Regulatory Solvency Assessment of Property/Casualty Insurance Companies in the United States

A presentation by Robert F. Conger
Past-President, Casualty Actuarial Society
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Regulatory Solvency Assessment of Property/Casualty Insurance Companies in the United States

- Current US regulatory approach to solvency assessment of property/casualty insurance companies
- Solvency Modernization Initiative
- Own Risk and Solvency Assessment (“ORSA”)

An important regulatory shift is underway towards greater emphasis on the insurer’s own view and management of its risks; and management’s own view of its capital adequacy to pursue its business strategy in the years ahead.
Current US Regulatory Solvency Assessment of Property/Casualty Insurance Companies
The Current US Solvency Regulatory Approach Is Characterized By Several Prescriptive Elements

<table>
<thead>
<tr>
<th>Restrictions and constraints on some risky activities</th>
<th>Regulatory financial monitoring and examinations</th>
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<td>Insurance company financial reporting and disclosures</td>
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<tr>
<td>Coming soon:</td>
<td>Risk-based capital process</td>
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<tr>
<td>Examination of ORSA</td>
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Guaranty funds provide a safety net
At the Core of US Regulatory Solvency Assessment: Extensive, Transparent Public Reporting And Disclosure Requirements

- Extremely detailed financial statements, and related information and disclosures
- Formal actuarial opinion regarding loss reserves
- Most of this information is open to review by “the public” in addition to being reported to regulators

Enables detailed regulatory diagnoses
- Company activities and performance
- Trends
- Risk characteristics
- Balance sheet strength...
Statutory Financial Statement Requirements for US P/C Insurance Companies are Specified in Detail

• Required elements, schedules, formats
• By line of business (also pre-defined)
  – Required “statutory accounting” methods
  – Standard across different insurance companies
• More conservative than GAAP
• Numerous narrative responses to standardized questions (e.g., asbestos and environmental exposure)
Illustrative Statutory Financial Statement Elements
– US Property/Casualty Insurance Companies

• Current and historical financial and related info
• Income statements by line of business, balance sheets
• Key ratios and trends
• Historical loss development patterns and favorable/unfavorable run-off of prior reserves
• Detailed expense categorization, large payments
• Each asset, each asset transaction
• Each reinsurer, amount and type of reinsurance ceded, status of recovery, collateral
• Affiliate and subsidiary detail
US P/C Insurance Companies Must Submit a Formal Actuarial Opinion Regarding Loss Reserves

• Scope of the Actuarial Opinion (and supplemental statements):
  – Reasonableness of balance sheet provision for unpaid and unreported claims
    • Before and after reinsurance
  – Actuarial range
  – Sources of uncertainty and risk

• Actuarial Opinion may be prepared by staff actuary or by outside consulting actuary

• The work of the P/C loss reserving actuary is governed by principles rather than by defined formulas or parameters
The Current US Solvency Regulatory Approach Is Characterized By Several Prescriptive Elements

- Restrictions and constraints on some risky activities
- Regulatory financial monitoring and examinations
- Insurance company financial reporting and disclosures
- Coming soon: Examination of ORSA
- Risk-based capital process
- Guaranty funds provide a safety net
Insurance Companies in the US Are Constrained By Regulatory Restrictions on Some Risky Activities

<table>
<thead>
<tr>
<th></th>
<th>Outright Restrictions</th>
<th>Accounting and RBC Treatments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensing requirements</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Minimum capital requirements</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Investments</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Reinsurance</td>
<td></td>
<td>✓</td>
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<tr>
<td>Loss reserves</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Risk-based capital parameters and actions</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Regulatory pre-approval requirements</td>
<td>✓</td>
<td></td>
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<tr>
<td>Regulatory “signals”</td>
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</tbody>
</table>
US Regulators Closely Scrutinize Insurance Company Financial Disclosures

**Goals**

- Identify potential adverse financial indicators
- Evaluate and understand company condition and problems
- Develop appropriate corrective action plans
- Minimize the number and impact of insolvencies

