Insurance principle-based reserving

Emerging industry challenges and opportunities

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Glossary

DR:	Deterministic Reserve. One of three components of PBR; which requires parallel modeling of assets alongside liabilities.
FSOC:	Financial Stability Oversight Council. An interagency federal regulatory body.
NAIC:	National Association of Insurance Commissioners
NPR:	Net Premium Reserve. One of three components of PBR, which uses a limited number of standardized assumptions.
PBR:	Principle-Based Reserving. The new mechanisms for assessing life insurance reserves based on company-specific components and advanced mathematical modeling processes.
SR:	Stochastic Reserve. One of three components of PBR, which requires parallel modeling of assets alongside liabilities.
SVL:	Standard Valuation Model Law, which implements PBR
VM:	Valuation Manual

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1. Executive summary

On January 1, 2017, a long-anticipated shift is expected to take effect in the U.S. life insurance regulatory framework. A new, more dynamic, more customized approach to calculating required reserves at U.S. insurance companies is making its way through the state-based regulatory system. The shift reflects a multiyear process to implement the National Association of Insurance Commissioners (NAIC) new Standard Valuation Model Law (SVL). The new SVL, upon implementation by states, will shift away from a standardized "one-size-fits-all" reserve requirement to a "Principle-Based Reserving" (PBR) model seeking to align reserves more closely with actual risk profiles at individual firms. While the shift to PBR has been anticipated for years, many life insurance companies have limited their activities around implementation until the adoption date has become clearer.

The next key date for PBR implementation, which applies to new business only, is July 1, 2016; per the SVL, the Valuation Manual (VM), which provides for the details of the methodology, will be effective 6 months after July 1 when the specified written premium requirements are met from the total number of required adopting states. If these requirements are met on July 1, 2016, then the VM will take effect on January 1, 2017. Once the VM is operative, PBR will be optional during a three-year transition period. PBR will then become mandatory on January 1, 2020. KPMG LLP (KPMG) further expects the Federal Reserve to leverage on these rules when setting regulatory capital requirements for insurance companies subject to Federal Reserve jurisdiction.

Over the next six months, life insurers should begin to undertake the complex initiatives to implement new reserve valuation models and new regulatory reporting structures if they want to be early adopters of PBR. Proactive action now will enable life insurers to assess the strategic implications that PBR implementation will have on their capital position, product design, and tax liabilities to maximize potential benefits from this market disruptor.

This Point of View assesses the implications the new rule holds for product profitability, model construction, model governance, regulatory reporting, and tax liabilities.

Insurance companies should be starting their compliance process now, irrespective of when they intend to adopt during the three-year transition period. Those who intend to be early adopters should strongly consider a multitiered implementation program that permits parallel, integrated systems to be built in order to meet the January 2017 implementation target. All life insurance companies should be proactive by conducting accelerated product and reserve reviews in the second half of 2016. Life insurance companies subject to Federal Reserve jurisdiction should also approach their PBR implementation with a heightened awareness of the link between reserves and regulatory capital.

2. Background

2.1 Principle-Based Reserving

Currently, insurers use a formula-based static approach to calculate reserves for life insurance products. In 2009, the NAIC issued a model law that introduced a new method for calculating life insurance policy reserves—the Principle-Based Reserving approach, or PBR. It is expected to reduce reserves that are too high for some products and, potentially, increase reserves for other products.

As of this report, 45 states representing over 79 percent of direct premiums written for life, accident and health, and fraternals have enacted laws implementing versions of PBR at the state level. The NAIC Legal Division has issued an opinion that a sufficient number of states have thus taken action to justify the NAIC from taking the final procedural step to make PBR effective as of January 1, 2017.

The new framework will require insurance companies to hold the higher of (a) a minimum floor reserve called the "Net Premium Reserve" (NPR) that uses prescribed assumptions and (b) the reserve that considers a wide range of future economic conditions and is computed using company-specific experience factors, such as mortality, policyholder behavior, and expenses. The goal is to better capture in the regulatory framework the true cost of insurer obligations as well as changes in underlying economic conditions that can impact the risk associated with individual insurance obligations over time.

The PBR requirements currently under discussion will apply initially only to life insurance products. The NAIC model law anticipates, however, that the new framework ultimately will also be extended to certain health insurance products and nonvariable annuities as well. A similar principle-based approach for variable annuities (AG 43) has been in place since 2009.

