

Solvency Modernization Initiative Update July 28, 2010

The Future of Risk-Based Capital Requirements

In June Director Christina Urias, Chair of the Solvency Modernization Initiative Task Force and the Arizona Director of Insurance, asked the Capital Adequacy Task Force to perform a holistic evaluation of the RBC formulas, factors, and methodologies and recommend a timeline for implementation of changes.¹

The Capital Adequacy Task Force's Solvency Modernization Initiative Subgroup met in Washington D.C. July 21-22 with more than 50 interested parties to brainstorm about the following issues:

- (1) Calibration of and covariance within RBC.
- (2) Missing risks that should be quantified in the RBC.
- (3) Identification of risk quantification that should be improved, using modeling where factor-based approaches are not sufficient to capture the identified risk.
- (4) Prioritization of projects.

While no final decisions were made at the meeting, the following are the general "take-aways" from the meeting:

- An over-all aim and description of a "future" RBC needs to be developed.
- The RBC formulas should continue to be separate by lines of business (e.g. life, P&C, health, etc.). However, there should be consistency between the formulas where possible.
- The overall calibration of the RBC to a specified level of safety was identified as a difficult issue to solve given that credible loss distributions are not available for each risk and factor and, thus, judgment would need to be utilized. Regulators will discuss this issue with counterparts in other countries and will issue a decision as to the level and time horizon to target. Impact studies will need to be performed to assess the effects of calibration on required capital amounts.
- Covariance in the RBC formula is currently assumed to be either at none (0) or complete (1) and participants recognized there should be improvement in this calculation. The belief is that the methodology could be similar across lines of business but that the actual dependencies should vary.
- In identification of significant needed improvements, participants agreed that the areas are already identified on the Capital Adequacy Task Force's work plan. Projects already underway to improve the RBC formula include the following: quantification of catastrophe risk in the property/casualty RBC using modeling, the improved measurement of interest rate and market risk (C-3) in the life RBC, improved measurement of asset risk in all formulas, and the impact of health reform in health RBC.
- Special focus should be given to proportionality and the ability to perform more sophisticated calculations, especially for small insurers.
- Consideration should be given to including some currently-excluded lines of business (e.g. title, guaranty, RRGs).
- The life insurance RBC model might need to utilize more modeling given the interaction of asset and liability valuation and the long-term nature of the liabilities (to achieve a total balance sheet approach).

¹Link to Director Urias' June 7, 2010 letter: http://www.naic.org/documents/committees_ex_isff_100607_rbc_ref.pdf

- Regulators need to make a plan of action as to how to address non-regulatory uses of RBC.
- This group is not charged to discuss group capital requirements.

Some additional issues that were identified include the following problems or improvements to current measurements: extreme events, procyclicality, risk mitigation, hedging, reinsurance, non-U.S. subsidiaries, defaults, counterparty credit risk, interest rate risk for property/casualty RBC, longevity improvements, operational risk, contagion/reputation risk, and asset/liability interaction. Regulators need to decide which items should be addressed, considering some items do not need to be addressed in the RBC directly either because some risk is already considered in valuation, is already included in the RBC formula (e.g. growth charges as a partial measure of operational risk), is not material, or could be grouped in the overall calibration (because quantification is too judgmental).

More details of the discussion can be obtained from the minutes of the meeting. For additional information about the SMI, see the SMI web page at http://www.naic.org/index_smi.htm