top issues

An annual report

Financial reporting: Are you ready for the new standard valuation law and principles based reserves?

Volume 5
2013

The insurance industry in 2013



pwc

Financial reporting: Are you ready for the new standard valuation law and principles based reserves?

In December 2012, the NAIC voted to adopt the current version of the Valuation Manual, recognizing that the manual will see some modifications in coming months. This was a first and crucial regulatory step in the move to principles based reserves (PBR) for life products. This adoption now enables state legislatures to include the revised Standard Valuation Law, which incorporates the Valuation Manual, in their legislative proceedings beginning this year, a crucial date because all legislatures will be in session. If adoption occurs on a timely basis, then the revised Standard Valuation Law and Valuation Manual will potentially be in effect for new issues beginning January 2015.

For individual life products, including term, whole life, universal life and variable life, the approach to reserves changes considerably from what CRVM, Regulation XXX, and AG38 currently prescribe. These changes likely will require many companies to take a fresh look at their systems, processes, data and governance for both pricing and valuation. In addition, the statutory earnings or profit signature likely will change as well, introducing the potential for increased volatility year over year.

There are three components of PBR for life insurance products that section VM-20 of the Valuation Manual covers: a net premium reserve (NPR), a deterministic reserve (DR), and stochastic reserve (SR). The NPR is a minimum policy level reserve that is calculated using prescribed assumptions and is formula-based. However, for many individual life products, the formulae are much more complex than under today's CRVM requirements. Companies will need to determine and hold the greater of a DR and SR unless the product meets the requirements of either the deterministic or stochastic exclusion tests. The DR and SR are calculated using projected asset and liability cash flows and are based on a gross premium rather than net premium basis. Reserves calculations are based on a combination of a company's prudent estimate assumptions (own experience assumptions with margin) and market assumptions in certain situations in which the company has little to no control over market forces (e.g., credit spreads and default rates).

PBR is a fundamental and comprehensive change to the way companies perform valuation.

Scope

All individual life products, including term, universal life and whole life are within the scope of VM-20. Although VM-20 currently excludes pre-need and credit life, it includes guaranteed issue and simplified issue products. VM-21 covers variable annuity products, and remains essentially unchanged from current AG43. The principles-based approaches for fixed annuities and health products are currently in development but we do not expect them to be in place by January 2015. The reserving guidelines for these products, as well as for credit life and disability, remain unchanged; sections VM-A and VM-C (fixed annuities), VM-25 (health) and VM-26 (credit life and disability) of the valuation manual include relevant requirements.

At a minimum, VM-20 requires all companies issuing individual life products, even those with only basic traditional products, to review their systems and processes to ensure their ability to meet:

- As VM-20 outlines, the minimum reserving requirements for the net premium reserve and,
- At a minimum, the deterministic and stochastic exclusion tests.

A robust governance process is necessary in order to align assumptions with experience.

Accordingly, there are steps insurers should take now to prepare for the changes that lie ahead. Areas for consideration include:

- **Experience Analysis/Data** – For assumptions where experience is somewhat in the company's control (e.g., persistency, mortality, expenses, interest crediting spreads), PBR requires insurers to utilize their own experience, to the extent they have it, and look to industry or other relevant data to supplement theirs, as necessary. This requires robust data collection and experience analysis. While many companies have recently improved their experience analysis, it often is not at the level of detail that a principles based approach expects or requires; moreover, this analysis often fails to incorporate a credibility assessment, as PBR requires for mortality.

  PBR requires re-assessment of assumptions for each valuation period. Therefore, a robust governance process is necessary in order to align assumptions with experience. Re-assessment also will require more communication and coordination between and among pricing, planning and forecasting, and valuation to prevent disconnects on reserving assumptions.

  In addition, Section VM-50 requires all companies with more than $50 million in individual life premiums (on an aggregate basis, including all affiliated companies) to annually submit data to the NAIC's designated statistical agent (e.g., MIB). Companies that are subject to the data submission requirements will need to be able to submit, at a minimum, mortality and policyholder behaviour data which meets the requirements that Section VM-51 outlines. Companies that do not already submit data to industry mortality studies will need the resources, data and capabilities to do so.

- **Margins** – For each major risk factor or assumption, other than those which are prescribed (such as mortality and assumptions in the NPR) or stochastically determined, a company will need to determine a margin it believes to be sufficient to "provide for adverse deviations and estimation error in the prudent estimate assumption." VM-20 identifies the following assumptions as material: mortality, morbidity, interest, equity returns, expenses, lapses, partial withdrawals, loans and option elections.

  The margin is subject to various requirements, including its need to be 1) explicit for each material assumption and 2) independent of any correlation among risk factors. Correlation can be taken into account, but only to the extent "the company can demonstrate that the method used to justify such a reduction is reasonable considering the range of scenarios contributing to the CTE calculation or considering the scenario used to calculate the deterministic reserve as applicable or considering appropriate adverse circumstances for risk factors not stochastically modeled." It is unclear how companies will demonstrate this.

  The insurance industry has raised a general concern about the overall impact of the margins in aggregate. This is an area of continued discussion concerning VM-20, and it may lead to changes prior to PBR's effective date.