2.2 Remaining ambiguities

In order for the new reserve framework to become effective in January 2017, states must self-certify and the NAIC must declare by July 2016 that a sufficient number of states have implemented "substantially similar" standards. While the outcome of the "substantially similar" determination introduces uncertainty into the time line for the effective date of PBR, all NAIC PBR-related work streams are proceeding under the assumption that PBR will become effective in January 2017.

This leaves less than six months for life insurers to undertake complex and sophisticated initiatives to implement new reserve valuation models and new regulatory reporting structures if they wish to be early adopters of PBR.

Life insurers active in more than one state market will potentially face additional compliance and model construction challenges as they build multiple, customized compliance processes, especially if they conduct business in certain key states that have not adopted PBR, such as New York.

2.2.1 Definitions

In December 2012, the NAIC adopted a VM designed to provide some cross-border consistency in how the PBR would be implemented and, thus, mitigate the need for insurers to modify products in ways that avoid the formulaic regulatory requirements.[1] Before the NAIC can complete its decade-long effort to adopt PBR, assessments need to determine that each of the states enacting the amended SVL to date have implemented laws "substantially similar" to the amended SVL.[2] These determinations have not yet been made by all states. A recent NAIC legal opinion suggests strongly that the necessary determinations will be issued by states.

The NAIC has attempted to accelerate implementation by signaling an intent to use implementation of laws "substantially similar" to the new PBR standard as a requirement for maintaining accreditation as an NAIC member. However, it is unclear whether the accreditation standards regarding the PBR will be identical to the NAIC model law.[3]

2.2.2 Exemptions

The SVL creates a "Single State Exemption" that allows the insurance commissioner to exempt specific product forms or product lines of a domestic company that is licensed and doing business only in the state of domicile. Louisiana, however, has enacted a general exemption giving the commissioner authority to exempt any domiciliary company from the VM. As of May 31, 2016, legislation to repeal this exemption has passed both the Louisiana House and Senate, and is currently awaiting signature by the Governor.

3. Implications

3.1 Life insurance reserves

Many state regulators see the shift towards the more customized and dynamic PBR as a mechanism for decreasing or eliminating excess reserves through captives. For example, Vermont's Deputy Commissioner of Captives, David Provost, indicated at the 2016 RIMS Conference that PBR "will probably strongly diminish the use of captives for excess reserves because there should not be excess reserves on a going forward basis."

In reality, excess reserves through captives will only run off over time. Existing reserves held by captives regarding business from prior years will remain in place. The new PBR framework instead may only decrease the potential creation of new captives or ceding of new business to existing captives for the purpose of minimizing the impact of redundant reserves.

Regulators will also take a cautious approach to adjusting reserves during the implementation period. As noted, PBR requires an insurer to compare the net premium reserve with its modeling results. The model-based calculations reflect elements of company experience and include more room for judgment.

Implementation questions concerning the embedded assumptions associated with the PBR calculation are already being raised. For example, the NPR floor reserve calculation relies on simplified assumptions that some see as being inconsistent with industry experience. As of the date of this publication, certain proposals to amend the NPR assumptions are under debate by the NAIC, which may result in a higher NPR under most circumstances. In particular, some have suggested that the currently prescribed assumptions for expense allowance and postlevel term profits are too high and should be modified to align more with industry experience.

The goal of the net premium reserve is to provide regulators with a minimum reserve that acts as a "guardrail" until regulators gain comfort with modeling techniques, model assumptions, and model governance processes and controls. If the NPR is too low, it will not serve as a sufficient "guardrail" in the view of those raising concerns. As of this writing, it is unclear what changes will be made, if any, to the NPR calculation. However, any changes are likely to not be effective until 2018.

1 The VM set three hurdles for full implementation: (1) the VM has been adopted by the NAIC (this action was taken in December 2012); (2) states representing greater than 75 percent of the applicable 2008 direct premiums written must have passed legislation "substantially similar" to the NAIC model law; and (3) at least forty-two (42) of the applicable fifty-five (55) NAIC jurisdictions must also have enacted legislation "substantially similar" to the NAIC model law.

2 At the 2015 NAIC Fall National Meeting, the Principles-Based Reserving Implementation (EX) Task Force (the "PBR Implementation Task Force") adopted the criteria for making a determination whether a state's adoption of the amended SVL should be considered "substantially similar." On May 2, the PBR Implementation Task Force indicated that, pending legislation passing in Louisiana, the substantially similar criteria has been met. Since May 2, Alabama and Minnesota have also adopted substantially similar legislation, which brings the totals to 45 states with 79 percent of premium.

3 Each state must self-certify that its implementation is "substantially similar" to the NAIC model law. However, NAIC recommendations can be used to support regulatory action, subject to the usual state administrative law review procedures.