**Tools**

- Financial analysis and diagnostics
- Risk-based capital
- Financial examinations
- Supervisory plan development

Depth of analysis varies with financial strength, prospective risks and complexity of insurance company
The US Risk-Based Capital Process for P/C Insurance Companies has Two Main Elements

- Defined calculation of Risk-Based Capital
- Defined triggers for pre-authorized actions
The US RBC Process Includes Pre-Defined Triggers and Pre-Authorized Actions

<table>
<thead>
<tr>
<th>Trigger: Ratio of Actual (adj) Capital to ACL Risk-Based Capital</th>
<th>Pre-authorized Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Action 200% or more</td>
<td>None</td>
</tr>
<tr>
<td>Company Action Level 150% to 200%</td>
<td>Insurer must submit report: analysis and action plan</td>
</tr>
<tr>
<td>Regulatory Action Level 100% to 150%</td>
<td>As above, plus regulatory examinations, analyses, and corrective orders</td>
</tr>
<tr>
<td>Authorized Control Level 70% to 100%</td>
<td>Regulator authorized to take control</td>
</tr>
<tr>
<td>Mandatory Control Level Less than 70%</td>
<td>Regulator required to place insurer under control</td>
</tr>
</tbody>
</table>
The RBC Calculation is Part of the Evolving Tool-Kit of the US Regulatory Process

• Much more risk-driven than prior regulatory rule-of-thumb ratios
• Evolves through extensive research and analysis
• But will never be able to respond to all situations
• All parameters and formulas prescribed

By design, RBC is a “back-stop” formulaic method to identify potentially failing insurance companies – other regulatory measures are likely to provide earlier identification of companies that may require intervention
US Insurance Regulatory System Solvency Modernization Initiative
Global Regulatory Approaches to Capital and Risk Management are Heading in the Direction of Convergence Around the “ICPs”

Solvency Modernization Initiative
- Governance and risk management
- Capital requirements
- Reinsurance
- Group supervision
- Stat accounting and financial reporting

The IAIS’s Insurance Core Principles (ICPs) shape policy making in over 190 markets — including the United States
ICPs Reflect Regulatory Practices from Leading Insurance Markets, Heavily Influenced by Solvency II

<table>
<thead>
<tr>
<th>Pillar I</th>
<th>Pillar II</th>
<th>Pillar III</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measurement of Assets, Liabilities and Capital</strong></td>
<td><strong>Supervisory Review Process</strong></td>
<td><strong>Disclosure Requirements</strong></td>
</tr>
<tr>
<td>Asset and Liability Calculation Standards</td>
<td>Regulatory Monitoring, Review, and Assessment Tools and Processes</td>
<td>Financial and Other Reports to Supervisor</td>
</tr>
<tr>
<td>Solvency Capital Requirements</td>
<td>Own Risk and Solvency Assessment</td>
<td>Solvency and Financial Condition Report</td>
</tr>
</tbody>
</table>
IAIS Insurance Core Principles

- Policy and legal framework
- Market conditions
- Supervisory objectives, resources, processes
- Licensing requirements
- Suitability of owners, board members, management team, auditors, and actuaries
- Corporate governance; internal controls; risk assessment and risk management; price management; reserve evaluation; capital adequacy
- Investment standards
- Information reporting – to regulators, to stakeholders
- Supervisory inspections, corrective measures, enforcement
US Solvency Modernization Initiative

Scope: Entire US financial regulatory system
All aspects related to insurance company financial condition

• Governance and risk management
  – Development of corporate governance standards
  – Requirements that insurers maintain robust risk management systems
  – Implementation of “Own Risk and Solvency Assessment” (ORSA)

• Capital requirements
  – Continued refinement of risk-based capital “floor” calculation
  – ORSA capital assessment will aid regulatory review of company/group financial stability
US Solvency Modernization Initiative cont’d

