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A US Perspective on Enterprise Risk Management

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PROGRESSION OF ERM IN THE US

- (1988-1991) Wake up call (Executive life, Mutual Benefit, Equitable Life)
- Individual risk management (flight to quality)
- More conscious risk taking (e.g. one company was willing to take credit risks but not duration risks)
- Understanding of inadvertent concentration
  - Real estate example
    - Mortgage
    - JV
    - Group Life

What is the US View of ERM?

"And then one day I decided that not taking risks was the greatest risk of all."

PROGRESSION OF ERM IN THE US

- Risk oblivion,
- Risk awareness
- Risk aversion
- Risk embrace
- Risk mitigation
- Concentration risk
- Enterprise risk management

ERM Developments Among US Actuaries

- Growing Awareness of ERM among actuarial professionals in the US
- Society of Actuaries implementing several initiatives to make actuaries the primary players in ERM
- SOA has recently published an ERM Specialty Guide
- Actuarial Standards Board (US) is determining whether Actuarial Standards of Practice are necessary for ERM and will develop them if needed
- S&P has an actuary developing their ERM evaluation methodology

Why the Interest in ERM in the US

- Corporate Accounting Scandals led to Sarbanes-Oxley
- NAIC has been developing a framework loosely based on the COSO definition – this would be implemented by 50 state insurance departments
- Rating Agencies (sometimes considered a de facto regulator) have increased their surveillance of ERM practices – Beginning in October 2005, S&P added a formal evaluation of ERM capabilities to the rating process

How US Companies Organize ERM

- Three different Models
  - Chief Risk Officer – reports to CEO
  - Chief Risk Officer – reports to CFO
  - Risk Committee without CRO
- Any of these Models are effective as long as there is transparency to the process

Risk Committee Model

- One Large Mutual Implements ERM through a Risk Committee
- Each area has a seat at the table
  - CEO, CFO, Chief Actuary, Secretary, General Counsel, Information Technology, Human Resources, Equity Product Management, Investment Management
  - This encourages a richer, more transparent dialogue among those responsible for managing risk
- In addition to the Risk Committee there are multiple risk committees responsible for various areas
- General product risk committee, Various other risk committees for other products and risks
- For example, risk mitigation involved Company moving interest rate setting on insurance products to investment department from insurance product managers

A Large Company Approach to ERM

- Large US Stock Company - ERM Framework

Risk Governance
•Board and Executive Group Oversight
•Consistent Standards and Common Risk Policy
•Independent, Integrated Risk Management

Risk Quantification/Aggregation/Monitoring
•Common Platform to Aggregate Risk
•Best Practice Risk Measurement Methodologies
•Key Risk Indicator Reporting

Risk Appetite and Control
•Formal Process to Set Risk Tolerance and Limits
•Risk Retention and Transfer Strategies

Large Company Approach - Risk Governance Framework

- Chief Risk Officer who reports to CFO
  - Also reports dotted/solid line to Risk Governance Committee
- Leaders for:
  - International Risk
  - ALM and Structured Transactions
  - Market Risk and Risk Reporting
  - Risk Metrics and Methodologies
  - Operational Risk

Assisted by an Enterprise Risk Council

- Executives from
  - Risk Management
  - Internal Audit
  - Compliance
  - IT Risk and Business Continuity
  - Accounting
  - Legal
  - Actuarial
- Assure that all areas communicate, share experience, the same problems need not be solved twice

Survey of ERM Practice at US Life Insurers

- Survey of 3 companies which are at the higher end of the ERM spectrum
- Not necessarily representative of the industry
- Responses from CRO or high level risk officer
- Discussed ERM practice

To What Extent ERM Implemented

- Senior Management takes responsibility for ERM
- It is an enterprise-wide activity whether it is at the corporate level or pushed down to the business unit level
- All of the companies have a CRO
- Why did these companies adopt ERM?

Why Did They Adopt ERM?

- Adopted to improve enterprise value through effective capital allocation and compare and understand divisional ROE's, and risk-adjusted returns
- Adopted to protect current enterprise value and to enable predictable future growth of that value
- Adopted to differentiate the company from its competitors
- Rating Agencies were not a driving force behind the adoption of ERM, although companies dialogued with rating agencies while they developed their ERM evaluation criteria
- Companies might adopt a rating agency best practice, but not change a practice if no value added

Identifying and Measuring Risks

- Run both stochastic and deterministic models
- Develop confidence levels and error ranges to understand the statistics
- Study the major risks for each business unit and combine them across the company
- Operational Risks difficult to measure – regulatory, sales practices, business interruption

Reviewing Risk Exposures

- Stress test – run NY 7 or other set of deterministic scenarios
- Review stochastic testing scenarios causing trouble; test lapses, surrenders and product features
- New Risks and New Products stress tested
- Risks are generally reviewed at each board meeting
- All are aggregating risks exposures, but few details

Response to Risks

- Taking risks is the basis of the business.
  - Reinsurance
  - Hedging
  - Internal Offsets
  - Financial instruments with offsetting risk characteristics
  - Avoid
  - Develop other locations to do business

Risk Tolerance

- Risk tolerance level
  - very low probability of losing ratings,
  - Lower probability of takeover by regulator
  - Lower probability of such regulator being unable to pay claims
- Effect on meeting financial performance goals, synergies between businesses, excess capital
- Interdependencies among risks are recognized

Plusses and Minuses of Adopting ERM

- Introduces delay in execution
- Difficult to get culture up and running, stopping company from taking risks
- Comparing risk metrics of various businesses
- Improve discipline →operating performance and reliability of forecast
- Helped to understand aggregate risk exposures
- Oversight – peer review, second set of eyes

Current Developments

- Reserves (Technical Reserves)
- Capital Management
  - US Companies starting to focus on Economic Capital
  - We have helped companies build nested stochastic models to develop and analyze Economic Capital

Reserves Based on ERM

- Rapid Progress towards Principles Based Reserves (PBR)
  - American Academy of Actuaries,
  - NAIC Life and Health Actuarial Task Force (LHATF)
  - US Actuarial Standards Board (ASB)

Capital Based on ERM

- Adoption of C-3 Phase 2 for determination of Variable Annuity capital requirements
  - Takes into account all of the risks of the products and looks at the tail risks

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Other Reasons for US Interest in ERM

- Fast Track for Principles Based Reserve for Life Insurance
- US GAAP moving towards a fair value model
- Companies Leaving “Insurance Land” and moving into “Financial Services Land”
- Pricing has not been consistent with capital markets pricing, but is slowly moving there - has been based on expected values, ignoring the tail risk

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QUESTIONS ?

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