

# **IAA Presidents Forum**

**Update on**

**Enterprise Risk Management (ERM)**

**Paris, 28 May 2006**

# Outline of Agenda

1. IAA Presidents Forum in Rio 2005 identified Risk Management as a key area of focus for the IAA
2. Clarify what is meant by ERM
3. Growing importance of ERM
4. Why should actuaries be involved in ERM ?
5. What have actuaries been doing in ERM ?
6. Update on ERM International Institute (ERMII)
7. Update on work in ERM of various actuarial bodies
8. Questions for discussion

# 1. Risk Management – Focus issues

Key issues arising from discussion at the last IAA meeting :

- growing the profession in Risk Management space;
- educating the average actuary on Risk Management;
- developing CPD in Risk Management;
- coordinating the flow of information as practice develops;
- providing international interface with regulators and rating agencies;
- exercising and demonstrating thought leadership; and
- strategic partnering with ERMII, GARP, PRMIA ?

## 2. What is ERM?

- Philosophy of managing risks holistically to achieve the desired balance between achieving stakeholder value and managing risk exposure
- Encompass all risks from sources across the enterprise
- Embedded within organisation at all levels, reinforced through actions of the Board and senior management

# Components of ERM

- Identifying and quantifying risk in the organisation
  - The scope is the whole of the enterprise
  - Considers financial, strategic, operational and other risks
  - Continual reassessment
- Organising how the risks will be managed
  - Structure
  - Implementation
  - Coordinated across enterprise, considers interdependencies
  - Communication of philosophy set by Board (both internally and externally)
- Monitoring
  - For process and quality of implementation
  - Prospective and retrospective
  - For new risks that emerge
- Taking Action
  - Pre-emptive and reactionary
  - Involves people at all levels

# 3. Growing importance of ERM

- Basel II requirements for banks – need to model and hold capital for operational risk;
- Insurance regulators around the world planning to introduce similar capital requirements for operational risk;
- Ernst & Young's Global Risk survey finds Investors are rewarding and penalising companies based on their approach to risk management;
- S&P introduced ERM into rating assessments
- FASB & IASB – emerging disclosure requirements

# Ernst & Young Global Survey - Highlights

- Risk levels are rising
- The roles of the CEO, CFO and the Board have been changed by risk management issues, in terms of greater responsibility and accountability for risk and risk management
- There is definite room for improvement in risk coverage and formalization
- Investment in risk management will rise
- Risk management challenges over the next three to five years include developing a more integrated and systematic approach, clarifying ownership of risk and embedding a risk culture throughout the organization.

# S&P introduction of ERM into ratings assessments

- 17 October 2005 S&P announces it will include an assessment of the risk-management practices of financial services firms (The ERM category)
- This ERM category will become a separate and major category of the rating assessment
- The ERM evaluation allows a more prospective view of an insurer's risk profile and capital needs
- The quality of management in the area of risk and the strategic choices relating to risk and return will be emphasized



# Accounting Standard frameworks – FASB and IASB

- **FASB (in “Concepts Statement No 1”) concluded:**  
“...Financial reporting should provide information to help investors, creditors, and others assess the amount, timing and uncertainty of prospective net cash inflows to the related enterprise (*para 39*)
- **The IASB framework:**  
“The economic decisions that are taken by users of financial statements require an evaluation of the ability of an entity to generate cash and cash equivalents and of the timing and certainty of their generation (*para 15*)

*Note the focus on information about uncertainty / certainty*

# “Fair” Value – Issues and Risks

More reliance on estimates

- Many items are not traded in liquid markets & lack verifiable price ;
- Determining “fair value” involves complicated models based on subjective estimates
- At best, estimates are difficult for investors/auditors to verify or compare across companies
- At worst, unscrupulous could manipulate models to flatter bottom line e.g. Enron

# Fair value – Solutions and Consequences

## Potential solutions

- Disclose assumptions behind estimates
- Disclose how different assumptions would affect profits
- Reveal whether estimated values have altered over time & why
- For key items show historical cost & updated fair value explaining derivation
- Objectivity and independence of those making estimates and those verifying them
- Harder scrutinising of numbers by investors
- Better disclosure e.g. how much profits are based on facts compared to estimates, how previous estimates panned out

## Consequences

- Encourage managers to value things realistically
- Highlights difficulty of measuring a firm's performance – a complex subjective notion which cannot be captured in a single profit figure
- Helps investors decide whether estimates are fair or foolhardy and to think harder about what a business is worth

# So - What risk issues does this raise?

- Are we monitoring and reporting risk issues adequately ?
- Are we allowing for the impact of accounting changes in our investment decisions ?
- How are others dealing with problems we also have to deal with e.g. estimates, assumptions, judgements ?
- What is the relationship between profits, risk and share value ?
- Are the rules resulting in right outcomes and behaviours ?
- What risks are we not considering e.g. carbon / water risk exposures ?
- Are we considering all of the issues that may impact us ?

## 4. Why should actuaries be involved in ERM ?

Actuaries have capacity to:

- develop forward looking financial and risk reporting analytics
- deal with and understand most risk aspects across an enterprise;
- allow for uncertainty in outcomes and timing;
- communicate results in complex situations;
- critically evaluate and review business operations;
- provide independent comfort to boards that due process has been followed.

