NAIC National Association of Insurance Commissioners & The Center for Insurance Policy and Research
CIPR newsletter

The Future of Life Insurance Regulation—Principle-Based Reserves

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◆ History

The NAIC adoption of the Valuation Manual at its 2012 Fall National Meeting likely marks the beginning of a new era of life insurance regulation. Since the days of Elizur Wright, the 19th century mathematician considered by many to be the patriarch of actuarial science, reserve calculations have been formula-driven. For almost 150 years, reserves generated using formula-driven approaches have provided security and stability for the insurance industry, dampening the impact of claims and narrowing claims-related earnings volatility. The security afforded by the recognition of reserve liabilities on insurance company balance sheets has supported company solvency and, in doing so, has bolstered consumer confidence. The formulaic nature of reserves gives regulators assurance that reserves for similar policies are calculated consistently across all companies, making the review and verification process relatively easy.

◆ Why Change?

Given the illustrious track record of consistency and stability accompanying formula-driven reserves, why change to principle-based reserving (PBR)? The answer lies in the changing nature of insurance products. For decades the industry flourished on products that were relatively simple in design and easy to understand. Term insurance, whole life and fixed annuity policies were the staples of the industry. These products, and the riders attached, were straight forward, simply priced and easily valued. The task of generating accurate reserves for these policies could be accomplished by any second- or third-year actuarial student with a solid understanding of life contingencies.

The 1980s ushered in the era of universal life policies. While such universal life policy features as flexible premiums, current and guaranteed cost of insurance scales, guaranteed maturity funds and guaranteed maturity premiums added a few wrinkles to the calculation process, the fundamentals of generating policy reserves remained fairly intact. In contrast, today's products have become much more complex.

The introduction of numerous option-based policy guarantees and other secondary guarantees require additional sophistication to effectively address their recognition and valuation in the reserve development process. Only recently has the industry taken steps to address the fact that some risks inherent in secondary guarantees are not adequately recognized in the traditional reserve formula. In addition to the increased complexity in policy design, significant variation in the types of assets underlying the reserve liability and the expected returns from those assets add to the challenge of determining that reserves are provided for adequately.

◆ Change to PBR

In response, the discussion of 'right-sized reserves' began to surface and gain traction. About 10 years ago, regulators and industry advocates began developing approaches to reserving that would fully reflect the risks inherent in secondary guarantees and policyholder options, the probability of exercising those guarantees and options, and the availability of cash flows from company investments to support those values. The current efforts to develop and codify PBR have evolved from those early discussions. With PBR, the calculation of company reserves will incorporate greater levels of actuarial analysis and will more closely reflect the company's own mortality, lapse and other policy experience. The reserving process will replace the traditional reserve formulae with stochastically generated reserves, using company experience data, to the extent that data is credible.

◆ Impact of Move to PBR

The recent NAIC adoption of the Valuation Manual is the first major step in the move to PBR. It allows the states to begin considering adoption of the *Standard Valuation Law* (#820), as well as the Valuation and Standard Nonforfeiture Law for Life Insurance (#808). The operative date of the Valuation Manual will be the January 1 of the year following the July 1 when the Model #820 has been enacted by at least 42 of the 55 jurisdictions with greater than 75% of the direct premiums written.[1] All policies issued on or after the operative date of the Valuation Manual will be subject to the PBR standard.

Some products will experience lower reserves under PBR; other products will see higher reserves. Term products are expected to exhibit the most consistent lowering of reserves. Overall, as PBR allows companies to use their own experience in the reserve determination process, reserve redundancies will be reduced. Capital that would have been committed to fund reserves will be available for companies to use as they choose. It is possible that competitive market forces will push companies to use a portion of the newly available capital to lower premiums, bringing further benefit to consumers.

◆ Challenges of Moving to PBR

As the industry moves to PBR, it will not be without challenges. The initial expense of implementing a PBR system could be substantial for some companies. Companies might have to purchase new software, train current staff or hire additional staff to successfully accomplish PBR. Replacing

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[1] As reported in the following annual statements submitted for 2008: life, accident and health annual statements; health annual statements; or fraternal annual statements.

the formula-driven approach with stochastic processing will be particularly challenging to smaller companies that might not have the in-house actuarial expertise to assume PBR-related responsibilities. These companies might be forced to rely on consultants to provide support. Regulators will also need to add to the resources necessary to review the company submissions and conduct audits.

