CAGNY Fall 2015 Meeting

Enterprise Risk Management Round Table Discussion with the Experts

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CAGNY
ERM Topics

December 3, 2015

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pwc

ORSA – 2016 and Beyond

A quick look back …

- ICP 16 requires regulators worldwide to encourage strong ERM practices. In response, many regulatory regimes have enacted ORSA requirements.
- Regulatory guidance emphasizes that ORSA is an ongoing key management process, not a regulatory reporting requirement.
- Companies working to strike a balance between reporting impactful, actionable information for business leaders and the Board and providing additional explanatory context necessary for communication with regulators.

ORSA Process	ORSA Summary Report
• Periodic, ongoing assessment of risk and capital adequacy (at least annually) • Linked to the business and strategic planning processes • Guided by a clearly articulated risk appetite framework (appetite, tolerances, and limits) • Strong governance over ORSA processes • Clear communication of ORSA results to management and the Board	• Periodic reporting of the results of internal ORSA processes • In US, provided to the Board • Filed with lead state regulator in 2015

A quick look back …

The ORSA Summary Report should be unique for each insurer representing the insurer's business, strategy and approach to ERM.

Section 1 Risk Management Framework	• Provides a summary of an insurer's risk management framework & policies, including: – Risk culture and governance – Risk identification and prioritization – Risk appetite, tolerances and limits – Risk management and controls – Risk reporting and communication
Section 2 Risk Exposure Assessment	• Documents management's quantitative assessment (or qualitative assessment where quantitative assessment is not feasible) of risk exposures in normal and stressed environments – Details of risks identified, measurement approaches used and mitigation activities – Quantification of risk for each major risk category – Outcomes of plausible adverse scenarios
Section 3 Group Risk Capital & Prospective Solvency Assessment	• Describes how the assessment of risk is used to determine the financial resources the company requires to achieve its business objectives over its business planning period, considering normal and stressed conditions • The insurer should have a robust capital assessment capability that supports its management of risk over the planning time horizon in line with its stated risk appetite

Looking ahead – ORSA 2016 and beyond

Improve

Not fully implemented:

- *Risk appetite framework* – alignment with business objectives and coherent
- *Forward looking assessments* - demonstration of links to strategy and managements response
- *Stress testing* – including linkages to risk drivers
- *Documentation* – process and controls

Refine

Needing enhancement:

- Alignment between risk and capital
- Tolerances and limits for each key risk with related assessments
- Enhanced descriptions of underlying processes and controls
- Each insurer, addressing shared lists of identified refinements - processes, tools, and controls

Communicate

Needing maturity:

- Management reporting at all management levels, including "line" leaders
- Improving balance between regulatory and internal reporting
- Maturity of ORSA Summary Report – extract background information to separate documents, enhance focus on Sections 2 and 3

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ERM STRATEGY

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Dave Ingram, CERA

Risk Management Strategy

Strategy is

“a pattern in a stream of decisions”

Henry Mintzberg

Business Planning

ERM Objective
Risk Trajectory

- Many different ways of saying a risk strategy - driven by different approach to risks
  - Grow Risk – increase risks faster than capital
  - Manage – balance risk growth and surplus growth
  - Grow Capacity – increase capital faster than risk
  - Diversify – if you cannot be sure which of the above is best

Risk strategy examples

Risk category	Sample risk strategy
Catastrophe	Tight control of aggregate
Underwriting risk	Calibrated pricing
Reserve	Conservatism in reserve setting
Credit	Minimize exposure
Equity	Take when there is excess capacity
Interest rate	ALM with intention to minimize
Operational	Minimize via cost/benefit analysis
Strategic	Maintain A.M. Best rating

Definition of Risk Strategy

- For an individual risk, the Risk Strategy is the choice to either **Exploit**, **Manage**, **Minimize**, **or Avoid**, the risk.
- For a firm, the Risk Strategy will be:
  - the methods used to determine which of the four approaches would be applied to each risk that the firm might be exposed to, and,
  - the process the firm will use to make their future decisions to continue with, or, change their choice of approach, considering changes in the firm's needs and an evolving risk environment.

