Pension
Protection
Fund

The Pension Protection Levy Consultation Document July 2005

Contents

Executive summary 4

List of tables and figures 9

Chapter 1 – Introduction and background 11
1.1 Introduction 11
1.2 Background 11
1.3 The initial and pension protection levies 12

Chapter 2 – Levy principles and risk 15
2.1 Levy principles 15
2.2 Risk 16

Chapter 3 – Pension scheme data analysis 19
3.1 Data collection for eligible schemes 19
3.2 Trends in pension provision 19
3.3 Number of occupational pension schemes 21
3.4 Member status 22
3.5 Pension scheme contributions 23
3.6 Insolvency risk 25
3.7 Level of underfunding 28

Chapter 4 – Underfunding risk 31
4.1 Introduction 31
4.2 Definition of underfunding 31
4.3 Assessment of underfunding level 31
4.4 Factors changing underfunding level 32
4.5 The effect of the assessment period 33
4.6 The Board's proposed approach 34

Chapter 5 – Insolvency risk 39
5.1 Introduction 39
5.2 Definition of insolvency 39
5.3 Approaches to measuring insolvency risk 39
5.4 Relationship between default and insolvency 43
5.5 The Board's proposed approach 45

Chapter 6 – Scheme structures 51
6.1 Introduction 51
6.2 Multi-employer schemes 51
6.3 The Board's proposed approach to multi-employer schemes 52
6.4 Hybrid schemes 54
6.5 Schemes with a partial crown guarantee 54
6.6 Schemes sponsored by an overseas employer 55
6.7 Schemes sponsored by not for profit organisations 55

Chapter 7 – The levy structure 57
- **7.1 Introduction** 57
- **7.2 Annual levy estimates** 57
- **7.3 Levy structure** 58
- **7.4 Individual risk based levy cap** 60
- **7.5 Matching the levy estimate** 61
- **7.6 Calculating the amount of risk based levy for an individual pension scheme** 63
- **7.7 Evolution of the levy structure** 66

Chapter 8 – The transitional period 68
- **8.1 Introduction** 68
- **8.2 The Board's proposed approach to the transitional period** 68
- **8.3 The Board's proposed approach to adapting valuations to measure underfunding in the financial year commencing 1 April 2006** 70
- **8.4 The Board's proposed approach to reduce the impact of the transitional period** 71

Chapter 9 – Asset allocation risk 77
- **9.1 Introduction** 77
- **9.2 Practicalities of using asset allocation** 77
- **9.3 Inclusion of asset allocation risk in the risk based levy** 78

Chapter 10 – The consultation process 80
- **10.1 Consultation responses** 80
- **10.2 Arrangements for written submissions** 82
- **10.3 Publishing a summary of responses** 83

Annex A - Pension Protection Fund compensation 84
Annex B - Declaration of structure of scheme 85
Annex C - Transitional provisions for estimating underfunding 86

Glossary 88

Abbreviations 90

Foreword

In its first consultation document, the Board of the Pension Protection Fund is seeking responses to its proposals for the pension protection levy from April 2007, and its modified proposals for the financial year beginning in April 2006.

Our proposals build on the consensus emerging from our discussions with key stakeholders over the past nine months and from the research we have conducted into how to give practical effect to the principles expressed. We would like to take this opportunity to record our thanks to those individuals and organisations who have given generously of their time and wisdom to help inform our thinking.

Comprehensive, accurate and current information on defined benefit schemes is not available. There are many surveys and models built around key sub-sets of schemes, and these provide a basis for reasonable extrapolation at the aggregate level.

Our key conclusions are that a credible and robust basis for the risk based levy exists and more importantly that the risk basis should be introduced as fully and as early as possible.

Much of our thinking has been on the question of balance between potentially competing interests; between scheme members and sponsoring employers; between well funded and poorly funded schemes; between strong employer covenants and weak. There are no “right” answers to these issues in a technical sense, which is why consultation and consensus are so important.

We propose a relatively simple and transparent structure for the risk based levy using familiar market techniques. This should inspire confidence and accelerate the timetable for implementation. Early implementation will limit the time and extent of high risk schemes being supported by low risk schemes.

We encourage employers to continue to reduce pension scheme deficits. This should give their scheme members increased confidence in the pension promise and will reduce the Board of the Pension Protection Fund’s risk exposure. In this way the levy will be lower for everyone than if funding remains comparatively weak. Employers have increased contribution rates significantly in recent years and, if continued, this should reduce deficits in the near term.

The Board is assuming that both the amount and distribution of risk will change significantly year on year. We therefore expect to recalibrate our risk models annually and consult each year on our proposals.

We look forward to hearing your responses.

The Board of the Pension Protection Fund

Executive summary

Background

The Pension Protection Fund has been established to pay compensation to members of eligible defined benefit pension schemes, when there is a qualifying insolvency event in relation to the employer on or after 6 April 2005, and where there are insufficient assets in the pension scheme to cover Pension Protection Fund levels of compensation.

Compensation will be funded partly by the assets transferred from schemes for which the Pension Protection Fund has assumed responsibility, and partly by an annual levy raised on eligible pension schemes.

The Pensions Act 2004 prescribes that after a transitional period at least 80% of the pension protection levy (the levy) must be risk based, and that when setting the risk based levy, the Board of the Pension Protection Fund (the Board) needs to consider the level of scheme underfunding and the likelihood of sponsoring employer insolvency.

One of the main purposes of this consultation document is to outline the Board's proposals for introducing the risk based levy during the financial year starting 1 April 2006, setting out the factors the Board will take into consideration when calculating the risk based element of the levy for eligible schemes.

The Board's proposals

At the heart of the Board's proposals for the risk based levy are three core principles:

- Fairness – ensuring that schemes pay an appropriate amount towards the levy reflecting the level of risk they pose
- Simplicity – applying effective and simple mechanisms and solutions for collecting the data required to set the levy; and
- Proportionality – ensuring that the levy is fair and proportionate between schemes and in its impact on individual schemes.

As well as ensuring that those schemes that pose the greatest risk to the Pension Protection Fund pay a fair and proportionate share of the levy, the risk based levy may also serve as a mechanism to influence and create incentives to encourage better funding by employers and schemes leading ultimately to a reduction in overall risk to the Pension Protection Fund.

There is broad industry support for the introduction of the risk based levy. The Board is keen to build on this consensus and introduce the risk based levy for all schemes as soon as possible. In order to introduce the risk based levy for

the 2006/7 financial year, the Board proposes to introduce a solution that takes into consideration the two elements of:

- Scheme underfunding; and
- Insolvency risk.

The Board acknowledges that asset allocation is an important leading indicator of future scheme funding levels. However, it proposes to defer the inclusion of an asset allocation risk factor until a later date. The Board considers that to include an asset allocation factor in the 2006/7 risk based levy calculation would place too much of an additional burden on schemes in relation to the additional benefit inclusion would bring.

The scheme based levy, which will account for 20% of the pension protection levy in 2006/7, will be calculated with reference to the level of a scheme's Pension Protection Fund liabilities rather than the number and status of members within each eligible scheme. As part of this consultation exercise, the Board would welcome views on its proposals for the pension protection levy as a whole, both the scheme based and risk based elements.

Scheme underfunding[1]

The Board proposes to measure underfunding risk by taking account of the difference between the value of a scheme's assets and the value of a scheme's Pension Protection Fund liabilities. To enable the risk based levy calculation to take account of underfunding risk, the Pensions Act 2004 requires all eligible pension schemes to complete an actuarial valuation (s179 levy valuation) of the scheme's assets and protected liabilities. Regulations provide for a period up to 5 April 2008 for conducting initial s179 levy valuations, and a further year to provide the information to the Board.

Ideally the Board would use consistently calculated underfunding data from 1 April 2006, but this will not be practical as not all eligible schemes will have completed s179 levy valuations by 31 December 2005.

To avoid high risk companies being subsidised by low risk companies, the Board proposes that for those schemes that have yet to complete a s179 levy valuation, the Board will adapt existing MFR valuation data supplied on the annual scheme return to estimate the underfunding on a s179 levy valuation basis.

Recognising that the new scheme funding requirements are expected to replace the MFR from September 2005, the Board proposes to use adapted MFR valuations for the 2006/7 financial year only. To promote fairness and the use of best evidence in future years, the Board proposes to ask Government to legislate to require all eligible schemes to provide s179

[1] The use of the terms "underfunding" and "liabilities" in this document refer to the Pension Protection Fund s179 levy valuation basis unless explicitly stated otherwise.

valuations by 31 December 2006. Your responses to the consultation are particularly important on this issue as new regulations would need to be made.

The Board is also proposing to scale up the value of the Pension Protection Fund liabilities by 5% to reflect the fact that the Board is exposed to the volatility of scheme deficits during the year following a valuation.

The Board proposes to calculate an underfunding amount for schemes with a funding level greater than 104% that is equal to 1% of the value of Pension Protection Fund liabilities. This reflects the lower possibility of a claim from these schemes, but takes into account that such a claim is not impossible.

Insolvency risk

The Pension Protection Fund is exposed to the insolvency risk of participating employers of eligible UK defined benefit pension schemes. Measuring this risk forms the second element of the Board's proposals for calculating the risk based levy during the financial year 2006/7.

In accordance with the principles of fairness and simplicity, the Board proposes to measure insolvency risk for participating employers by selecting a market solution provided by a credit rating agency, credit scoring institution or credit insurer. The Board is confident that the available market solutions will cover the majority of eligible schemes, and will enable the Board and levy payers to benefit from economies of scale.

The market solution will be required to measure the insolvency risk factor for the employer/s of each eligible pension scheme by estimating the one year probability of insolvency. This measure matches the risk exposure to the levy cycle of the Pension Protection Fund, and is consistent with the definition of an insolvency event in the Pensions Act 2004.

The Board also proposes to apply a banding approach to the measurement of insolvency probability. The Board will define ranges or bands and assign the same probability of insolvency to companies grouped in the same band instead of using the individual quantitative measurement of risk directly from a model. If a rating or score cannot be obtained, a generic risk band will be applied.

The Board's approach to banding will:

- allow for the fact that insolvency risk is being measured at an instant in time, mitigating the impact of any short term volatility;

- reduce the impact of any discrepancy between the chosen market solution and other providers of insolvency risk assessment.

The levy structure

The Board is obliged to estimate the total amount it needs to raise from the levy each year taking into account the levy ceiling. It will do this by considering actual claims experience, the ongoing solvency of the fund, and likely levels of future claims.

The initial indicative estimate of £300 million for the total pension protection levy for the 2005/6 financial year was outlined in the regulatory impact assessment (RIA), developed by the Department for Work and Pensions to accompany the Pensions Bill (that became the Pensions Act 2004), based on data as at December 2003. This data related to a range of eligible pension schemes and was based on a set of economic and other assumptions appropriate to that time. Since the RIA was published, other organisations have made estimates based on more current economic and longevity assumptions and their estimates have all been higher.

Over the next few months, the Board will be doing modelling work to determine its levy estimate for 2006/07. This estimate will take into account changes in the key assumptions since December 2003, mainly in relation to interest rates and mortality. With lower interest rates at present, and an assumption of greater longevity, it is likely that the Board's own estimate will be somewhat higher than the figure in the regulatory impact assessment. We aim to publish the estimate by 30 November 2005, alongside a summary of responses to this consultation exercise, and an outline of the levy structure for 2006/07. There will be a further four week period of consultation after the levy estimate is published.

Individual schemes will be charged a levy based on the product of their underfunding risk and insolvency risk, scaled up or down to match the levy estimate so that the full amount is collected. For multi-employer schemes, the Board proposes to take into account their structure when calculating the levy factors.

The Board is aware that concerns have been expressed about the potential financial impact that the pension protection levy may have on schemes and their sponsoring employers. The Board therefore proposes to limit the amount of risk based levy which will be payable by an individual pension scheme in any year. A cap will be applied to ensure that no scheme pays a risk based levy greater than a fixed percentage of its protected liabilities.

Responding to this consultation document and next steps

The Board of the Pension Protection Fund welcomes your views on the proposals contained in this consultation document and in particular responses to the questions highlighted in each section.

The consultation period will be 12 weeks and responses to this consultation document should reach us by 4 October 2005. Further details of how to

respond to this consultation document are contained in Chapter 10 of this document.

List of tables and figures

Table

1	Occupational pension schemes by benefit type as at 31 March 2004
2	Occupational pension schemes by number of members (in thousands)
3	Estimated Pension Protection Fund deficits
4	Calculation of underfunding risk
5	Definition of credit ratings
6	Likelihood of default over time
7	Criteria for assessing insolvency risk providers
8	Insolvency risk bands
9	Approach to multi-employer schemes
10	Levy factors
11	Example of individual risk based levy cap
12	Risk exposure as a percentage of Pension Protection Fund liabilities
13	Risk based levy per £1m of Pension Protection Fund liability
14	Comparison of transitional period options
15	Comparison of options for adapting MFR valuations

List of figures

Figure

1	Long term trends in the DB-DC shift
2	Composition of scheme member status
3	Pension scheme employer contributions
4	Annual default experience and insolvency rate
5	Probability of business failure over 12 months
6	Distribution of credit strength and annualised average default rate
7	Movements across rating categories over a one year horizon
8	Volatility of pension scheme funding level
9	Underfunding risk
10	One year probability of default
11	One year business failure probabilities
12	Insolvency risk by strength of company

Chapter 1

Introduction and background

Chapter 1 – Introduction and background

1.1 Introduction

1.1.1 The Pension Protection Fund, which became operational on 6 April 2005, is a statutory fund run by the Board of the Pension Protection Fund. The Board is a statutory corporation established under the provisions of the Pensions Act 2004.

1.1.2 The Pension Protection Fund has been established to pay compensation to members of occupational defined benefit pension schemes, following a sponsoring employer insolvency from 6 April 2005 onwards, provided there are insufficient assets to pay the Pension Protection Fund level of compensation and the scheme did not commence wind up prior to 6 April 2005. A basic description of Pension Protection Fund compensation can be found at Annex A.

1.1.3 Compensation payments will be funded partly by the assets transferred from schemes for which the Pension Protection Fund has assumed responsibility, and partly by an annual levy raised from eligible pension schemes. For the first levy year, which started on 6 April 2005, the levy is based on scheme membership numbers only, but the Board intends to introduce a risk based levy during the financial year commencing 1 April 2006.

1.1.4 The purpose of this consultation document is to outline the Board's proposals for introducing a risk based levy and scheme based levy and to provide the opportunity for interested parties to comment. The Board is obliged to consult when there are either any alterations to the rates or factors used to set the pension protection levy or when no consultation has taken place in the previous two years. However, the Board intends to consult annually for the foreseeable future.

1.2 Background

1.2.1 Employees join occupational defined benefit pension schemes expecting that they will receive the pension that they have been promised. This promise is realised if there are sufficient scheme assets to meet pension liabilities as they fall due, or the sponsoring employer is able to make good any shortfall. In most cases members receive the pension they have been promised.

1.2.2 However, if an employer becomes insolvent there are sometimes insufficient funds in the pension scheme to meet the liabilities in full. In some cases employees have contributed to a pension scheme for their entire working life, only to discover that when the scheme wound up in the immediate run-up to their retirement, they received a much lower pension than they expected. This has led to reduced confidence in occupational pension schemes.

1.2.3 To help manage risk, the Pensions Act 2004 requires the Board to set and charge eligible schemes a pension protection levy that considers the likelihood of sponsoring employer insolvency. This will ensure that those schemes posing the greatest risk will pay a fair share of the levy. The fund will compensate the members of failed defined benefit and hybrid pension schemes[2] at statutorily determined rates (see Annex A). This will provide members of eligible schemes with the assurance that their pension benefits are reasonably secure even in the event of the insolvency of their sponsoring employer.

1.3 The initial and pension protection levies

1.3.1 Initial levy

The initial levy introduced from 6 April 2005 has been set by the Secretary of State for Work and Pensions and the Department for Social Development in Northern Ireland and will apply only for one year. The initial levy is a scheme based levy only, where schemes are charged £15 for each active member and pensioner member and £5 for each deferred member. The initial levy rates and levy structure are detailed in The Occupational Pension Schemes (Levies) Regulations 2005[3].

1.3.2 Pension protection levy

The pension protection levy, which will consist of a scheme based levy and a risk based levy, will replace the initial levy during the financial year 2006/7 and will be set annually by the Board of the Pension Protection Fund.

1.3.3 Scheme based levy

The Board must consider the level of a pension scheme’s liabilities and may consider the number of members and the amount of pensionable earnings in respect of active members, when setting the scheme based levy. The scheme based levy may be up to 20% of the total estimated amount of pension protection levy to be collected across all schemes in any one year, except during the transitional period (see below).

1.3.4 Risk based levy

The Board must consider the level of scheme underfunding[4] and the likelihood of sponsoring employer insolvency and may also consider asset allocation and any other risk factors that may be prescribed in regulations when setting the risk based pension protection levy. The risk based levy must be at least 80% of the total estimated amount of

---

[2] The Board will compensate the members of hybrid schemes where they have defined benefit rights.

[3] In this document, references to the law that applies in Great Britain should be taken to include corresponding legislation in Northern Ireland.

[4] The use of the terms “underfunding” and “liabilities” in this document refer to the Pension Protection Fund s179 levy valuation basis unless explicitly stated otherwise.

pension protection levy to be collected across all schemes in any one year, except during the transitional period (see below).

1.3.5 Changes to the pension protection levy

The Board will determine any annual change to the total amount of pension protection levy to be collected across all schemes, within the limit set by the Secretary of State for Work and Pensions. Any annual increase to the aggregate amount of pension protection levy will be restricted to 25% of the total estimated levy in the previous year.

1.3.6 Transitional period

The transitional period (the length of which will be determined in regulations later this year) allows modifications to the pension protection levy to enable the gradual introduction of a risk based levy.

Pension
Protection
Fund

Chapter 2

Levy principles and risk

Chapter 2 – Levy principles and risk

2.1 Levy principles

2.1.1 The Board is committed to developing a risk based levy using the principles outlined in this chapter.

2.1.2 The Board proposes fairness, simplicity and proportionality as the three key principles to inform the development of the risk based levy. Dependent on the outcome of this consultation process these principles will guide the Board when setting future levy rates and structures.

Fairness

Fairness will be promoted when setting the levy rates and levy structure by ensuring that schemes pay an appropriate amount towards the levy reflecting the level of risk they pose.