• Reinsurance
  – Requirements regarding collateral from reinsurers
  – Redesign of US reinsurance regulatory framework

• Group supervision
  – Analysis of individual entity risk and enterprise risk across affiliated companies

• Statutory accounting and financial reporting
  – Principle-based reserves for life insurance companies
Own Risk and Solvency Assessment ("ORSA") for US Insurance Companies
ORSA Involves a Self-Assessment of The Insurer’s Risk Management Framework and Solvency Position

- ORSA is a process that examines the full scope of the insurer’s enterprise risk management framework.
- The “own” in ORSA places the responsibility on management — to self assess the risk and capital management framework, given current and future risks.
- The ORSA output is a set of documents that demonstrate the results of management’s self-assessment:
  - The company’s risk management and capital evaluation processes
  - The results of management’s self-assessments
The NAIC has identified two primary goals for the ORSA

“1. To foster an effective level of ERM at all insurers, through which each insurer identifies, assesses, monitors, prioritizes and reports on its material and relevant risks identified by the insurer, using techniques that are appropriate to the nature, scale and complexity of the insurer’s risks, in a manner that is adequate to support risk and capital decisions; and

2. To provide a group-level perspective on risk and capital, as a supplement to the existing legal entity view.”

— From the NAIC ORSA Guidance Manual, March 2013
The ORSA Results in a Richer View of the Insurance Group’s Capital and Risk Management Framework

Risk-Based Capital:
- Legal entity
- Rear view
- Factor-based
- Standard
- Regulatory action

Richer View:
- ERM framework
- Governance
- Capital
- Risk
- Feedback loop

ORSA:
- Insurance group
- Forward-looking
- Dynamic factors
- Tailored
- Strategic action

The ORSA improves the regulator’s view of risk and capital
- Risk-based capital will remain as the key determinant for minimum legal-entity regulatory capital
- The ORSA will provide the regulator with the insurer’s view of its group risk capital and risk management based on the insurer’s unique factors and analysis
- The combination of the two will allow regulators to key in and focus on the most important issues for policyholder protection/security
In an ORSA, Internal Processes Are Communicated Through an External Reporting Requirement

<table>
<thead>
<tr>
<th>What an ORSA is not</th>
<th>What an ORSA is</th>
</tr>
</thead>
<tbody>
<tr>
<td>A point-in-time activity</td>
<td>A continuous process</td>
</tr>
<tr>
<td>Pre-defined by regulator</td>
<td>Determined by firm (i.e., “own”)</td>
</tr>
<tr>
<td>A regulatory report, a template or form to complete</td>
<td>Own risk profile and risk appetite</td>
</tr>
<tr>
<td>Just a mathematical calculation</td>
<td>Short- and long-term risks</td>
</tr>
<tr>
<td>A requirement to develop an economic capital model</td>
<td>Both qualitative and quantitative</td>
</tr>
<tr>
<td>A new group capital requirement</td>
<td>Overall solvency needs</td>
</tr>
<tr>
<td>Just a process to tick a regulatory box</td>
<td>Adequacy of capital</td>
</tr>
<tr>
<td></td>
<td>Continuous compliance</td>
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Insurers Will Complete an Annual “Self-assessment”; the Regulator May Request a Summary Report

<table>
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<th>U.S. ORSA — Regulatory Reporting Requirement</th>
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<tr>
<td><strong>Threshold</strong></td>
</tr>
<tr>
<td>● All individual insurers with gross premium &gt; $500M</td>
</tr>
<tr>
<td>● All insurance groups with gross premium &gt; $1B</td>
</tr>
<tr>
<td>● Includes unaffiliated domestic and international premium</td>
</tr>
<tr>
<td><strong>Annual</strong></td>
</tr>
<tr>
<td>● ORSA should be conducted at least annually</td>
</tr>
<tr>
<td>● Summary report may be requested by the state regulator</td>
</tr>
<tr>
<td><strong>Dynamic</strong></td>
</tr>
<tr>
<td>● ORSA should reflect changes in business strategy</td>
</tr>
<tr>
<td>● A refresh may be needed for significant shifts, e.g., M&amp;A</td>
</tr>
<tr>
<td><strong>Capital Projection</strong></td>
</tr>
<tr>
<td>● Should be consistent with business planning horizon</td>
</tr>
<tr>
<td>● Suggests capital projections of two to five years</td>
</tr>
<tr>
<td><strong>Documentation</strong></td>
</tr>
<tr>
<td>● Supporting documentation should be in place</td>
</tr>
<tr>
<td>● May be reviewed as part of the on-site financial exam</td>
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</table>
The ORSA Summary Report Provides Three Categories of Descriptive Material

