

Risk Base Capital

Lcdo. Alexander S. Adams Vega
Puerto Rico Commissioner of Insurance





Background

- The history of insurance regulation is essentially a history of solvency regulation.
- The core of the U.S. financial regulatory system is the financial solvency oversight, which is predominately built around risk-focused financial analysis and examination, and uniform statutory accounting practices and procedures.
- Solvency regulation has a strong public interest component because it is intended to protect an insurer's policyholders, creditors, and the public from harm that may result from the insurer's insolvency.
- In early 90's the NAIC developed model laws on regulating the risk base capital requirements of insurers (the "Risk-Based Capital Model Act")



NAIC Model Laws Governing Risk-Based Capital

- The NAIC Model Acts governs U.S. solvency framework, referring insurer's "risk-based capital," or the minimum amount of capital the insurers are required to maintain ("Risk Base Capital for Insurers Model Act").
- The RBC calculation uses a standardized formula to benchmark specified level of regulatory actions for weakly capitalized insurers.
- Every domestic insurer is required to prepare and submit to the state regulator a report of its RBC Levels as of the end of the calendar year, in a form and containing such information following the RBC instructions adopted by the NAIC.



NAIC Model Laws Governing Risk-Based Capital

- The RBC Model Act sets four different levels of capital with associated “events” for each level: **Company Action Level; Regulatory Action Level; Authorized Control Level and Mandatory Control Level.**
- The RBC system was created to provide: 1) a capital adequacy standard that is related to risk; 2) a safety net for insurers 3) uniformity among the states; and 4) regulatory authority for timely action.
- The RBC calculation uses a standardized formula to benchmark specified level of regulatory actions with respect to an insurer when the capital level falls within certain threshold amounts that are below the minimum capital requirement.



NAIC Model Laws Governing Risk-Based Capital

(1) Company Action Level- (200% of ACL) may require the insurer to prepare a risk-based capital plan that identifies the problems and proposes solutions.

(2) Regulatory Action Level- (150% of ACL) may require, in addition to the preparation of a RBC plan, that an insurer submit to an examination and take corrective actions as specified by the regulator.

(3) Authorized Control Level- (ACL) the trigger point for the regulator's action or control levels are determined as a percentage of the ACL number by using the RBC formula .

(4) Mandatory Control Level- (70% of the ACL) requires that the insurance regulator assume control over the insurer.

RBC Factors



- The RBC formula considers a set of risks specific to the sector and then adjusts for the fact that the risks in the various categories might be correlated by subtracting off the so-called covariance factor.
- RBC is calculated by applying factors to various asset, premium and reserve items.
- The RBC formula calculates a Total Adjusted Capital (TAC), by identifying dollar amounts of specific risk exposures in specific risk categories (i.e. direct/indirect affiliate/subsidiary insurer risks, fixed income risks, equity risks, credit risks, underwriting risks, etc.).

RBC Factors



- **Insurance Risk**-measures the potential losses an insurer may face due to underwriting activities. This includes assessing the risk associated with the insurer's policyholder obligations, such as claims payments and policy lapses.
- **Asset Risk**- evaluates the investment portfolio of an insurer and the potential losses that may arise from fluctuations in the value of investments, such as stocks, bonds, and real estate.
- **Interest Rate Risk**- considers the potential impact of interest rate fluctuations on an insurer's financial position. It assesses the vulnerability of an insurer's investments and liabilities to changes in interest rates.

RBC Factors



- **Business Risk-** evaluates the risks associated with an insurer's overall business operations. This component takes into account factors like market competition, regulatory environment, and strategic decisions.
- **Catastrophe Risk-** assesses the potential losses an insurer may face due to catastrophic events, such as natural disasters or large-scale accidents. This component is particularly relevant for P&C insurers, as they are exposed to significant losses from events like hurricanes, earthquakes, or wildfires.

RBC Factors



- **Reserves for Adverse Deviation:** The reserves for adverse deviation component is an additional buffer that insurers maintain to account for unforeseen risks or uncertainties not adequately captured by the other components. It serves as a safety net to ensure insurers have sufficient capital to withstand unexpected events or adverse market conditions.