- **Best evidence will be used to set and calculate the levy**. Until all schemes provide consistent information, the Board will use the best evidence available;
- **A risk based approach will be adopted for all schemes as soon as is practically possible**. This will help to manage the risks faced by the Pension Protection Fund from an early stage. It also takes into consideration feedback received from industry about charging schemes a share of the overall levy proportionate to the level of risk they pose;
- **Incentives to good behaviour will be created**. The Board intends to design a levy structure that will reward schemes that are well funded and that effectively manage their risks and eliminates perverse incentives, particularly during the transitional period.

Simplicity

An effective and simple mechanism for collecting the data required to set the levy will be applied.

- **Data relevant and material to the risk being managed should be used.** Data supplied by scheme trustees to support a risk assessment should be materially relevant and as recent as possible;
- **Market solutions are used (where possible) when calculating risk factors.** This will provide transparency and credibility to all stakeholders.

Proportionality

The levy will be fair and proportionate between schemes and in its impact on individual schemes.

- **A proportionate approach will be taken to the introduction of a risk based levy.** The Board will have regard to the interests of employers and scheme members while ensuring that material risks to the Board are adequately quantified and managed;

- **An effective balance will be struck between cost and risk, fairness and affordability**. A levy will be charged that reflects the risk a scheme poses but which does not, on its own, threaten the ongoing viability of the sponsoring employer or pension scheme;

- **The costs of increasing the sophistication of the levy will be balanced against the benefits.** Changes to levy factors or levy structure will take into account the associated financial and non-financial benefits and costs.

2.2 Risk

2.2.1 To execute its functions and responsibilities effectively, the Board must actively manage the risks posed by eligible pension schemes and their sponsoring employers, in conjunction with the Pensions Regulator. These risks are crucial to the assessment of the cost of claims on the Pension Protection Fund and resulting liabilities. The risk based levy is the main mechanism through which the Board can influence and create incentives to encourage good behaviour by employers and schemes and achieve a reduction in its risk exposure.

2.2.2 The Board must consider the level of pension scheme deficits, and the likelihood of a sponsoring employer entering insolvency, when establishing its exposure to risk and assessing the risk based levy. The Board will consider the effects of historic risks and understand, assess and manage possible future risks.

2.2.3 The effects of historic risks that have led to the current environment include:

- the current level of pension scheme deficits due to low interest rates;

- higher benefit costs due to increases in life expectancy;

- the effect of the asset allocation strategies adopted by schemes and the percentage of investments that do not match income streams to future liability profiles;

- the closure of defined benefit pension schemes to new members, increasing the percentage of deferred and pensioner members.

2.2.4 The future risks faced by the Board include:

- volatility in market performance of investments impacting on pension scheme funding levels and the level of return on Pension Protection Fund investments;
- the effect of the asset allocation strategies adopted by schemes and the percentage of non-matching investments;
- potentially higher benefit costs for schemes and compensation costs for the Board as a result of continuing increases in life expectancy;
- the pace at which schemes build up their assets to match their liabilities;
- the level of corporate failures;
- the response to the existence of the Pension Protection Fund by defined benefit pension schemes and their sponsoring employers.

These future risks faced by the Board will be managed by a combination of the risk based levy, the investment strategy followed by the Board, the application of the Pension Regulator's statutory powers and the implementation of the new scheme funding requirements to replace the MFR.

2.2.5 The Board, in conjunction with the Pensions Regulator, proposes to closely monitor the funding position of eligible schemes. This will highlight any increased risk for schemes at an early stage. It will also carefully consider the impact of its proposals for the risk based levy on eligible schemes.

Questions

1. Do you agree that the Board should construct the risk based levy in a way that combines the principles of fairness, simplicity and proportionality?

Pension
Protection
Fund

Chapter 3

Pension scheme data analysis

Chapter 3 – Pension scheme data analysis

Chapter summary

This chapter sets out the range of data sources used to inform the introduction of a risk based levy. In particular it discusses:

- Recent trends in pension provision
- Analysis of data on underfunding risk and insolvency risk

3.1 Data collection for eligible schemes

3.1.1 The Pensions Act 2004 and the Pension Protection Fund (Entry Rules) Regulations 2005 define the population of eligible schemes.

3.1.2 The Board recognises there is limited data relating to eligible schemes. Previously, information on such a large group of schemes has not been required. The Board has used a number of data sources to formulate its assumptions about the risk based levy. These assumptions are likely to be refined over time as and when new data is received.

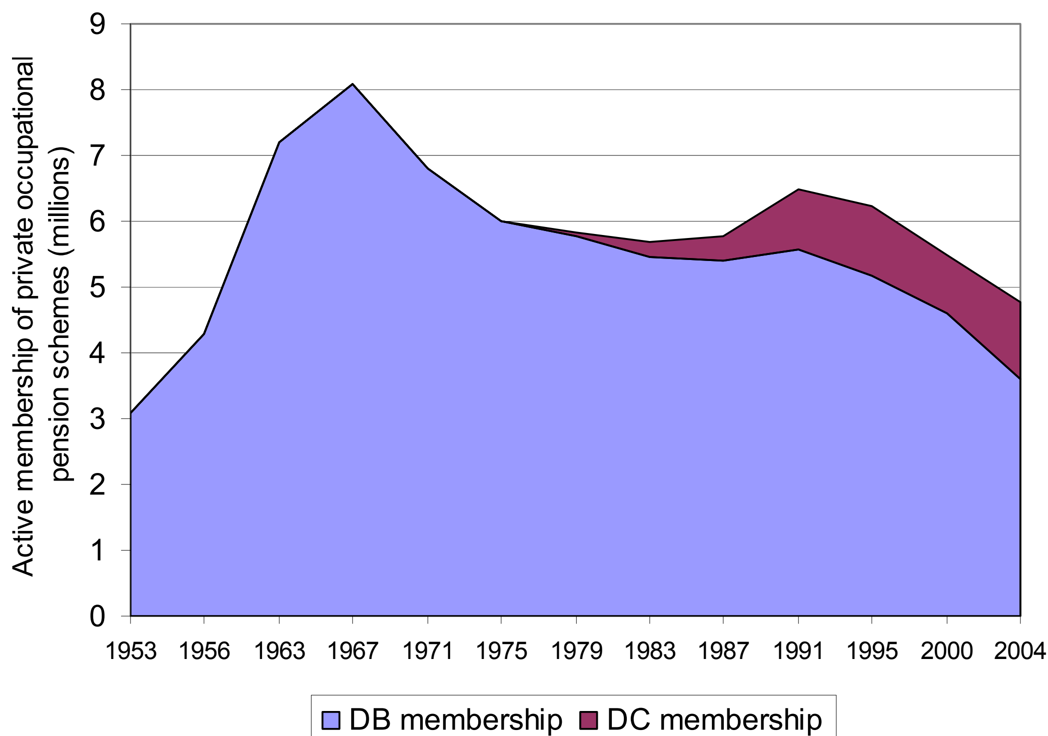
3.1.3 The Board considers that it would be imprudent to postpone the introduction of a risk based levy simply because a complete data set is currently unavailable. Therefore, the Board has concluded that:

- there will be sufficient data available to support the introduction of a simplified risk based levy during the financial year commencing 1 April 2006;
- in future years the acquisition of additional comprehensive data will be required to facilitate a more sophisticated approach to calculating the risk based levy;
- it will work in partnership with the Pensions Regulator to develop the mandatory new annual scheme return form to collect a complete data set ensuring minimal additional data requests on schemes.

3.2 Trends in pension provision

3.2.1 Over the last 40 years there has been a gradual decline in defined benefit pension provision in favour of defined contribution provision. Figure 1 below illustrates this for active members of private sector occupational pension schemes:

Figure 1 – Long term trends in the DB-DC shift



Source: Government Actuary's Department (GAD) 2005

3.2.2 The National Association of Pension Funds (NAPF) survey 2004 stated that 10% of private sector defined benefit schemes closed to new staff in 2004. This is compared to 26% in 2003 and 19% in 2002. Extrapolating the results of this survey to the population of schemes suggests that for every 1000 schemes open to new members at the end of 2001 only 540 remained open at the end of 2004. As these schemes are closed to new members, they will continue to exist but the membership will slowly age and decrease.

3.2.3 The number of defined benefit pension schemes is diminishing due to a number of factors, which include a reluctance or inability by some companies to continue to support open-ended pension commitments and meet the associated costs. The combination of low real interest rates and a fall in equity market values has led to higher pensions liabilities and lower asset values. This has come at a time when new financial reporting requirements on sponsoring employers have led to increased disclosure of pension costs and their inclusion in measuring company financial performance. In addition defined benefit pension costs are likely to continue to rise as pension payments to individual scheme members continue to be paid for a longer period due to improvements in mortality rates.

3.2.4 A continued decline in defined benefit pension provision could result in a reduced number of eligible pension schemes. This could have two consequences for the Board. It could reduce the number of schemes

that may require Pension Protection Fund assistance. It could also reduce the number of schemes required to pay the pension protection levy.

3.3 Number of occupational pension schemes

3.3.1 The reported number of defined benefit pension schemes and hybrid schemes as at 31 March 2004 was 12,931 based on data collected by the Occupational Pensions Regulatory Authority. This is comparable to the estimate set out in the regulatory impact assessment produced by the Department for Work and Pensions to support the Pensions Act 2004. However, this table (1) includes schemes that are ineligible or exempt from the Pension Protection Fund provisions and so the actual number of eligible pension schemes is likely to be lower.

Table 1 - Occupational pension schemes by benefit type as at 31 March 2004

Size of scheme by membership	Number of money purchase schemes	Number of defined benefit schemes	Number of hybrid schemes	Number unknown
2-11	64,275	2,552	1,969	7,041
12-99	6,354	3,085	407	792
100-999	1,783	3,196	460	246
1,000-4,999	231	722	178	36
5,000-9,999	33	125	35	10
10,000+	21	154	48	15
Totals	**72,697**	**9,834**	**3,097**	**8,140**

Source: Occupational Pensions Regulatory Authority

3.3.2 Table 2 shows the change in occupational pension scheme membership numbers between 31 March 2003 and 31 March 2004. The numbers include both defined benefit and defined contribution scheme members. Schemes with over 10,000 members account for 60% of the total number of scheme members. This is concentrated in 175 occupational pension schemes, of which 154 schemes are defined benefit.

Table 2 - Occupational pension schemes by number of members (in thousands)

Size of scheme by membership	Number of members at 31 March 2004 (in thousands)	As % of total members	Number of members as at 31 March 2003 (in thousands)	As % of total members
2-11	222	1.4%	241	1.5%
12-99	399	2.5%	449	2.8%
100-999	1,813	11.2%	1,862	11.6%
1000-4999	2,508	15.5%	2,488	15.6%
5000-9999	1,436	8.9%	1,390	8.7%
10000+	9,766	60.5%	9,562	59.8%
Totals	**16,144**	**100%**	**15,992**	**100%**

Source: Occupational Pensions Regulatory Authority

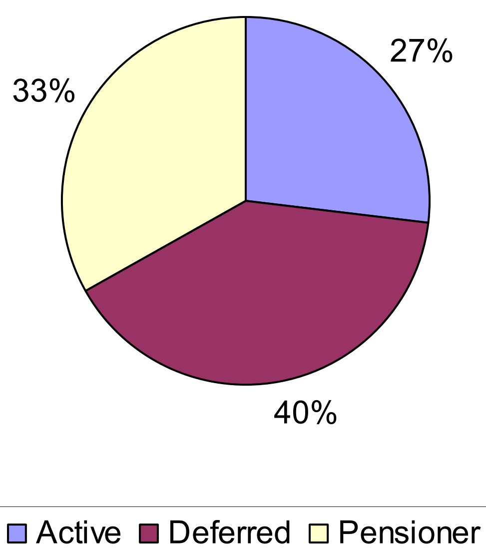
3.3.3 The number of active, deferred and pensioner scheme members possessing defined benefit rights has been used to calculate the initial levy by the Secretary of State for Work and Pensions and the Department for Social Development in Northern Ireland. The Board's levy income for the financial year 2005/6 has been directly linked to the distribution of active, pensioner and deferred members.

3.3.4 From the financial year commencing 1 April 2006 the Board proposes that the scheme based levy should be calculated with reference to the level of a scheme's liabilities rather than the number and status of members within each eligible scheme.

3.4 Member status

3.4.1 The findings from a data gathering exercise undertaken in October 2004 on behalf of the Pension Protection Fund, covering approximately 7,000 eligible schemes, show that 27% of scheme members are active members.

Figure 2 - Composition of scheme member status



Source: Board of the Pension Protection Fund

3.4.2 The distribution of scheme member status has several implications for the Board:

- a higher percentage of pensioner members leads to a greater impact on the amount of compensation immediately payable following a scheme's entry into the Pension Protection Fund;

- the difference between an actuarial valuation to determine asset and liability values on a Pension Protection Fund basis and a valuation to determine full buy-out will be greater if there is a higher percentage of active and deferred members in a scheme.

3.4.3 The Board, through the Pensions Regulator, will collect data about the distribution of member status. This will highlight to the Board any major shift in member status which could impact on future claims and levies.

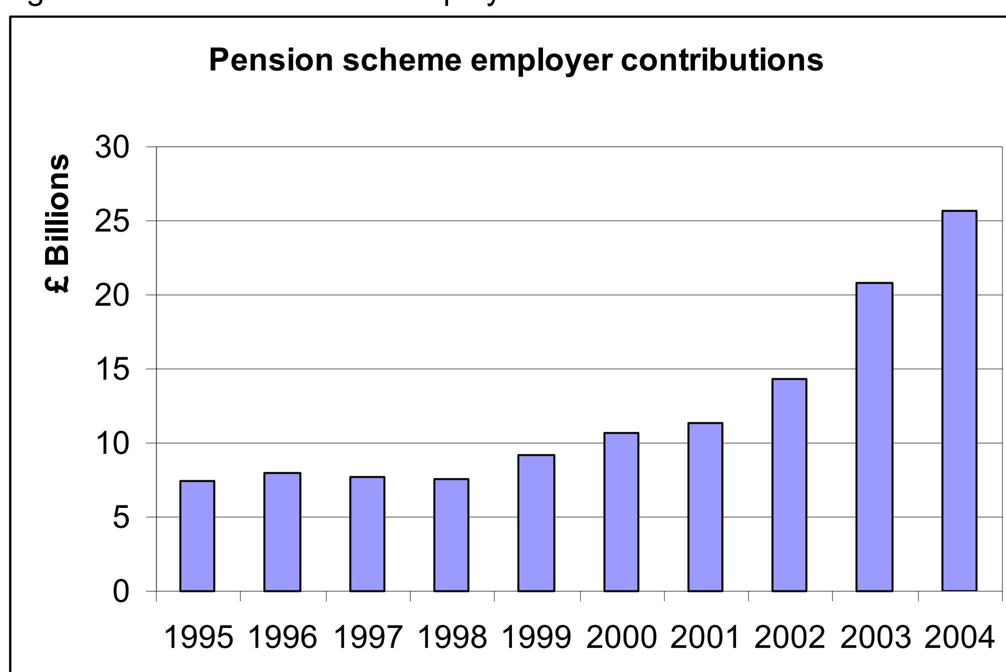
3.5 Pension scheme contributions

3.5.1 The Board is encouraged by the results of the National Association of Pension Funds (NAPF) 2004 annual survey suggesting that 71% of private sector schemes have increased their contributions in an attempt to reduce their pension scheme deficits and 41% have increased employee contributions. Increasing the level of contributions also helps to reduce the employer's exposure to risk from the pension scheme.

3.5.2 Sponsoring employers are aware of the increasing deficits in pension schemes and as a result are increasing the level of contributions. However, pension scheme liabilities are presently increasing at an equivalent or greater rate, due to low interest rates and increased life expectancy. The overall position is that deficits have only marginally reduced. Nevertheless the Board considers that the future rate of increase in liabilities may not match the increase in the previous period so continuing contributions at the same level are likely to have a greater impact on pension scheme deficits going forward.

3.5.3 Figure 3, derived from Office for National Statistics (ONS) data, shows how employer contributions have risen markedly since 2000:

Figure 3 – Pension scheme employer contributions



Source: National Statistics, MQ5, table 4.3

3.5.4 Although the schemes covered by the ONS data are not precisely the same as the population of eligible schemes, they are closely aligned. The amount of employer contributions did not change much in the late 1990s, but there has been a very significant increase over the last two years. The ONS data estimates employer contributions to be £26bn in 2004 compared to £21bn in 2003 and £14bn in 2002. In fact, employer contributions have grown by a compound annual rate of 25% between 2001 and 2004. Employee contributions were £5bn in 2004.

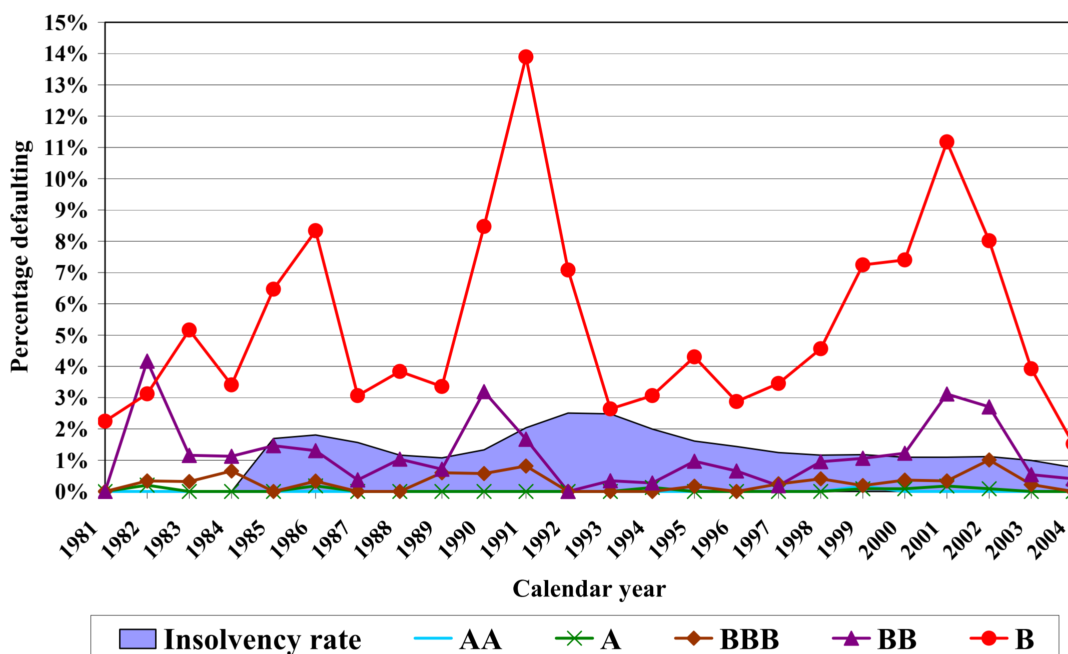
3.5.5 The introduction of the new scheme funding requirements to replace the Minimum Funding Requirement (MFR), expected to be phased in from September 2005, will require trustees to agree a funding strategy for the scheme with the sponsoring employer based on a sufficiently prudent calculation of the scheme's technical provisions. The level of levy charged to schemes, and the risks faced by the Pension Protection Fund, should be reduced by additional contributions made and also

where the investment strategies followed by schemes improve the value of the schemes' assets relative to their liabilities.

