



Casualty Loss Reserve Seminar
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Risk Metrics for Decision-Making and ORSA

**A Collection of Essays from the CASA/SOA/CIA
Joint Risk Management Section**

Key Themes

Moderator- Robert F, Wolf, FCAS, CERA, ASA, MAAA

On behalf of the Joint Risk Management Council of the Casualty Actuarial Society, Society of Actuaries, Canadian Institute of Actuaries



Purpose of ORSA

- Helps the NAIC in its initiative to bring US aligned with ICPs, which were developed by the IAIS

Shapella/Stein



Evolution of ERM

- Rick Gorvett talks about
 - Critical Point in its Evolution
 - Clear Guiding Principles
 - But Work needed in core concepts
 - Suggests an interdisciplinary perspective
 - Behavioral Economics
 - Complexity Science
 - Ingram's stuff



ORSA is and is not...

(Shapella/Stein)

ORSA is

- A Process- Good ERM Practice
- Forward Looking
- Embedded in Decision-making
- Consistent with Business Culture
- Improve risk/capital management process
- Transparent Communication

ORSA is not

- just a regulatory mandate
- An RBC score (no ORSA score)
- Merely a quantitative exercise
- Requiring an economic capital model, although one can be used as a tool



Benefits of ORSA (Ren/Xie)

- Improves Risk Management-
 - not Compliance (Gutttermann/Paton/Sen)
 - If Compliance, ORSA will Fail
- Aids regulators
- Policyholders- better prices
- Investor Confidence
- Rating Agency valuing Greater Transparency
- Employee/public confidence



A CONTRARIAN VIEWPOINT



In D'arcy's essay, he defines

- Actuary's Key Role
 - Quantifying the Uncertainty Surrounding the Future Financial Results of the Firm
 - Certification Performance tied to Accountable Professional Standards
 - Publicly Reported Information
 - Retrospective Evaluation of Individual Certifier



Innovative Concepts

- Effective Resiliency Factor (Gorvett)
 - Exposure to Reduced Operating Level due to adverse event
- Minimally Destructive Scenarios (Campbell)
 - What's the probability we can survive" to "This is what we won't survive. Are we comfortable with that?"



Recommendations from Essayists

- Focus- Prospective Assessment of Solvency Positions (Scanlon et el.)
 - Multiyear (Loisel)
- Multiple Metrics (Scanlon et el., Strommen)
- Balance Complexity with Simplicity (Scanlon et el.)
- Suggestion- “What-if” scenarios (Scanlon)
- Need Integration into existing Business Model as well as Tool for NAIC as well as Executive Suite (J.Sears)
- Focus (Rudolph)
 - Risk Concentration
 - Realistic Stress Testing
 - Top-Down Corporate Culture Assessment



Recommendations Continued

- Find the “ERM” Goal before developing an ERM System that fit’s someone else’s objectives (Ingram)
- Focus on Plausible Stress Scenarios (Cubukil, Ling)
- Consider the Human Element
 - Management Behavior (Loisel)
 - Correlation through Experience (Loisel)
 - Moral Hazard (Loisel)
 - Behavioral Biases (Grossack)



Particulars

- Risk-Neutral vs. Real World capital calibration
(D Wang)
- Use Cost Capital as risk metric in reserves,
probability level as risk metric for capital
(D.Wang)
- Understand strength/weaknesses and
uncertainties inherent in models
(Ericson/Cleary)



Thank You?