Chapter 25 – PR Insurance Code (26 LPRA §§ 2501 – 2509)

Require domestic insurers to establish a reserve fund for the payment of losses arising from all their policies that provide catastrophic insurance coverage.

The trust shall use its funds solely and exclusively for the payment of catastrophic insurance losses and for the adjustment expenses inherent to said losses.

The reserve for catastrophic insurance losses shall reach at least eight percent (8%) of its catastrophic exposure for hurricanes.

Solvency Modernization Initiative



- To compliment RBC requirements, state regulators worked on the **Solvency Modernization Initiative (SMI)**.
- Regulatory bodies have recognized the importance of keeping risk-based capital standards up to date to address emerging risks and ensure financial stability.
- Risk-based capital requirements enable regulators to evaluate insurers' financial health in a more comprehensive manner. Instead of relying solely on total assets or surplus assessment, modern solvency requirements take into account the specific risks inherent in an insurer's portfolio.

Solvency Modernization Initiative

The NAIC **Risk Management and Own Risk and Solvency Assessment Model Act** (#505) went into effect on Jan. 1, 2015.

“ORSA”, as a key component of regulatory reform, is an internal process undertaken by an insurer or insurance group to assess the adequacy of its risk management and current and prospective solvency positions under normal and severe stress scenarios.

ORSA has two primary goals:

- (1) To foster an effective level of **Enterprise Risk Management** for all insurers in the group and;
- (2) To provide **Group-Level Perspective** on risk and capital that will allow regulators to obtain a better picture of the risks facing an entire insurance holding company system.



Solvency Modernization Initiative



NAIC OWN RISK AND SOLVENCY ASSESSMENT (ORSA) GUIDANCE MANUAL

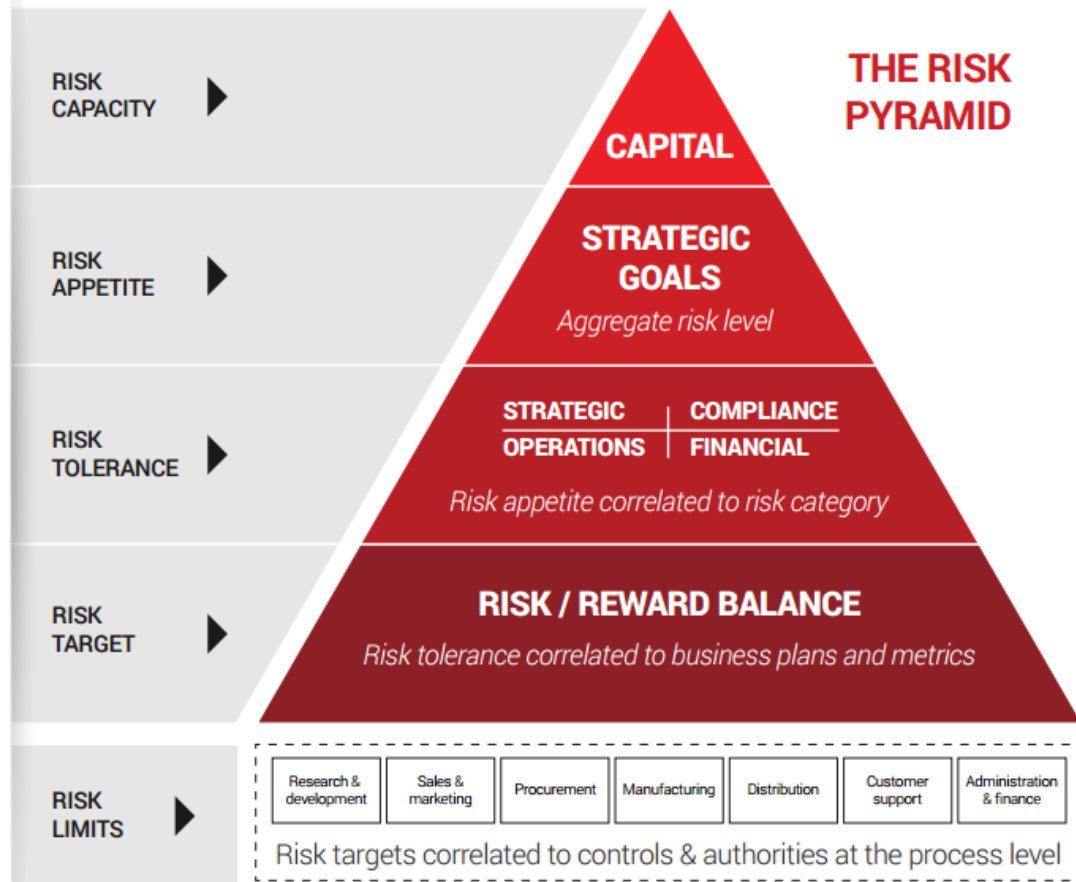
“ORSA Guidance Manual”, provides information for insurers on performing its ORSA and documenting risk policies and procedures.