3.6 Insolvency risk

3.6.1 The following graph (figure 4) shows both the annual UK default experience from 1981 to 2004 based on Standard & Poor's global default experience and the annual insolvency rate of registered companies in England and Wales since 1985 based on data from the Department of Trade and Industry. It can be seen that entities with a credit rating of BB or lower are particularly susceptible to economic cycles and that currently both the default rate and the insolvency rate are at a cyclical low point.

Figure 4 – Annual default experience and insolvency rate

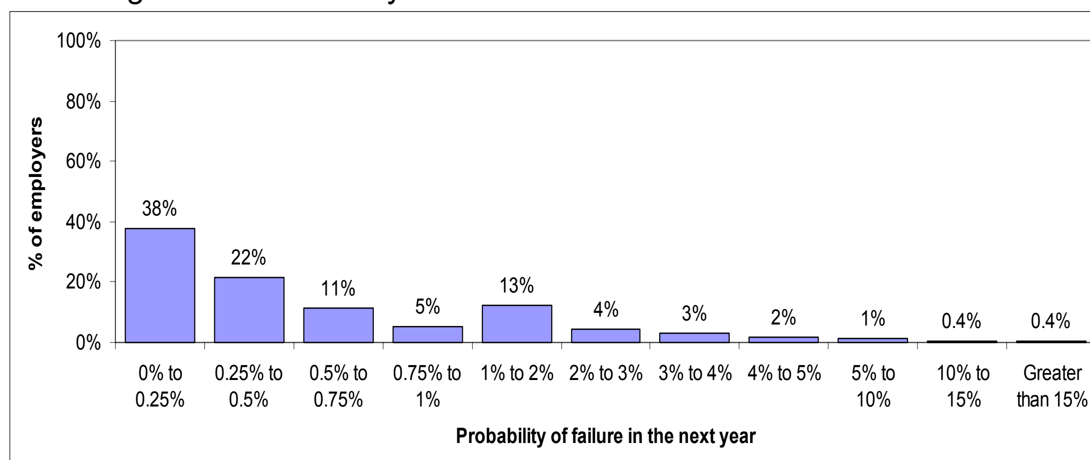


Source: Standard & Poor's and Department of Trade and Industry

3.6.2 Standard & Poor's have conducted research which indicates that global default risk is at its lowest level since 1997. Their forecast suggests that the default rate is expected to rise in 2005 as economic activity slows. Conversely, Euler Hermes, a global credit insurer, has forecast an 11% fall in corporate insolvencies in the UK in 2005. The Board acknowledges that default risk is a leading indicator for the likelihood of insolvency.

3.6.3 The following chart (figure 5) illustrates the distribution of the likelihood of business failure over a 12 month period for sponsoring employers from a sample of 1,000 schemes including the largest 500 schemes based on scheme membership numbers.

Figure 5 – Probability of business failure over 12 months



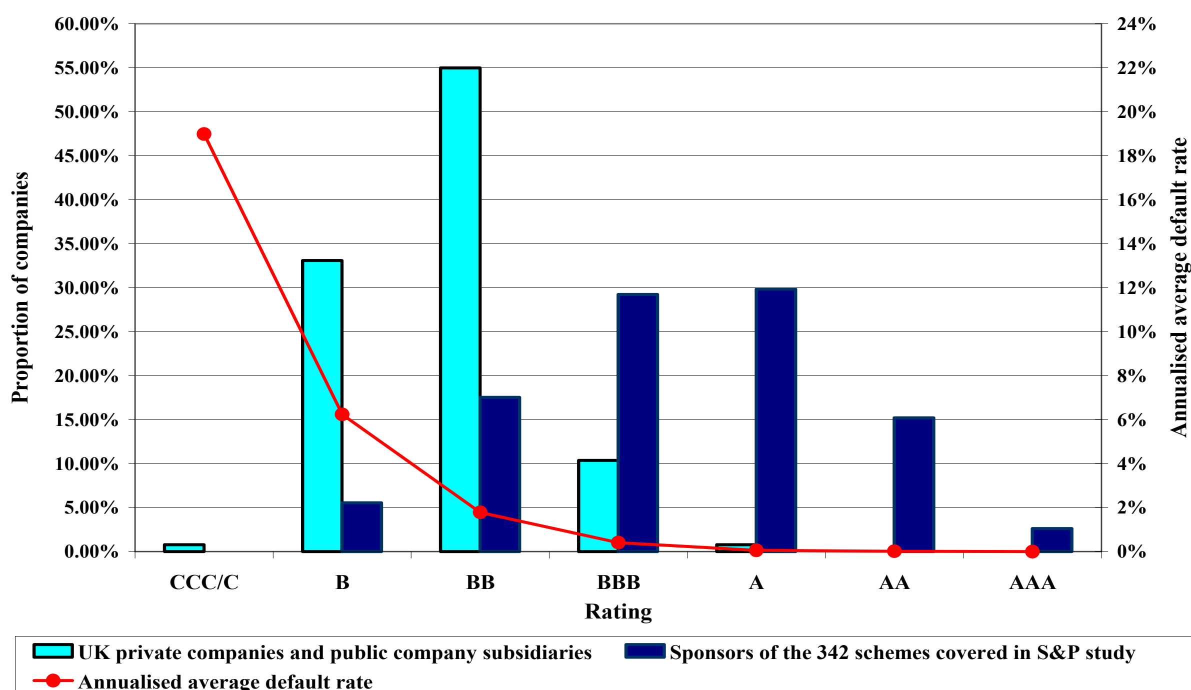
Source: D&B

3.6.4 It can be seen that 60% of the sample of sponsoring employers have a likelihood of business failure of less than 0.5% equivalent to the lowest investment grade rating from the rating agencies. The definition of business failure is similar to qualifying insolvency event as defined in the Pensions Act 2004. This data helps to inform the Board about the likely distribution of the risk based levy across eligible schemes.

3.6.5 An analysis conducted by Standard & Poor's considered the level of possible claims on the Pension Protection Fund from the largest 342 private sector defined benefit pension schemes. This was extended by inference to the remaining schemes eligible for protection from the Pension Protection Fund.

3.6.6 The following graph (figure 6) compares the distribution of the credit ratings of private UK companies covered by Standard & Poor's credit models and the credit ratings of the sponsors of the 342 largest schemes, together with the annualised average default rate from 1981 to 2004 for each credit rating.

Figure 6 – Distribution of credit strength and annualised average default rate

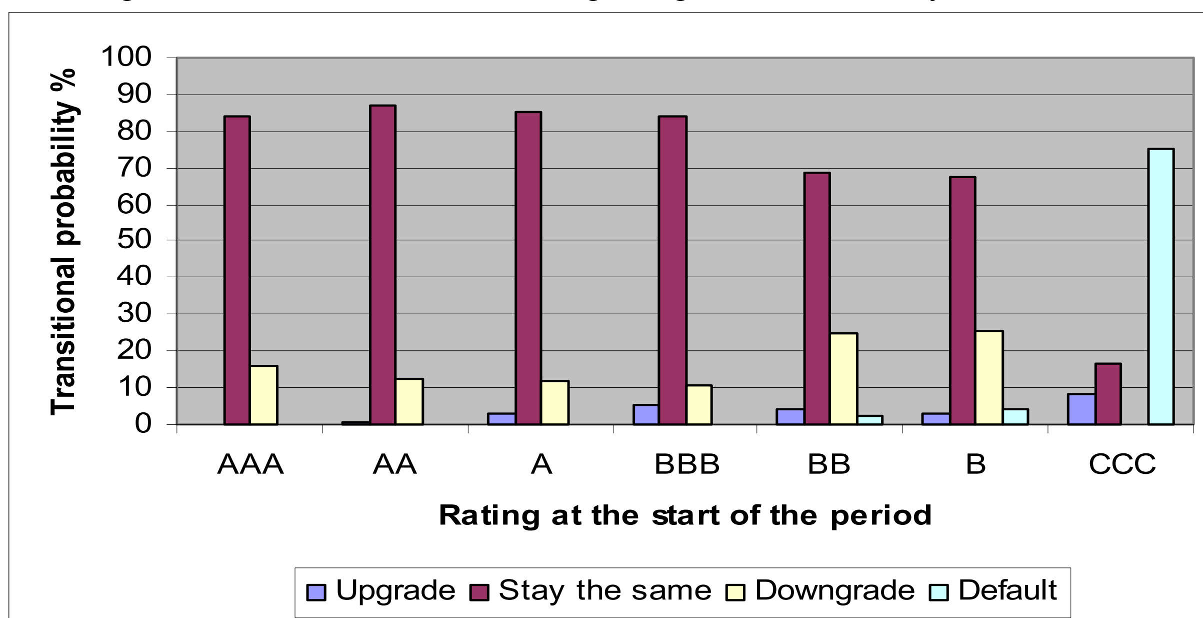


Source: Standard & Poor's

3.6.7 The distribution of credit strength is significantly lower for the private companies compared to the companies sponsoring the 342 largest schemes.

3.6.7 Standard & Poor's have also provided data for UK issuers showing the movements across the major rating categories in the UK, based on the period 31 December 1980 to 31 December 2003 using a one year horizon (figure 7):

Figure 7 – Movements across rating categories over a one year horizon



Source: Standard & Poor's

3.6.9 Figure 7 illustrates that employers are more likely to downgrade than upgrade and that employers with the lower ratings may be more prone to falls in rating category. There is a greater deterioration in rating categories for 'BB' issuers and below and only marginal upgrades for all issuers.

3.7 Level of underfunding[5]

3.7.1 Using a sample of eligible pension schemes the Board has estimated that the aggregate Pension Protection Fund liabilities for all eligible schemes could amount to £1,000 billion with a corresponding aggregate deficit of £134 billion. These figures were estimated as at 30 September 2004.

[5] The use of the terms "underfunding" and "liabilities" in this document refer to the Pension Protection Fund s179 levy valuation basis unless explicitly stated otherwise.

Table 3 – Estimated Pension Protection Fund deficits

Estimated Pension Protection Fund deficits				
		Population	**Liabilities £bn**	**Deficit £bn**
	FTSE 350 data set	4,117,000	280	29
Large	Over 5000 members	10,808,000	730	76
Medium	100 – 4,999 members	3,501,000	235	49
Small	Under 100 members	572,000	35	9
Total		**14,881,000**	**1000**	**134**

Source: Board of the Pension Protection Fund

3.7.2 Many estimates have been put forward relating to the total level of liabilities for eligible schemes. The Board appreciates that the various estimates are based on assumptions about the likely level of eligible scheme deficits, so any estimate is subject to a significant degree of doubt. As a result the Board, together with the Pensions Regulator, seeks to collect a complete data set of eligible scheme deficit information during 2005/6.

3.7.3 Table 3 suggests that the deficit level of the largest schemes is more than half of the total estimated deficit exposure for the Pension Protection Fund. A report produced by Standard & Poor's also suggests that the largest 342 pension schemes in the UK have an aggregate credit exposure to their sponsoring employers of £85 billion under the FRS 17 accounting standard.

Pension
Protection
Fund

Chapter 4

Underfunding risk

Chapter 4 – Underfunding risk

Chapter summary

This chapter sets out the Board's proposals for taking into account underfunding risk when setting the risk based levy. It considers:

- The definition of underfunding
- The assessment of underfunding level
- Factors changing underfunding level

4.1 Introduction

4.1.1 The Pensions Act 2004 requires the Board to reference pension scheme underfunding[6] when assessing the risk based levy.

4.2 Definition of underfunding

4.2.1 The funding level of a pension scheme at a point in time can be defined as follows:

$$\text{Funding level} = \frac{\text{value of assets}}{\text{value of liabilities}} \times 100\%$$

The term underfunding is used if the funding level is less than 100% (i.e. the value of the liabilities is greater than the value of the assets).

4.2.2 The value of the assets is normally determined using market prices.

4.2.3 The value of the liabilities is determined by completing an actuarial valuation. The actuary calculates the liabilities by making a number of financial and demographic assumptions and using scheme membership data and information on benefit entitlements.

Example

A scheme with assets valued at £96million and actuarial liabilities valued at £120million would have a $\text{funding level} = \frac{96}{120} \times 100\% = 80\%$

4.3 Assessment of underfunding level

4.3.1 To enable the calculation of a risk based levy, section 179 of the Pensions Act 2004 requires all eligible pension schemes to complete an actuarial valuation ("s179 levy valuation") of scheme assets and protected liabilities. Protected liabilities are defined in regulation 6 of the Pension Protection Fund (Valuation) Regulations 2005, and

[6] The use of the terms "underfunding" and "liabilities" in this document refer to the Pension Protection Fund s179 levy valuation basis unless explicitly stated otherwise.

guidance issued by the Board. A s179 levy valuation broadly approximates the cost of buying out Pension Protection Fund liabilities from an insurance company.

4.3.2 Under current regulations all eligible pension schemes must complete an initial s179 levy valuation using an effective valuation date between 1 November 2004 and 5 April 2008. Schemes will have one year from the effective valuation date to provide the valuation result to the Board or the Pensions Regulator. The Board must receive valuation results by 31 December each year to enable it include the results in the levy calculation for the subsequent financial year. This means that for the financial year commencing 1 April 2006, pension schemes should provide valuation results by 31 December 2005.

4.3.3 The Board will collect details of s179 levy valuations using the annual scheme return issued by the Pensions Regulator, assuming that this information is available by the deadline for the completion of the scheme return. If the s179 levy valuation information only becomes available after the scheme return deadline, and before 31 December, then pension schemes should submit their valuation result directly to the Board by completing Appendix 2 of the "Guidance for undertaking the risk based levy valuation". Schemes should not delay completion of their scheme returns until they have the s179 levy valuation information. The Board would prefer them to return their scheme return in a timely fashion, and then submit appendix 2 separately to the Board.

Example
If a scheme completed an actuarial valuation with an effective date of 31 March 2005 the same membership data can be re-used to complete an initial s179 levy valuation, applying the assumptions set out in guidance issued by the Board. The scheme would have until 31 March 2006 to provide the result to the Board but would need to provide the result by 31 December 2005 for it to be included in the risk based levy calculation for the financial year starting on 1 April 2006.

4.4 Factors changing underfunding level

4.4.1 The surplus or deficit of a pension scheme at a point in time measures the difference between the value of the assets and the value of the liabilities. It follows that the change in underfunding level between two points in time can be measured by the change in the value of the assets minus the change in the value of the liabilities.

4.4.2 There are several significant factors that change the value of assets:

- Market risk (interest rates/equity markets)
- Currency risk
- Credit risk
- Volatility risk

- Stock selection
- Contribution strategy

4.4.3 The value of the liabilities will change as a result of pension payments, benefit changes, unwinding of the discount rate, service costs, membership changes, service entitlements, mortality experience and any revaluation or indexation.

4.5 The effect of the assessment period

4.5.1 If a scheme is underfunded then the difference between the value of the assets and the value of Pension Protection Fund liabilities is an estimate of the likely claim amount if the scheme's sponsoring employer becomes insolvent during the period corresponding to the financial year. This amount is estimated prior to the start of the financial year using the results of a s179 levy valuation.

4.5.2 If a scheme's sponsoring employer has an insolvency event then an insolvency practitioner will send a notice under section 120 of the Pensions Act 2004 ("s120 notice") to the Pension Protection Fund. Assuming that this is a qualifying insolvency event, no debt compromise has occurred and the scheme did not start to wind up before 6 April 2005 then an assessment period will commence. The assessment period will establish whether or not the scheme members are eligible to receive compensation from the Board.

4.5.3 The determination of whether or not the assets and Pension Protection Fund liabilities of the scheme will be transferred to the Board will be based on the results of a valuation completed in accordance with section 143 of the Pensions Act 2004 ("s143 entry valuation") using an effective date corresponding to the start of the assessment period.

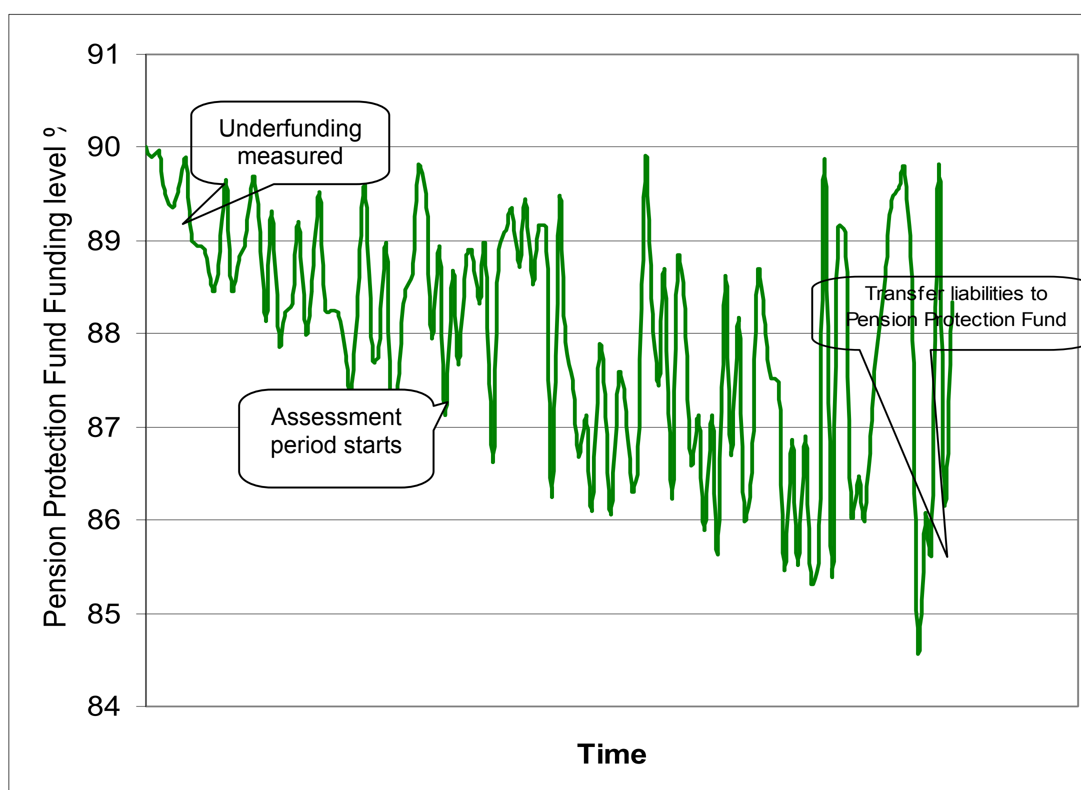
4.5.4 The s143 entry valuation of the assets and liabilities will differ from a s179 levy valuation due to the exclusion of any amounts treated as a debt due to the trustees under section 75 of the Pensions Act 1995 ("s75 debt") from the s179 value of the assets. In insolvency the recovery of any s75 debt will usually rank equal to other unsecured creditors unless trustees have come to some other arrangement with the sponsor. The level of expected recovery will be determined by the ratio of the pension deficit to other unsecured creditors and the ratio of unsecured creditors in total relative to the sponsor's net assets less any secured creditors. The values will also differ due to the difference in timing of the two valuations, and the fact that a s179 levy valuation does not precisely reflect Pension Protection Fund compensation levels[7].

