appropriate to introduce into the levy a risk factor based on the nature of schemes' investment strategies, as allowed for under the Pensions Act 2004. At that time the Board concluded that the cost of implementation for schemes and the probable limited impact of the factor — KPMG analysis suggested only three per cent of the levy would be redistributed — on a one-year calculation would not make it worthwhile.

3.1.2 The Board has gained more information on the dispersion of risk between schemes during the period since that consultation and it is apparent that a group of schemes have a much lower exposure to investment risk than average. The Board has made observations about the change in environment during that time:

- Scheme funding has been very volatile;
- The trend of diversification has continued, though at a different rate for different groups; and,
- Support for taking account of investment risk in the levy has grown.

3.1.3 However, investment risk has a significantly greater impact on scheme funding when looking at a longer period, particularly a period of adverse economic scenarios. The introduction of an investment risk component to the risk-based levy formula could redistribute just over 10 per cent of the levy.

3.1.4 This chapter summarises the Board's proposals to gather data on schemes' investment risk and the responses to the questions contained in the consultation, before proposing that further work is undertaken.

3.2 Summary of the November proposals

3.2.1 The consultation contained five proposed options for collecting the data required to calculate an investment risk factor, ranging from the simple to the complex. Those options and their broad implications are summarised here; the pros and cons of each are covered in detail in Chapter 5 of the consultation.

3.2.2 Option 1 is to use information on aggregate asset allocation to calculate common discount factors for all schemes — initially 10 per cent for short-term underfunding and 40 per cent for long-term underfunding — to be adjusted over time as aggregate data changes. This would not take into account scheme-specific information or sophisticated investment strategies.

3.2.3 Option 2 would involve the voluntary certification of low-risk investments in order to distinguish between low-risk and standard-risk schemes. This would be simple to operate, but would again exclude the most sophisticated strategies. It could also introduce cliff edges and disadvantage those that are unable to demonstrate that they are low-risk as a result of the particular nature of their strategies or of the resources available to them. Selection bias on the part of the low-risk group could also disadvantage the average-risk schemes. Options 1 and 2 are therefore not attractive to the Board.

3.2.4 Option 3, the Board's preferred option in the short term, would use existing data on asset allocation, gathered via Exchange, to estimate funding volatility and calculate a scheme-specific investment risk factor. The most sophisticated strategies would not be recognised within the limits of the scheme return, which anyway could not distinguish between the relative risk of asset sub-classes, but this option would allow for a reasonably fair measure of investment risk in the levy formula.

3.2.5 Option 4 would involve the voluntary certification of the results of simple stress tests on scheme assets and liabilities as recorded under Option 3, allowing for the substitution of a scheme-specific asset volatility for the standard asset volatility. This would recognise, for example, derivatives strategies that limit the loss of a schemes' equity portfolio in negative market conditions. It would need to be established, however, whether these tests sufficiently recognise different levels of investment risk, how the tests are calibrated and what guidance would be required. The Board did not offer this as a preferred option.

3.2.6 Option 5, which the Board saw as a potential long-term solution in the long term at least for large schemes, would allow schemes to submit the results of modelling work on their portfolios that measures changes in risk factors. This would allow for the recognition of sophisticated strategies, but would also be complex and time consuming option. Questions were asked about whether this should be compulsory for the largest schemes, how the risks to be modelled and the appropriate levels of stress to be modelled are determined and what the guidance would need to cover.

3.3 Answers to specific questions

Do you agree that taking account of investment risk in the levy is unlikely in itself to alter the behaviour of schemes or impact markets? (Q.5)

3.3.1 Opinion is fairly divided on this question. Very few say a change in behaviour will affect markets outright, but several recognise that the Board would be sending a psychological message to trustees and there may be a resulting change in behaviour or attitudes as "emotive" decisions are made and undue regard is paid to the size of the levy bill rather than what is best for the scheme. The middle ground believes that schemes' behaviour will change to an extent, but that it won't have a significant impact on markets.

Do you agree with Option 3, the proposal to use asset and liability information currently obtained through the Exchange scheme return to calculate a scheme- specific volatility measure that would be incorporated in the new risk-based levy formula? (Q.6)

3.3.2 Two-thirds of respondents to this question are in favour of using Option 3 to measure investment risk, at least in the short term. Just over a third of this number give straightforward support with the grounds, if specified, being that it is the most simple and practical option.

3.3.3 The remainder of those in favour recognise that the approach has limitations, such as not being able to take into account more sophisticated information.

3.3.4 Among those who disagree with the approach, the feeling is that it would not recognise the more sophisticated investment strategies that they or their clients use. This was reflected in responses from the representative organisations in particular.

3.3.5 There are a number of preferences for Option 4, which is for some a useful compromise between a limited, simplistic Option 3 and a potentially expensive, overly complex Option 5.

3.3.6 A number of potential areas for refinement were identified, such as looking at how to split assets in the proxy asset mix, examining the expectation of different values for the one-year and five-year investment risk factors and recognition of the possibility that markets, and possibly strategies, change over five years.