Section 1 – **Description of the Insurer’s Risk Management Framework**

Section 2 – **Insurer’s Assessment of Risk Exposure**

Section 3 – **Group Assessment of Risk Capital and Prospective Solvency Assessment**

Solvency Modernization Initiative

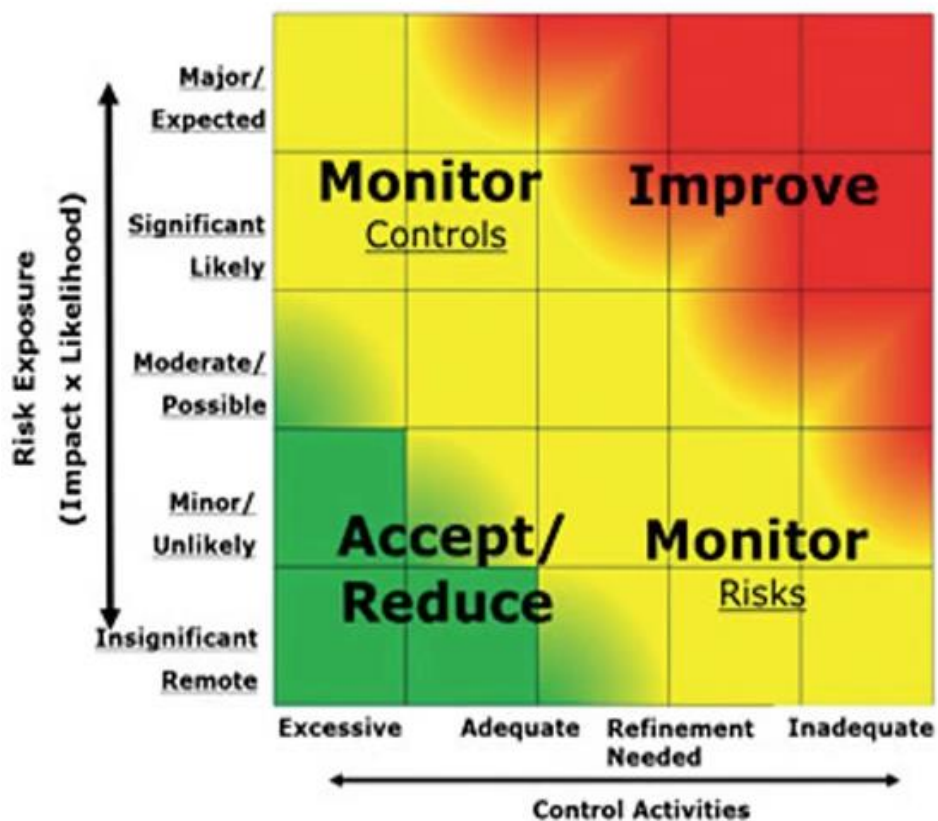


“ORSA Guidance Manual”

Section 1 – **Description of Risk Management Framework**

- Risk Culture and Governance
- Risk Identification and Prioritization
- Risk Appetite, Tolerances and Limits
- Risk Management and Controls
- Risk Reporting and Communication

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“ORSA Guidance Manual”

Section 2 – Insurer’s Assessment of Risk Exposure

- Detailed Description of Material Risks, Assessment Methodology and Assumptions
- Section 2 may include detailed descriptions and explanations of the material and relevant risks identified by the insurer, the assessment methods used, key assumptions made, risk-mitigation activities and outcomes of any plausible adverse scenarios assessed.