4 The Valuation of Life Insurance Policies Model Regulation provides rules for minimum and basic standards of valuation for life insurance plans with secondary guarantees or nonlevel premiums or benefits.

3.2 Product profitability and design

Implementation of the VM seems likely to generate variations in reserves across the insurance industry. KPMG expects, that at least initially, term life insurance products may become marginally more profitable due to the elimination of the deficiency reserves required by the Valuation of Life Insurance Policies Model Regulation[4] (formerly known as Guideline XXX).

However, due to fierce competition, this is unlikely to increase profitability in the long run as insurers will likely push down prices further once they are able to gain comfort with their assessment of the impact of PBR on their own business. Insurers can prevent unpleasant surprises by considering PBR early in the product design process in order to generate a more realistic assessment of potential product profitability.

PBR also creates pricing issues due to the uncertainty it creates regarding the calculation of tax reserves. Because product pricing relies on profit projections, tax considerations are an integral part of the product design process for life insurers. Companies should be prepared to be flexible in their product design for the first few years of PBR implementation. Flexibility will permit companies to modify pricing and design as tax reserve regulations become clearer.

3.3 Valuation system upgrades

PBR introduces a number of new concepts to statutory reserving, foremost among these being the NPR, the Deterministic Reserve (DR), and the Stochastic Reserve (SR). The NPR is relatively straightforward to implement, as it uses a limited number of standardized assumptions. However, the DR and the SR are much more complex.

The current valuation methodology incorporates standardized assumptions and does not include the modeling of assets. PBR shifts towards a very different foundation: both the DR and the SR require company-specific assumptions and the parallel modeling of assets alongside the liabilities. A robust review and challenge framework is required to ensure that the assumptions used are reasonable and that they will be neither too generous (running the risk of regulatory concerns) nor too conservative (leading to increased reserves).

The DR and SR also require a new, dynamic process for the periodic resetting of assumptions based on each company's actual experience regarding key vectors (e.g., mortality, lapses, and discount rate) and a complex margin setting process that combines standardized components together with individual components set by the company using sound actuarial judgment. In addition, the calculation of the SR requires many thousands of runs to be performed.

Even if insurance companies take advantage of Section 2.G of VM-20[5] (which permits simplifications that do not materially reduce the reserve), implementation of the new reserve regulations will require very significant computing time for valuations. Many firms will likely shift their modeling activities to cloud-based platforms in order to increase available computing capacity at peak times.

At a minimum, the VM will require insurance companies to enhance their current models. Some firms may instead choose to build entirely new models designed precisely to address the technical specifications of the new reserve regulation. An integrated software platform would provide the most parsimonious modeling of all of the components required under the VM.

3.4 Expanding corporate governance obligations

The VM provides specific guidance for insurance company boards and senior management regarding PBR. It specifically states that PBR implementation "does not expand the existing legal duties"[6] of company boards, senior management, appointed actuaries, and/or qualified actuaries. However, KPMG expects that boards and senior management will need to adjust their oversight processes regarding reserve modeling.

The VM requires use of a robust cash flow testing model that complies with Actuarial Standards of Practice in developing cash flow models and projecting cash flows. In addition, the VM's Appendix G (Corporate Governance Guidance for Principle-Based Reserves) requires the board of directors to establish a process for general oversight of the actuarial function regarding PBR, including oversight of policies, procedures, controls, and resources. Review and action related to PBR must be recorded in the board's meeting minutes.

Senior management must report at least annually to the board regarding related risk tolerance policies, procedures, controls, and risk management strategies, and that resources have been put in place and policies are being followed. The procedures include a requirement that PBR calculations must be overseen by qualified actuaries who provide a separate summary report to the board of directors and senior management that delivers an opinion of reserve adequacy.

3.5 New, more complex regulatory reporting requirements

The complexity of the new reserve regulation combined with the increased reliance on internal assumptions generates a significant expansion in the regulatory reporting framework, as set forth in the VM. Companies will need detailed documentation showing, in particular, how assumptions and margins were derived. The level of detail required by the VM is similar to the level of detail required by the Canadian regulator, Office of the Superintendent of Financial Institutions, for its Appointed Actuary's report.

KPMG's experience with Solvency II implementation recently in Europe indicates that the most effective implementation strategy pairs construction of automated regulatory reporting functionalities in parallel with model construction. Parallel construction by integrated teams enhances a firm's ability to meet both model construction and regulatory reporting requirements in a timely manner while maximizing the opportunity to build integrated communication structures between the two systems, thus enhancing the efficiency of the regulatory reporting system.