3.3.7 Other technical issues raised include: the inclusion of recovery plans, recovery of investment losses and recovery of funding deficits in the investment risk factor; recognition of schemes' Statements of Funding Principles; the impact of buy-in; and clarity around the applicable dates of asset values and asset splits on the scheme return.

Do you think that, if Option 3 is implemented, behaviour that seeks to reduce the levy charged, rather than genuinely reducing risk, would have a material impact on levy collections? (For example by altering investment strategy immediately after a reporting date or using derivatives to increase risk.) (Q.7)

3.3.8 Two thirds of those that give a firm answer think this type of behaviour is unlikely, because of the costs incurred and the time and effort required for strategies such as making short-term asset allocation adjustments as PPF data deadlines approach.

3.3.9 Those who think such behaviour is a risk accept that it is probably a minor one and not likely to make a huge impact on collections overall. Others suggest that changes to strategies will be timed to coincide with the levy requirements so that they are more beneficial or less detrimental.

Do you agree that, in the longer term, Option 5, the approach which is based on schemes modelling their own investment risk, should be introduced, at least for larger schemes? (Q.8)

3.3.10 Those in favour are largely so because of Option 5's potential to provide the most accurate assessment of risk, particularly for those schemes with complex strategies or that would see levy benefits. Those who do not give a firm answer are often positive about the benefits of recognising the reduced risk of certain strategies, but concerned about the practicalities.

3.3.11 The fairness of having two systems and/or making one compulsory for larger schemes is raised in a number of responses: extra calculation measures, designed with larger schemes in mind, could be unfair. Conversely, some respondents think it unfair that a group of the strongest schemes would be able to benefit from a more accurate assessment of their risk than the rest. One respondent suggests that it would be problematic to have two approaches available so the factor should be abandoned.

3.3.12 The majority of responses, however, focus on the simplicity of the calculation and the proportionality of the associated costs. While Option 5 is deemed expensive, its complexity could be as attractive to some as the simplicity of Option 3 is to others. A small number believe that the costs and complexity will be too prohibitive to smaller schemes to make it a worthwhile exercise, or could be at odds with simplicity in other areas of the levy, but some would like to compare the cost to the potential difference in levy before commenting.

3.3.13 Other issues raised include the objectivity of models and their use for other purposes: would the models be useful for real ongoing risk management, or simply be a costly tool that benefits the levy only? Responses differ: some schemes already own costly asset/liability models and will want to use these; some think a market for off-the-shelf products will be created. Indeed, some suggested consultancies would be the main beneficiaries, though consultancies themselves were fairly divided for and against.

3.3.14 Support for Option 4 is also expressed in responses to this question. It was considered by some as a more cost-effective option, allowing for the recognition of more sophisticated investment strategies but without the requirement for costly models. Bridging the gap between Options 3 and 5, seen as a significant one by many, Option 4 may also render those two options unnecessary, even in the short term.

If so, should this be compulsory for the largest schemes? (Q.9)

3.3.15 There is little support for a compulsory Option 5 for the largest schemes, though there are several reasons for this expressed in answers to this question. One is fairness: a number of respondents believe that all schemes should be treated equally and have their investment risk calculated with the same system; it would be unfair to make larger schemes only have a more complex levy calculation, but if all larger schemes had to do this and were

able to reduce their share of the levies as a result, the smaller schemes might be comparatively disadvantaged.

3.3.16 Others believe that it shouldn't be compulsory because it is likely to create significant additional costs for schemes, though it could be optional for those willing to incur them. However, one respondent thinks that if Option 5 is not compulsory then only those schemes that can afford internal models and stand to gain from them will use them, pushing up levies for smaller or weaker schemes that are already under pressure to meet levy costs.

If so, what threshold should apply? (Q.10)

3.3.17 This question is rarely answered separately from the others on investment risk, if at all, and relatively few ideas were offered. One respondent believes a reference to scheme asset values would be appropriate, whereas another thinks any threshold should be based on the risk posed to PPF by levy amount. Those that believe Option 5 should not be compulsory are obviously against a threshold. A handful of respondents find it too early to identify a threshold without any knowledge of the costs involved and/or that the time of implementation is the appropriate point to determine one.

Should an internal models approach be offered to smaller schemes if they wish to use it? (Q.11)

3.3.18 The majority either believe that this option should either be available for all schemes that want to use it or, if the Board introduces a compulsory Option 5, compulsory for all schemes. However, respondents recognise again that there could be significant costs involved and there might be limited take-up if it is optional. If it is compulsory, we would be inflicting additional costs on schemes. The issue of the PPF's monitoring of results is also raised.

3.3.19 Again, the possibility off-the-shelf models and a potential boost to the consulting industry are identified.

What questions about the approach do you consider would need to be resolved before Option 5 could be introduced? (Q.12)

3.3.20 In addition to those identified by the Board in paragraph 5.2.5 of the consultation document, the primarily technical questions identified are:

- How to properly reflect risk in terms of employer covenant, funding and investment principles.
- How to allocate levels of risk to different asset classes and differentiate between different liabilities, possibly taking into account assets with implications for longevity risk.
- How to verify and validate models.