[7] See regulation 6(b) of the Valuation Regulations, and para 4.1 of the Board's guidance on undertaking a section 179 valuation.

4.5.5 If the value of the assets at the start of the assessment period is less than the value of the Pension Protection Fund liabilities and the scheme cannot be rescued then the scheme members are eligible to receive compensation from the Board. The difference between the s143 entry valuation of the assets and liabilities is the actual value of the claim amount as at the start of the assessment period.

4.5.6 The value of the assets and liabilities will change between the assessment period start date and the date of legal transfer to the Pension Protection Fund, as illustrated in figure 8 below[8]. Hence, when the legal transfer of assets and liabilities takes place the value of the assets and liabilities will also have changed. The final claim amount, taking into account any recovery of s75 debt, will not be known until at least the date of legal transfer of the assets and Pension Protection Fund liabilities to the Fund.

Figure 8 – Volatility of pension scheme funding level



Source: Board of the Pension Protection Fund

4.6 The Board's proposed approach

4.6.1 The Board proposes to scale up the value of the s179 Pension Protection Fund liabilities by 5% to reflect the difference between the estimated claim amount using a s179 levy valuation and the unknown future settled claim amount on legal transfer of assets and Pension

[8] This is a general illustration, and is not based on specific market movements, or a specific asset allocation strategy.

Protection Fund liabilities measured on a s143 entry valuation basis. This reflects the fact that the Board is exposed to market risk during the period between an insolvency date and the date on which any assets and Pension Protection Fund liabilities are legally transferred to the Board. The 5% inflation factor reflects the downside risk over a one year period based on an assumed exposure to non-matching assets in the pension scheme's investment strategy. The inflation factor is a transitional measure which will apply until a separate asset allocation risk factor is introduced.

4.6.2 The Board proposes to measure underfunding risk by referencing the difference between the value of a scheme's assets and the value of a scheme's Pension Protection Fund liabilities. If the Pension Protection Fund funding level is less than 104%, then underfunding risk will be measured by the difference between 105% of the value of Pension Protection Fund liabilities and the value of scheme assets. For schemes with a funding level greater than or equal to 104% the Board proposes to calculate an underfunding component in the risk based levy that is equal to 1% of the value of Pension Protection Fund liabilities.

4.6.3 All schemes present some risk. The Board has decided that this should be recognised by allowing for the insolvency risk and a very low measure of potential underfunding risk in respect of all schemes with a funding level greater than or equal to 104%.

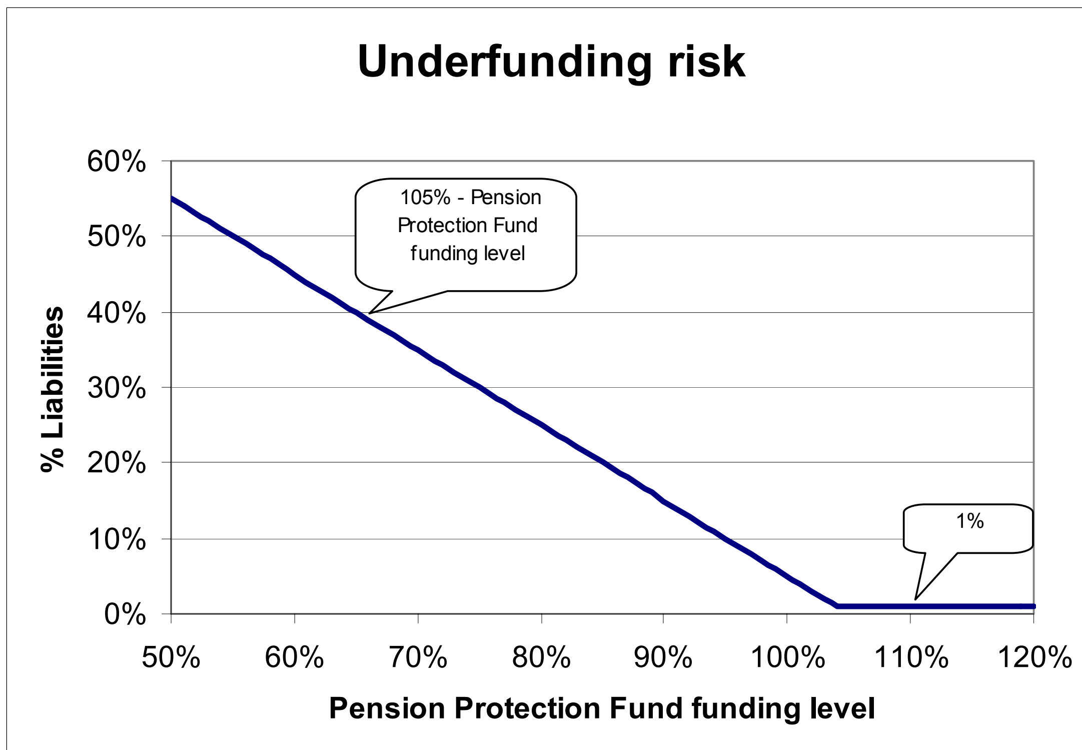
Table 4 – Calculation of underfunding risk

Pension Protection Fund funding level	Underfunding risk
<104%	*1.05 x Value of Pension Protection Fund liabilities – Value of assets
≥104%	0.01 x Value of Pension Protection Fund liabilities

*(105% - funding level) x Value of Pension Protection Fund liabilities

Source: Board of the Pension Protection Fund

Figure 9 – Underfunding risk



Source: Board of the Pension Protection Fund

Examples

A scheme with assets valued at £ 96 million and Pension Protection Fund liabilities valued at £ 120 million would have a funding level $= \frac{96}{120} \times 100\% = 80\%$ which is less than 104%.

Underfunding risk is measured as

$$1.05 \times \text{Value of Pension Protection Fund liabilities} - \text{Value of assets}$$

$$= 1.05 \times 120 - 96 = 126 - 96 = £30 \text{ million}$$

A scheme with assets valued at £ 90 million and protected liabilities valued at £ 85 million would have a funding level = $\frac{90}{85} \times 100\% = 105.8\%$ which is greater than 104% so underfunding risk is measured as

$$0.01 \times \text{Value of Pension Protection Fund liabilities} = 0.01 \times £85\text{million} = £850{,}000.$$

4.6.4 A pension scheme in a well funded position at the start of the financial year may still find that it requires help from the Pension Protection Fund as a result of changes in asset and liability values during the year.

4.6.5 The proposal to charge a risk based levy to schemes with funding levels over 100% recognises that:

- the volatility and fluctuations in deficits throughout the financial year will not be reflected in the levy;
- further long term improvements in life expectancy will tend to increase liabilities.

4.6.6 The Board believes that trustees need to be aware of their responsibility to monitor and manage the mismatch risk between scheme assets and liabilities. The Board expects trustees to understand the sensitivity of the funding level to different investment strategies, economic and financial market outcomes.

4.6.7 The Board notes the results of a recent survey conducted by the Association of Consulting Actuaries which found that 88% of the pension schemes sampled completed informal valuations between formal valuations, with 69% conducting these on an annual basis. The Board encourages eligible schemes to complete an annual s179 levy valuation. This would ensure best evidence is used to assess the risk based levy resulting in a fairer levy. Trustees would be able to respond appropriately to changes in funding level including those due to changes in any market variables used to value the liabilities. This would reduce the level of risk posed by schemes and would positively impact the amount of levy they may be required to pay.

4.6.8 The Board's proposed approach to underfunding risk for schemes that do not provide a s179 levy valuation during the financial year starting 1 April 2006 is outlined in chapter 8.

Questions

1. Do you agree that 104% should be the cut-off point above which schemes' underfunding risk would be based on a fixed percentage of Pension Protection Fund liabilities?

2. If you are the trustee of a scheme, do you expect to submit a s179 levy valuation by 31 December 2005? If not, when do you expect to submit a s179 levy valuation?

Pension
Protection
Fund

Chapter 5

Insolvency risk

Chapter 5 – Insolvency risk

Chapter summary

This chapter deals with the Board's proposals for taking account of insolvency risk (the financial strength of the sponsoring employer) when setting the risk based levy. It outlines:

- The definition of insolvency
- The different approaches for measuring insolvency risk
- The relationship between default and insolvency

5.1 Introduction

5.1.1 The Pension Protection Fund is exposed to the insolvency risk of participating employers of eligible UK defined benefit and the defined benefit part of hybrid pension schemes.

5.1.2 The Pensions Act 2004 states that the Board must take account of insolvency risk in the calculation of the risk based levy.

5.1.3 This chapter sets out the Board's proposed approach to measuring the insolvency risk (financial strength) of a single sponsoring employer. The next chapter describes how the Board proposes to deal with multi-employer schemes.

5.2 Definition of insolvency

5.2.1 A UK company is insolvent if it does not have enough assets to cover its liabilities (actual and contingent) and/or it cannot pay its debts as they fall due as defined in the s123 of the Insolvency Act 1986.

5.2.2 The Pension Protection Fund (Entry Rules) Regulations 2005 define the qualifying insolvency events that could trigger an assessment period. In England and Wales the five main events are:

- Administration
- Administrative Receivership
- Compulsory Liquidation
- Creditors Voluntary Liquidation
- Company Voluntary Arrangement

5.3 Approaches to measuring insolvency risk

5.3.1 Institutions that assess, calculate and price the default or insolvency risk of companies include credit rating agencies, credit scoring institutions and credit insurers. Many of these institutions measure credit or default risk rather than insolvency risk. The financial markets trade instruments such as corporate bonds and credit derivatives,

prices of which incorporate default risk. Default occurs when a bond issuer fails to make an interest or capital payment on an outstanding debt. Default and insolvency are related because a company may default on a debt issue prior to an insolvency event.

Credit rating agencies

5.3.2 Credit rating agencies assign a credit rating to assess the capacity of public and private companies to repay the interest and capital on borrowing and the degree of protection to the lender in the event of default. Credit ratings are derived using a combination of expert judgement and quantitative and qualitative analysis and are designed to be an assessment of risk over the economic cycle.

5.3.3 The rating agencies use a letter scale to categorise the different levels of credit risk and may further modify the scale to highlight different degrees of risk within categories. Table 5 below summarises the meaning of different ratings. Due to differences in methodologies, the credit ratings published by competing agencies may differ from each other especially for issuers with a greater perceived risk of default.

Table 5 – Definition of credit ratings

S&P	Moody's	Definition
AAA	Aaa	Extremely strong capacity to meet its financial commitments
AA	Aa	Very strong capacity to meet its financial commitments
A	A	Strong capacity to meet its financial commitments
BBB	Baa	Adequate capacity to meet its financial commitments
BB	Ba	Less vulnerable to non payment compared to other lower rating but may have inadequate capacity to pay in adverse business, financial or economic conditions.
B	B	More vulnerable to non payment and has less capacity to meet financial commitments. Adverse business, financial or economic conditions will impair capacity to pay.
CCC	Caa	Vulnerable to non payment and is dependant on favourable business, financial or economic conditions to meet obligations.
CC	Ca	Highly vulnerable to non payment
C	C	Highly vulnerable to non payment
D		In payment default

Source: Standard & Poors and Moody's Investors Services and Board of the Pension Protection Fund

Credit scoring institutions

5.3.4 Credit scoring institutions assess the credit worthiness of a range of businesses including large companies, small and medium sized

enterprises and other entities by assigning a credit score. The score ranks either the default risk or payment delinquency or insolvency risk of companies. Credit scores tend to be based on statistical models that use a combination of accounting, transactions, business and financial information and are a shorter term measure of risk.

5.3.5 The credit scoring institutions use a number scale to categorise different levels of insolvency or credit risk. For example, D&B calculate a failure score which is a percentile score using a 1 to 100 scale, which positions a company relative to all other companies and is a statistically derived and mathematically calculated score that predicts business failure. A failure score of 1 indicates a significant chance of a company being declared bankrupt; the failure score of 100 indicates a remote chance.

5.3.6 Default risk can be assessed either qualitatively by a rating or quantitatively by a probability. Both are representations of risk. A probability assesses the likelihood that an event will occur. Insolvency risk is usually measured by a credit score or failure score which can be converted into an implied insolvency probability. Many credit institutions calculate a probability of default or insolvency using theoretical models based on financial economic theory that can be associated with an individual credit rating or credit score. Instead of providing a ranking or qualitative assessment these models provide a quantitative assessment of risk. For example an annual insolvency probability of 0.8% for a company indicates that there is an 8 in 1000 chance of insolvency in the next year.

5.3.7 These models use a combination of financial market, transaction, accounting and general company information to estimate risk and can be updated at any desired frequency providing that the input data is available. Insolvency probabilities can be estimated directly by applying a methodology that outputs an assessment of business failure or bankruptcy. Alternatively insolvency probabilities can be estimated indirectly by recalibrating models of default risk to measure insolvency risk.

Credit insurers

5.3.8 Credit insurers provide insurance protection to compensate companies in the event that their trading partners become bankrupt or insolvent. Many companies use credit scores to assess the creditworthiness of their trade debtors and may use a credit insurer to protect against insolvency risk. These institutions calculate a premium based on the size of the receivables and insolvency risk of the trading partner.

5.3.9 The advantages of using external assessment from rating agencies and credit scoring institutions are that the assessments are independent, a consistent approach is used and there is general acceptance by market participants. The disadvantages include some degree of subjectivity in the derivation of the estimate and also limited coverage of the

population of sponsoring employers, particularly in the case of solicited credit ratings. Another potential disadvantage is that default measures may overestimate the risk of insolvency unless some method of recalibrating ratings can be developed. The Board recognises that the capital structure of a company will influence the relative assessment of default risk compared to insolvency risk.

Financial instruments

5.3.10 Traded financial instruments can be used to estimate default risk. The market prices of corporate bonds take into account the default risk of the issuing company. The difference in yield between a corporate bond and a government bond with similar characteristics includes compensation for default risk. Credit default swaps contracts are derivatives that provide protection to the buyer in the event of borrower default. If the borrower defaults on its debt during the protection period then the buyer of the contract will claim from the seller of the contract. Estimating default risk directly from these instruments is currently an area of empirical and academic research.

5.3.11 Corporate bond prices reflect factors other than default risk. These include the likely recovery amount on default, the uncertainty of the recovery amount, the seniority of the debt, the poorer liquidity of corporate bonds compared to government bonds and any options to repay capital early. Credit derivatives can be used to derive estimates of risk (particularly short term risk) but also suffer from some of the issues associated with corporate bonds. Deriving true probabilities of default is complex. Again, even if the implicit default risk can be derived it is not a measure of the insolvency probability.

5.3.12 The advantage of using the prices of financial instruments to derive estimates of default risk is better transparency; new information is continuously reflected in prices and publicly available. The disadvantages of using financial instruments are a lack of coverage of the participating employer population (since the availability of pricing depends on the company issuing traded securities), greater volatility in the estimates and the difficulty of separating default/insolvency risk from the other factors.

5.3.13 Financial markets and different financial and credit institutions may differ in their assessment of an individual company's risk. In particular, there is generally a dispersion of rating or likelihood of default or insolvency for companies that are perceived to carry a higher risk. The absolute estimates of risk can vary for individual companies due to:

- the different theories underlying different models;
- the assumptions;
- the sensitivity of model inputs to changes in market variables.

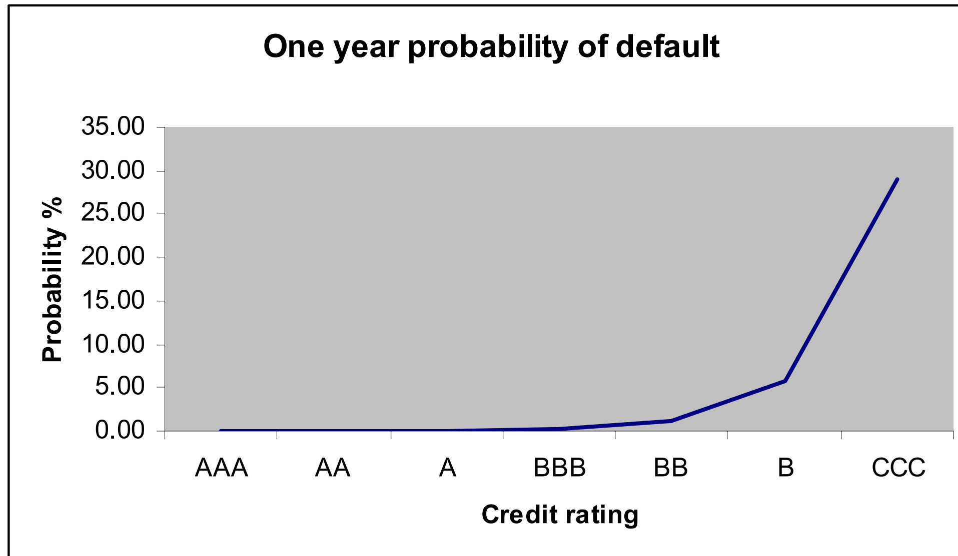
5.4 Relationship between default and insolvency

5.4.1 Insolvency and default rates are related to the business cycle and average historical insolvency rates tend to have been below historical average default rates. Insolvency risk appears to be less volatile than default risk. The variability of insolvency and default rates during the economic cycle indicate that claims on the Pension Protection Fund are likely to be cyclical.

