

PBR: The Canadian Experience

While the idea of principles-based reserves may be evolving in the United States, it's been a way of life for most Canadian actuaries over the past 15 years.

BY RALPH OVSEC

CANADIAN VETERANS of the principles-based reserve (PBR) system will most likely agree that despite the extra requirements and added responsibility, the principles-based approach has stood the test of time and continues to deliver many benefits for all users.

The most significant benefits of calculating reserves based on a set of guiding principles are the responsiveness to product changes and the company's ability to reflect its own experience. Rather than using strictly prescribed assumptions, each insurer has the latitude to customize assumptions that reflect experience, product mix, and even the company's own characteristics and risk management practices. This provides everyone with a better understanding of the economics—and the risks—of the business.

Without this flexibility, regulations tend to cater to the lowest common denominator. Strong performing companies would suffer from this extra measure of built-in conservatism. Under principles-based reserves, these same companies are able to calculate their reserves using assumptions and margins relevant to their own business.

Under Canada's system, reserves are calculated as gross premium reserves and reflect best-estimate assumptions and appropriate margins for all contingencies. The best-estimate assumptions are intended to be precisely that—future best estimates with no provisions for conservatism. Conservatism is set through explicit valuation margins that are appropriate to the specific risk. Future expected profits are then equal to the future releases of these explicit margins.

Streamlined Federal Regulation

While U.S. statutory governance of insurance is at the state level through the National Association of Insurance Commissioners

(NAIC), Canada's insurers are regulated largely at the federal level by the Office of the Superintendent of Financial Institutions (OSFI). Under this more centralized approach, the OSFI delegates responsibility for setting statutory reserving standards to the Canadian Institute of Actuaries (CIA). OSFI retains the responsibility for setting capital standards but involves the industry in discussing these issues as well.

The CIA takes its reserve-setting responsibility seriously. The CIA has established Standards of Practice that define how business is to be valued, how best-estimate assumptions are developed, and what constitutes appropriate ranges for valuation margins. These standards are reviewed and, where appropriate, updated regularly to reflect new products and techniques, emerging issues, and changes in accounting standards. Supplementary documents, referred to as educational notes, offer interpretations of standards and alternate acceptable methods of valuation. Any changes to the standards must go through a detailed review process before they're proposed to the CIA membership for ratification by a majority vote. There are many, sometimes colorful debates during this review process.

Several CIA committees are designed to assist actuaries and cover topics such as understanding risk measures and calculation, developing experience studies, or dealing with investment matters. These and other CIA committees are in constant correspondence with regulators as well.

Challenges for Actuaries

The weighty responsibility of self-regulation adds challenge to the actuary's job. Developing experience-based assumptions requires actuaries to regularly monitor the behavior of their own business.

A key feature of the principles-based reserves and gross premi-



um method of valuation is that assumption changes made as a result of these assumption reviews are capitalized into income as they occur. These changes can be material and require the actuary to provide complex explanations to the various users.

Principles-based reserving requires continued attention to the Standards of Practice. To remain current, Canadian actuaries must document their own compliance with continuing professional development requirements. In the future, appointed actuaries will be required to have a Practice Certificate in order to sign statements, similar to the U.K. approach.

Most important, PBR methods require the actuary to have an extremely well-rounded working understanding of a company's products and operations, risk structure, and emerging experience. The actuaries have to produce solid experience studies and take ownership of the expected experience and level of margin in the calculation of reserves. The Canadian system ensures that actuaries have access to information and the board of directors.

Built-in Checks and Balances

Once actuaries have jumped all these hurdles, they must report on the results of their work to a number of third parties, including regulators,

auditors, and external reviewers.

The OSFI requires a detailed annual report of the valuation, data checks, assumptions, and assumption changes for all significant products. Regulators check assumptions for appropriateness and compare mortality and margin levels across the industry to understand the range of practice.

In addition to Standards of Practice, assumptions must also comply with the Canadian GAAP reporting standards and pass the review of an external auditor guided by the Accounting Standards Board.

At least once every three years, an independent third party reviews the actuaries' processes and assumptions. The purpose of this review is to obtain third-party validation of the assumptions and calculations. A formal opinion is then generated for the actuary, auditor, and regulator confirming that the assumptions and reserves are reasonable.

Last but not least, management and the board of directors are also standing in line as an actuary's key clients. Explanations of assumptions and their development, and the impact of any changes on reserves and income statements, are critically important in understanding how the business has behaved.

PBR and its requirement of appropriate assumptions have placed a very high emphasis on data. The insurance industry recognizes this and respects the fact that reinsurers need good data. At Swiss Re Life & Health Canada, close to 100 percent of our client data exist on a policy-by-policy basis, allowing us to develop our own experience studies and use the information to benefit clients.

There's no question the PBR process is time consuming. With PBR in place, however, actuaries enjoy more challenging, rewarding jobs. And ultimately, the entire industry benefits from better assessment of risk through better data and more precise assumptions. ●

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