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ERM is NOT just Modeling

2015 Fall CAGNY

Kevin M. Madigan, PhD, ACAS, MAAA, CERA

December 3, 2015

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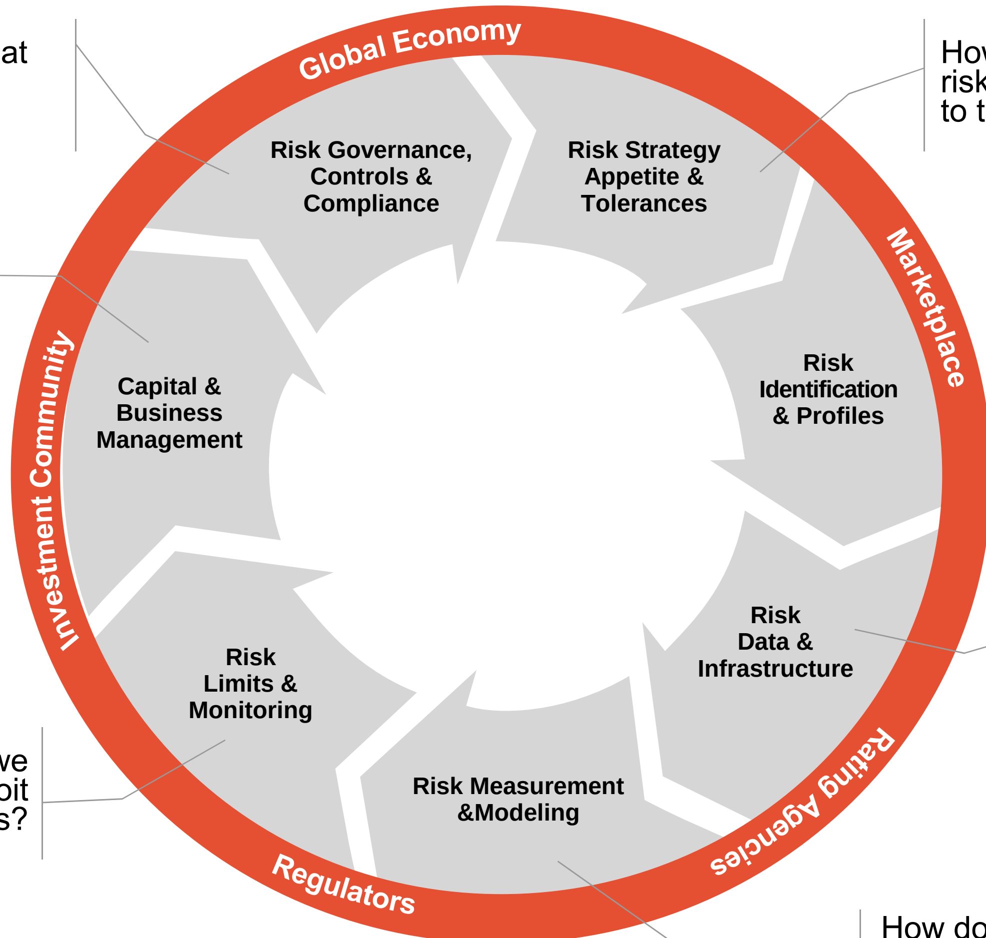
ERM is NOT "Just" Modeling

How good are we at overseeing risk-taking?

How much risk are we willing to take?

What are we doing about the risks (both upside and downside)?

