The Pension Protection Fund (PPF) and the Fraud Protection Fund (FPF) Cliff Speed & Phil Page 30 November 2004

The PPF - questions

- Why?
- What is the PPF?
 - -How will it operate?
 - —When will this happen?
- What can we learn from the PBGC?
- What questions remain about the PPF?
- How should the levies be set?
- 2x 50 min sessions

The PPF - questions

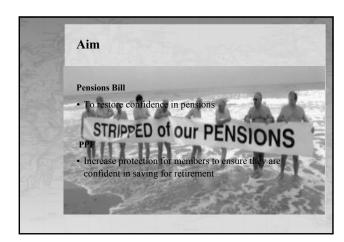
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- What questions remain about the PPF? (Phil)
- How *should* the levies be set?

(Cliff)

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2x 50 min sessions



Pension Protection Fund Who will run it? Board of the PPF Chairman, Chief Executive and at least 5 "ordinary members" Majority to be non-executives Chairman to be appointed by Secretary of State Appointment of Chief Executive and first 5 ordinary members initially by Secretary of State, subsequently by Board PPB will also be responsible for the Fraud Compensation Fund (FCF)

Pension Protection Fund Protected liabilities Members over NPA (and ill-health pensioners) 100% of benefits payable under scheme Members under NPA (including early retirement pensioners) 90% of banefits payable, subject to 'compensation cap' https://doi.org/10.1006/1

Pension Protection Fund How will it be funded? · Levies in respect of "eligible schemes" (excludes pure money purchase schemes and others to be prescribed in regulations) · Assets of schemes for which PPB assumes responsibility • Investment returns (bonds + some equities?) · Borrowing NO GOVERNMENT FUNDING How much will be raised? • £300m per annum (??), but • Initial levy set by the SoS (for 12 months) — £150m in the first year - Based only on scheme factors (liabilities plus others e.g. no of members) Risk based levy introduced during "transitional period" (Totalling £300m pa ??) — 3 years? How much will be raised? • Final risk-based levy arrangements will apply after "transitional period" (£300m pa) — e.g. 1 April 2009 Summary

An under-capitalised insurance company (does it allow selection against itself?)
....or penalising the stragglers.

Pension Protection Fund Calculation of Levy (1)

Ultimately

- · Based on both 'risk' and 'scheme' factors
- · Must be at least 80% 'risk-based' (see below) (Note: was 50%)
- 'Levy ceiling' applies increased annually in line with earnings (unless PPB recommends and HMT approves larger increase)
- Estimated amount must be no more than 25% higher than that raised in previous year
- Different bases could apply for different types (or sizes) of scheme

nb Regulatory Impact Assessment (RIA) includes "80% risk-based" illustration

Pension Protection Fund Calculation of Levy (2)

During 'initial period' (12 months)

- · Normal rules do not apply
- · Based on 'scheme factors' only for first year

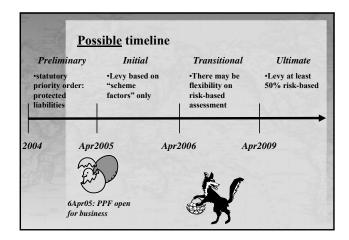
During 'transitional period' (unspecified duration, but perhaps 3 years)

- May be less than ultimate 'risk-based' proportion of 80%
- · Lower 'ceiling' may apply
- Flexibility for schemes to choose whether risk-based assessment applies to them??

Calculation of levy (3) - Issues in transitional period

- Govt suggested PPF Board may wish to "encourage" schemes to move to risk-based sooner rather than later
- -Implies higher scheme-based than risk-based
- —Stay with scheme levy until next (PPF) valuation?

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Pension Protection Fund Calculation of scheme factors Levy

'Scheme factors' include

- number of members,
- pensionable earnings
- liabilities, + other prescribed factors

Possible scale

- Actives £16pa (may be higher in initial and transitional period)
- Non-actives £8pa (ditto)
- •Plus £1 Fraud levy per member

Pension Protection Fund Calculation of risk factors Levy 'Risk factors' must include:

- · funding position
- · chance of employer insolvency

may include

- investment strategy (mismatching)
- · other matters to be prescribed

Pension Protection Fund How much will the levy be?

