ERM Developments and Opportunities for Actuaries (abridged)

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ERM Developments and Opportunities for Actuaries

- Recent developments in Enterprise Risk Management (ERM)
  - Solvency II
  - Corporate Governance
  - IORP II
  - Systemic Risk
- How well positioned are actuaries to seize the opportunities?

ERM

- COSO (2004): "*Enterprise risk management is a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within the risk appetite, to provide reasonable assurance regarding achievement of entity objectives*"

Adapted from Chapman (2006)

Differentiators / key enablers

Differentiators

- Considers all risks
- Applied across whole business
- Risk embedded into decision-making processes

Key enablers

- Commitment and leadership from the top
- Risk owned by business
- Supporting risk management function
- Effective communication to all stakeholders of how risk is managed

Source: Slides for Kemp and Patel (2011). *Entity-wide Risk Management for Pension Funds*

Is ERM quantitative or qualitative?

Quantitative?	Qualitative?
Risk measures, Hedging, Pricing, Sensitivities, ...	Governance, Culture, Disciplines, Policies, ...
Value-at-risk, TVaR, Expected shortfall, Probability of default, Expected/unexpected loss, Volatility, RAROC, Economic capital, …	Risk appetite statements, Risk challenge, Misalignment of interests, Board engagement, Risk capture and Ranking, Workshops, Processes, ...

- Answer: both
- And with cross-over elements, e.g. stress testing and reverse stress testing involve defining scenarios that might be problematic and then quantifying their impact, but with less focus on probability of outcome

Recent Developments in Enterprise Risk Management (ERM)

- Solvency II
- Corporate Governance
- IORP II
- Systemic Risk

Solvency II

- Requires firms to implement a comprehensive risk management framework and other governance elements (i.e. 'ERM')
- Firms need to carry out 'in development' Own Risks and Solvency Assessment (ORSA) in 2014 and in 2015 before go-live in 2016
- Draft Delegated Act, published October 2014
  - Systems of governance covered in Articles 258 – 275
  - Firms required to have a risk management function (269), compliance function (270), internal audit function (271) and actuarial function (272)
  - Capital add-ons can be imposed in relation to deviations from SCR assumptions (282), transitional measures (284 – 285) or in relation to deviations from governance standards (286)

Corporate Governance (1)

- FRC's updated Corporate Governance Code applies to accounting periods beginning on or after 1 Oct 2014 and to all companies with Premium listing of equity shares regardless of where incorporated. Includes sections on:
  - Leadership, Effectiveness, Accountability, Remuneration and Relations with Shareholders
- Section on Accountability now includes:
  - "*The board is responsible for determining the nature and extent of the principal risks it is willing to take in achieving its strategic objectives. The board should maintain sound risk management and internal control systems.*" [C.2]
  - "*The board should establish formal and transparent arrangements for considering how they should apply the corporate reporting, risk management and internal control principles and for maintaining an appropriate relationship with the company's auditors.*" [C.3]

Corporate Governance Code (2)

- C2.2 indicates that Directors should:
  - Confirm in annual report that they have carried out a "*robust assessment of the principal risks facing the company, including those that would threaten its business model, future performance, solvency or liquidity.*"
  - Monitor and review company's risk management and internal control systems (including financial, operational and compliance controls) and "*at least annually, carry out a review of their effectiveness, and report on that review in the annual report.*"
- Although C.3 refers to risk management it primarily relates to the board audit committee, internal audit function and interaction with external auditors
  - With a presumption that auditors are the likely experts in risk governance?

IORP II

- According to NAPF (2014), the proposed IORP II Directive is currently being discussed in EU's 'co-decision' process, involving detailed scrutiny by Council of Ministers and the European Parliament.
- Proposals as at 17 September 2014 involve:
  - New / modified requirements relating to System of Governance (Articles 21 – 32), including Articles covering fit and proper requirements(23), remuneration (24) and existence of specific control functions (25) including risk-management (26), internal control (26a), internal audit (27) and, where appropriate, actuarial (28)
  - Requirement to carry out a 'risk evaluation for pensions' (29)
- Illustrative of wider societal trend towards enhanced risk management disciplines

Systemic risk

- Politicians and regulators worry about systemic risk:
  - System-wide impact of the recent financial crisis and maybe also note that political revolutions have often been triggered by financial crises
- They are increasingly sceptical about different components of the financial sector being inherently different when it comes to potential to create, amplify or transmit systemic risk. Problems during the crisis included:
  - Lehman, Freddie Mac, Fannie Mae but also AIG, money market funds and shadow banks
- Some firms now deemed global systemically important financial institutions (G-SIFIs), including both banks (G-SIBs) and insurers (G-SIIs)
  - Financial Stability Board has been consulting on including others, i.e. non-bank non-insurer (NBNI) G-SIFIs, see FSB (2014)

Haldane (2014) (Bank of England) notes

- "*Macro-prudential policy is gaining ground every bit as quickly as central bank independence did in the 1990s. It has quite radical implications. Pre-crisis credit cycles were allowed to operate largely unconstrained. Macro-prudential policy overturns that orthodoxy, with policy instead leaning against the credit cycle to moderate its fluctuations, both during the upswing and the downswing.*"

- He is hopeful that the financial system and economy may become less prone to the low-frequency, high-cost banking crises seen in the past.

- However, he thinks that the financial system could "*exhibit a new strain of systemic risk – a greater number of higher-frequency, higher-amplitude cyclical fluctuations in asset prices and financial activity, now originating on the balance sheets of mutual funds, insurance companies and pension funds*" which could in turn be transmitted to, and mirrored, in greater cyclical instabilities in the wider economy

Consequence of decision to have some G-SIIs

Presumes that G-SII's will eventually be subject to higher capital requirements

Requires an agreed common base against which to measure "higher"

Requires a global capital framework (c.f. Basel III)

Hence IAIS proposals for a global **Insurance Capital Standard** (ICS) by end 2016 and

Basic Capital Requirements (BCR) by end 2014

Further implications

- FSB’s proposed assessment methodologies for NBNI G-SIFIs explicitly designed to be consistent with those for other G-SIFIs
  - Likely implies longer term harmonisation of capital adequacy (and governance) requirements across financial services industry?
- Where do pension funds fit into this picture?
  - Some might be large enough to fall within scope of some of the tests proposed by FSB (2014)
  - But most of these are sovereign or local government schemes and in any case asset management community pushing back on meaningfulness of “size” measure

Opportunities for Actuaries

- Increased societal focus on improved risk management, e.g. Walker Review, fall out from 2007-09 credit crisis, updated Corporate Governance Code
- Actuarial Profession committed to developing market and business aware actuaries, building brand recognition, facilitating networking and rolling out CERA designation in context of competition from other professional bodies. But:
  - Do we need to align other aspects of actuarial training and CPD to needs of actuaries wishing to specialise in ERM?
  - Do actuaries typically have sufficient “market” or “governance” expertise to compete effectively against other risk managers or accountants

ERM Developments and Opportunities for Actuaries

- Recent developments
  - Continued societal trend towards enhanced risk management
- How well positioned are actuaries?
  - Lots of opportunities and, if entrepreneurial, should be able to stress rounded skill-set
  - But also potential to fall into an uneasy middle ground
    - Maybe not seen as strong enough quantitatively or in business/market knowledge for some activities?
    - Maybe not seen as strong enough in governance disciplines for some others?

Important Information