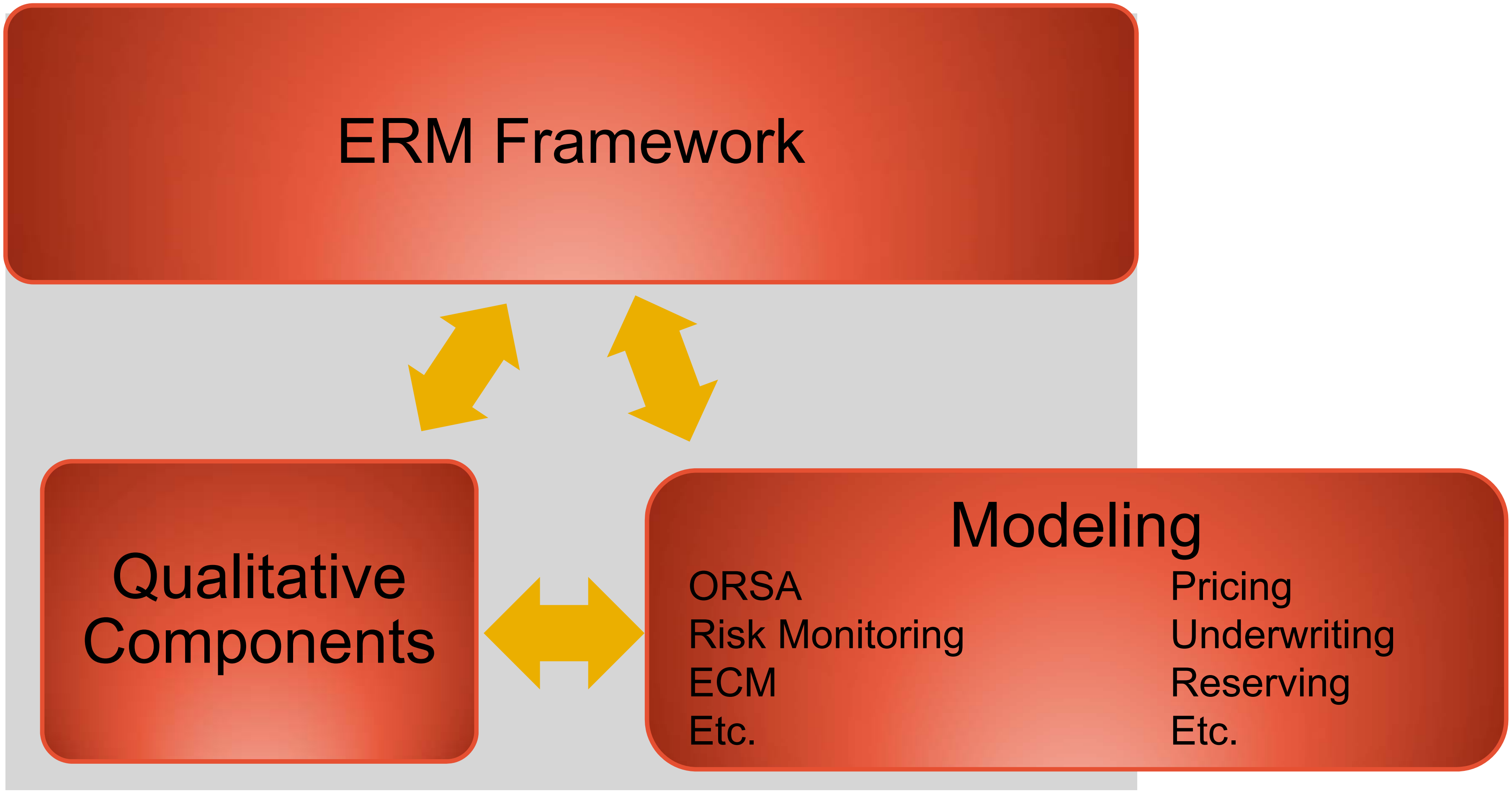


How do we insure that we have the right information to manage risk?

How well do we control/exploit the risks?

How do we determine the size and scope of the risks?

