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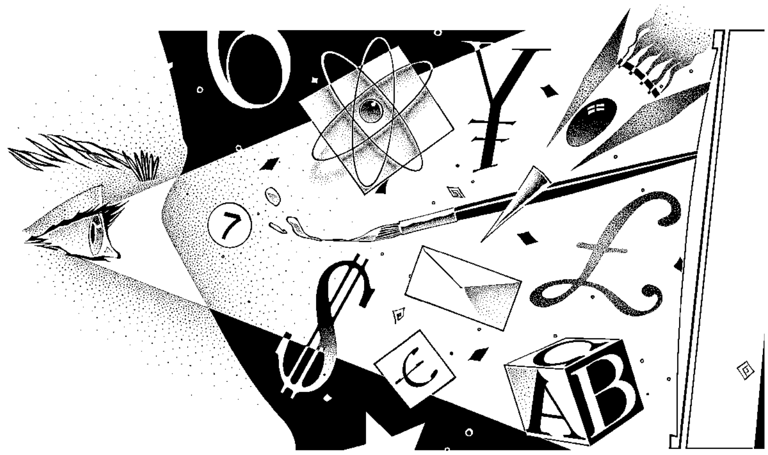
What Is the Unified Valuation System (UVS) and What Are its Origins?

by Donna C. Novak



The Life and Health Actuarial Task Force (LAHTF) of the National Association of Insurance Commissioners (NAIC) asked the American Academy of Actuaries (Academy) for assistance in the development of an alternative valuation methodology to address many of the shortcomings of the current valuation system for U.S. life and health insurers. LHATF was concerned that the current valuation system does not work ideally for newer life and health insurance products and has led to the proliferation of undesirable variations in state requirements. The unified valuation system is the Academy's response to this request.

In 1997, the Academy Valuation Task Force formed a team to address the problems with the current valuation system that has met regularly since the original charge. After their initial analysis, it determined that the current system has generated a "proliferation of inconsistent requirements that do not adequately address current product design, do not reflect emerging experience, and do not appropriately address significant risks." The task force, therefore, concluded that because of these serious deficiencies in the current valuation system, a revised approach is warranted.

Next, the Valuation Task Force studied the valuation methodologies of other countries. Australia, Canada, and Singapore were studied in depth, since they all have capital adequacy standards that are more forward-looking that the current U.S. methodology. The valuation approaches used in these countries consider business plans and recognize the need for actuarial judgment.

Although the Valuation Task Force considered a number of potential methodologies that would eliminated the deficiencies of the current system, the alternative that has received the most focus is the "S-curve alternative." The S-curve is the probability curve representing the probability that the organization will be viable at some point in the future depending on some set of variables. The appointed actuary would do an analysis of organization's obligations and the assets allocated to support those obligations. If the probability that the assets are not adequate to meet the obligations at specific regulatory levels, regulatory intervention similar to the risk-based capital (RBC) regulatory action levels would be triggered.

The Valuation Task Force has demonstrated the implementation of this concept by drafting a number of tools that would be used in its implementation including a model law, samples of an appointed actuaries opinion with accompanying memorandum, and a sample of a reviewing actuary's opinion. In this paradigm, the appointed actuary's report is reviewed for completeness and compliance by an independent actuary identified as the reviewing actuary.

Because of the importance of the viability analysis to the organization, it would be required that it be presented to management and the board of directors indicating the insurer's ability to carry out its business plan. Many feel that even if the S-curve approach is not implemented as a regulatory tool, it is important for good corporate management that this type of analysis to be done.

Without a forward-looking analysis of risk, organizations do not have adequate information concerning the level and makeup of current risk and the probability that the organization will not be able to cover these risks with current assets and financial strategies.

The unified valuation system approach provides holistic financial information and enables the insurance industry to find a new dynamic dimension of service and protection. It is addresses "overall asset adequacy rather than contract reserves, by testing all of the material obligations of the insurer and not just those specifically associated with insurance for the full duration of those obligations reflective of the actuary's professional judgment concerning the future viability of the insurer." In doing an analysis of the ongoing viability of the company, it is flexible, permitting the appointed actuary to recognize the company's cash flows pursuant to appropriate assumptions that would be revised over time to reflect changes in the insurer's circumstances.

Objectives of UVS

The Valuation Task Force identified three objectives of valuation that must be satisfied for any new valuation system:

1. Evaluation of the ability of a company to execute various business alternatives

2. Evaluation of the adequacy of resources relative to obligations

3. Measurement of changes in resources relative to obligations

The Valuation Task Force identified as its future work the defining of a unified valuation system that would meet all three of these objectives.

Framework of UVS

The Valuation Task Force set out the following framework for a unified valuation system:

1. Provide information to policyholders, regulators, and others to assist them in making informed judgments about insurers' financial condition.

2. Support financial analysis both at points in time and over time.

3. Address overall solvency, not just contract reserves; in particular, address resources consistent with obligations.

4. Produce auditable and verifiable results and incorporate an actuarial "feedback loop" in which assumptions and projected results are compared to emerging experience.
5. Cover all insurance activities; it is holistic, considers the entire enterprise, rather than merely representing a sum of independent parts.

6. Balance practicality, cost, and resource effectiveness in relation to the value of the information to the audience.

7. Be consistent for all companies and among regulatory jurisdictions.

8. Be flexible; e.g., be able to accommodate unidentified future needs.

9. Utilize actuarial judgment in the development and interpretation of results in preference to prescribed methods and assumptions.

10. Accommodate materiality issues.

Year 2000 Goals for UVS

The Valuation Task Force will pursue the following three items with LHATF:

1. Requirement of a viability report

2. The best way to include High Impact Low Frequency events in the report

3. Use of the S-Curve approach in Risk Based Capital for new and innovative products

Additionally, the Valuation Task Force will be working with academics to refine the S-curve approach and will be creating a model that will show how this approach can be used in a multi-line company.

The model will take a stochastic approach to predict the probability of the organization being viability at specific points in time. Input to the model will include economic, mortality, morbidity, loss, expense and corporate strategy assumptions. Multiple lines of business will be modeled independently using common assumptions and then brought together into a company-wide model. Output will be designed to support general management decision making, as well as, the viability report.

Working with academics, the Valuation Task Force will get input from leading experts in the country on how to structure and implement an S-curve approach. This effort started the first week in January with a meeting in Chicago where leading experts in economics and statistics from the top schools met with the Valuation Task Force to discuss UVS. Further discussions will talk place during the spring and summer.

In the fall, the Valuation Task Force is planning a one-day seminar on UVS in conjunction with the SOA. At this seminar, representative academics will present their perspective on UVS. Also, the individuals responsible for creating the UVS model will describe their process. This should give participants a through understanding of the UVS approach and how to actually implement it in a complex corporate environment.

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Donna C. Novak, ASA, MAAA, is a consulting actuary at Deloitte & Touche, LLP in Fox Lake, IL. She can be reached at donovak@dttus.com.