

EC review of the IORP Directive

Solvency II for Pensions Working Party Matthew Pearlman, Celene Lee, Jethro Green

Political background Some names and faces





Political background Another name and face





Political background One possible compromise



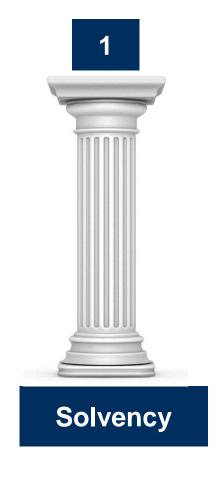


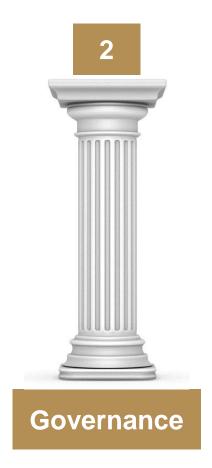
Where are we?





The three Pillars of Solvency II









Quantitative Impact Study (QIS)

What is it

 An attempt to calculate "Solvency II"-style figures on a common and consistent basis for European defined benefit IORPs.

Timetable

- Launch in May 2012 October 2012
- Finalise by September 2012 January 2013
- Preliminary results (April 2013) followed by more detail later ("mid-2013") and further consolation on sponsor support (report at "end June 2013")
- Sponsor support etc "would have to be tested in follow up QIS exercises" (Insurers had 5 QISs)



QIS – who took part

Table 3.1: Approaches to completing the QIS in participating countries				
		IORPs	Supervisor	
Belgium		14	-	
Germany	: Pensionsfonds	11	-	
	: Pensionskassen	27		
Ireland		-	representative data	
Netherlands		9	-	
Norway		7	-	
Sweden	: Pension funds	9 provided input	completed spreadsheet	
	: Pension foundations	-	representative data	
	: Art 4 insurer	1	-	
United Kingdom				

The Holistic Balance Sheet

Options/Method: **Assets** Calculate "market value" and "maximum" of sponsor support Benchmark = Market value via two options Maximum (both based on 50% recovery on default): sponsor **SCR** (1) Probability distributions of future deficits support (via various σ, ρ etc) and sponsor default probabilities (2) Probability tree in which each year the sponsor may default or not default Upper Bound or Maximum = 50% shareholder funds + deficit contributions + 33% of future company "cashflows"

Pension |

Financial

Shown as ancillary own funds

Options/Method:

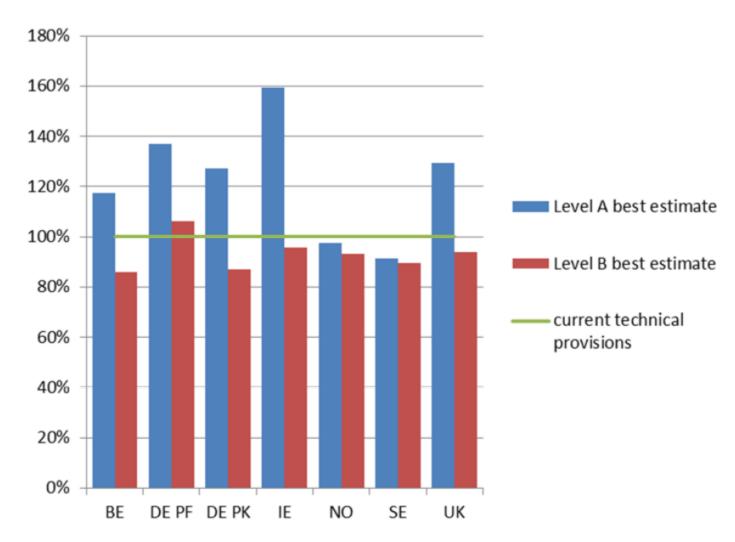
- Expected PPS benefits allowing for company default probabilities
- Simplification option as per (2) above
- Include/exclude as asset
- Include/exclude in SCR calculation
- Interaction with sponsor covenant

Sum of range of shocks: Liabilities • Confidence level 99.5%, 97.5% or 95% Inflation/real risk treatment Equity dampener, duration adjustment Loss-absorbing benefits/security mechanisms (PPS, sponsor support) Solvency Capital Requirement **MCR Options:** 35% of SCR 8% Risk None (but prudent TPs) margin Individual calculations Level A (best Swap curve less 35bps: estimate Options on convergence **Technical** liabilities) methodology. **Provisions** counter-cyclical premium and matching adjustment) Level B Institute **Expected return** and Faculty on assets of Actuaries