ERM is NOT "Just" Modeling



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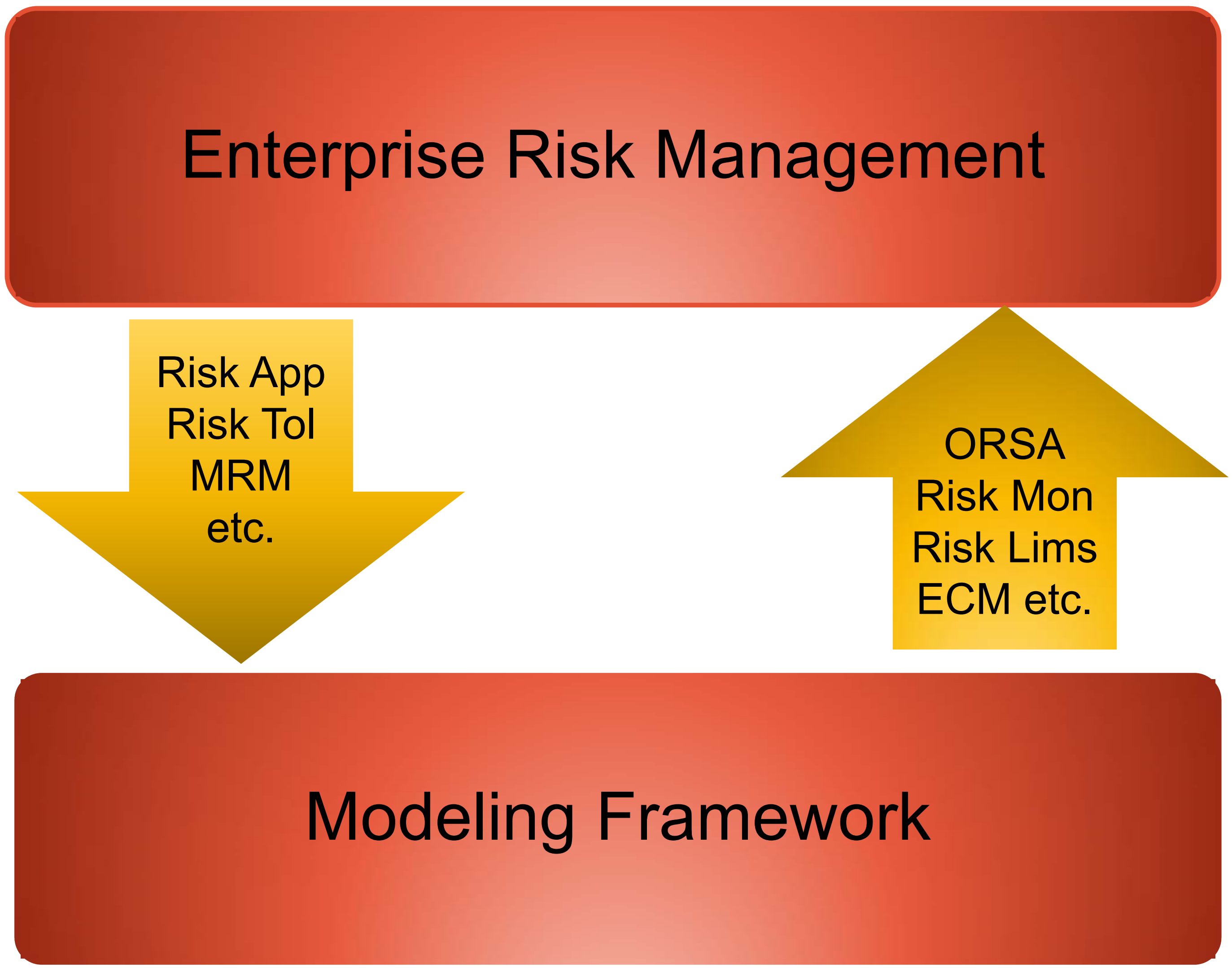

ERM is NOT "Just" Modeling - Example

Risk Appetite	
Risk Strategy Strategic expression of overall philosophy towards risk-trading necessary to achieve the mission, so that from the Board on down there is alignment	
What risks to take?	**How much risk to take?**
Risk Preferences Articulating risk as opportunity, identifying risks that need to be taken deliberately in the expectation of creating value, needed to achieve the mission	**Risk Tolerances** Quantitative expression of the amount of aggregate risk the organization will tolerate over varying time horizons as a means to achieve its mission
Risk Attractiveness Tactical assessment of the risks within the preference set, reflecting current circumstances	**Risk Limits** Granular operational controls on specific risks; expressed in metrics that are locally relevant and practical to monitor

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MAKING BUSINESS DECISIONS WITH RISK MANAGEMENT

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Business Decisions

- Acquisition
- Expand into New Line of Business
- Share Buyback
- Increase Equity Investments
- Reinsurance Purchasing
- Modernize Major IT System

Risk Management & Acquisition

Three Risk Management Questions:

How does the acquisition impact Risk Profile?

- Does it increase concentration of risk or increase diversification?

How will you manage the risks of the new combined operation?

- Capacity and Expertise

How will you manage the transition?

- Making sure that risk taking does not go out of control during the transition

Risk Management & New Line of Business

- Preparing for Success
  - What if Sales grow as much or more than hoped for?

Capital

- Best to have a multi source plan
  - Retained Earnings
  - Reinsurance
  - Surplus Notes
  - New Capital

ORSA Process can help to establish needs

Operations

- Can human and computer systems handle higher volumes?

KRIs and Risk Control Cycle need to be sensitive to overcapacity

Risk Management

- Do RM resources need to expand as business expands?

An easy way to turn success into disaster is for risk management to fail to keep up with growth