The time needed to produce these reports should not be underestimated.

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[5] The section permits a company to use simplifications, approximations, and modeling efficiency techniques to calculate the NPR, the DR; and/or the SR required if the company can demonstrate that it will not understate the reserve.

[6] NAIC Valuation Manual, Appendix G, Corporate Governance Guidance for Principle-Based Reserves, Section 1B, paragraph 4.

3.6 U.S. federal taxation issues

The interaction between the new sophisticated reserve regulation and the more simplistic U.S. tax code remains unclear. The reason for uncertainty in U.S. tax implications is because, as noted, the reserve calculation itself is shifting towards a more dynamic calculation that relies on customized valuation assumptions that are updated annually whereas the current approach to tax reserves has all companies using a standardized set of assumptions and approach. Uncertainty regarding tax liabilities will impact first profit projections and then product pricing.

In addition to the introduction of the VM starting in 2017, the NAIC's 2017 Commissioner's Standard Ordinary mortality table will be the prevailing table for contracts beginning in 2017. As with PBR, there is a three-year transition period, and this table will be required for contracts issued in 2020 onwards. This change, in parallel with PBR implementation, will likely create incentives for companies to introduce this mortality table into their calculations when they elect to start valuing on a PBR basis.

The IRS has not yet issued guidance on how the tax reserve should be calculated once PBR is in place for statutory reserves. Many expect U.S. tax authorities, at least initially, will rely on the standardized NPR in order to generate a consistent industry-wide approach to assessing and auditing insurance company tax obligations. A comparable approach was used in the variable annuities context under Actuarial Guideline 43. While the tax reserve basis would only match the statutory reserve basis when the NPR is held, this would be a consistent approach across the market and significantly reduce the complexities of auditing with regard to tax.

Companies that do not perform PBR valuations face the highest level of uncertainty regarding how tax obligations will be calculated. Companies in states that do not adopt the VM and companies that qualify for the small company exemption may find themselves in this category. The IRS has not yet issued guidance on how these companies will be treated. Many believe that the IRS will require these companies to produce tax reserves based on PBR even if the companies are not required to undertake that calculation for regulatory capital purposes.

3.7 Federal Reserve regulatory capital

Changes in reserving requirements will impact regulatory capital requirements as well. As noted throughout this Point of View, the exact scope and level of impact among life insurers cannot be forecasted with confidence at this time. However, it is clear that changes at the state level will impact emerging federal regulatory capital standards for life insurance companies subject to Federal Reserve jurisdiction.[7] The Federal Reserve is preparing to exercise its regulatory capital authority regarding insurance companies for the first time during the summer of 2016.

In a speech to the NAIC in May 2016,[8] Federal Reserve Governor Daniel K. Tarullo endorsed a "building block approach" for insurance company regulatory capital requirements in which "the capital requirement for each regulated insurance or depository institution subsidiary generally would be based on the regulatory capital rules of that subsidiary's lead regulator—whether a state or foreign insurance regulator or a federal banking regulator for depository institutions."

The implications for life insurers subject to Federal Reserve jurisdiction are clear: any changes in regulatory capital requirements due to shifts in reserves associated with implementing PBR will have a direct impact on federal-level regulatory capital requirements. FSOC-designated life insurers can be expected to face the highest level of scrutiny from the Federal Reserve. Life insurers subject to Federal Reserve jurisdiction should therefore also approach their PBR implementation with a heightened awareness of the link between reserves and regulatory capital.

4. Conclusion

The U.S. regulatory framework for calculating and managing reserves at life insurance companies is changing in a material manner. It is widely expected that the necessary actions and implementation targets will be met in July 2016 and the implementation period will begin in January 2017.

Life insurance companies need to begin evaluating their corporate governance and internal reserve modeling processes now in order to help ensure an orderly transition to the new system and an accurate assessment of related tax issues. Life insurance companies subject to Federal Reserve jurisdiction should also approach their PBR implementation with a heightened awareness of the link between reserves and regulatory capital.

[7] The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) created Federal Reserve jurisdiction over three types of insurance companies:
(i) savings and loan holding companies with insurance company subsidiaries;
(ii) insurance companies that own federally insured financial institutions; and
(iii) insurance companies designated as systemically significant by the Financial Stability Oversight Council.

[8] *Insurance Companies and the Role of the Federal Reserve,* speech by Gov. Daniel K. Tarullo to the NAIC International Insurance Forum (May 20, 2016).

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