6 June 2013

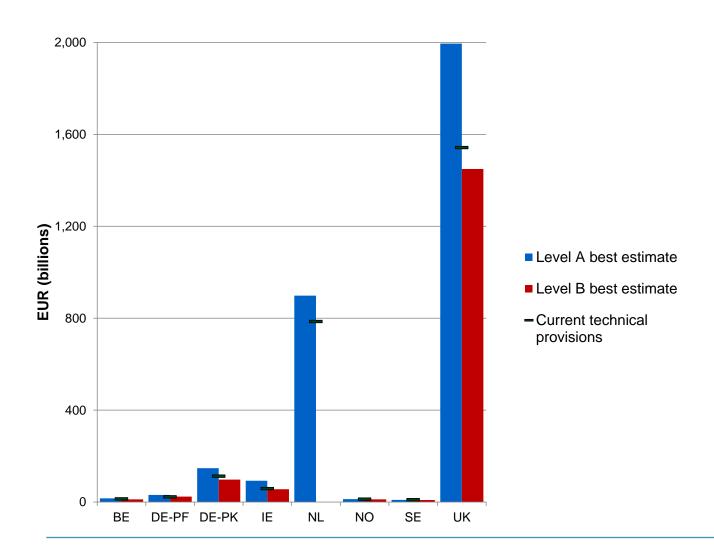
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TPs – Old World and New World



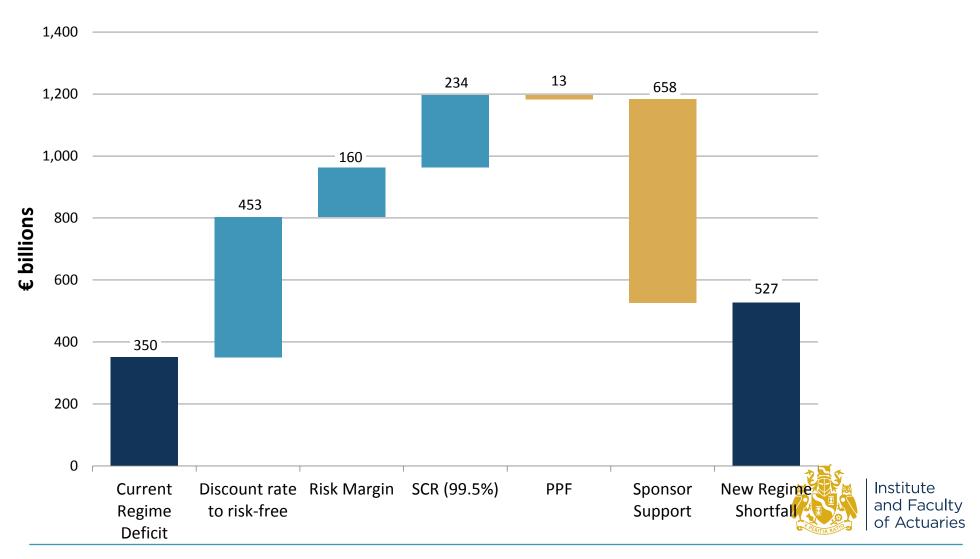


TPs - unscaled

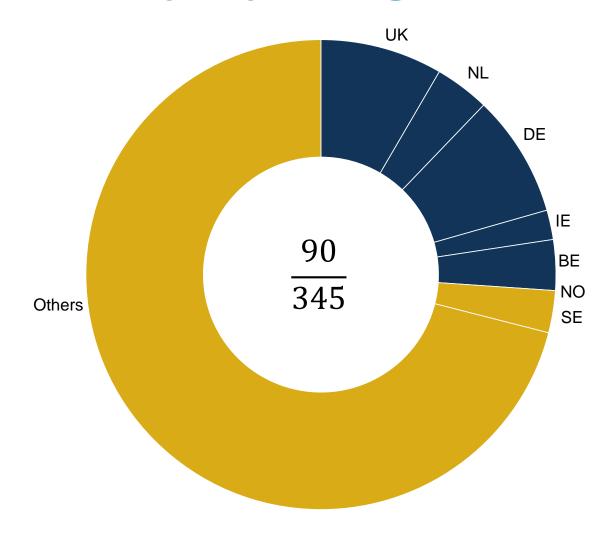




UK's Holistic Balance Sheet

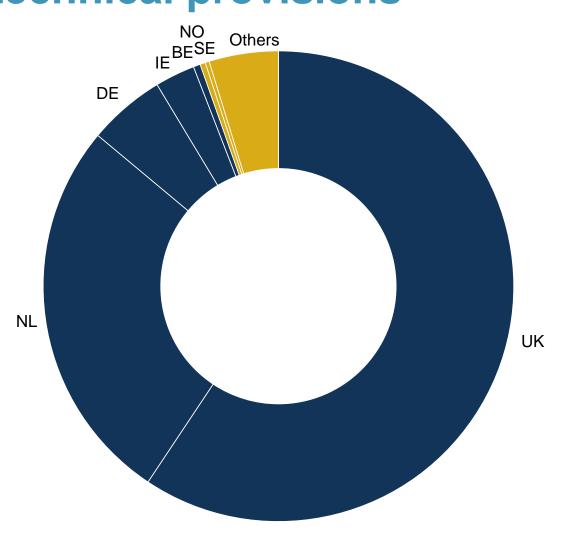


Qualified majority voting





Or by technical provisions





Sponsor support

Benchmark	Upper bound	
Market valuation	Maximum support	
£658 billion	£2,739 billion	
As an asset	As ancillary own fund	
True and fair view?	Aggregation	

- Proposals for revised specifications by end of June 2013 for future QIS
- 6.50 "...the use of this method may materially misstate the value of sponsor support in the UK and therefore the figures mentioned above are highly uncertain...Until the further work on sponsor support is completed, the current results should be interpreted with caution as it is possible that the sponsor support figure will change considerably..."