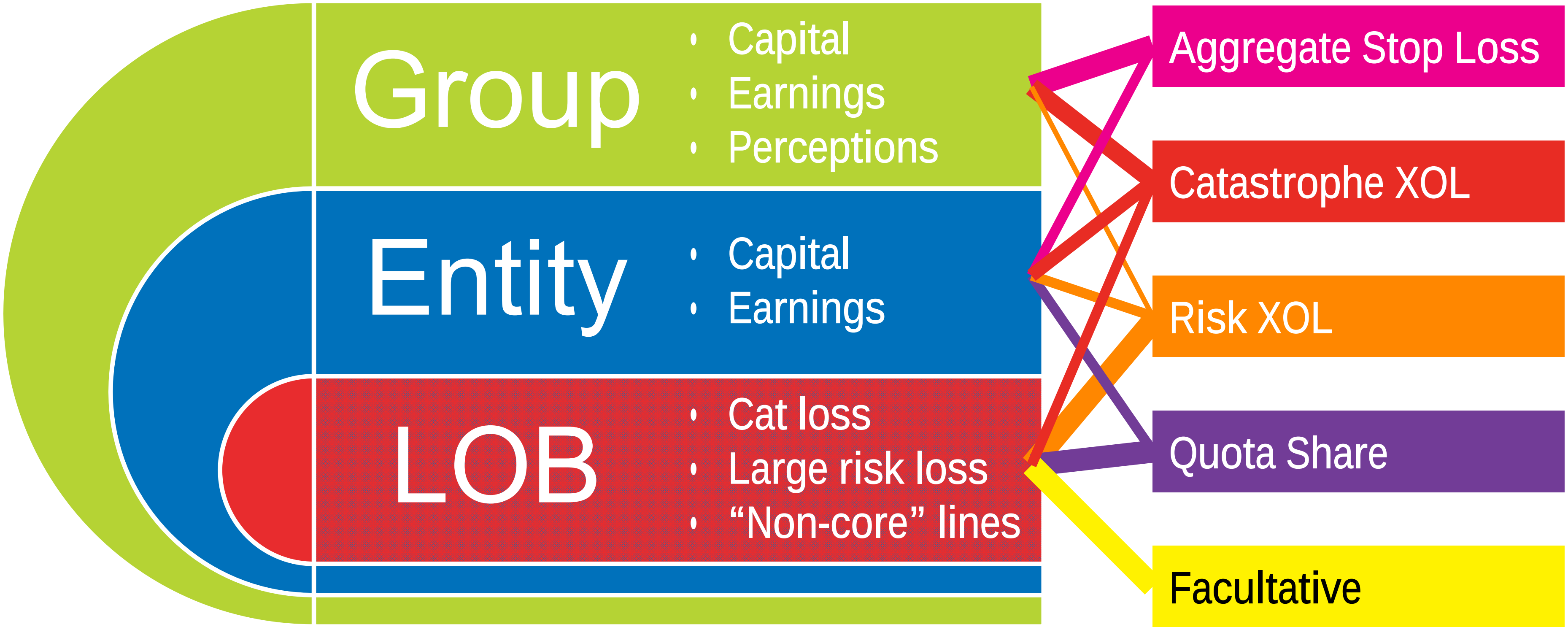
Risk Management & Share Buy Back

- Capital Adequacy
  - The ORSA process can be used with a reduction in capital at time zero.
- Is the Share Buyback consistent with the Risk Trajectory?
  - Grow Capital Faster than Risk
  - Grow Risk Faster than Capital
  - Manage to maintain Risk to Capital relationship

Risk Management & Increase Equities

- Risk Modelers have been increasing the assumed level of tail risk in Stocks
  - AM Best – BCAR was 15%
  - Company models commonly had risk as 20% to 25%
  - Current views are around 40%
- First question from RM is: whether current view of Capital Adequacy and impact of Stocks on Risk Profile are at the right level?
  - Which other risks are correlated with Equities?
  - Are the short term returns seen to provide an appropriate return on risk?