- Changes in asset allocations over the period of time measured.
- Exposure to material interest rate and inflation mismatching.
- Issues relating to the impact of buyout cost increases and the treatment of bulk annuity policies.

Cost-related issues include:

- The challenge of putting in place a structure which copes with all investment arrangements, without introducing disproportionate costs.

Issues relating to the levy principles raised were:

- Consideration of issues which face smaller schemes that invest in managed funds and insurance company deferred annuities, as well as general reassurance that there would be no disadvantage to small/medium schemes.
- Clarity on the benefits of a more complex and time-consuming system and information on what proportion of schemes would enjoy those benefits.

3.4 The Board's response

3.4.1 The Board considers that there is general support for the recognition of investment risk in some form; this is demonstrated by the range and depth of answers received to the questions above, for which the Board is grateful. The Board is minded, therefore, to pursue the inclusion of an investment risk factor in the underfunding risk calculation of the risk-based levy as part of taking account of unexpected risk.

3.4.2 Most respondents were content with basing an investment risk factor on current information (Option 3). That said, if that option or Option 5 were to be taken forward, there would be a need for work on the practicalities.

3.4.3 The limits of Option 3 were recognised in the consultation and strongly echoed in some respondents' views. In particular, there is a small group concerned that Option 3 is so flawed as to not be worth implementing even in the short term, ahead of a more sophisticated solution. On the other hand, the cost and complexity of Option 5 makes it for many an unattractive prospect. The Board has also gained feedback in relation to the capabilities of schemes' existing investment risk models, which are not likely to be suited to use for calculating an investment risk factor in the levy as they are calibrated to calculate the schemes' risks.

3.4.4 Having considered all the arguments, the Board is minded to take forward further work on the options. In particular, support from a number of respondents for Option 4 — the submission of additional information such as the results of stress tests — is sufficiently strong for that to receive careful consideration. Further views from stakeholders will be sought on how Option 4 could be adopted and the stress tests verified.

3.4.5 The treatment of annuity policies will also be explored in more detail. The Board believes it possible to take account of these in that they will serve to reduce the average investment risk of a portfolio of assets — this is effectively the same as excluding their value from assets and liabilities.

4. Next Steps

4.1 Summary of the Board's initial conclusions

4.1.1 Responses to the consultation recognised that the principle of the Board's proposals was a fair recognition of schemes' risk to the PPF and consequently a fairer distribution of the levy according to those risks. This principle was supported by the vast majority of respondents and the Board is encouraged that it shares this fundamental aim with stakeholders.

4.1.2 The Board has therefore concluded that it will do further work on the introduction of a risk-based levy component that reflects schemes' risk over the longer term.

4.1.3 The Board will also continue to look at ways to introduce an investment risk factor into the calculation of underfunding risk, with data gathering centred on Option 4, certification of simple stress tests. The Board will work closely with stakeholders to develop this proposal.

4.2 Further engagement with stakeholders

4.2.1 The Board recognises that there is broad support for its pursuit of these aims, but also appreciates that consultation respondents had some concerns about the details. With that in mind, the Board proposes to engage with a group of stakeholders with technical expertise in the areas identified for more work.

4.2.2 Two development groups will be established. A group of senior stakeholders will establish the principles behind the case for a new levy formula and formulate broad proposals that can then be tested. This will be supported by a technical group, which will look at the detailed methods for putting these proposals into effect and ensure they are practical.

4.2.3 Although the Board is keen that debate is impartial and new ideas are generated, it is anticipated that the areas for this additional work will cover:

- The principles of a new levy formula that charges for unexpected risk.
- What the balance should be between short-term (expected) and long-term (unexpected) risk.
- Options for the measurement of long-term insolvency risk.
- The use of the PPF's long-term risk model in the development of proposals.
- Options for the measurement of investment risk, particularly in relation to the more sophisticated investment strategies.

4.3 Timing

4.3.1 The Board will be aim to take forward work starting in early autumn 2009. A consultation document on the new proposals will follow in early 2010. Following this, the Board expects to publish its final policy for the introduction of a new levy formula later in 2010. Implementation would be no earlier than 2012/13.

4.4 Comments on this document

4.4.1 As a further consultation is following, the Board does not anticipate that its stakeholders will have extensive comments on this document. However, if you would like to make comments about the Board's initial conclusions, please direct them to:

Chris Collins

Head of Policy

Pension Protection Fund

Knollys House

Addiscombe Road

Croydon

CR0 6SR

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

4.4.2 This consultation is being conducted in line with the Code of Practice on Consultation. The code can be accessed via the website of the Department for Business, Enterprise & Regulatory Reform (BERR) at: http://www.berr.gov.uk/files/file44364.pdf

4.4.3 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 Corporate Affairs

Pension Protection Fund

9th Floor Knollys House

17 Addiscombe Road

Croydon

CR0 6SR

Tel: 020 8633 4968

Pension
Protection
Fund

www.pensionprotectionfund.org.uk

©The Board of the Pension Protection Fund 2009

CDS/424058