Solvency Modernization Initiative

Scenario-based stress testing has gained traction as an innovative method to assess capital adequacy under various hypothetical scenarios.

The Catastrophe Modeling Center of Excellence (COE) provides state regulators with technical training and expertise regarding catastrophe models and information regarding their use within the insurance industry:

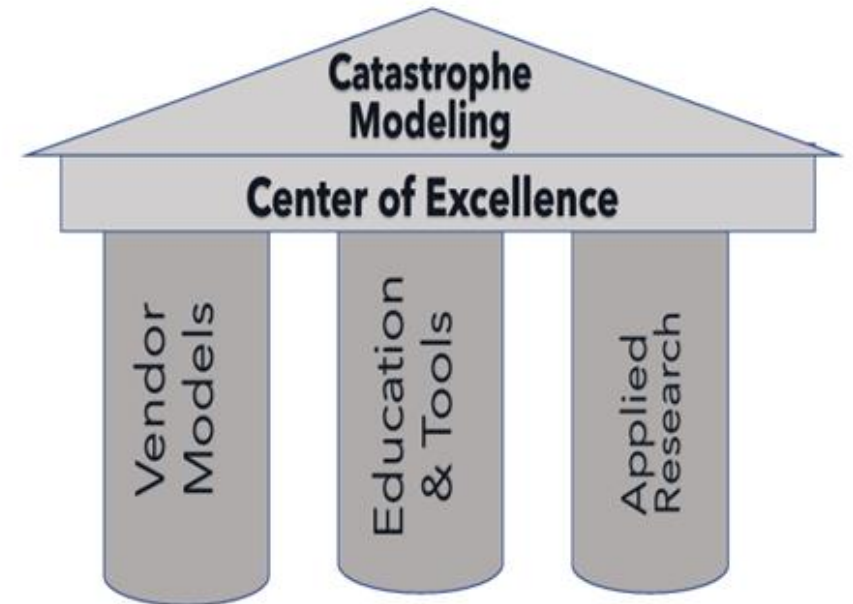
- ✓ Ratemaking,
- ✓ Credit quantification,
- ✓ Reinsurance purchase,
- ✓ Capital, and
- ✓ Solvency assessment.



CENTER FOR INSURANCE POLICY AND RESEARCH

MISSION STATEMENT

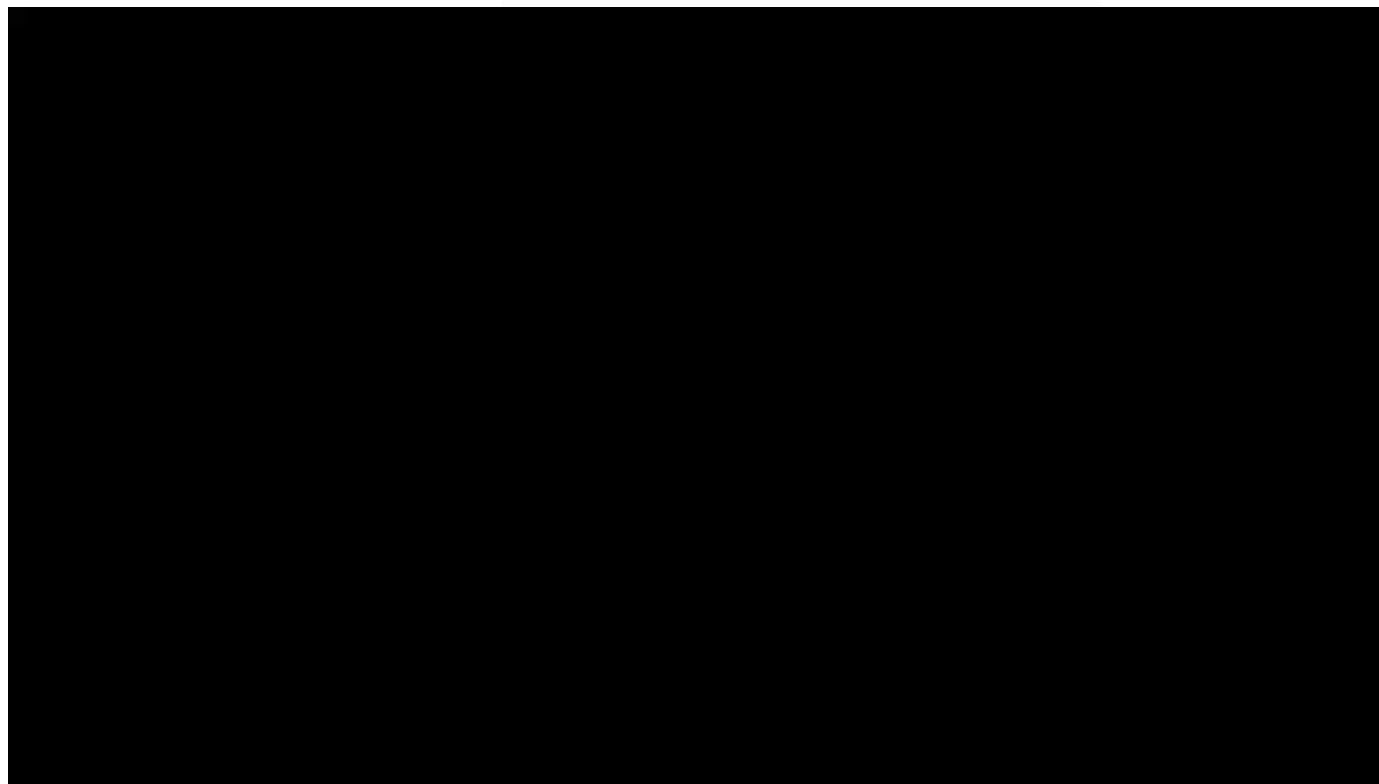
The purpose of the NAIC Catastrophe Modeling Center of Excellence (COE) is to **provide state insurance regulators with the necessary technical expertise, tools, and information to effectively regulate their markets.**