**Section 1:**
Description of Risk Management Framework
- A high-level summary of the insurer’s risk management framework

**Section 2:**
Assessment of Risk Exposures (Quantitative and Qualitative)
- Detail showing the insurer’s process for assessing risks, including stress tests

**Section 3:**
Group Risk Capital and Prospective Solvency Assessment
- Insurer’s demonstration that current and future capital is sufficient to support risks identified
Description of the Insurer’s Risk Management Framework

• Summary of the following elements:
  – Risk Culture and Governance
  – Risk Identification and Prioritization
  – Risk Appetite, Tolerances, and Limits
  – Risk Management and Controls
  – Risk Reporting and Communication

• Demonstration that the process is dynamic
  – Ongoing management, monitoring and feedback loops

Supporting Risk Policies

• Underwriting
• Investment
• Claims underwriting/processing
• Asset-liability management (ALM)
• Reinsurance counterparty
• Mergers and acquisitions
• Compensation and incentives
• Anti-fraud
• All other ERM activities, policies or programs
Insurer’s Assessment of Risk Exposures

Assess
- Summary of assessment for each material and relevant risk

Method
- May be quantitative or qualitative, depending on the nature of the risk

Stress
- Impact of risk should be shown in both normal and stressed conditions

Capital
- May use regulatory, economic, rating agency or other views of capital

Validation
- Should explain the process for model validation and calibration
Group Risk Capital and . . .

- **Group Risk Capital**
  - *Should address the question:* What level of capital is necessary to support the group’s individual and collective risks at the insurer’s defined solvency standard?
  - *Risk capital:* Amount of capital that satisfies the insurer’s capital needs at the defined level of security
  - *Available capital:* Amount of “excess” (or “deficit”) capital above (or below) the risk capital indication
• Prospective Solvency Assessment
  – Model time horizon and security standard should consider the nature of the business strategy and the company’s risk appetite
  – Demonstrate and document link between business strategy and the amount, quality, and source of capital needed to support business strategy
  – Describe actions to address capital shortages or business strategy changes
Closing observations
The Multi-Dimensional US Approach to Solvency Assessment Will Continue to Evolve

• Various prescriptive elements have been in place for many years
  – Extensive, transparent, standardized public disclosure of detailed financial information
  – Regulatory monitoring and analysis of financial data and disclosures
  – Regulatory examination of insurance companies
  – Risk-Based Capital calculations using defined formulas and parameters

• ORSA – an important evolution towards regulatory emphasis on...
  – The insurer’s own risk management discipline
  – Management’s solvency assessment
Robert F. Conger

Education and Credentials

- BA, with honors, economics and mathematics, Amherst College
- Fellow, Casualty Actuarial Society
- Member, American Academy of Actuaries
- Honorary Fellow, Institute of Actuaries

Professional Leadership

- Casualty Actuarial Society: Past President, and long-time volunteer – with particular focus on CAS international, editorial, and staff-volunteer activities
- International Actuarial Association: Active volunteer and leader on initiatives related to the development of the actuarial profession in areas of the world where it is not well-established
- ICA 2014: Chair of the Organizing Committee
- The Actuarial Foundation: Board of Trustees, Chair of Actuarial Diversity Scholarship
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