



Institute
and Faculty
of Actuaries

Integrated Risk Management for DB pension schemes working party

November 2015

Integrated Risk Management for DB Pension Schemes Working Party

Scope:

“The Pensions Regulator’s latest Code of Practice includes guidance to trustees on integrated risk management techniques i.e. ways of assessing the three keys risks relating to defined benefit pension schemes – funding, investment and covenant – and creating a framework for the management of these risks.

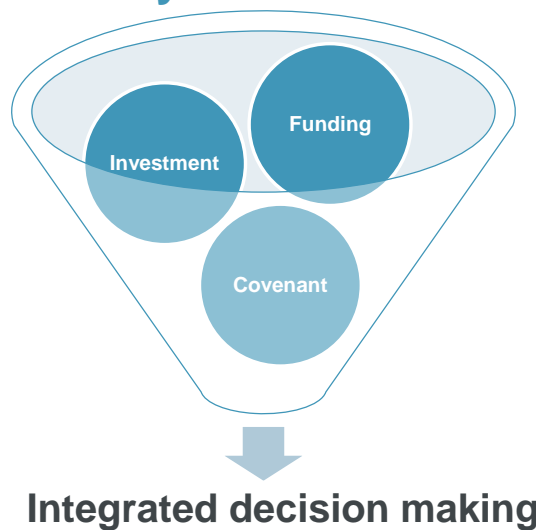
The concept of risk management is very familiar to members of the IFoA and the expertise that members have in this area means that the IFoA can make a significant contribution to this debate, and potentially lead the way in establishing risk management models that would be helpful to pension scheme trustees and sponsors”.

Session purpose

- To identify the needs of actuaries in regard to IRM work for DB pension schemes
- To provide a first cut of the working party's assessment of its potential activity in this area
- To extend the working party's understanding of solutions
- To encourage actuaries (in all roles) to grasp the opportunities presented by ERM/IRM

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What do we mean by IRM



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What does good IRM look like...



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What does good IRM look like...



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Short term vs long term

A problem or the actuary's USP?

What happens?

- Covenant reviews often based on sense-checking short term business plans
- Investment risk measured by 1 year VaR

What matters?

- Sustainability of covenant over the long term
- Long term success/risks of investment strategy

Actuaries can give a long term focus to decision making

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Our goals...

Help actuaries develop IRM techniques

- Paper giving ideas and detailed case studies demonstrating “good” IRM in practice (spring/summer 2016)
- Presentation at IFoA Pensions Conference (summer 2016)

Help develop the regulatory framework

- The Pensions Regulator's IRM guidance for Trustees
- FRC - Pensions TAS (TAS 300)

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Specific issues to address

Effective communication	Identify risk capacity/appetites of the parties	Cost effective quantitative assessment of risk	Allocating risk to different stakeholders
Develop appropriate risk distribution(s) and capital structures	Internal monitoring tools and options to respond to changes	Integrating sponsor and trustee analyses	External disclosures to shareholders members or regulators

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Past contributions from the profession

2001	Pensions, Funding and Risk (Chapman, Gordon & Speed)	Pension scheme funding in the context of shareholder value
2011	Entity-wide risk management for pension funds (Kemp&Patel)	Applying ERM philosophy to schemes
2012	PPF financial management	Detailed case study of application of ERM principles
2013	Valuing sponsor support* (PwC)	Covenant adviser's approach to the valuation problem
2013	Market-Consistent Valuation of a Defined Benefit Pension Fund's Employer Covenant and its use in Risk-Based Capital Assessment *(B&H)	Theoretical valuation of covenant

*These papers were prepared to support IORP2 research.
You don't have to believe in IORP2 to find them useful!

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PPF case study

Objective

- Self-sufficient by 2030 (i.e. they will no longer need to raise any levies.), i.e.
- Being fully funded on a reasonably risk-free measure of liabilities;
- Removed exposure to interest rate and inflation risk, risky assets; and
- Acquired protection against residual risks (longevity and residual insolvency).

Constraints

- Decreasing DB scheme population reduces levy raising powers.
- Remaining schemes likely to be better funded than they are now
- Difficult to raise levies from a smaller population of well funded schemes.

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PPF case study

Modelling

- A stochastic claims and balance sheet mode
- Generates a distribution of asset return, insolvency and longevity scenarios over a chosen time horizon
- Projects a distribution of possible PPF balance sheet outcomes.

Decision making

- The probability of reaching self-sufficiency by 2030
- Downside risk: Maximum deficit reached with 90% probability

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Tools menu

Analyse

- Stochastic asset/liability/covenant modelling
- Investment/covenant scenarios
- Sponsor cashflow potential
- Sponsor credit rating
- Benchmarking/surveys

Plan

- Right size risk allocation
- Journey plans
- Agreed trigger actions
- Contingency plans/fire drills

Govern

- SFP/SIP
- Deeds of agreement
- Risk registers (?)
- PPF model framework

Monitor

- Dashboards
 - Funding/investment
 - Business performance
 - Gearing/credit rating
- Metrics connecting these

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Regulatory perspectives

TPR

- Expects IRM to be at centre of scheme financial management
- Part 3 morphing into IRM framework (with EU support?)
- Sets principles but [can't/won't/shouldn't] define how to do it
- Neutral on which profession leads

FRC – new listed company requirements from 2015 year-end R&A

- Principal risks & uncertainties:
- Robust assessment: stress and scenario tests
- Reverse stress tests
- Long term viability statement: 3 to 5 years worth of risk

FRC – New Pensions TAS

- Likely to include something on IRM

Others (charities, government, etc)

- Typically advocating similar models

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Questions

Comments

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Time to vote

- You have 5 votes
- Feel free to add additional items and/or comments

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And the WP's risk management

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References

Pensions, Funding and Risk

<http://www.actuaries.org.uk/research-and-resources/documents/pensions-funding-and-risk>

Entity-wide risk management for pension funds

Paper - <http://www.actuaries.org.uk/research-and-resources/documents/entity-wide-risk-management-pension-funds>

Slides - <http://www.actuaries.org.uk/research-and-resources/documents/sessional-research-event-entity-wide-risk-management-pension-funds>

Financial management of the UK Pension Protection fund

<http://www.actuaries.org.uk/research-and-resources/documents/financial-management-uk-pensions-protection-fund>

Valuing sponsor support

Paper - <http://www.actuaries.org.uk/research-and-resources/documents/valuing-sponsor-support>

Slides - <http://www.actuaries.org.uk/research-and-resources/documents/sessional-research-event-holistic-balance-sheet-and-employer-covenant>

Market-Consistent Valuation of a Defined Benefit Pension Fund's Employer Covenant and its use in Risk-Based Capital Assessment

Paper - <http://www.actuaries.org.uk/research-and-resources/documents/market-consistent-valuation-defined-benefit-pension-fund%E2%80%99s-employer-covenant>

Slides - <http://www.actuaries.org.uk/research-and-resources/documents/sessional-research-event-holistic-balance-sheet-and-employer-covenant>

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