Solvency Modernization Initiative

Scenario-based stress testing

For example, a property and casualty insurer may simulate a severe hurricane or earthquake scenario to gauge the adequacy of their reserves and reinsurance coverage, ensuring they can withstand such a catastrophic event without compromising their financial stability.



Solvency Modernization Initiative



“ORSA Guidance Manual”

Section 3 – **Group Assessment of Risk Capital and Prospective Solvency Assessment**

→ The group capital assessment should include key methodologies, assumptions and considerations used in quantifying available capital and risk capital.

→ Such an assessment may involve a review of any group solvency assessment, and the methodology used to allocate group capital across insurance legal entities, as well as consideration on risk capital or the movement of risk capital to legal entities within the holding company system.

→ Form F-. ENTERPRISE RISK REPORT under Insurance Holding Regulation addresses enterprise risk exposures that could adversely affect the insurance holding company system.



Assessment of and Insights from NAIC Climate Risk Disclosure Data

November 2020

Solvency Modernization Initiative

- **The Climate Risk Disclosure Survey**, adopted by the NAIC, is a voluntary risk management tool for state insurance regulators to request from insurers on an annual basis a disclosure of the insurers' assessment and management of their "climate-related risks".
- The **Climate Risk Disclosure Survey** purpose is to:
 - ✓ Enhance transparency about climate-related risks.
 - ✓ Identify good practices and vulnerabilities.
 - ✓ Provide a baseline supervisory tool.
 - ✓ Promote insurer strategic management.
 - ✓ Better-informed collaboration among regulators. Align strategies with international climate risk frameworks.

Environmental, Social, and Governance (ESG) Policies



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ESG factors are increasingly being incorporated into corporate governance frameworks as well as risk management and risk assessment frameworks so that companies can better assess their risk exposure and mitigate against those risks.

The NAIC encourages insurers, regulatory bodies, and policymakers to consider the reliability of metrics and the impact of ESG policies on the financial condition of insurers and the availability and affordability of insurance products and services.

Collaboration and Standardization Efforts



- Regulators are recognizing the importance of collaboration and standardization to establishing common frameworks for solvency measurement.
- For example, the International Association of Insurance Supervisors (IAIS) has developed the Insurance Capital Standard (ICS), aiming to create a globally harmonized approach to valuation, qualifying capital resources, and standard method for the measurement of capital requirement.
- Collaborative efforts promote transparency and create a common language for supervisory discussions of group solvency to enhance global convergence among group capital standards.

Thank you!