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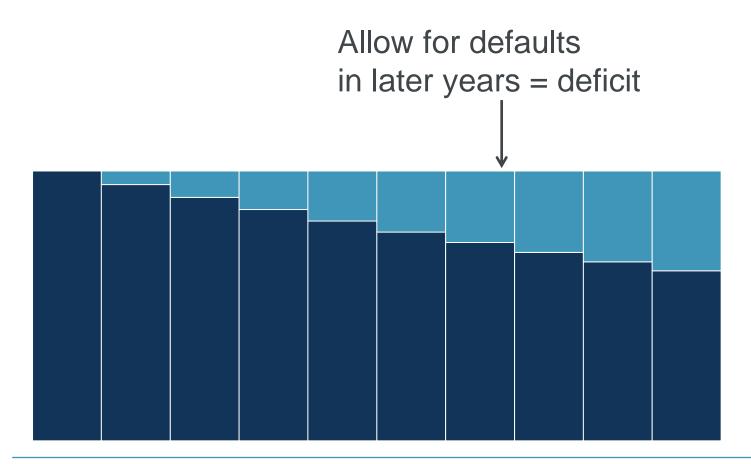
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Recovery plan Actual (assume level, no discounting etc)

Can afford in year 1



Recovery plan Allow for default





Measurement of sponsor covenant Key observations

- Parent company support / goodwill / intangible assets
- Same default probability (4.175%) for companies with credit of B and below
- For UK, unrated assumed to be BBB (0.24%)
- Broad brush recovery rate of 50% cap
- Definition of cashflows considerable potential for interpretation and judgement



Measurement of sponsor covenant Business valuator's view

- Market consistency scheme can never sell its claim on a sponsor
- HBS 6.39 : average of 3 most recent year's cashflows
 - Definition of cashflows
- HBS 6.39 suggests the use of 33% of cashflow as an input
- Use of future business plans EIOPA suggests if sufficient information from future business plans – these can be used but not for QIS.
- EBITDA less capital expenditure, ungeared tax and working capital movements "free cashflow used to support debt and equity" as recognised by most financial analysts
- Suggestion that detailed analysis only carried out if value is less than 3x HBS deficit



Measurement of sponsor covenant Modeller's view – borrowing insurance concepts

- Market-consistent valuation methodology means that we do not need to make a
 direct estimate of the sponsor's probability of default, we only need to observe the
 market price of bearing that default risk.
- Assume pension fund is an unsecured creditor like other corporate debt-holders
- The sponsor's commitment can be a fairly complex form of cashflows:
 - Credit-risky and long-term
 - May be dynamic and path-dependent
 - Sponsor credit risk may be correlated with deficit size ('wrong-way risk')
 - Market-implied cost of sponsor credit risk may not be directly observable, etc.
- Requires market-based estimate of cost of exposure to default risk across all
 possible future circumstances that may arise over the period in which deficit
 contributions are made

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Measurement of sponsor covenant Key questions still unresolved

- HBS meant to be from a member's perspective
- Too optimistic
 - Not giving enough warning about level of insecurity faced by members
 - Not allow them options to seek alternative retirement income
- Too conservative
 - Scare-mongering
 - Leads to wrong decisions being made, e.g. transfer into personal pension market
- Whichever method is adopted, likely to require historic assessment of credit risks
- Systematic underestimate of defaults?



Limitations of QIS

- 18 variants but none on sponsor support
- UK ignores benefit reductions
- Ireland ignores sponsor support
- Netherlands has discretionary benefit reduction powers but ignored them
 - "This means that the relevant items in the holistic balance sheet do not reflect the accurate value"
- Distribution of results by scheme could point to significant weaknesses
- Risk margin set at 8%



First impressions

- 6.50 "...the use of this method may materially misstate the value of sponsor support in the UK and therefore the figures mentioned above are highly uncertain... the current results should be interpreted with caution as it is possible that the sponsor support figure will change considerably..."
- 8.14 "...the required calculations were very complex and extensive....certainly too
 costly for small pension schemes. It was also suspected...that the results are not
 representative."
- 8.15 "...QIS outcomes depend on many assumptions. The 97.5% and 95% confidence levels are derived using an overly simplified method. ...If a new European prudential regime is introduced...the holistic balance sheet values [will change]...Many IORPs concluded that the results of this QIS are therefore not reliable and that more QISs are needed..."



Possible outcomes

More QISs

IORP 2016, PA 2017

Holistic balance sheet

10+ year transition

Sell equities Buy bonds



Close future DB accrual

Pillars 2 & 3

EU sustainability agenda

Scope: benefit reductions

Regulator powers



Questions

Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.

