A Proposed Unified Valuation System

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Abstract

Two and a half years age, the Life/Health Actuarial Task Force came to the American Academy of Actuaries with the request to start with a clean sheet of paper and propose a new statutory valuation system. With the 1000's of hours and $100,000's of dollars being devoted to even the simplest types of insurance (Term and XXX) reserve standards and with similar investments needed for new and innovative products (like equity indexed annuities) it was hoped that a better approach could be formulated.
The Academy group recommended a "Unified Valuation System" based on an actuary documenting all of the risks assumed by the insurance enterprise and its approach to managing that risk (reinsurance, hedging, etc,). For risk retained by the company a probability distribution is determined. This approach allows a focus on actuarial analysis to determine solvency and viability through the use of an "S-curve" approach to quantify the level of assets needed to be sufficient X% of the time. I.e., the probability of ruin is 1-X and could be defined at a level of 70-85% for reserves and along a spectrum of 90-99% for required capital, with different trigger points to equate to the current RBC regulatory action levels.
I will briefly describe some analytical examples of this stochastic modeling of risk used to illustrate the S-curve approach to valuation, but more importantly describe key additional areas of research and theory, which need to be developed. For example, defining the impact of risk and covariance from a total company perspective. While a later session will go through a detailed specific product example, the focus of this presentation is an invitation for additional research to support a new approach to statutory valuation of life and health risk that can result in better management and regulatory information.