Regulation Impact Assessment provides illustration based on

- · £300m overall (80% risk-based)
- . £4 par £1 000 for first 200/ une
- £8 per £1,000 for resemble handing

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Pension Protection Fund What triggers PPB involvement?

- Insolvency Practitioner notifies PPB that 'insolvency event' has occurred in relation to employer and whether a 'scheme rescue' is possible
- Trustees must apply to PPB if the employer "is unlikely to continue as a going concern"
- Regulator must notify PPB if it becomes aware that the employer "is unlikely to continue as a going concern"

Pension Protection Fund Assessment Period (1)

- Begins with employer's insolvency or application/notification to PPB
- Actuarial valuation carried out to determine whether 'protected liabilities' are covered
- · PPB will pursue debt on the employer
- Restrictions apply to accrual and payment of benefits, contributions, transfers, investment
- Ends (usually at least 12 months later)....

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Pension Protection Fund Assessment Period (2)

ENDS when

 PPB approves valuation and 'assumes responsibility' - transfer notice issued and trustees discharged

OR

 Valuation shows scheme assets sufficient to cover protected liabilities - trustees must proceed to wind-up

OR

 PPB ceases to be involved because 'scheme rescue' occurs or scheme was not 'eligible' or was set up or amended to exploit the PPF – withdrawal notice issued

Safety valves

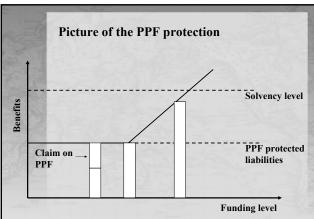
If necessary the PPF Board can

- Adjust the rate of revaluation
- Adjust the rate of increases in payment

If both reduced to zero then

• SoS may reduce the 90%/100% rates of compensation

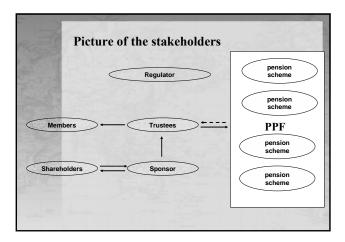
These are nuclear options - self-defeating



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Moral Hazard

·Avoid "debt-on-the-employer"

- ie Corporate structuring, asset stripping etc
- Pay a "contribution" to scheme (or PPF)
- Post 27/4/04 actions, 6 year time limit

•If an employer is "insufficiently resourced"

- Financial Support Direction
- Joint and several liability, or bank g'tee
- Not limited to after 11/6/03

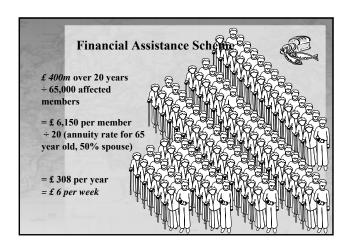
Will the PPF be retrospective?

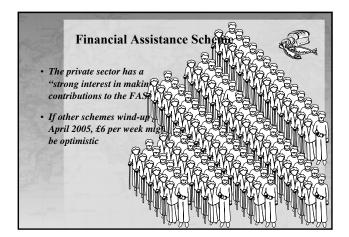
To enter the PPF must have after 5 April '05

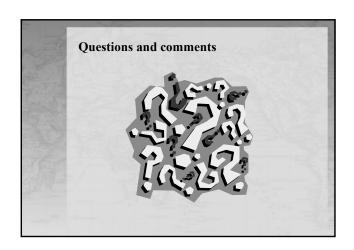
- Scheme must not have started to wind-up before 5th April '05
- Insolvency event
- receiver appointed, enters administration, creditor winding-up, court ordered winding-up
- Not voluntary insolvency

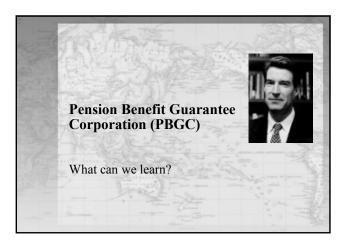
This does <u>not</u> bar companies that have entered insolvency proceedings before April 05

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PBGC - the US inspiration for the PPF

Set up in 1974 to:

- Encourage the continuation and maintenance of DB plans
- Provide timely and uninterrupted payment of pension benefits
- Keep pension insurance premiums to a minimum (!)