- **Systems capabilities** – PBR requires projection of both asset and liability cash flows. Depending on the product characteristics, some products will require stochastic modelling in addition to deterministic or prescribed cash flows. Moreover, companies will need to be able to determine reserves under three different bases: net premium method (minimum), deterministic and stochastic, as well as including and excluding ceded reinsurance. Even with a very simple product portfolio for which the net premium reserve is the minimum floor, a company must be able to show it meets the stochastic and deterministic exclusion tests and ensure it does so on both a ceded and gross of reinsurance basis.

- **Asset modelling** – VM-20 requires the modelling of all cash flows, including assets and liabilities. Asset modelling requires the company to model the segments of business consistent to its asset segmentation plan, investment strategies and allocation strategies of investment income. Asset modelling also requires companies to identify their starting asset position, net asset earned rates, discount rates, derivative programs, realized capitals gains and losses, investment expenses, asset prepayments, policy loans, interest maintenance reserve liabilities, etc.
- **Reinsurance** – The application of reinsurance, allocation of reinsurance credit to each reinsurance agreement, as well as consideration of assumptions absent reinsurance, still need further consideration and development. Within VM-20, ceded reinsurance is to be considered in the determination of the minimum reserves. Reinsurance cash flows need to take into consideration the specific terms of the reinsurance agreements, actions, or the options available to the assuming company, including elements of the agreements which 1) they can change, 2) account for the insurer's right to terminate and recapture, among other things. However, VM-20 also requires that a company determine and disclose the minimum reserves excluding the effect of ceded reinsurance. This can lead to a very complex determination of the deterministic and stochastic exclusion tests. If, absent reinsurance, a group of policies does not pass the exclusion tests, then a company will need to determine the minimum reserves without reinsurance by considering the deterministic and stochastic reserve amounts (even if, on an after reinsurance basis, they would not be required). Determining modified coinsurance reserve and interest determination also require special consideration. In addition, in some instances, modelling the assets held by a counterparty may be mandatory, and the company will have to consider the investment strategy and management actions of the party holding the assets.
- **Reporting and management information** – In addition to the traditional Actuarial Opinion and Model Regulation (AOMR) reporting requirements, PBR requires additional reporting in the form of a PBR Actuarial Report; VM-31 spells out these requirements. For individual life policies and contracts, an actuarial report must include the following:
    1. Summary of Results
    2. Assumptions and margins
    3. Cash Flow Model
    4. Mortality Assumptions
    5. Policyholder Behavior Assumptions
    6. Expense Assumptions
    7. Asset Assumptions
    8. Revenue Sharing Assumptions
    9. Reinsurance Assumptions
    10. Non-Guaranteed Element Assumptions
    11. Deterministic and Stochastic Reserve Exclusion Tests
    12. Other Disclosure Information
    13. Investment Certification
    14. Senior Management Certification

For the above requirements, the PBR Actuarial Report must include "documentation and disclosure sufficient for another qualified actuary in the same practice area to evaluate the work," as well as "descriptions of all material decisions made and information used by the company in complying with the minimum documentation and reporting requirements." For many organizations, this will require improvements to their documentation, especially for key assumptions, material decisions, and model completeness and validation processes. The reporting requirements for mortality, policyholder behaviour, asset and reinsurance assumptions are likely to be much more complex than the current AOMR requirements.

In addition to the reporting requirements the valuation manual outlines, principles-based reserves will result in more volatility in statutory earnings. There also are more drivers for change in the overall reserve levels. This brings into question traditional management reporting information for key drivers of value and uncertainty if it will be sufficient for the blocks of business under the newer reserving method. As a result, senior management and the board are likely to need additional instruction on changes in potential profit emergence, increased volatility and expected outcomes.

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- **Governance/controls** – VM-20 requirements require significant changes to companies' processes and controls to ensure a sufficient change control process, assumption governance and controls, experience analysis governance and documentation. The reliance on modelling and cash flow projections necessitates a need for model governance and validation of inputs/outputs and an internal feedback loop on the process.

  Statutory reserves now will be subject to a company's experience assumptions and margin development, and theoretically will be reset each year after issue as insurers gain experience and modify assumptions. Accordingly, in order to set appropriate expectations for profitability, earnings growth, and capital requirements, it will be imperative for insurers to align and effectively coordinate product development, in force product management, planning, forecasting, and valuation. In addition, some companies have separate and distinct areas that perform statutory valuation but not other reporting requirements such as US GAAP, IFRS or MCEV.

  While there will continue to be substantial differences in the methods insurers use to determine the reserves of values under these different basis, they all will be dependent to some extent on future cash flow expectations and anticipated experience assumptions. Companies may want to revisit their current systems, processes and structures to verify that there is appropriate alignment among the various reporting methods, and that their closing processes are leveraging all available common technology and calculation engines to improve reporting efficiency. There is no doubt that the new calculation and reporting requirements under VM-20 will require a more involved closing process for statutory reserves.

Implications

PBR may not be effective until year-end 2015, but the timeframe for implementation is actually quite short for the amount of effort involved. As we have described, PBR:

- Is a fundamental and comprehensive change to the way companies perform valuation;
- Is occurring in an environment in which there are many competing demands for actuarial resources (including ORSA development and, quite possibly, a new insurance contracts standard for GAAP reporting); and,
- As companies begin to plan for their adoption of PBR, they are frequently surprised by the amount of effort it requires.

Unless you like surprises, we strongly recommend you start planning too!

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