

ERM Fundamentals

CASE Spring Meeting
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Kevin M Madigan, PhD, ACAS, MAAA

What should you know...

Or ... Our Agenda for Today

Definitions of ERM

Differing Standards

Basic Ingredients of ERM

Spectrum of Risk Attitudes

Current Activities

- RIMS: "A strategic business discipline that supports the achievement of an organization's objectives by addressing the full spectrum of its risks and managing the combined impact of those risks as an interrelated risk portfolio".
- CAS: "The discipline by which an organization in any industry assesses, controls, exploits, finances, and monitors risks from all sources for the purpose of increasing the organization's short- and long-term value to its stakeholders".
- COSO: "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 its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives".

- IAIS: "The process of identifying, assessing, measuring, monitoring, controlling and mitigating risks".
- ISO 31000: risk is "effect of uncertainty on objectives"; Risk management is a strategic discipline for making risk-adjusted decisions, and should not be compliance-based
- Corporate Value of Enterprise Risk Management, by Sim Segal (2011): "The process by which companies identify, measure, manage, and disclose all key risks to increase value to stakeholders".
- At least one promoter of GRC: "ERM is the R in GRC if GRC processes (and supporting technologies) are done right."

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- At least one promoter of CRC. "FRM is the R in GRC if GRC processes (an included not agree less!) are done right."

Some similarities, some differences

ERM ≠ ECM

- More on that later

Different ERM Standards

AN OVERVIEW OF WIDELY USED RISK MANAGEMENT
STANDARDS AND GUIDELINES, A Joint Report of RIMS
Standards and Practices Committee and RIMS ERM Committee
- Week of March 14, 2011

Cross walk of 6 ERM Standards

ISO 31000: 2009, Risk Management - Practices and Guidelines

OCEG "Red Book" 2.0: 2009, GRC Capability Model

BS 31100: 2008, Code of Practice for Risk Management

COSO: 2004, Enterprise Risk Management - Integrated Framework

FERMA: 2002, A Risk Management Standard

SOLVENCY II: 2012, Risk Management for the Insurance Industry

Outlines commonalities and differences

Different ERM Standards

From AN OVERVIEW OF WIDELY USED RISK MANAGEMENT STANDARDS AND GUIDELINES:

RIMS RMM ATTRIBUTE	ISO 31000	OCEG	BS 31100	COSO	FERMA	SOLVENCYII
ERM-Based Approach	Х	Х	Х	Х	Х	Х
Process Management	Х	Х	Х	Х	Х	Х
Risk Appetite Management	Х	Х	х	Х	Х	х
Root Cause Discipline	Х		х			Х
Uncovering Risks	Х	Х	Х	Х	Х	Х
Performance Management	Х		х	х	Х	Х
Business Resiliency & Sustainability	Х	Х				Х

Traditional Risk Management

- Identify
- Assess
- Evaluate
- Mitigate
- Monitor
- Holistically

Necessary Ingredients of ERM ... for one recipe (at least)

- Risk Appetite, Preferences, Policies and Standards
- Risk Identification and Measurement
- Risk Targets and Tolerances
- Risk Limits / Controls / Governance
- Risk Language
- Culture
- Environment Encouraging Learning

From Corporate Value of Enterprise Risk Management, by Sim Segal (2011)

10 Key Criteria

Enterprise Wide Scope
All Risk Categories
Integrated Across Risk Types
Aggregated Metrics
Includes Decision Making
Balances Risk/Return Mgmt
Appropriate Risk Disclosures
Measures Value Impact
Primary Stakeholder Focus

ERM Process Cycle

Risk Identification
Risk Quantification
Risk Decision Making
Risk Messaging

Risk Appetite and Preferences

Risk Appetite

Maximum risk organization chooses to take during a defined time period in pursuit of its objectives

Risk Preferences

Which tradeoffs will be made, which combinations are acceptable?

Which risks do you want?

Which risks do you shun?

Which can you live with if you must?

What are you? What do you want to be?

Policies and Standards

Write this down and publish

Identification and Measurement

 Systematically identify, classify and understand key risks

- Measure and evaluate risk in a consistent way across the organization
- Is Economic Capital model necessary for ERM?
 - That depends...