◆ NAIC/Industry Response to Challenges

To allow companies time to identify and address these challenges, the Valuation Manual provides a three-year transition period beginning on the operative date of the manual before companies are required to comply with PBR standards. Companies are permitted to comply earlier, anytime within those three years, if they desire.

The Valuation Manual also provides exemption criteria that might relieve some insurers from having to do more sophisticated stochastic modeling to generate reserves on certain policies. Successfully passing one or both Valuation Manual exclusion tests will allow companies to instead use the simpler, but less exacting, net premium reserve or deterministic reserve calculation.

In recognition of the challenges the states will encounter as PBR is implemented, the NAIC has committed to providing supports to assist state insurance regulators in meeting these challenges. The NAIC's PBR implementation plan, recently released for comment on the Web page of the Principles-Based Reserving (E) Working Group,[2] lays out the rudimentary steps necessary for PBR implementation, including significant training and the hiring of additional actuarial staff to assist the states in reviewing and assessing company reserves.

As the PBR process continues to progress, the NAIC will continue to address questions and concerns expressed by regulators and industry. In addition to the question of resources, another concern is that, as PBR decreases reserves, it could also increase the risk of insolvency. While the basic premise underlying this concern—i.e., the lower the reserve the greater the probability of insolvency—is obviously true, it fails to consider that the Towers Watson study on PBR concluded that term policies are possibly over-reserved by as much as 100%. So, while it is fair to surmise that reducing the reserve on a policy to a reasonably conservative level could increase that policy's risk of default, the increased risk is most likely neither significant nor material. Further, the regulatory framework is set up to adjust the reserving process as needed with changes to the Valuation Manual, and requires the review of company assumptions and experience. This introduces a self-correcting feature into the reserve process.

Another concern is that allowing companies to determine their reserve assumptions could lead to a pursuit of short-term earnings and capital wins at the expense of long term solvency. This concern makes the point that, as the banking industry faced its crisis, the banking version of PBR failed to provide adequate supports to prevent failures. It is expected that insurance regulators will be vigilant to any type of gaming in this regard. Today, companies are engaging in myriad reinsurance and captive arrangements in order to enhance earnings and capital figures by reducing reserve redundancies. Some regulators believe that the move to PBR will minimize the need for such arrangements, thereby allowing state insurance regulators to regain control of how reserves are generated.

Further, it must be noted that, while there are some similarities between the insurance and banking sectors, the two sectors are fundamentally different, as is the nature of the liabilities. While both banking and insurance offer products, bank deposits and cash value insurance policies, that are essentially put options owned by the depositor/policyowner, only the insurance products require the maintenance of cash equal to 100% of the value of the option. Insurance entities also tend to invest funds supporting its liabilities more conservatively, resulting in lower asset default rates and more predictable returns. The major risks accepted by insurance entities are based on fortuitous events that conform well to the law of large numbers and are therefore fairly predictable. Most importantly, the application of PBR to the insurance valuation process will be prospective, covering only policies issued after adoption of the regulation. This will allow ample opportunities for the industry to apply corrections to the principle-based approach at a time when reserve redundancies in policies issued prior to PBR can absorb the capital strain.

◆ Conclusion

It is anticipated to take from three to five years to obtain the 42 state adoptions of Model #820 necessary to make the Valuation Manual operative. Given that time frame and the three-year transition period required by the Valuation Manual, most companies will not produce PBR until 2018 at the earliest. In the meantime the NAIC is continuing to develop supports for the states for PBR implementation. Not only will the supports assist in the performance of reviews and assessments, but NAIC will also work with insurance industry trade groups to provide training. Meanwhile, the Valuation Manual will continue to undergo additions, revisions and enhancements to incorporate more products and to capture the product innovations that are sure to arise.

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[2] *www.naic.org/committees_e_isftf_pbr_wg.htm*

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