An Overview of the Enterprise Risk Management Process

Laureen Regan, Ph.D.
Fox School of Business and Management
Temple University

What is Enterprise Risk Management?

- Risk Management is "the culture, processes and structures which are directed towards the effective management of potential opportunities and adverse effects." (AN/NZS 4360)
- Risk Management enables decision-making under uncertainty.

Highest level goals of ERM

- Encourage rational risk taking
- Increase firm value
- Protect interests of stakeholders
- Drivers of ERM investment?
  - Credit rating agencies
  - Demands from shareholders
  - Regulatory compliance
    - SOX, NAIC
  - Competitive Advantage

ERM Benefits

Satisfies SOX and COSO, exchange requirements

Reduces the Cost of Capital

Benefits

Improves earnings consistency over time

Enables **Rating Agencies** to more rationally rate debt and equity

Benefits of ERM:
- Reputation
- Regulation
- Ratings
- Results

Benefits are difficult to measure empirically at this stage of development.

ERM standards

- Australia/New Zealand: AS/NZS 4360
  - Initial 1999, Revised 2004
- COSO ERM Framework
  - Initial September, 2004
- UK: Turnbull Report (Internal Control Guidance)
  - initial 1999, revised Oct 2005
- Canada: Toronto Stock Exchange Report (Corporate Governance)
  - initial 1995
- ISO 31000: Risk Management Standard
  - Initial draft September, 2007, Target release June 30, 2009
- NAIC Solvency Modernization (Pending)

The ERM Process

- 1. Set Goals
- 2. Identify Exposure
- 3. Analyze exposure
  - measure and evaluate
- 4. Treatment
  - mitigate and finance
- 5. Monitor and Communicate

The Development Stage of Enterprise Risk Management

- The stage of ERM development:
  - 3% = Optimized
  - 10% =Embedded
  - 25% = Established
  - 32% = Formalized
  - 23% = Undeveloped
  - 7% = Not stated/applicable

Source: Aon's *Enterprise Risk Management-- The Full Picture,* November 2007.

The ERM Process Step1: Set the Goals and Context

- Strategic context: there should be a close relationship between strategic objectives and management of risks.
  - Determine the firm's risk appetite
    - How much risk are we willing to accept and at what level of return?
  - Determine risk tolerance
    - Acceptable level of variation relative to achievement of objectives
- Set up the ERM structure
  - ERM policy and role of Board

The ERM Process Step 2: Identify Exposures

- Must be systematic: Exposures missed here are dropped from further consideration.
- Focus on risks whose consequences seriously impair the firm's ability to achieve its goals.
- Must identify all material risks whether they are under control of the firm or not.
  - Examples: regulation, systemic exposures
- Multi-disciplinary team

Source: Aon Global Risk Management Survey '07

Survey: Top Ten Risks, 2007

- Damage to reputation
- Business interruption
- Third party liability
- Distribution or supply chain failure
- Market environment
- Regulatory/legislative change
- Failure to attract or retain staff
- Market risk (financial)
- Physical damage
- Merger/acquisition/restructuring

Source: Aon Global Risk Management Survey ‘09

Survey: Top Ten Risks, 2009

- Economic slowdown
- Regulatory/legislative changes
- Business interruption
- Increasing competition
- Commodity price risk
- Damage to reputation
- Cash flow/liquidity risk
- Distribution or supply chain failure
- Third-party liability
- Failure to attract or retain top talent

The ERM Process Step 3: Assessment

- Identification results in a master list
  - Most serious risks should be addressed first
    - Stress and Scenario Testing, Stochastic Modeling
  - Data availability and credibility requirements affect quantitative analysis.
    - Examples: New exposures, rare occurrences
    - Model risk must be acknowledged and managed
- Qualitative methods may be used for initial screening
  - Use scales to rank exposures on a relative basis
  - Must have uniform definitions of frequency and severity→ what is “serious”, “likely”, “rare”

The ERM Process Step 4: Treatment→Loss Control

- Definition: Investment to reduce exposure to risk
- Implementation tends to be industry specific
- Examples
  - Six Sigma
  - Business continuity planning and crisis management
  - Insurance / Reinsurance / Hedging

Link to Corporate Governance

- Board has oversight function
- Key Role of Internal Audit
  - Assurance regarding the ERM process
  - Evaluation of the ERM Process
  - Assurance regarding handling of key risks
- ERM targets should be based on economic capital, regulatory capital requirements, and financial resources.

Wrap-up: The ERM Process

- Link RM to strategy
- Identify exposures
- Assess: qualitative and quantitative methods
- Mitigate: Prevention and Response
- Finance: Hedges / Insurance / Capital Markets
- Review and Revise

Thank You