Risk Management & Reinsurance



Reinsurance links to Risk Appetite at multiple levels

Risk Management & Modernize IT Project

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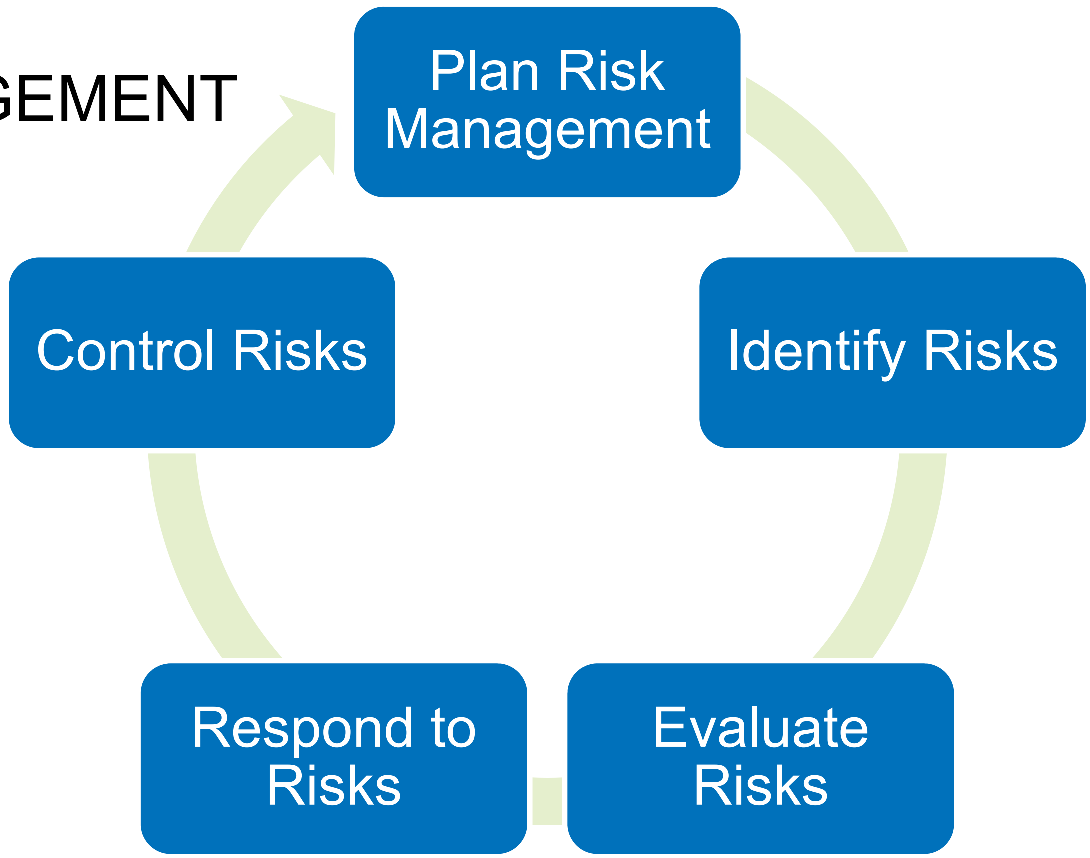
PROJECT
RISK MANAGEMENT



Using ERM frameworks to manage emerging risks (e.g. cyber risk)

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Thoughts on Cyber re: ERM

Emerging Risk No More

The Question is NOT “will we be breached?”

When will we be breached? (have we already been?)

How to respond

How to deploy limited resources to manage risk

Opportunity to profit by assuming risk

Typical pricing and underwriting challenges

Must manage both sides of “risk balance sheet”

Thoughts on Cyber re: ERM

NAIC Principles for Effective Cybersecurity

Principle 9. “Cybersecurity risks should be incorporated and addressed as part of an insurer’s or an insurance producer’s enterprise risk management (ERM) process. Cybersecurity transcends the information technology department and must include all facets of an organization.”

NACD Cybersecurity Principles

Principle 1. “Directors need to understand and approach cybersecurity as an enterprise-wide risk management issue”

Principle 5. “Board-management discussion of cyber risk should include identification of which risks to avoid, accept, mitigate, or transfer through insurance, as well as specific plans associated with each approach.”

ERM and Global Convergence

Global ORSA regulatory requirements

- ORSA regulations in place or effective in 2016 will likely lead to even greater convergence of ERM practices globally.

ORSA Regulation	Australia	Bermuda	Canada	EEA	Japan	Mexico	Singapore	Switzerland	US
Reporting requirement	ICAAP	CISSA	ORSA	ORSA	ORSA	ORSA	ORSA	ORSA	ORSA
Effective	2013	2011	2014	2016	2015	2015	2014	2016	2015
Use of another country's ORSA report	No	Yes	No	Only if equivalent	Yes, with conditions	No	No	No	Yes, with conditions
Frequency	Annual	Annual	Annual	Annual or risk profile	Annual	Annual	Tier1, Annual	Annual or request	Annual
Role of the board	Approve ICAAP	Review CISSA	Review & challenge	Active participant	Approve ORSA	Review & monitor	Approve ORSA	Review & steer	Receive ORSA
Require stress & scenario testing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Horizon for forward looking assessment	3 yrs.	Planning	Planning	Planning	3-5 yrs.	>= 2 yrs.	Planning	>= 3 yrs.	Planning

International insurance capital standard

IAIS ICS Principles

- Dual objectives – policyholder protection and financial security
- For GSIIs and IAIGs
- Reflects all material risks
- Allows for comparability of outcomes
- Promotes sound risk management
- Minimize inappropriate pro-cyclical behavior
- Strike balance between risk sensitivity and simplicity
- Transparency
- Capital requirement is based on appropriate target criteria