5.4.2 The difference between default and insolvency risk can be linked to the capital structure of the company. Changes to a sponsoring company's net equity may change the subsequent likelihood of sponsor default and change the amount of s75 debt likely to be recovered from the sponsoring employer in the event of insolvency. Default probabilities could be adjusted to estimate insolvency probabilities by scaling the one year probability of default to reflect the average difference between the two methods. One estimate is that on average 72% of historical bond defaults were followed by insolvency of the corporate entity. This estimate suggests that using an unadjusted default probability to measure insolvency may on average overestimate insolvency risk and as a result could lead to both an individual levy and the aggregate risk based levy being disproportionate to the true risk. However, this does not allow for the impact of a company's capital structure or differences by rating category, sector or whether or not the company has a defined benefit pension scheme.

5.4.3 Default studies compiled by the credit rating agencies illustrate that there is a relationship between credit rating and default probability. These empirical studies look at the default experience of actual bond issues and are based on a broad universe of issuers rather than just those issuers with a defined benefit pension scheme. Figure 10 below shows the likelihood that a bond issue with a given credit rating at the start of the year will default by the end of the year. The data has been obtained from Standard & Poor's. The probability of default increases exponentially as the credit rating weakens. The probability of default for investment grade companies (AAA to BBB) is significantly lower than that of speculative grade companies (BB to CCC).

Figure 10 – One year probability of default



Source: Standard & Poor's

5.4.4 The credit scoring institutions are able to calibrate their credit scores to the likelihood of business failure. Figure 11 below gives a sample set of scores and the corresponding probabilities of business failure or insolvency over the following one year. The data is based on a population of UK companies. The probability of insolvency increases exponentially as the credit score decreases.

Figure 11 – One year business failure probabilities

Source: D&B

5.4.5 Table 6 below shows the likelihood that a bond with a given credit rating at the start of a period will have defaulted by the end of the time horizon. For example, the likelihood that a bond rated AA today will default over the next year is 0.01% but the likelihood it will default over the next seven years increases to 0.54%. The probability of default (or insolvency) increases as the time horizon extends. This is true for all ratings categories but the degree of risk is much more dispersed by rating class at longer time horizons. Hence, highly rated issuers still represent a risk to the Board over time and the Board needs to take this into account when making provision for future large claims.

Table 6 – Likelihood of default over time

	Time horizon in years										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**15**
AAA	0	0	0.03	0.06	0.1	0.17	0.24	0.36	0.41	0.45	0.61
AA	0.01	0.04	0.09	0.19	0.3	0.41	0.54	0.64	0.74	0.85	1.35
A	0.04	0.13	0.24	0.4	0.61	0.84	1.11	1.34	1.63	1.94	2.98
BBB	0.29	0.81	1.4	2.19	2.99	3.73	4.35	4.95	5.5	6.1	8.72
BB	1.2	3.58	6.39	8.97	11.25	13.47	15.25	16.75	18.16	19.2	22.59
B	5.71	12.49	18.09	22.37	25.4	27.7	29.76	31.32	32.54	33.75	38.63
CCC	28.83	37.79	43.52	47.44	50.85	52.13	53.39	54.05	55.56	56.45	59.44

Source: Standard & Poor's

5.5 The Board's proposed approach

5.5.1 The Board's objective is to adopt an approach to measuring insolvency risk that is simple, transparent and results in a fair and proportionate risk based levy. The Board proposes to measure insolvency risk for participating employers by selecting a third party market solution provided by a credit rating agency, credit scoring institution or credit insurer. The Board is confident that the available market solutions will cover the full population of eligible schemes.

5.5.2 The Board proposes to apply the criteria in table 7 below to decide which market solution should be chosen to measure insolvency risk.

Table 7 – Criteria for assessing insolvency risk providers

Criteria	Definition/requirement
Acceptability	An approach that is accepted by the market and is robust enough to stand up to scrutiny, both to the overall approach, and to any individual assessment produced
Transparency	The purpose, methodology, procedure and analytical details of the approach are published and clear to understand
Methodology	The methodology is rigorous and technically robust, and empirically valid
Broad coverage	The third party provider is able to measure insolvency risk

	for the maximum percentage of the eligible population
Flexibility	An approach that is able to take into account corporate and pension scheme structure and the different types of corporate entities
Value for money	The approach is cost effective so that it does not result in a disproportionate cost of calculation versus collection and that the burden on schemes and employers to provide information is kept to a minimum
Stable results	The approach leads to a stable measure of risk
Consistency	The ranking of insolvency risk for individual companies is consistent with the ranking produced by other approaches

Source: Board of the Pension Protection Fund

5.5.3 The Board and levy payers should be able to benefit from economies of scale. By following this approach the costs of implementing a risk based levy should be reduced. A transparent market solution will allow eligible pension schemes, the Pensions Regulator and the Board to continuously and consistently assess the financial strength of the sponsoring employer in addition to being an input to the risk based levy calculation. The Board is working together with the Pensions Regulator to ensure a consistent approach is adopted to risk measurement.

5.5.4 The Board will ask a third party provider to measure the insolvency risk factor for participating employers of each eligible pension scheme[9] by estimating the one year probability of insolvency. This is a statistical measure that estimates the likelihood that a company will become insolvent over a one year period. This measure matches the risk exposure to the levy cycle of the Pension Protection Fund and is consistent with the definition of insolvency event in the Pensions Act 2004.

5.5.5 During the passage of the legislation, it was suggested that the sponsoring employers of schemes with fewer than 100 members might not have their insolvency risk taken into account for the risk based levy. This was to avoid imposing unreasonable burdens on small schemes. However, since the Board proposes to use a market solution to gather this information, it will not involve any burden on schemes themselves, so an exemption for small schemes is no longer considered appropriate.

5.5.6 The Board proposes to apply a banding approach to the measurement of insolvency probability. The Board will define ranges or bands and assign the same probability of insolvency to companies grouped in the same band instead of using the individual quantitative measurement of risk directly from a model.

5.5.7 The purpose of a banding approach is to:

[9] Including those schemes where the sponsoring employer had an initial insolvency event before 6 April 2005.

- allow for the fact that insolvency risk is being measured at an instant in time, mitigating the impact of any short term volatility;
- reduce the impact of any discrepancy between the chosen market solution and other providers of insolvency risk assessment.

5.5.8 The banding approach can be adapted to take account of the different types of possible market solutions including solicited ratings, unsolicited ratings and probability scores.

5.5.9 Table 8 below shows how insolvency risk could be mapped across to a risk banding using credit ratings and failure scores:

Table 8 – Insolvency risk bands

Insolvency Risk band	Rating	Failure score	Assumed probability of insolvency
1	aaa to a-	98 to 100	0.13%
2	bbb+ to bbb-	78 to 97	0.60%
3	bb+ to bb	55 to 77	1.25%
4	bb-	38 to 54	1.70%
5	-	20 to 37	2.35%
6	b+	13 to 19	3.40%
7	-	8 to 12	4.75%
8	b	6 to 7	6.60%
9	b-	4 to 5	9.75%
10	ccc	1 to 3	15.00%
Generic (G)	Average probability of insolvency		To be determined

Source: Board of the Pension Protection Fund

Example
A pension scheme with a sponsoring employer possessing a failure score of 80 would be included in insolvency risk band 2 and the assumed insolvency probability would be 0.60%.

5.5.10 The credit ratings used to derive the insolvency risk bandings correlate with credit ratings used by the large credit rating agencies. The associated failure scores have been derived from data obtained from a leading credit scoring agency.

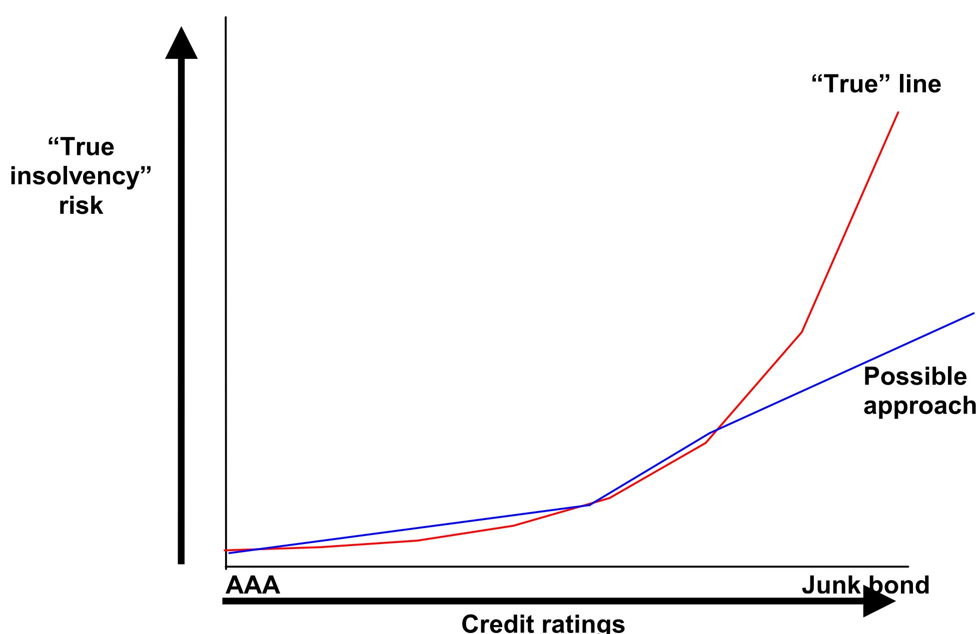
5.5.11 The Board proposes to group schemes into ten insolvency risk bandings. The Board favours the use of a fairly small number of bands to ensure there is sufficient difference in the levy applied to schemes with different risk profiles.

5.5.12 The probability of insolvency assumed for risk band ten has been capped at 15% to ensure that the level of the levy for those schemes

on the extremes of the underfunding risk and insolvency risk spectra is not unmanageable and to mitigate the risk of pushing a sponsoring employer into insolvency.

5.5.13 The 15% figure is based on a sample of 1000 sponsoring employers of eligible schemes received from a credit scoring institution. The sample was analysed to determine the distribution of the insolvency probabilities of the sponsors of the schemes in the sample. A figure of 15% was selected because it is at the upper end of the distribution, but did provide some protection for the weakest employers. The Board considers that it represents an appropriate balance between sharing risks, whilst offering some protection to the weakest employers.

Figure 12 – Insolvency risk by strength of company



Source: Board of the Pension Protection Fund

5.5.14 Figure 12 above shows generically the profile of insolvency risk by financial strength of company. It is clear that there is an exponential increase in risk as the financial strength decreases. The Board will work in partnership with the Pensions Regulator to ensure that the funding position of weaker schemes is gradually improved.

5.5.15 If a rating or score cannot be obtained a generic risk band will be applied. The probability of insolvency for the generic band will be determined once the nature of the entities falling into this category has been established[10].

[10] The Board cannot be more specific about what entities might fall into this band until the insolvency risk provider has been selected. Insolvency risk providers have demonstrated an ability to rate/score a very wide range of entities, so the Board considers that the generic risk band will only be used in a very small minority of cases.

Questions

1. Do you agree with the proposed approach to measuring insolvency, including measuring the insolvency risk of all eligible schemes?
2. Do you agree that insolvency should be viewed over a 12 month horizon, since the levy is intended to meet the cost of new claims arising during the annual levy cycle?
3. Do you agree that insolvency should be banded?
4. Do you agree that there should be ten bands?
5. Do you agree that insolvency risk should be capped at 15%?
6. Do you agree that there should be a generic band?
7. Do you agree with the focus on a market-based approach?

Pension
Protection
Fund

Chapter 6

Scheme structures

Chapter 6 – Scheme structures

Chapter summary

This chapter considers the issues relating to different scheme structures. In particular it considers:

- The different types of multi-employer pension scheme
- The application of the risk based levy to multi-employer schemes
- The calculation of risk factors for hybrid schemes, schemes with a partial crown guarantee and schemes sponsored by not for profit organisations

6.1 Introduction

6.1.1 The risks faced by pension schemes sponsored by multiple employers are markedly different to those faced by those sponsored by a single employer. The structure and rules of different types of schemes have an impact on how the risk is shared among participating employers and therefore on the calculation of levy risk factors.

6.2 Multi-employer schemes

6.2.1 Initial findings from the Pensions Regulator indicate that many of the top 500 pension schemes are multi-employer schemes with over 100,000 participating sponsoring employers between them.

6.2.2 There are two main scheme structures for multi-employer schemes:

- Sectionalised, and
- Non sectionalised.

In addition, both types of scheme may contain a requirement, or discretion, to segregate the scheme on insolvency.

6.2.3 The sharing of risks in multi-employer schemes depends on both the scheme rules and the scheme structure. Diverse multi-employer provisions create differing levels of risk exposure. In addition, different provisions of regulations apply to the different scheme structures affecting the likelihood of the Pension Protection Fund assuming responsibility for part or all of the scheme's liabilities.

6.2.4 The following additional information would be required to determine the risk factors for multi-employer schemes:

- the individual insolvency probability for each sponsoring entity in relation to the scheme;
- the correlation and financial dependency between each sponsoring entity (if any);

- the proportion of assets and liabilities being supported by each of the sponsoring entities;
- the effect of scheme specific rules.

6.2.5 If a scheme has a rule with a requirement to segregate on insolvency[11] then any deficit left by the insolvent employer is not financed by other participating employers, and may pass to the Pension Protection Fund. If there is a discretionary requirement to segregate on insolvency of a participating employer[12] then the trustees can choose what course of action to take. This can result in either the risk being shared amongst the remaining participating employers or that part of the scheme being dealt with separately.

6.2.6 Where there is no such requirement to segregate on insolvency, an assessment period would not start until the last remaining sponsoring employer suffered an insolvency event or withdrew after meeting their obligations. For such schemes the risk of insolvency is shared across all participating employers. Should one employer become insolvent the other employers are responsible for keeping the scheme sufficiently funded to pay members benefits as they fall due. Although this type of scheme is relatively less risky at the outset, employer insolvency can place a greater level of financial stress on the remaining employers. This is because the pension liabilities for the remaining employers are increased thus increasing the relative risk of subsequent insolvency events occurring in those remaining sponsoring employers.

6.3 The Board's proposed approach to multi-employer schemes

6.3.1 The Board proposes to take into account the structure of multi-employer pension schemes when calculating the levy factors. This is in line with its principles of fairness and proportionality.

6.3.2 Over time, the Board will use the Pension Regulator's database to determine the participating employers of each pension scheme to assess which employers should be included in any insolvency risk calculation. The Pensions Regulator collects data on the participating employers of defined benefit pension schemes in its annual scheme return. This year's return asks for information on the principal employer, and the biggest and smallest participating employers (in terms of number of members of the pension scheme). From next year, we plan to collect information on all participating employers, and on the structure of schemes.

[11] The actual rule may relate to the employer "ceasing to participate" rather than insolvency. The provisions concerned are set out in Parts 4 and 5 of the Pension Protection Fund (Multi-employer Schemes) (Modification) Regulations 2005

[12] The actual rule may relate to the employer "ceasing to participate" rather than insolvency. The provisions concerned are set out in Parts 7 and 8 of the Pension Protection Fund (Multi-employer Schemes) (Modification) Regulations 2005

6.3.3 Until full information is available, the Board will not be able to adopt a sophisticated method for determining the insolvency risk of multi-employer schemes. However, sufficient information is available to enable the Board to calculate insolvency risk in a simple, consistent manner for multi-employer schemes with different structures. The Board therefore proposes that, subject to the outcome of this consultation, the Government should make regulations to allow the Board, for one year only, to assess insolvency risk for all types of scheme based on the insolvency risk of the biggest employer in the scheme, or section of the scheme.

6.3.4 As set out in paragraph 6.3.2, the scheme return will contain information on three participating employers as a minimum: the principal employer, and the largest and smallest employers (by number of members of the pension scheme). In terms of measuring insolvency risk, in the absence of full information, the Board needs to identify the most significant participating employer in terms of the risk to the Pension Protection Fund. In some cases, this will be the principal employer. However, the principal employer often has that status for historical reasons that do not necessarily reflect the current structure of the company group. The Board therefore considers that the insolvency risk of the biggest employer will be more relevant in most cases, and proposes to use that score/rating for the purposes of calculating the risk based levy.

6.3.5 The table below shows how underfunding and insolvency risk will be established for the different types of multi-employer schemes from 2007/8. This approach reflects the requirements of the Pension Protection Fund (Multi-employer schemes) (Modification) Regulations 2005. Annex B contains a form by which schemes can inform the Pension Protection Fund into which of the categories in the table they fall. Where this form is submitted to the Board by 31 December 2005, the Board proposes to assess the insolvency risk of the employers in relation to the scheme on the basis described in the table for 2006/7, rather than on the basis of the biggest employer. Next year's scheme return will capture the information requested in the form at Annex B, so the approach in the table will be used for all multi-employer schemes from 2007/8, as set out above.

Table 9 – Approach to multi-employer schemes

		Scheme Structure			
		Sectionalised		**Non-sectionalised**	
		Underfunding	**Insolvency**	**Underfunding**	**Insolvency**
Segregation provision	**No requirement or discretion to segregate on insolvency**	Separate s179 levy valuation undertaken for each section of the scheme	Assessment of risk of all employers within each section of the scheme becoming insolvent	One s179 levy valuation undertaken for whole scheme	Assessment of risk of all employers within the scheme becoming insolvent

	Discretion to segregate on insolvency	Separate s179 levy valuation undertaken for each section of the scheme	Average of insolvency ratings for the whole group within each section	One s179 levy valuation undertaken for whole scheme	Average of insolvency ratings for whole group
	Requirement to segregate on insolvency	Separate s179 levy valuation undertaken for each section of the scheme	Average of insolvency ratings for the whole group within each section	One s179 levy valuation undertaken for whole scheme	Average of insolvency ratings for whole group

Source: Board of the Pension Protection Fund

6.4 Hybrid schemes

6.4.1 The underfunding risk for hybrid schemes with separate defined benefit and defined contribution sections will be based on the level of underfunding relating to the defined benefit portion of the scheme. For a hybrid "better of" scheme the assets and benefits will relate to only those members where the defined benefits exceed the defined contribution benefits at the relevant time.

Example
A hybrid scheme has total liabilities of £ 85 million of which £ 65 million are in relation to the defined benefit portion of the scheme and £20m in relation to the defined contribution portion. The value of the defined benefit assets are £ 55 million so the funding level is 84.6% which is less than 104%. Underfunding risk would be calculated as 1.05 x Liabilities – Assets = 1.05 x 65 – 55 = 68.25 – 55 = £ 13.25 million.

6.5 Schemes with a partial crown guarantee

6.5.1 Schemes that possess a partial crown guarantee will be charged a risk based levy for the part of the scheme that does not have a crown guarantee. This will be determined by estimating the accrued benefit liabilities for those scheme members that are covered by a crown guarantee.

Example
A scheme with a partial crown guarantee securing 40% of the liabilities of the scheme will be charged a levy based on the remaining 60% of the liabilities and assets.