Risk Targets and Tolerances

Targets

- Given appetite, preferences, ID and metrics, develop optimal level of risk desired in pursuit of stated (and agreed upon) objectives
- Tolerances
 - In pursuit of targets, what are tolerable levels of risk?
 - Usually Tolerance > Appetite (not always)
- Write these down and publish

Limits, Controls & Governance

- Limits
 - Thresholds designed to help stay within tolerances
- Controls and Governance
 - Authority levels
 - Track, report, enforce limits
 - Method for resolving breaches
- Write down and publish

Language

- Explicitly strive for clarity in all risk related vocabulary used in organization
- Avoid the use of different words for the same ideas OR same words for different ideas
 - Even in seemingly inconsequential matters
- Communication is essential, hence semantics
 - Take care not to stifle creativity / innovation

Culture

- Resources and focus required at highest levels
- Commitment from all members of the senior management
- ERM "champion" for design, implementation, oversight
 - This is crucial If everyone is responsible then no one is responsible
 - Identified
 - Accountable
 - Authority
 - Chief Risk Officer?
 - Dedicated ERM staff?

Other considerations

- Perceptions of Fairness
- Human Interactions
- Organizational Behaviors
- Remember Traditional Risk Mgmt
 - Identify
 - Assess
 - Evaluate
 - Mitigate
 - Monitor

ERM Fundamentals

- ERM details are never "One Size Fits All"
- Each organization is unique
- Bedrock commonalities inform all ERM
- ERM must be appropriate to the size, scale and complexity of risks faced by organization
- Some risks bring opportunity; others do not and never will
- There is no such thing as "the one, true path"

Recent work of Ingram and Underwood

"(R)isk perspectives fall into four broad groups with almost wholly incompatible views—and only one of those four perspectives is totally compatible with the current paradigm of Enterprise Risk Management (ERM). If proponents of ERM do not offer approaches that make sense for each of the four risk perspectives, ERM can and will fall out of management favor as it had in many firms during the recent boom." The Full Spectrum of Risk Attitude

Alice Underwood and David Ingram

The Actuary, Aug / Sept 2010

The Four Basic Perspectives

- Managers
- Maximizers
- Conservators
- Pragmatists
- All are valid are each is well suited to particular environments
- Most orgs have all four in senior positions

The Full Spectrum of Risk Attitude Alice Underwood and David Ingram **The Actuary**, Aug / Sept 2010

Managers

- Mildly risk averse
- Carefully balance risk and reward
- Reliance on complicated models
- Well suited for risk steering and times of moderate economic growth
- Sustains damage in uncertain times and recessions
- Passes on opportunities during booms
- Some view risk steering as the "only true" ERM

The Full Spectrum of Risk Attitude Alice Underwood and David Ingram **The Actuary**, Aug / Sept 2010

Maximizers

- Not risk averse seek large risks for large gains
- Believe risk is mean reverting
- Focus on pricing risk "correctly"
- Well suited for risk trading during economic booms
- Dangerous when boom is ending / bubble bursting
- View 'ERM' as impediment to profit
- "Cowboys"

Conservators

- Very risk averse
- World is extremely dangerous
- Caution and loss avoidance required at all times
- Well suited for loss controlling and recessions
- 'ERM' gives license to the cowboys
- Misses significant opportunities, focused on survival

- Pragmatists
 - Future unpredictable
 - Highly valued:
 - Flexibility
 - Freedom
 - Limited downside
 - Avoid commitments
 - Strategic planning, risk analysis, and 'ERM' not valued
 - Don't manage risk; diversify it
 - Well suited for uncertain times

The Full Spectrum of Risk Attitude Alice Underwood and David Ingram **The Actuary**, Aug / Sept 2010

- Rational Adaptability is required
- Give voice to all four
- Closely monitor risk environment
- Align RM strategy with environment

RISK ATTITUDE	Maximizer	Conservator	Pragmatist	Manager
Risk Environment	Boom	Recession	Uncertain	Moderate
RM Strategy	Risk Trading	Loss Controlling	Diversification	Risk Steering

The Full Spectrum of Risk Attitude Alice Underwood and David Ingram **The Actuary**, Aug / Sept 2010

Sampling of ERM Current Events

- IAIS issues ICP 16
 - The supervisory regime establishes enterprise risk management requirements for solvency purposes that require insurers to address all relevant and material risks
- NAIC Own Risk and Solvency Assessment (ORSA)
- EU and BDA Regulators to allow ICA for Regulatory Capital Purposes
- S&P ERM Level III Review
- ASB Task Force drafting ERM SOPs
- AM Best ERM SRQ

Economic Capital Modeling Becoming Huge Focus for Insurers

NAIC ORSA

Board and Senior Management have responsibility of regularly performing its Own Risk and Solvency Assessment (ORSA) to assess the adequacy of its risk management and current and likely future solvency position.