In many respects it is the model for the PPF

PBGC - Governance

- No statutory guarantor
- •US Treasury denies it would bail out the PBGC
- Commentators believe it would have to
- -E.g. Savings & Loans scandal

UK Government has stated taxpayers' money will not be used to bail out the PPF

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PBGC Premiums

- •Flat per-member basis until 1988
- Capped risk-based element 1988 1994
- •Cap phased out 1994-1997
- Choice over liability calculation
- Premiums reflect underfunding but not sponsor risk

PBGC - Funding

- · Has been in deficit for most of its life
- Current deficit around \$11bn to be paid by ongoing schemes
- •In 2003, the PBGC had to take over the pension obligations of 152 plans covering 206,000 workers
- In total, the agency estimates pensions nationwide are underfunded by \$450 billion.

PBGC Beneficiaries

US Steel Industry

- 3% of those protected
- 52% of all claims by value

US airline industry

- 2% of those protected
- 17% of all claims by value

Their employees and customers





PBGC's experience ·Analysis of the largest claims on PBGC, representing over 50% of the amount of all claims, shows, -10 yrs out over 85% of sponsors were subinvestment grade status —3 yrs out 100% Differences between PBGC and PPF PPF will use risk based premiums from the start (almost) PPF has differing objectives – emphasis on protection rather than encouraging provision Regulator has a role PBGC - successes? • Currently pays >500,000 pensioners • Has reserves of \$34 billion · Number of DB schemes has fallen - from 112,000, - to 31,000 in the past 20 years.

What questions remain about the **PPF?**

FAQ1

- $\underline{Q1}$ Should the risk based levy depend on: strength of employer (we know it will)

 - investment strategy?other factors?
- $\underline{Q2}$ What proportion of the total levy should be risk based? (Note: will be at least 80%)
- $\underline{Q3}$ What basis (discount rate) should be used to measure the deficit for the PPF?
- Q4 Should the Government stand behind the PPF?
- Q5 How should the PPF invest?

FAQ2

- O6 How will the PPF affect funding strategy for a scheme:
 poorly funded (below PPF liability)?
 well funded (above PPF liability)?
- Q7 How will the PPF affect investment strategy for a scheme:
 poorly funded (below PPF liability)?
 funded up to PPF liability?

 - well funded (above PPF liability)? Does the strength of the employer covenant make a difference?
- $\underline{Q8}$ Will the employer cover the levy in addition to the contributions?
- $\underline{\mathbf{Q9}}$ What moral hazards exist? How should the regulator react?
- $\underline{Q}10$ Is £ 300m the right total amount for the PPF to levy?

Q Should the risk based levy depend on: - strength of the employer? - investment strategy? - other factors? • Should T&N and BP pay the same levy per £1m deficit? • Consider a scheme with assets = protected liabilities · Can these factors be practically incorporated? · Small sponsors/schemes require different treatment • Consider insurance under-writing? Ú Q What proportion of the total levy should be risk based? Lower the risk based levy the greater the cross-subsidy · Cross subsidy bad — Companies paying for promises from competitors · Cross subsidy good - Worst situation schemes not able to pay full for the risk they contribute in full, so need to be subsidised — Is this economics or politics? Ú Q What basis (discount rate) should be used to measure the deficit for the PPF? What happens when sponsor goes bust? Are there "sufficient" funds to meet protected liabilities? If this is on a different (weaker) basis to insurance Co · PPF says you have enough money • Insurance Co says you do not PPF basis must be a proxy for insurance buy-out Gilts - 1/2 %?? Ú

Q Should the Government stand behind the PPF? No • Then companies are in a mutual insurance arrangement

- Cross-subsidy between competing companies

Yes

- Tax-payers pay for company promises
- · Members of company pensions have above average pension provision. Should those with lower pensions subsidise the pensions of those with higher provision?

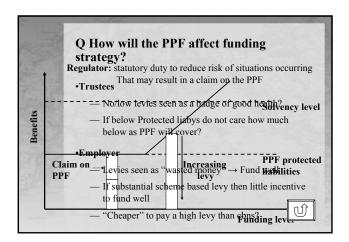
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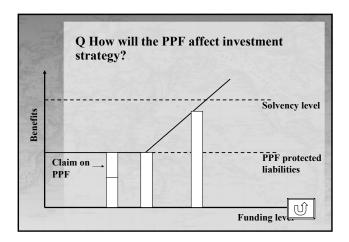
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Behavioural effects on the PPF Board?