A scheme with a 40% partial crown guarantee has a deficit of £300 million with total assets of £1,200 million and Pension Protection Fund liabilities of £1,500 million. Underfunding risk would be calculated using 60% of the value of the assets and 60% of the value of the Pension Protection Fund liabilities.

The scheme is 80% funded and so underfunding risk = 1.05 x Liabilities – Assets = 1.05 x 0.6 x 1500 – 0.6 x 1200 = 945 – 720 = £ 225 million.

6.6 Schemes sponsored by an overseas employer

6.6.1 If a UK registered pension scheme is sponsored by an overseas employer the pension scheme will still be required to complete a s179 levy valuation. This will provide the basis on which to assess the level of underfunding for the risk based levy.

6.6.2 The approach to measuring insolvency risk will depend upon the company structure. If there is a UK subsidiary sponsoring the pension scheme then the insolvency risk of the subsidiary will be measured. If there is no UK subsidiary and the company is located overseas the Board intends to apply a consistent insolvency assessment for the overseas employer, through a third party, using relevant company information as outlined in chapter 5.

6.7 Schemes sponsored by not for profit organisations

6.7.1 Pension schemes sponsored by charities and not for profit organisations will be covered by the Pension Protection Fund and will be charged the pension protection levy. The Board's intention is to charge a levy based on both scheme factors and risk factors in line with its proposals for other schemes. Where market solutions do not extend to these organisations the Board is confident that current methodologies can be adapted to produce the appropriate insolvency measure.

Questions

1. Do you agree with the Board's transitional approach to multi-employer schemes, using full data on multi-employer schemes where it is provided, and a simpler approach where it is not?

Chapter 7

The levy structure

Chapter 7 – The levy structure

Chapter summary

This chapter outlines the levy structure proposed by the Board for introducing a risk based levy during the financial year starting on 1 April 2006. It considers:

- The total levy estimate
- The levy factors and percentage of scheme based and risk based levy
- The introduction of an individual risk based levy cap
- The levy calculation process

7.1 Introduction

7.1.1 The Board will consider the following issues when determining the levy structure:

- the risk factors to be applied;
- the amount it considers necessary to raise;
- the respective proportions of the risk based and scheme based levies;
- the extent to which fully funded schemes on a Pension Protection Fund basis should be charged a levy;
- how to provide incentives to schemes to improve their funding level;
- the impact of the pension protection levy on schemes and on sponsoring companies.

7.1.2 The Board is committed to introducing a risk based levy as early as possible to ensure fairness and proportionality for levy payers and is proposing to introduce the risk based levy during the financial year commencing 1 April 2006. The pension protection levy will become payable on 1 April, although it may not be collected until later in the year.

7.2 Annual levy estimates

7.2.1 Each year the Board will establish its estimate of the total pension protection levy to be collected for the following financial year. The Board will take into account the expected claims in the succeeding year and the variance of actual versus expected claims experience from preceding years. The Board will also consider its estimated total liabilities and the period over which it considers appropriate and prudent to collect the funding for these liabilities and the extent to which it aims to accrue a reserve for future large claims.

7.2.2 The levy estimate calculated by the Board must not exceed the levy ceiling set each year by the Secretary of State for Work and Pensions. Regulations which will be drafted later this year, taking into account the

outcome of this consultation, will detail the levy ceiling and the anticipated lower levy ceiling which may apply during the transitional period.

7.2.3 The initial indicative estimate of £300 million for the total pension protection levy for the 2005/6 financial year was outlined in the regulatory impact assessment (RIA), developed by the Department for Work and Pensions to accompany the Pensions Bill (that became the Pensions Act 2004), based on data as at December 2003. This data related to a range of eligible pension schemes and was based on a set of economic and other assumptions appropriate to that time. Since the RIA was published, other organisations have made estimates based on more current economic and longevity assumptions and their estimates have all been higher.

7.2.4 Over the next few months, the Board will be doing modelling work to determine its levy estimate for 2006/07. This estimate will take into account changes in the key assumptions since December 2003, mainly in relation to interest rates and mortality. With lower interest rates at present, and an assumption of greater longevity, it is likely that the Board's own estimate will be somewhat higher than the figure in the regulatory impact assessment. We aim to publish the estimate by 30 November 2005, alongside a summary of responses to this consultation exercise, and an outline of the levy structure for 2006/07. There will be a further four week period of consultation after the levy estimate is published.

7.3 Levy structure

7.3.1 For the financial year commencing 1 April 2006 the Board proposes to use the following factors when setting the pension protection levy:

Table 10 – Levy factors

Levy element	Levy factor
Scheme based	• the level of a scheme's Pension Protection Fund liabilities measured using a s179 basis, as at 31 December 2005
Risk based	• the level of a scheme's underfunding using a s179 basis, as at 31 December 2005 • the risk of insolvency in relation to the sponsoring employer(s), as at 31 December 2005

Source: Board of the Pension Protection Fund

7.3.2 The Board proposes that for the financial year commencing 1 April 2006 80% of the pension protection levy is risk based and the remaining 20% is scheme based. Using the regulatory impact assessment estimate of £300 million this would imply that the Board would raise £240 million in risk based levy and £60 million in scheme based levy.

7.3.3 The Board proposes to adopt an 80/20 split in levies in 2006/7 because:

- the Pensions Act requires the Board to collect at least 80% of the pension protection levy through the risk based levy for each year falling after the transitional period. The Board wishes to adopt this approach during the transitional period to maintain consistency;
- collecting the majority of the levy in a way which reflects the risk they represent is fair;
- stakeholder views suggest that a primarily risk based levy should be adopted as early as possible.

Scheme based levy

7.3.4 The scheme based levy will be apportioned across all eligible schemes using the total level of Pension Protection Fund liabilities calculated for all eligible schemes. The Board will divide the scheme based levy estimate by the total Pension Protection liabilities for all eligible schemes to derive a constant percentage (multiplier) to be applied to each scheme's Pension Protection Fund liabilities.

$$\text{multiplier} = \frac{\text{total scheme based levy estimate}}{\text{total Pension Protection Fund liabilities for all schemes}}$$

Example
The estimated total amount of Pension Protection Fund liabilities of all eligible schemes is £1000 billion. The scheme based levy estimates to collect £60 million (i.e. 20% of £300 million).

$$\frac{\text{total scheme based levy estimate}}{\text{total Pension Protection Fund liabilities for all schemes}} = \frac{\text{60 million}}{\text{1000 billion}} = 0.006\%$$

A scheme would pay £60 in scheme based levy for each £1m of Pension Protection Fund liabilities.

7.3.5 The scheme based levy formula for an individual scheme is proposed to be:

$$\text{Scheme based levy} = \text{scheme's Pension Protection Fund liabilities} \times \text{multiplier}$$

Example
Scheme A has Pension Protection Fund liabilities of £250 million and would pay 0.006% x Pension Protection Fund liabilities= 0.006% x £250 million = £15,000 in scheme based levy. (i.e. it pays £60 in scheme based levy for each £1m of Pension Protection Fund liabilities)

7.3.6 The amount of total Pension Protection Fund liabilities to be used in the levy calculation will be based on the information provided in scheme return forms submitted by all pension schemes to the Pensions Regulator.

Risk based levy

7.3.7 The remaining 80% of the pension protection levy will be risk based and will be apportioned across all eligible schemes using a combination of the underfunding risk and insolvency risk factors. Those schemes with a larger funding deficit or schemes at greater risk of sponsoring employer insolvency will pay a larger share of the risk based levy in line with and subject to the Board's principle of proportionality.

7.4 Individual risk based levy cap

7.4.1 The Pensions Act 2004 does not require the Board to limit the levy it charges an individual scheme. However, the Board is aware that concerns have been expressed about the potential financial impact that the pension protection levy may have on schemes and their sponsoring employer. Therefore, the Board proposes to limit the amount of risk based levy which will be payable by an individual pension scheme in any year. The reasons for applying a limit or cap include:

- if the levy was on a true insurance basis, some schemes would simply be unable to pay the level of levy required, based on the level of risk they pose;

- paying the pension protection levy is compulsory. Schemes cannot choose whether to pay the levy or not and as a result cannot make financial decisions about whether it can afford protection;

- whilst the Board advocates fairness of the risk based levy it is also conscious of the need to set a collectable levy which needs to be proportionate and take into account individual pension schemes' ability to pay. The Board needs to balance the level of risk posed against the ability of schemes to pay;

- schemes and employers in distress need time to work their way out of their difficulties. The Pension Protection Fund will refer schemes which have had their levy capped to the Pensions Regulator for increased monitoring.

7.4.2 The Board proposes to apply an individual risk based levy limit set at a level that would affect those schemes with employers included in the proposed insolvency risk bands 9 and 10 and which have weak funding levels (less than 65% and 80% respectively). This is consistent with the Board's objective of allowing time for schemes and employers in distress to work their way out of their difficulties, setting and meeting

recovery plans as part of the new scheme funding requirements replacing the MFR. The Board considers the cap level to be reasonable taking into account the need for each scheme to maintain appropriate funding levels in addition to paying the annual pension protection levy.

7.4.3 If the levy scaling factor calculated in accordance with paragraphs 7.5.1 - 7.5.4 below is 1 (as assumed for simplicity in the examples) the cap level would be equal to 3% of a pension scheme's protected liabilities. However, the percentage cap will only be determined once the levy scaling factor has been set. The key proposal the Board is making relates to the extent of coverage of the cap, not the percentage cap itself. A percentage cap of 3% has been used in table 11 below for illustrative purposes only.

Table 11 - Example of individual risk based levy cap

Total Pension Protection Fund liabilities	Percentage cap	Maximum individual risk based levy limit
£100,000	3%	£3,000
£10 million	3%	£300,000
£100 million	3%	£3 million
£500 million	3%	£15 million
£1 billion	3%	£30 million
£2 billion	3%	£60 million

Source: Board of the Pension Protection Fund

7.5 Matching the levy estimate

7.5.1 The Board will calculate a levy scaling factor to ensure that the total amount raised by the risk based levy closely matches the Board's levy estimate, published prior to the start of each financial year. A levy scaling factor will be necessary because the total risk exposure across all eligible schemes may well be higher than the total amount the Board considers it should raise. This is largely because of the way underfunding risk is measured (with no upper limit beyond which there is deemed to be no underfunding risk), and because the section 179 valuation basis approximates the cost of buying out Pension Protection Fund liabilities with an insurance company. The levy estimate may well be calculated on a different basis, stripping out profit and other loadings from the insurance buy-out cost.

7.5.2 Step 1 - The Board will calculate its risk exposure to an individual scheme by multiplying together:

- the scheme's underfunding risk factor;
- the insolvency probability corresponding to the employer's insolvency risk band;
- the proportion of the pension protection levy that will be risk based.

The underfunding risk factor will be derived using the approach set out in chapter 4. The insolvency risk band will be derived using the approach set out in chapter 5 taking into account the scheme structure as described in chapter 6. The proposed proportion of the pension protection levy that will be risk based is 80% for the financial year commencing 1 April 2006.

Risk exposure = underfunding risk x insolvency risk band probability x % risk based

Example (step 1)

Scheme A has Pension Protection Fund liabilities valued at £250 million and assets valued at £212.5 million. There is a single sponsoring employer with an insolvency failure score of 82 (corresponding to risk band 2 with associated insolvency probability of 0.60%).

The funding level of the scheme is

$$\frac{\text{value of assets}}{\text{value of Pension Protection Fund liabilities}} \times 100\% = \frac{212.5}{250} \times 100\% = 85\%$$

Underfunding risk = 1.05 x Pension Protection Fund liabilities – assets
= 1.05 x 250 – 212.5 = 262.5 – 212.5 = £50 million

Risk exposure = underfunding risk x insolvency risk band probability x % risk based
= £50 million x 0.60% x 80% = £240,000

This is equal to 0.096% of scheme A's Pension Protection Fund liabilities.

7.5.3 Step 2 - The Board will calculate an estimate of the total risk exposure represented by all eligible schemes by adding together the estimated risk exposures of each individual scheme.

7.5.4 Step 3 - The Board's risk based levy estimate (E) will be divided by the estimated total risk exposure for all eligible schemes to calculate a levy scaling factor. This scaling factor will be used to ensure that the total amount of risk based levy charged is close to the Board's pension protection levy estimate.

$$\text{Levy scaling factor} = \frac{\text{Risk based Levy estimate}}{\text{Total risk exposure for all eligible schemes}}$$

7.6 Calculating the amount of risk based levy for an individual pension scheme

7.6.1 Step 1 – Once the levy scaling factor has been estimated the levy exposure can be calculated for every scheme as the product of a scheme's risk exposure and the levy scaling factor. In all the examples below, the levy scaling factor is assumed to be 1. This is purely for ease of calculation, and should not be seen as an indication of what the levy scaling factor might be.

The calculation will be based on underfunding risk factor information derived from the annual scheme return data and insolvency risk information from the third party provider.

$$\text{Levy exposure} = \text{risk exposure} \times \text{levy scaling factor}$$

Example (step 1)
If the levy scaling factor is 1 then scheme A with risk exposure = £240,000 will have a levy exposure = £240,000 x 1 = £240,000 which is 0.096% of its Pension Protection Fund liabilities.

7.6.2 Step 2 - The individual risk based levy cap will then be applied to limit the amount of risk based levy payable by any one scheme. If no scheme breaches the limit then a scheme's risk based levy is equal to its scaled risk exposure.

Example (step 2)
Scheme A has Pension Protection Fund liabilities of £250 million. The maximum risk based levy payable is £7.5 million (i.e. 3% of £250 million, assuming a scaling factor of 1). Scheme A will pay a risk based levy of £240,000 assuming that no scheme breaches the limit.

7.6.3 Step 3 – Any scheme with scaled risk exposure greater than the capped percentage of Pension Protection Fund liabilities will be charged a risk based levy equal to the capped percentage of its Pension Protection Fund liabilities.

Example (step 3)
Scheme X has Pension Protection Fund liabilities of £100 million, funding level of 65% and insolvency risk band 9 which equates to a levy exposure of £3.12 million which is 3.12% of Pension Protection Fund liabilities so scheme X would be charged a risk based levy of £3 million (3% x £100m) based on a 3% limit.

7.6.4 Step 4 – Calculate the total levy exposure (T) and the total risk based levy capped amount (K) for those schemes where a cap has been applied.

Example (step 4)
Suppose that schemes X and Y have levy exposure of £3.12m and £620,000 respectively with corresponding Pension Protection Fund liabilities of £100m and £20m respectively. Suppose that these are the only two schemes where the 3% limit is applied. Schemes X and Y would be charged a risk based levy of £3m and £600,000 respectively.
The total risk based levy capped amount K is £3.6m (=£3m + £0.6m) and the total levy exposure T is £3.74m (=£3.12m + £0.62m) for schemes subject to the 3% limit.

7.6.5 Step 5 - This capped amount is then deducted from the risk based levy estimate to derive the levy remainder. A new levy scaling factor is then calculated by multiplying the previous levy scaling factor by $\frac{E-K}{E-T}$.

Example (step 5)
The levy remainder = E – K = risk based levy estimate – sum of risk based levy amounts for capped schemes = £240 million – (£3.6 million) = £236.4 million. Using the example above the previous scaling factor would be multiplied by
$\frac{E-K}{E-T} = \frac{240-3.6}{240-3.74} = 1.000593$ where T is the total levy exposure for the schemes subject to the 3% cap.

7.6.6 Steps 1 to 5 are repeated using the new levy scaling factor until the total risk based levy estimate has been allocated across all eligible schemes.

7.6.7 The levy structure proposed by the Board is sufficiently flexible to enable the total risk exposure to be scaled to reflect the amount of levy the Board has estimated to collect. This will ensure that the appropriate amount is collected from the levy in line with the levy ceiling and the levy increase rules set out in legislation. Table 12 below shows the risk exposure as a percentage of Pension Protection Fund liabilities for a range of funding levels and insolvency risk bands.

Table 12 – Risk exposure as a percentage of Pension Protection Fund liabilities

Funding level: Funding Level %	Insolvency risk band: 1 0.13%	2 0.60%	3 1.25%	4 1.70%	5 2.35%	6 3.40%	7 4.75%	8 6.60%	9 9.75%	10 15%
50%	0.057%	0.264%	0.550%	0.748%	1.034%	1.496%	2.090%	2.904%	4.290%	6.600%
55%	0.052%	0.240%	0.500%	0.680%	0.940%	1.360%	1.900%	2.640%	3.900%	6.000%
60%	0.047%	0.216%	0.450%	0.612%	0.846%	1.224%	1.710%	2.376%	3.510%	5.400%
65%	0.042%	0.192%	0.400%	0.544%	0.752%	1.088%	1.520%	2.112%	3.120%	4.800%
70%	0.036%	0.168%	0.350%	0.476%	0.658%	0.952%	1.330%	1.848%	2.730%	4.200%
75%	0.031%	0.144%	0.300%	0.408%	0.564%	0.816%	1.140%	1.584%	2.340%	3.600%
80%	0.026%	0.120%	0.250%	0.340%	0.470%	0.680%	0.950%	1.320%	1.950%	3.000%
85%	0.021%	0.096%	0.200%	0.272%	0.376%	0.544%	0.760%	1.056%	1.560%	2.400%
90%	0.016%	0.072%	0.150%	0.204%	0.282%	0.408%	0.570%	0.792%	1.170%	1.800%
95%	0.010%	0.048%	0.100%	0.136%	0.188%	0.272%	0.380%	0.528%	0.780%	1.200%
100%	0.005%	0.024%	0.050%	0.068%	0.094%	0.136%	0.190%	0.264%	0.390%	0.600%
104%	0.001%	0.005%	0.010%	0.014%	0.019%	0.027%	0.038%	0.053%	0.078%	0.120%
110%	0.001%	0.005%	0.010%	0.014%	0.019%	0.027%	0.038%	0.053%	0.078%	0.120%
115%	0.001%	0.005%	0.010%	0.014%	0.019%	0.027%	0.038%	0.053%	0.078%	0.120%
120%	0.001%	0.005%	0.010%	0.014%	0.019%	0.027%	0.038%	0.053%	0.078%	0.120%

Source: Board of the Pension Protection Fund

7.6.8 Assuming a scaling factor of one, for ease of calculation only, and that no scheme is subject to the cap, then table 13 below lists the risk based levy per £1m of Pension Protection Fund liability. The cells highlighted in red indicate combinations of funding level and insolvency risk band that would result in the application of the limit. The cells highlighted in green indicate the combinations corresponding to a funding level greater than or equal to 104%.

