

BOWLES SYMPOSIUM – GEORGIA STATE

What we have learned from the unfolding Financial Crisis

Wayne Fisher, FCAS, FCIA, MAAA, CERA
Executive Director,
Enterprise Risk Management Institute International

February 12, 2009



E-book: Risk Management: The current financial crisis: Lessons Learned

Lessons Learned and Future Implications (February 2009)

- JRMS, SOA, CAS, CIA, ERMII and INARM

“Enterprise Risk Management did not fail. It was never applied”

Five lessons:

- Incentive compensation requires appropriate alignment with desired performance**
- Authority to make decisions requires accountability**
- Risks not managed today will not be manageable tomorrow**
- The “M” in ERM is for management; not modeling**
- Everyone behaves the same in crisis mode**

Actuaries

Risk is Opportunity.sm

RIMS has a view, too

RIMS: A Wake-up Call for Enterprise Risk Management (February 2009)

- “...a closer look reveals that these issues didn’t arise from a failure of risk management as a business discipline”, rather:
- “...system-wide failure to embrace appropriate ERM behaviors...”
- “...an apparent failure to develop and reward internal risk management competencies...”
- and, “...there was a failure to use enterprise risk management to inform management’s decision making for both risk-taking and risk-avoiding decisions”

Your Board, and Regulators, will need to be convinced!!

It's not the "model models"...rather it's the "business models"

- "All models are wrong, but some are useful"

(George Box, Robustness in Statistics, 1979)

- Key is driving transparency and discussion, in an ERM context, with the individuals ultimately responsible for the enterprise, the BoD
- Culture, behaviors, conviction & courage
- The "CSO" is critical (the Common Sense Officer)

Actuaries

Risk is Opportunity.sm

How one might build an “ERM-aware” enterprise...and address these lessons

- Let's say you as CRO found:
 - Culture of (very) independent BUs
 - “Data desert” at Corporate Center
 - No accountable risk managers in the businesses
 - “Form over substance”
 - Financial guarantees and “alternative” activities
 - Poor transparency
 - No agreement or understanding of an enterprise risk appetite
 - Short term (only) financial incentives
 - Internal reinsurance masking underlying U/W performance
- So, where to start....using these lessons



An ERM Risk Policy is a good way to engage the organization...and the Board

- ❑ Detailed limits at BU level for sub-elements of Financial, Strategic, Insurance, Operational and Credit and Investment Risk
- ❑ Consistent definitions and centralized data collection
- ❑ Ownership at business/functional areas
- ❑ Compliance audited
- ❑ On-going enhancements; leverage the Board's interest and keep them engaged...

Actuaries

Risk is Opportunity.sm

...development of an ERM Risk Policy (continued)...

- ❑ Limits linked to the an initial enterprise risk appetite
- ❑ Risk Policy and all changes approved by the Risk Committee and full Board
- ❑ “What gets measured gets done” (Jim Schiro) had the collateral benefit of “You don’t do what you can’t measure”....as you need to report compliance with the Risk Policy limits.
- ❑ Close to the action, local “Risk Committees” review compliance and reporting...and keep management engaged at all levels.

Agreeing the Risk Appetite is the perfect way to engage and commit the Board...


- ❑ Questions such as the following...
 - What is the worst Net Income you would accept 1 in 10 years?
 - How frequently would you accept cutting or eliminating the dividend? 1 in 20 years?
 - How frequently are you willing to accept the need to raise additional capital? 1 in 10? Or, 1 in 20?
 - How frequently are you willing to accept a ratings downgrade?
- ❑ ...are at the heart of the BoD's governance responsibilities...and will capture the imagination
- ❑ And provide the key parameters for the ERM framework and models; capital considerations more for the tail, earnings considerations more for the core

Actuaries

Risk is Opportunity.sm

...which allows the “Virtuous Circle” ERM Framework...and to drive awareness

- ❑ The BoD’s agreed group risk appetite.....
- ❑ Aligned risk limits cascaded to all entities/functions
- ❑ Day to day decisions on underwriting, investments, etc.
- ❑ Monitor compliance with risk policy limits
- ❑ Integrated enterprise-wide risk modeling and analysis
- ❑ Input on stress scenarios/ non-modeled risk
- ❑ Identification of risks for mitigation/hedging
- ❑ Revise risk policy to ensure alignment
- ❑ Brief BoD on compliance, recommit to risk appetite
- ❑ And so on, and so on....



Cascading reports lead to an effective Risk Dashboard...for the BoD and senior mgt

- ❑ Requires a detailed, limit-based Risk Policy
- ❑ Limit monitoring systems at all levels in the organization, (underwriting & investments)
- ❑ Review of exposure/limit reporting by local Risk Committees
- ❑ Cascading reports to regions/divisions; quality in analysis a performance measure
- ❑ Risk Management undertakes correlation and aggregation analyses/stress testing & modeling

Actuaries

Risk is Opportunity.sm

...and for non-modelled risk – a structured enterprise-wide risk profiling exercise

- ❑ Risk Committees at BU, Divisional and Group levels conduct risk profiling as part of planning exercise, including quarterly reports on mitigation actions. Reports cascaded upwards.
- ❑ Systematic risk identification, assessment and mitigation tool used to identify, measure and monitor risk across the Group
- ❑ Identifies, defines and assesses all types of risks, and determines optimal improvement strategies for unacceptable risks
- ❑ Aligned with strategic & operational plan
- ❑ Promotes teamwork, communication, transparency and knowledge exchange within the Group

Characteristics include...

- ❑ Strategic / macro / holistic
- ❑ Top-down as well as local, bottom up, & unconstrained
- ❑ Prospective in focus; “Black Swans”
- ❑ Aligned with Strategic & Operational Plan
- ❑ Acceptability focuses on long-term risk adjusted return
- ❑ Quantification in terms of economic capital and impact on financial statements
- ❑ Commitment to remedial action plan & follow through
- ❑ And absolutely key, it needs to engage management at all levels...even the Board!

Actuaries

Risk is Opportunity.sm

The WEF (and GLORAM) provide stress test scenarios...

- ❑ **Global risks in the perspective of countries**
- ❑ Exposure of 160 countries to 24 global risks
- ❑ **Economic risks**
- ❑ Food price rise, oil price rise, US\$ decline,
- ❑ China hard landing, fiscal crises, current
- ❑ account imbalances, asset bubbles, retrenchment
- ❑ from globalization, deflation, inflation.
- ❑ **Geopolitical, Environmental, Health risks,**
- ❑ **and Technological risks**
- ❑ Terrorism, interstate war, state failure, transnational
- ❑ crime and corruption, migration, droughts, rising
- ❑ sea level, water shortages, seismic disasters, storms
- ❑ and floods, pandemics, infectious diseases, chronic
- ❑ diseases, information infrastructure breakdown,
- ❑ new technologies, technical accidents.

To Do's: Realizing ERM Value

- ❑ “Walk the Talk” with embedding ERM into the corporate DNA; maintain emphasis on transparency; all levels
- ❑ Credible risk reporting and limit adherence with monitoring at all levels; local risk committees
- ❑ Realistic risk modeling with emphasis on data, aggregation and correlation modeling in stress scenarios validates the risk policy limits and linkage to enterprise risk tolerance; ownership within organizations
- ❑ Seek good, collaborative judgment and insight into the business dynamics as keys to success
- ❑ And leverage the involvement of the Board

Actuaries

Risk is Opportunity.sm