Q How should the PPF invest? PPF Board required to consider interests of levy payers and current/potential beneficiaries · How are the interests of levy payers best served?





Q Will the employer cover the levy in addition to the contributions?

E'er pays the "balance of cost" – so yes, but when?

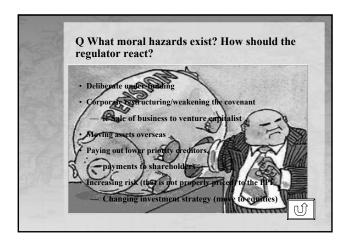
If PPF does not reflect the risk the scheme brings

Levies paid from the scheme reduces FL

Effectively scheme borrowing more from the PPF

The levy (interest) may be a subsidised loan to the sponsor

What is the role of the regulator here?



Q Is £ 300m the right amount in aggregate for the PPF to levy?

Who has the data to tell?

Lessons from DB schemes

- Can not set the benefits AND the cost
- If the costs are set does this mean the benefits are flexible (ie not guaranteed)?

True cost will depend on market conditions

• Size of deficits, strength of employers, asset allocation



How should the levy be set?

If an insurer offered this protection how would it be priced?

Claim = Deficit at insolvency

Levy = PV [deficit at insolvency]

Levy = PV ($E_Q[max(L_p - A, 0) \& insolvency]$)

Levy = Fn(Deficit, Pr[insolvency], Asset allocation)

(if insolvency independent of capital markets)

How should the levy be set? (2)

Need to assess the following

- Deficit
- Pr[insolvency]
- asset-liability mismatch

How to measure the deficit

- · Choice of basis is key
- Best guesstimate is a buy-out proxy
- GN9: gilts -1/2%

arguably unfeasible for it to be anything else!

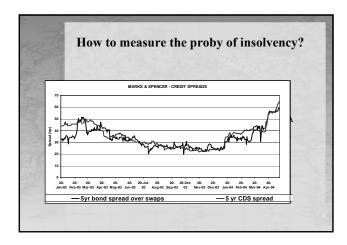
• Take account of all features of Protected Liabilities

Why Charge for the risk of insolvency?

Assume £50m deficit & Pr Insolvency 1% hence charge each scheme \rightarrow £0.5m levy

Sponsor	Deficit £m	Pr[insolv]	Fair Levy £m	Overpayment / Subsidy £m
AAA	50	0.2%	0.10	0.40
AA	50	0.2%	0.10	0.40
A	50	0.5%	0.25	0.25
BBB1	50	0.6%	0.30	0.20
BBB2	50	3.7%	1.85	1.35
BB	50	6.0%	3.00	2.50

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Reminder - PBGC's experience

•Analysis of the largest claims on PBGC, representing over 50% of the amount of all claims, shows,

- —10 yrs out over 85% of sponsors were subinvestment grade status
- —3 yrs out 100%

Proby of insolvency for smaller companies

- Credit scoring is a standard practice in banking
- For example S&P Credit Default tracker
- Wisdom Toothbrushes
- Harris & Sheldon
- Prym Newey (UK)
- Will the PPF just assume unquoted companies are high risk?

Asset-mismatch risk

Will the deficit be stable?

Assessing the correlation between Assets and the interest rate sensitive liabilities.

Consider 2 companies both with assets of 105% of the protected liabilities,

- Co. A has all pension assets in equities
- Co. B has all pension assets in bonds

Company represents a bigger risk to the insurer.

So what is the "right" levy? Out-performance option Proby Insolv $x \in_{\mathbb{Q}} [\max(L_p - A, 0)]$ Levy against funding level for £100m liabilities (lines are for different asset mixes in 20% steps) 200k 150k 100% equity 100k 100% hedged 70% 80% 90% 100% 110% 130% 140%

Why is this approach unlikely?

- Too complex?
 - —For most schemes
 - —But for those that represent largest risk
- Political pressure
 - -No "disincentive" for equity investment
- · Lobbying from weak schemes
 - -Need for subsidy

What will happen? Deficit must be included Rough risk rating for sponsors More accurate assessment for large schemes Where bonds/CDS are traded? Asset mismatch phased in over time? The Pension Protection Fund (PPF) and the Fraud Protection Fund (FPF) Cliff Speed & Phil Page 30 November 2004