Table 13 – Risk based levy per £1m of Pension Protection Fund liability

Funding level: Funding Level %	Insolvency risk band: 1 0.13%	2 0.60%	3 1.25%	4 1.70%	5 2.35%	6 3.40%	7 4.75%	8 6.60%	9 9.75%	10 15%
50%	572	2,640	5,500	7,480	10,340	14,960	20,900	29,040	30,000	30,000
55%	520	2,400	5,000	6,800	9,400	13,600	19,000	26,400	30,000	30,000
60%	468	2,160	4,500	6,120	8,460	12,240	17,100	23,760	30,000	30,000
65%	416	1,920	4,000	5,440	7,520	10,880	15,200	21,120	30,000	30,000
70%	364	1,680	3,500	4,760	6,580	9,520	13,300	18,480	27,300	30,000
75%	312	1,440	3,000	4,080	5,640	8,160	11,400	15,840	23,400	30,000
80%	260	1,200	2,500	3,400	4,700	6,800	9,500	13,200	19,500	30,000
85%	208	960	2,000	2,720	3,760	5,440	7,600	10,560	15,600	24,000
90%	156	720	1,500	2,040	2,820	4,080	5,700	7,920	11,700	18,000
95%	104	480	1,000	1,360	1,880	2,720	3,800	5,280	7,800	12,000
100%	52	240	500	680	940	1,360	1,900	2,640	3,900	6,000
104%	10	48	100	136	188	272	380	528	780	1,200
110%	10	48	100	136	188	272	380	528	780	1,200
115%	10	48	100	136	188	272	380	528	780	1,200
120%	10	48	100	136	188	272	380	528	780	1,200

Source: Board of the Pension Protection Fund

Example
Scheme B has Pension Protection Fund liabilities of £100m, a funding level of 90% and is in insolvency risk band 1. The risk based levy would be £156 per £1m of Pension Protection Fund liability. Scheme B would pay 100 x £156 = £15,600 in risk based levy (0.0156% of Pension Protection Fund liabilities).

7.7 Evolution of the levy structure

7.7.1 The Board expects the levy structure and the measures to determine the risk factors to become more sophisticated over time.

7.7.2 The Board proposes to review each aspect of the levy on an annual basis. Stakeholders will be consulted accordingly. In particular, the Board recognises the importance of asset allocation as a risk factor for determining the levy structure and will consider the need to introduce this risk factor as soon as practicable.

Questions

1. Do you agree that there is a strong imperative to move to a risk-based system as quickly as possible?

2. Do you agree that the risk exposure should be based on a product of insolvency and underfunding risk?

3. Do you agree that a cap on individual scheme levies should be applied, and that the cap should apply to those schemes with employers included in insolvency risk bands 9 and 10 and which have weak Pension Protection Fund funding levels (less than 65% and 80% respectively)?

Pension
Protection
Fund

Chapter 8

The transitional period

Chapter 8 – The transitional period

Chapter summary

This chapter outlines the Board's proposals for introducing a risk based levy during the transitional period. It considers:

- The use of valuation information during the transitional period
- The Board's proposed approach to measuring underfunding when a s179 levy valuation is not provided by 31 December 2005
- The Board's proposed approach to reducing the impact of the transitional period

8.1 Introduction

8.1.1 The Pensions Act 2004 allows for a transitional period to gradually introduce the risk based levy which commences on 1 April 2006 and may end in March 2010. Regulations will be drafted later this year taking into account the outcome of this consultation in respect of the transitional period.

8.1.2 The legislation relating to the risk based levy confers some flexibility during the transitional period. The requirement to collect at least 80% of the levy from the risk based levy can be varied by the Board and the 25% rule limiting the annual increase in the levy and a temporary levy ceiling can be varied by the Secretary of State for Work and Pensions.

8.2 The Board's proposed approach to the transitional period

8.2.1 The Board is seeking to introduce a simplified risk based levy for all eligible schemes during the financial year commencing 1 April 2006, subject to the results of this consultation. The Board is eager to ensure a fair distribution of levy costs across schemes whilst balancing flexibility and practicality during the transitional period. The Board encourages trustees to complete an initial s179 levy valuation at the earliest opportunity.

8.2.2 Ideally, the Board would use consistently calculated underfunding data from 1 April 2006, but this will not be practical, due to data and timing constraints, since s179 levy valuation data will not be available for all eligible schemes by 31 December 2005. This is the last date for the submission of data to be included in the levy calculation for the financial year commencing 1 April 2006. It is not yet known how many schemes will undertake an initial s179 levy valuation by 31 December 2005. Therefore, current legislation implies the risk based levy will initially only be applied fully to a very limited number of schemes.

8.2.3 The Board is eager to maximise the coverage of eligible schemes that are charged the risk based levy during the financial year 2006/7 to ensure effective risk management and demonstrate fairness to all levy payers. The following options are available to introduce a risk based levy for eligible schemes from this date:

- implement a risk based levy for those schemes that elect to complete a s179 levy valuation by 31 December 2005 and charge all other eligible schemes a scheme based levy only;

- use s179 valuation data for those schemes that provide the data to the Board by 31 December 2005. For all other eligible schemes adapt the results of another type of actuarial valuation to estimate underfunding on a s179 levy valuation basis e.g. MFR or FRS17. This would mean the risk based levy could be applied to all eligible schemes.

8.2.4 The Board has considered the options available and as a result the Board's preferred approach to ensure a fairer levy is outlined below.

Financial year commencing 1 April 2006
Use s179 levy valuation data for those schemes that have provided the information to the Board by 31 December 2005. Adapt information from schemes' most recent MFR valuation to estimate underfunding on a s179 levy valuation basis for those schemes that do not provide a s179 valuation by 31 December 2005.
Financial year commencing 1 April 2007
Require all eligible schemes to provide a s179 valuation by 31 December 2006 to enable a risk based levy to be calculated using a consistent underfunding risk factor.

Table 14 - Comparison of transitional period options

Financial year	Pensions Act 2004 provisions	Board's proposed approach
2006/7	Levy calculated using s179 levy valuations only. Schemes that have not undertaken a s179 levy valuation will pay a levy based on scheme factors only	Levy calculated using s179 levy valuations where available. If no s179 levy valuation is provided then the scheme's most recent MFR valuation will be adapted
2007/8	Levy calculated using s179 levy valuations only. Schemes that have not undertaken a s179 levy valuation will pay a levy based on scheme factors only	Require all eligible schemes to complete a s179 levy valuation by 31 Dec 2006. Risk based levy to be calculated for all schemes using s179 levy valuations. Full risk based levy implemented
2008/9	Levy calculated using s179 levy valuations only. Schemes that have not undertaken a s179 levy valuation will pay a levy based on scheme factors only	Risk based levy to be calculated for all schemes using s179 levy valuations. Full risk based levy implemented

2009/10	Levy calculated using s179 levy valuations only. Schemes that have not undertaken a s179 levy valuation will pay a levy based on scheme factors only	Risk based levy to be calculated for all schemes using s179 levy valuations. Full risk based levy implemented
2010/11	Full risk based levy implemented	Risk based levy to be calculated for all schemes using s179 levy valuations. Full risk based levy implemented

Source: Board of the Pension Protection Fund

8.3 The Board's proposed approach to adapting valuations to measure underfunding in the financial year commencing 1 April 2006

8.3.1 The Board is aware that adapting the results of a different valuation to estimate underfunding on a s179 levy valuation basis would be an approximation. The Board has considered the advantages and disadvantages of using either MFR or FRS17 valuation information to estimate a s179 levy valuation. Other valuation bases are available but were not considered to be superior to the MFR basis for the purposes of this calculation.

8.3.2 The Board proposes to use the MFR basis since all eligible schemes should have completed a valuation on an MFR basis, which is closer to the s179 valuation basis since it assumes active members leave service. This would enable more extensive coverage of eligible schemes and achieve consistency.

8.3.3 Not all pension schemes are obliged to conduct an FRS17 valuation. The basis is much less prescriptive and company directors have broader scope to set the valuation assumptions. Therefore, achieving extensive coverage and consistency across all eligible schemes would be challenging.

8.3.4 Adapt the MFR valuations to obtain estimated s179 levy valuations

MFR data will need to be updated to reflect the changes in economic conditions and asset pricing, as MFR valuations will have been conducted at various times over the last three years. Certain criteria and assumptions could then be applied to the updated data to adjust the liabilities to reflect the Pension Protection Fund level. The level of accuracy will largely depend upon the approach taken and the ability to collect the required data within the necessary timescales. The amount of additional data that should be sought is very much a balance between cost effectiveness, accuracy and proportionality. It would not be appropriate for the Board to collect such a substantial amount of data to the extent that it would be more cost effective for a scheme to complete a s179 levy valuation.

8.3.5 Table 15 below sets out the pros (✓) and cons (×) of four options for taking account of MFR data against a range of practical issues:

Table 15 – Comparisons of options for adapting MFR valuations

Approach	Timing	Additional cost to scheme	Additional data required*	Consistency
s179 levy valuation undertaken by schemes	✗	✗	✗	✓
Comprehensive adjustment undertaken by individual schemes	✗	✗	✗	✓
Medium adjustment undertaken by the Pension Protection Fund	✗	✓	✗	✓
Simple adjustment undertaken by the Pension Protection Fund	✓	✓	✓	✓

*other than information set out in the scheme return
Source: Board of the Pension Protection Fund

8.3.6 It would be impractical to require all schemes to complete a s179 levy valuation by 31 December 2005. Alternatively, pension schemes could adapt their own MFR valuation themselves and provide the results to the Board using a prescribed basis set out by the Board. This would produce a reasonable degree of accuracy but would place an additional burden on schemes to complete such an exercise within a very limited timescale.

8.3.7 After careful consideration of the options, the Board proposes that for the financial year 2006/7 it is most appropriate, cost effective and practical to use a simplified approach minimising additional data requirements that adapts the MFR information supplied on the annual scheme return form to estimate s179 levy valuation results. This will:

- minimise additional data requirements;
- simplify the development of an estimate for a s179 levy valuation;
- promote fairness in the levy structure;
- result in a consistent approach to underfunding for those schemes that have not completed a s179 levy valuation by 31 December 2005.

8.3.8 The process proposed for adapting an MFR valuation can be found at Annex C.

8.4 The Board's proposed approach to reduce the impact of the transitional period

8.4.1 The transitional period could result in some schemes paying a proportionately higher risk based levy due to other schemes deferring

the timing of their initial s179 levy valuation. In line with its principles of fairness, simplicity, and proportionality, the Board recommends that this and other disadvantages of the transitional period should be eliminated as soon as possible by requiring all eligible schemes to complete an initial s179 levy valuation earlier than set out in current legislation. This can be achieved by changes to regulations. These changes would be:

- **fair**, because they would ensure that schemes pay an appropriate amount towards the levy, based on best evidence, and do not have the option to defer a s179 levy valuation, even where they are conducting their usual valuation before April 2008;
- **simple,** because the data would be materially relevant, and so would not require adjustment by the Board;
- **proportionate,** because although some schemes would incur a one-off additional cost, the majority would not need to conduct an out-of-cycle valuation.

8.4.2 The Board's proposed approach would require all schemes to complete and submit their initial s179 levy valuation to the Board by 31 December 2006 (as opposed to 5 April 2008 for completion, and 5 April 2009 for submission, as per the existing regulations). This would mean that underfunding risk would be measured on an accurate, consistent basis for all schemes from 1 April 2007.

8.4.3 The "relevant time" (the date in relation to which the assets and liabilities of the eligible scheme are calculated) for an initial s179 levy valuation can be any time from 1 November 2004, and most valuations are completed as at 31 December, 31 March, or 5 April. Since actuaries will require some time between the "relevant time", and the date by which they must provide details of the valuation to the Board (proposed as 31 December 2006), the Board is assuming that it will receive details of valuations as at 31 December 2004, 31 March 2005, 31 December 2005, and 31 March 2006. This should mean that approximately two-thirds of schemes should be able to provide the Board with details of a s179 valuation by 31 December 2006 without conducting an additional valuation.

8.4.4 For those schemes where an MFR valuation is underway, but a s179 levy valuation is not being carried out, they would have two options. They could either ask their scheme actuary to revisit the data used for the MFR valuation to prepare a s179 levy valuation with the same effective date, or they could conduct a standalone s179 levy valuation at a later date. The most cost-effective option would be to ask the scheme actuary to revisit the data used in the MFR valuation, so this is the option that has been costed below.

8.4.5 For any scheme required to complete its triennial ongoing valuation after 6 April 2005, even in the absence of the Board's proposal to bring forward the date for initial s179 levy valuations, the most cost-effective

solution would be to complete a s179 levy valuation at the same time. Otherwise it would mean performing a more expensive, standalone s179 levy valuation in order to meet the existing 5 April 2008 deadline. Moreover, although schemes are not obliged to complete a s179 levy valuation alongside their usual triennial valuation, the only reason not to combine the two would be if a scheme thought it would pay a smaller share of the risk-based levy as a result, which is precisely the sort of perverse incentive that the Board is seeking to eliminate.

8.4.6 The cost of a s179 levy valuation depends on whether it is completed as a standalone exercise, or alongside a scheme's triennial ongoing valuation, which must include a solvency disclosure. If the valuation is completed alongside a scheme's triennial valuation, the Board estimates that the average cost could be £1,500[13]. Alternatively, if the valuation is completed as a standalone exercise, the Board estimates that the average cost could be £10,000[14] for a scheme with more than 100 members, and £2,000 for a scheme with fewer than 100 members. Overall, the Board estimates that the additional cost of its proposal, which would bring forward the date at which accurate, consistent underfunding information could be used in the risk-based levy by three years (from 2010/11 to 2007/8 – see below), could be approximately £16m[15]. This is likely to represent between 1 and 2% of the overall pension protection levy to be collected during those three years.

8.4.7 Alongside limited additional costs, the other potential disadvantage of the Board's proposed approach is the impact it might have on the transition from the MFR to the new scheme funding requirements. The stated policy is to allow trustees to comply with the new requirements in line with their existing three yearly valuation cycle. The proposed requirement to obtain a s179 levy valuation by December 2006 will be a relevant consideration for trustees, who might decide to minimise costs by bringing forward their first valuation under the new scheme funding requirements. This could affect schemes with a December 2006 or March/April 2007 MFR effective date (around a third of all schemes

[13] Based on the estimated cost of annual re-certification under the Minimum Funding Requirement, included in the Regulatory Impact Assessment that accompanied the Pensions Bill.

[14] These two figures are based on the estimated cost of conducting a full Minimum Funding Requirement valuation, included in the Regulatory Impact Assessment that accompanied the Pensions Bill.

[15] This cost, which is rounded to the nearest £million is based on the following assumptions: 7,000 eligible schemes, of which 60% have fewer than 100 members; approximately 2/3 could complete a s179 valuation alongside their normal triennial valuation before 31 December 2006 (see above). For those completing valuations as at 31 December 2005 and 31 March 2006 (assumed to be 1/3 of all eligible schemes), no additional costs for bringing forward s179 valuations have been included. This is because the current deadline for producing an initial s179 valuation would fall before their next triennial valuation would be due. For those completing valuations as at 31 December 2004 and 31 March 2005 (assumed to be 1/3 of all eligible schemes), the average additional cost of £1,500 has been used. For the 1/3 of schemes obliged to conduct a standalone exercise, an average cost of £10,000 has been used for 40% of schemes, and an average cost of £2,000 has been used for the remaining 60% of schemes.

subject to the new scheme funding requirements). If trustees did decide to bring forward their first valuations under the new scheme funding requirements, this would also affect workflows within the actuarial profession.

8.4.8 The alternative to bringing forward the date by which schemes have to complete their first s179 levy valuation is to continue to use adapted MFR valuations for schemes until they complete their initial s179 levy valuation, and submit the information to the Board. At worst, this could mean using adapted MFR valuations up to 2010/11. This is because the Board requires details of s179 levy valuations by 31 December, for use in the following year's levy calculation. Since 5 April 2009 is the latest date by which schemes must currently provide s179 information to the Board that information would not be taken into account until the levy calculation for 2010/11.

8.4.9 The Board reasons for not preferring this alternative are:

- the new scheme funding requirements to replace the MFR are expected to be introduced from September 2005, so the MFR may increasingly be viewed as an obsolete and inappropriate basis for calculating underfunding risk;
- MFR valuations would be more and more out-of-date, and changes the scheme has made would not be reflected in their last MFR valuations;
- the inconsistency between the treatment of schemes that had provided s179 levy valuations and schemes that had not may increase over time;
- giving schemes the option not to complete a s179 levy valuation alongside their usual triennial ongoing valuation provides perverse incentives that the Board would like to eliminate.

8.4.10 On balance, the Board thinks that the costs for schemes in bringing forward the deadline for conducting an initial s179 levy valuation are more than outweighed by the benefits of using timely, accurate data in an individual scheme's risk based levy calculation and achieving fairness across all levy payers. Since the Board's proposals would require the Government to lay regulations, your comments would be particularly welcome in this area.

Questions

1. Do you agree it is reasonable to used adapted MFR valuations as an estimate of s179 levy valuations?

2. Do you consider that an adapted MFR valuation could be used beyond the financial year 2006/7, if all schemes were not required to complete a s179 levy valuation by 31 December 2006?

3. Do you agree that it is desirable to **receive** s179 levy valuations for all schemes from 31 December 2006?

4. If you answered **no** to Q3 which of the following dates is preferable to 31 December 2006 in your view?

   (a) 31 December 2007

   (b) 31 December 2008

   (c) 5 April 2009

   (d) Any other date, please specify.

5. Do you agree that the disadvantages of bringing forward the deadline for completing an initial s179 valuation are a price worth paying to move to a fairer and consistent risk based levy using s179 levy valuations by 31 December 2006?

6. Do you think that the estimated additional costs of bringing forward the deadline for completing an initial s179 valuation are realistic?

Pension
Protection
Fund

Chapter 9

Asset allocation risk

Chapter 9 – Asset allocation risk

Chapter summary

This chapter outlines the Board's proposals for introducing asset allocation as a risk factor. It considers:

- The most appropriate time for introducing asset allocation
- Changes in the value of assets and liabilities
- The practicalities of using asset allocation risk

9.1 Introduction

9.1.1 The Pensions Act 2004 allows the Board to take asset allocation risk into account as an additional factor when setting the risk based levy. However, the Board does not intend to include asset allocation as a risk factor when setting the risk based levy during the financial year starting on 1 April 2006.

9.1.2 The Board acknowledges that asset allocation is an important leading indicator of future scheme funding levels. Two pension schemes may have the same underfunding risk and same likelihood of sponsoring employer insolvency but follow very different asset allocation strategies. By not considering asset allocation risk the Board acknowledges that some of the volatility in a scheme's funding level may not be recognised directly in a risk based levy calculation. Therefore, the Board proposes to introduce asset allocation as a risk factor as soon as is practicable and intends to undertake a separate consultation exercise to consider the issues.