S&P ERM Level III Review

"S&P believes that an insurer's ECM is an integral component of an insurer's ERM program. .. (A)nalyze insurers' ECMs to further our understanding of their ERM capabilities and capital needs... We view it as positive for the assessment of risk management culture when an insurer can demonstrate that it has identified and modeled all of its major risk exposures, including the correlation of these risk exposures. Also, the insurer's construction of the ECM and the use of its results will indicate how well senior management understands the company's own risk profile and how much it supports the ERM framework".

ASB Appoints ERM Task Force

- 2005 decided field was not yet ready
- 2010 reported back with recommendations
 - Existing SOPs not sufficient to guide actuaries practicing in ERM area
 - ERM is significant new area of actuarial practice
 - Actuaries need standards in this new area
 - Regulators are moving towards ERM regulations where professional standards could be important

Actuarial Standards Board (ASB)

■ May 2010

- Accepted Task Force recommendations to develop new standards
- Requested Task Force to develop draft standards

■ March 2011

- Task Force presents a discussion draft for ERM standards to ASB
- Board decides to circulate the discussion draft for comments (March 14, 2011)

Discussion Draft Topics

- 1. Risk Evaluation
 - Economic Capital Models
 - Other Risk Evaluation
- 2. Risk Treatment
 - Risk Control Cycle
 - Risk Tolerance/Appetite/Limits
 - Risk measuring and reporting (Covered in #1 above)
 - Risk Mitigation
 - Emerging Risks

Important ERM Topics that were not included

- Culture
- Organization
- Governance

Key ERM elements in new ORSA

- 1) Identify risks
- 2) Measure risks
- 3) Risk feedback loop
- 4) Risk tolerance statement
- 5) Risk policy

Key ERM elements in new ORSA

- 1) Identify risks <==Specified
- 2) Measure risks <==Risk Evaluation
- 3) Risk feedback loop <==Risk Treatment
- 4) Risk tolerance statement <==Risk Treatment
- 5) Risk policy <==Risk Treatment

Adequacy of Capital

Addressed by Risk Evaluation

Preliminary Conclusion:

■ These two standards would support an actuarial professional opinion for the ORSA

Contents of Draft ERM Standards

- Scope
 - Discussion of tasks performed
 - Tells when to apply standard
- Considerations (Shoulds)
- Communication
- Disclosures (Musts)

Questions posed in Request for Comments

- Does this conflict with any other standards for ERM of firms?
- Are these too prescriptive or too little prescriptions
- Do these cover the ERM work of actuaries?
- Could these be of help to actuaries if they are doing ERM work outside of insurance?
- Are they clear?
- Do they encourage the right behaviors and discourage the wrong behaviors?

Future of these Drafts

- Comment Period requested by June 15
- Task Force will prepare discussion of comments and review with ASB
 - Not public response

Future of these Drafts

- If board agrees, Task Force will proceed to write standards
 - There will be a second comment period
 - At the end of the second comment period,
 - the board considers the comments,
 - agrees to changes (or not) and then
 - Makes the revised standard effective

Conclusion

- Thanks to the ERM Task Force for their work over the past 15 months
 - David Ingram, Chairperson, Mary Ellen Coggins, Wayne Fisher, Kevin Madigan, Clause Metzner, David Rogers, Max Rudolph, Dave Sandberg, John Stark
- Please Read the draft standards
 - Available at ASB website
- Consider the questions raised
- Consider making comments to the board

Postscript

- There is a new movement in the International Actuarial Association to produce a set of International Actuarial Standards of Practice
 - Demand from smaller associations who would rather rely upon international standards than try to create their own
- The IAA has formed a committee to start to create a small set of standards
 - An ERM Task Force has been formed to create an ERM standard



Thank You For Your Attention

Kevin M. Madigan, PhD, ACAS, MAAA 518.288.0139

kmadigan@pinnacleactuaries.com