# 5. What have actuaries been doing in ERM?

High level risks		Life Insurance	Retail Banking (mortgage)	General Insurance
Expenses too high	Competitive pressure on prices		Competitive margin squeeze	Hardening / softening of rates (insurance cycle)
	Inefficient expense management	<b>Expense over-runs</b>		
	Lower business volumes than anticipated	New business risk <b>Lapses</b>	New business volumes <b>Prepayment risk</b> <b>Churn risk</b>	New business volumes Poor renewal rates
	Operational risks (and one-off expenses)	Unit pricing risks Data integrity risks	<b>Operational risk</b>	Data integrity risks
Claims or default costs higher than anticipated	Poor quality / high risk customers	<b>Underwriting risk</b>	<b>Credit risk</b>	<b>Underwriting risk</b>
	Inadequate claims handling	Claims management	Default recovery risk	<b>Claims management</b>
	Profit released too early	Reserving risk	Provisioning risk	Reserving risk
	Deterioration of underlying risks	<b>Experience investigations</b>	Increasing defaults	Adverse trend in claim costs
Investment earnings (or debt servicing costs) worse than anticipated	Adverse market movements	<b>Asset / liability mismatching</b> Investment return risk (on surplus assets)	<b>Interest rate risk</b> (market risk) Cost of funding	Investment risk
	Asset defaults	Credit risk		Credit risk
Other strategic risks	Revenue risks			
	Reputation risks...			

**Same risks.... but different names**

# 6. Update on work of ERMII

## Objectives of ERMII

- ERMII will be a partnership between universities and others interested on fostering university based ERM education & research
- ERMII will develop an accreditation system for university ERM programs so that wherever taught in the world, the ERM program will have minimum common attributes

# Why was ERMII formed ?

- Increased demand from investors, rating agencies and regulators for holistic risk management and better corporate accountability and transparency
- Risk Management (and increasingly Enterprise Risk Management) techniques becoming increasingly important
- Increasing scope and importance of the CRO role
- New profession emerging in risk management (CFAs, GARP/PRMIA, etc)
- Actuarial profession needs to make sure it has a “seat at the table”



# What can Local Actuarial Bodies do ?

- Build awareness :
  - Increase profile of ERM in actuarial profession
  - Elevate importance of ERM in business community
  - Run seminars in conjunction with ERMII/Prima/GARP
- Build relationships with local universities affiliated with ERMII
- Develop methodologies and frameworks
- Promote relevant education programs and CPD
- Consider accreditation programs

# Education and CPD

Currently ERM education is fragmented globally.

There is a need for a program that will:

- Enhance opportunities for actuaries

- Develop a focused ERM qualification

- Evolve cross fertilisation of ideas

- Allow actuarial profession to adapt, diversify and grow

# 7. Update on work of various actuarial bodies

- Society of Actuaries (SoA) and
- Casualty Actuarial Society (CAS)
  
- Canadian Institute of Actuaries (CIA)
- Institute of Actuaries (UK)
- Institute of Actuaries of Australia (IAAust)
- Others ?

# Risk Management Section (SoA and CAS )

- Jointly sponsored by SoA and CAS
- Adopting the name of

**ERMAP**

– ERM Actuarial Professionals



- Current section membership of 2,200  
(1,650 SoA members – one of the five largest  
SoA Sections after only 2-3 years)

# ERMAP Objectives

1. Integration with CAS members
2. Member Services
3. Continuing Education
4. Basic Education
5. Research
6. Support of CAS and SoA initiatives

# ERMAP Frameworks

## **Comprehensive Model of Risk (CMR)**

- Single framework for looking at any risk
- Framework for looking at all existing risks consistently
- Lead to the use of best risk management techniques

## **Combined Actuarial Risk Management Toolkit (CARMT)**

- Pool knowledge and talents from all parts of the actuarial profession
- For example, toolkit includes casualty / GI actuaries credibility theory techniques to analyse tail risks and life actuaries asset/liability management techniques

# ERMAP Continuing Education

- Sessions at Spring & Annual SoA & CAS Meetings
- ERM Symposium
- GARP Convention
- Several Seminars (co-sponsored with others)
- Webcasts (Pandemic Influenza, ERM, Other)
- ERM Online Guide
- Local/Regional Meetings

# ERMAP Risk Management News

- Newsletter every 4 months
  - March newsletter (36 pages with 11 articles)
- ERM Credential – Committee is defining
- Risk Management Section discussing affiliation with CIA
- Risk Management Section talking to IoA (UK) about joint activities



# CIA

- Strong support within CIA to become a joint sponsor of the SoA / CAS Risk Management Section - work is under way to see what is needed to make this happen
- Currently considering a form of ERM credential below the Fellowship level, such as an Associate (similar to SoA)
- Currently considering possibility/desirability of CIA becoming a member of ERMII. ERMII viewed as complementing the work of SoA / CAS Risk Management Section

# Institute of Actuaries (UK)

- Recently established a Risk management taskforce
- Sessional meeting on 24 April 2006 to engage in a debate on the role of risk management in their work including questions such as:
  - Which actuarial fields are most advanced in the area of risk management ?
  - Is a change of mindset required to make the most of the opportunities ?
  - What about the part played by the actuarial education system ?
  - Should actuaries look to broaden their experience at an earlier stage in their careers ?

# IAAust

- Currently considering a form of ERM credential at the Fellowship level
- Working with University of NSW (a member of ERMII) to facilitate ERM credential
- IAAust is a founding member of ERMII
- Recently established Practice Committee (equivalent of a 'Section' in SoA terms), following on from work of a Taskforce over the last year

# Questions for discussion :

- Should we partner with ERMII / GARP / PRMIA ? If so, how ?
- How should we coordinate CPD and flow of information ?
- How to interface with regulators and rating agencies ?
- How to pursue ERM opportunities in banking and other opportunities ?
- How can “followers” benefit from ERM activities of leaders ?
- What should IAA be doing ? Is co-ordination required ?