9.2 Practicalities of using asset allocation

9.2.1 There are practical issues associated with capturing asset allocation information to use in the calculation of a risk based levy. Some of these are:

- Schemes will make changes to their asset allocation prior to and during the levy year
- Schemes may invest in many different asset classes and sub-sets of asset classes
- The risk characteristics of the invested assets are relevant for determining asset allocation risk as well as the exposure to the asset e.g. mismatched duration of the bond assets compared with the liabilities
- Schemes may use structured or unitised products such as special purpose vehicles, collateralised debt obligations and hedge funds

- Smaller insured schemes may be invested in assets such as "with profits" insurance contracts, where the performance may be less volatile but more difficult to predict or understand
- Schemes may invest in the assets of the sponsoring employer
- Schemes may buy contingent contracts that provide protection in the event of employer insolvency
- Schemes may use derivative contracts to improve the match between assets and liabilities and which may immunize the scheme against movements in financial conditions

9.2.2 The Board would expect that the trustees would understand the risk of any investments compared to the liabilities and expects the trustees to be able to categorise the assets into matching assets and non-matching assets.

9.3 Inclusion of asset allocation risk in the risk based levy

9.3.1 The Board is considering introducing an approach to asset allocation risk that is consistent with the risk framework used by insurance companies and banks and complements the approach to the new scheme funding requirements to replace the MFR. This approach would be administered by the scheme actuary and reviewed by the pension scheme trustees.

9.3.2 The expected volatility of the surplus or deficit can be used as a measure of asset allocation risk. The higher the volatility, the greater the likelihood that at a future date there will be a mismatch between the change in the value of assets and liabilities.

9.3.3 There are a number of approaches that could be taken to derive an estimate of asset allocation risk. These could include using either a statistical model or a stochastic model or a simpler approach based on applying a market value adjustment to the value of the assets that reflects an assessment of mismatch risk.

Questions

1. Do you agree that the Board should include asset allocation risk as a factor for setting the risk based levy as early as practicable?

2. Do you agree that this is something that is important and which will merit early consideration in a separate consultation exercise?

3. Do you agree that the main issues to consider in a further consultation are those listed here?

Pension
Protection
Fund

Chapter 10

The consultation process

Chapter 10 – The consultation process

10.1 Consultation responses

10.1.1 The Board of the Pension Protection Fund welcomes your views on the proposals contained in this consultation document and in particular responses to the questions.

10.1.2 In addition to responses to the questions contained in this consultation document the Board welcomes submissions on any other significant issues.

Summary of Questions

Chapter 2

1. Do you agree that the Board should construct the risk based levy in a way that combines the principles of fairness, simplicity and proportionality?

Chapter 4

1. Do you agree that 104% should be the cut-off point above which schemes' underfunding risk would be based on a fixed percentage of Pension Protection Fund liabilities?
2. Do you expect to submit a s179 levy valuation by 31 December 2005? If not, when do you expect to submit a s179 levy valuation?

Chapter 5

1. Do you agree with the proposed approach to measuring insolvency, including measuring the insolvency risk of all eligible schemes?
2. Do you agree that insolvency should be viewed over a 12 month horizon, since the levy is intended to meet the cost of new claims arising during the annual levy cycle?
3. Do you agree that insolvency should be banded?
4. Do you agree that there should be ten bands?
5. Do you agree that insolvency risk should be capped at 15%?
6. Do you agree that there should be a generic band?
7. Do you agree with the focus on a market-based approach?

Chapter 6

1. Do you agree with the Board's transitional approach to multi-employer schemes, using full data on multi-employer schemes where it is provided, and a simpler approach where it is not?

Chapter 7

1. Do you agree that there is a strong imperative to move to a risk-based system as quickly as possible?

2. Do you agree that the risk exposure should be based on a product of insolvency and underfunding risk?

3. Do you agree that a cap on individual scheme levies should be applied, and that the cap should apply to those schemes with employers included in insolvency risk bands 9 and 10 and which have weak Pension Protection Fund funding levels (less than 65% and 80% respectively)?

Chapter 8

1. Do you agree it is reasonable to used adapted MFR valuations as an estimate of s179 levy valuations?

2. Do you consider that an adapted MFR valuation could be used beyond the financial year 2006/7, if all schemes were not required to complete a s179 levy valuation by 31 December 2006?

3. Do you agree that it is desirable to **receive** s179 levy valuations for all schemes from 31 December 2006?

4. If you answered **no** to Q3 which of the following dates is preferable to 31 December 2006 in your view?

    (a) 31 December 2007

    (b) 31 December 2008

    (c) 5 April 2009

    (d) Any other date, please specify.

5. Do you agree that the disadvantages of bringing forward the deadline for completing an initial s179 valuation are a price worth paying to move to a fairer and consistent risk based levy using s179 levy valuations by 31 December 2006?

6. Do you think that the estimated additional costs of bringing forward the deadline for completing an initial s179 valuation are realistic?

Chapter 9

1. Do you agree that the Board should include asset allocation risk as a factor for setting the risk based levy as early as practicable?

2. Do you agree that this is something that is important and which will merit early consideration in a separate consultation exercise?

3. Do you agree that the main issues to consider in a further consultation are those listed here?

10.2 Arrangements for written submissions

10.2.1 The consultation period begins on 12 July 2005 and will end on 4 October 2005, please ensure that your response reaches us by that date. If you would like further copies of this consultation document it can be found on our website at www.pensionprotectionfund.org.uk. You may also call our publications number on 020 8867 3297 or email pensionprotectionfund@ecgroup.uk.com to obtain a paper copy.

10.2.2 Please send all consultation responses to:

Sara Protheroe
Levy Manager
Pension Protection Fund
Knollys House
17 Addiscombe Road
Croydon
CR0 6SR

Tel: 020 8633 4900
Email: consultation@ppf.gsi.gov.uk

10.2.3 When responding please state whether you are responding as an individual or representing the views of an organisation. If responding on behalf of a larger organisation please make it clear who the organisation represents, and where applicable, how the views of members were assembled. If responding on behalf of a pension scheme please include details of your scheme including the number of

members and the most recently calculated value of the scheme's liabilities

10.2.4 The requirements of the Freedom of Information Act (2000) state all information contained in the response, including personal information, may be subject to publication or disclosure. By providing personal information for the purposes of the public consultation exercise, it is understood that a Respondent consents to its disclosure and publication. If this is not the case, the Respondent should limit any personal information which is provided, or remove it completely. If a Respondent requests that the information given in response to the consultation be kept confidential, this will only be possible if it is consistent with Freedom of Information Act obligations and general law on this issue. The contact point to discuss this issue is Paul Reynolds. Further information about the Freedom of Information Act can be found on the website of the Department for Constitutional Affairs - http://www.dca.gov.uk/foi/guidance/exguide/index.htm

10.3 Publishing a summary of responses

10.3.1 The Board will aim to publish a summary of responses, including the levy structure and the Board's levy estimate for 2006/7, by 30 November 2005, at www.pensionprotectionfund.org.uk Paper copies will be made available on request. The publication will be followed by a further four week period of consultation.

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

10.3.3 This is the first consultation undertaken by the Pension Protection Fund. The Board would value any feedback on the effectiveness of this process. If you have any comments then please contact:

Paul Reynolds
Head of Communications
Pension Protection Fund
Knollys House
17 Addiscombe Road
Croydon
CR0 6SR

Tel: 020 8633 4968
E-mail: paul.reynolds@ppf.gsi.gov.uk

Annex A - Pension Protection Fund compensation

1. For individuals that have reached their scheme's normal pension age or, irrespective of age, are either already in receipt of survivors' pension or a pension on the grounds of ill health, the Pension Protection Fund will pay **100% level of compensation**.

   In broad terms and in normal circumstances, this means a starting level of compensation that equates to 100% of the pension in payment immediately before the assessment date (subject to a review of the rules of the scheme by the Pension Protection Fund).

   The part of this compensation that is derived from pensionable service on or after 6 April 1997 will be increased each year in line with the Retail Prices Index capped at 2.5%. This could, potentially, result in a lower rate of increase than the scheme would have provided.

2. For the majority of people below their scheme's normal pension age the Pension Protection Fund will pay **90% level of compensation**.

   In broad terms and in normal circumstances, this means 90% of the pension an individual had accrued immediately before the assessment date (subject to a review of the rules of the scheme by the Pension Protection Fund) plus revaluation in line with the increase in the Retail Prices Index between the assessment date and the commencement of compensation payments (subject to a maximum increase for the whole period calculated by assuming RPI rose by 5% each year). This compensation is subject to an overall cap, which equates to £25,000 at age 65 (the cap will be adjusted according to the age at which compensation comes into payment).

   Once compensation is in payment, the part that derives from pensionable service on or after 6 April 1997 will be increased each year in line with the Retail Prices Index capped at 2.5%. Again, this could result in a lower rate of increase than the scheme would have provided.

   In addition there will also be compensation for certain survivors.

Annex B - Declaration of structure of scheme

Pension Schemes Registry number:

1. I declare that ……………………………… [name of scheme] is structured on the following basis:

(a)	☐	non-segregated scheme with requirement to segregate on cessation of participation of an employer
(b)	☐	non-segregated scheme with discretion to segregate on cessation of participation of an employer
(c)	☐	non-segregated scheme to which neither (a) nor (b) applies
(d)	☐	segregated scheme with requirement to segregate on cessation of participation of an employer
(e)	☐	segregated scheme with discretion to segregate on cessation of participation of an employer
(f)	☐	segregated scheme to which neither (d) nor (e) applies

These categories mirror the categories set out in Paragraphs 74 and 75 of the Pension Protection Fund (Multi-employer Schemes) (Modification) Regulations 2005 (the "Regulations") or Regulations 74 and 75 of the Pension Protection Fund (Multi-employer Schemes) (Modification) Regulations (Northern Ireland) 2005.

2. I attach a list of the names and company numbers of all the "employers" in the scheme as at the date of this declaration for the purposes of the Regulations, separated by section where relevant.

……………………………………
For and on behalf of the trustees/managers of the pension scheme above

Dated ……………………………

Annex C - Transitional provisions for estimating underfunding

As set out in Chapter 8, the Board is proposing to adjust data from the most recent MFR valuations for the purpose of assessing underfunding for those schemes which do not submit a s179 levy valuation to the Board by 31 December 2005.

MFR valuations are based on scheme benefits and use a statutory basis for valuation.

Section 179 levy valuations are based on scheme benefits adjusted to allow for the main differences between the Pension Protection Fund level of compensation and the level of scheme benefits. In particular the scheme benefits are adjusted so that indexation is allowed for on the Pension Protection Fund basis and the liabilities for those under the Normal Pension Age of the scheme allow for the 90% level of compensation and the compensation cap.

Section 179 levy valuation liabilities are calculated on a basis which approximates to an insurance buy out level.

It is therefore necessary to make adjustments to the MFR results to allow for the differences in the benefits valued and the basis of valuation. In addition, as the effective dates of the MFR valuations could span about 4 years, it is necessary to roll forward the results from the valuation date to a date consistent with that in the s179 levy valuations being submitted, so that the valuations are on broadly consistent bases.

The available MFR data will be collected in the Pensions Regulator's scheme return including:

(a) date of the MFR valuation
(b) value of assets
(c) value of liabilities, showing the values separately for pensions in payment, deferred members and active members
(d) Expense allowance (which may be included in the figures in (c) or shown separately).
(e) Information on the level of indexation of pensions in payment in respect of service before April 1997

Adjustments for compensation level

In order to take account of the difference between scheme benefits as used in the MFR valuation and the Pension Protection Fund level of benefits as used for a s179 levy valuation, it is proposed to make adjustments as follows:

(a) For pensioners, the liabilities will be adjusted to take account of the level of pension increases guaranteed by the scheme for pre-April 1997

service and therefore included in the MFR valuation but which should be excluded from a s179 levy valuation. The factor will depend on the information provided in the scheme return on the scheme's indexation provisions. Some pensions in payment will be in respect of members who are below the Normal Pension Age of the scheme at the valuation date and who should be subject to the 90% factor and the cap. Further investigation will be carried out to determine any factors which might be used to derive suitable adjustments to the pensioner liabilities.

(b) For active and deferred members, the liabilities will be multiplied by 0.9 to take account of the 90% level of compensation for those under the scheme's normal pension age. They will also be adjusted in a similar way to the pensioner liabilities to allow for the estimated impact of the difference in pension increases.

The Pension Protection Fund will estimate the average ages of pensioner, deferred and active members in order to derive suitable average factors for each of the indexation adjustments. The factors will also take into account the relative values of pre- and post-April 1997 liabilities.

Further consideration will be given to possible adjustments for the compensation cap.

Adjustment for differences in valuation factors

Adjustment to liabilities

The economic and demographic assumptions to be used for MFR valuations are set out in Actuarial Guidance Note GN27 and for the s179 levy valuations are set out in Pension Protection Fund guidance. Factors will be calculated appropriate to valuing each of the three types of scheme member on both of these bases and at the relevant dates. The liabilities will then be adjusted in line with the different factors. To make the results consistent with up to date s179 valuations, the results will be increased in line with the change in average earnings between the date of the MFR valuation and 31 December 2005.

Adjustment to assets

The scheme return will include an analysis of the scheme assets contained in the most recent audited financial statement as well as the total amount of the assets at the MFR valuation date. It is proposed to update the value of assets as at the MFR valuation date taking account of the distribution of assets in the latest accounts and the changes in suitable indices for each of the asset categories.

Glossary

Active member	A person who is in pensionable service under an occupational pension scheme.
Assessment period	If a qualifying insolvency event occurs in relation to an employer of an eligible scheme, this will trigger the beginning of an assessment period. During this period the Pension Protection Fund will assess whether or not it must assume responsibility for the scheme.
Associated	A pension scheme which has more than one sponsoring employer and where the sponsoring employers are linked to the same parent company or have a financial dependency on each other.
Closed scheme	A pension scheme which does not admit new members. Contributions may stop being paid and benefits in relation to future service may stop accruing.
Deferred member	A member of an occupational pension scheme who is no longer accruing benefits in respect to current service but is not yet a pensioner.
Deficit	See underfunding.
Defined Benefit pension scheme	This is where the rules of the scheme decide how much pension the member will get. There are different ways of working out the size of the pension, but the member will know which system the scheme uses. The most common type of defined benefit pension scheme is a final salary scheme. A defined benefit pension scheme may include the defined benefit part of a hybrid scheme, for example a scheme that pays a combination of defined benefit and money purchase benefits.
Eligible schemes	A Scheme as set out in s126 of the Pensions Act 2004. Eligible schemes will be liable to pay the Pension Protection Fund levy and the scheme members may be entitled to compensation should a qualifying insolvency event occur in relation to the sponsoring employer.
Exempt schemes	Pension schemes which are not liable to pay the pension protection levies and whose members will not be eligible for Pension Protection Fund compensation.
Hybrid schemes	An occupational pension scheme which offers both defined benefit and money purchase benefits.
Initial levy	Money paid to the Pensions Protection Fund by eligible schemes, dependent on the number of active, deferred and pensioner members.
Insolvency event	These vary depending on whether an employer is an individual, a company or a partnership.
Minimum funding requirement	A requirement under section 56 of the Pensions Act 1995 that, under a prescribed set of actuarial assumptions, the value of the assets of a defined benefit pension scheme should not be less than its prescribed liabilities.

Money Purchase pension scheme	A scheme which provides benefits calculated by reference to contributions.
Multi-employer schemes	Occupational pension scheme which has more than one sponsoring employer.
Non-sectionalised scheme	A multi-employer scheme which is not divided into sections.
Occupational pension scheme	A pension scheme organised by an employer or on behalf of a group of employers to provide pension benefits in respect of one or more employees on leaving service or on death or in retirement.
Occupational pensions regulatory authority (OPRA)	An independent body set under the Pensions Act 1995 that regulates occupational pension schemes. This has now been replaced by the Pensions Regulator with effect from 6 April 2005.
Open scheme	A pension scheme which admits new active members.
Pensioner member	A member of an occupational pension scheme who is currently receiving a pension, including those dependants currently receiving pension following the death of a member.
Pension protection levy	Money paid to the Pension Protection Fund by eligible schemes to pay towards the cost of compensation. See initial levy and risk based levy.
Risk based levy	Money paid to the Pension Protection Fund by eligible schemes, dependent on the level of underfunding, the insolvent risk posed by the employers, and other risk factors.
s179 levy valuation	An actuarial valuation undertaken by all eligible scheme to determine the underfunding risk for setting the risk based levy.
Scheme actuary	The named actuary appointed by the trustees of an occupational pension scheme under the Pensions Act 1995.
Sectionalised scheme	A multi-employer scheme which is divided into two or more sections where: (a) any contributions payable to the scheme by an employer in relation to the scheme or by a member are allocated to that employer's or that member's section; and (b) a specified proportion of the assets of the scheme is attributable to each section of the scheme and cannot be used for the purposes of any other section.
Sponsoring employer	An employer who has agreed to provide benefits to employees under a pension scheme.
Surplus	The excess of the value of the assets over the value of the liabilities in a defined benefit pension scheme on a particular basis.
The Pensions Regulator	The new regulatory body for occupational pension schemes in the UK which replaced OPRA from 6 April 2005.
Transitional period	Four year period commencing 1 April 2006

Trustee	For an occupational pension scheme set up under a trust, a trustee is a person or a company appointed to carry out what the trust must do. They must follow the laws that apply to trusts.
Underfunding	This is when the value of a pension scheme's assets is less than the value of its liabilities.
Wind up	The process of terminating an occupational pension scheme, usually by purchasing immediate and deferred annuities for the beneficiaries, or by transferring the assets and liabilities to another scheme in accordance with the scheme documentation or any laws that may apply.

Abbreviations

ACA	Association of Consulting Actuaries
DB	Defined benefit
DC	Defined contribution
FRS 17	Financial Reporting Standard No. 17
FoI	Freedom of Information
GAD	Government Actuary's Department
MFR	Minimum funding requirement
NAPF	National Association of Pension Funds
ONS	Office for National Statistics
OPRA	Occupational pensions regulatory authority
S&P	Standard & Poor's
RIA	Regulatory impact assessment
TPR	The Pensions Regulator

Pension
Protection
Fund

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

Please quote reference PPF0504.

Telephone: 020 8867 3297
Email: pensionprotectionfund@ecgroup.uk.com

www.pensionprotectionfund.org.uk

©The Board of the Pension Protection Fund 2005

Ref: PPF0504

CDS/420559