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Reporting and Disclosure Requirements Under VM-31: Reporting Requirements for Business Subject to PBR

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With principle-based reserves (PBR) for life insurance under VM-20, *Requirements for Principle-Based Reserves for Life Products* (VM-20), becoming operative in most states effective Jan. 1, 2017, companies have been working diligently to understand the technical guidance and to build the actuarial models and processes needed to comply with its requirements. Companies have spent numerous hours investigating and discussing such issues as levels of aggregation for mortality experience, the various requirements related to asset returns and the numerous uncertainties related to tax implications. Yet, in focusing so much attention on the front-end preparation and technical issues, companies may be missing one of the key elements of successful implementation: compliance with the reporting and disclosure requirements of VM-31, *PBR Actuarial Report Requirements for Business Subject to a Principle-Based Reserve Valuation*. Actuaries reviewing these requirements will find them to be comprehensive in both breadth of coverage and depth of detail. Companies that fail to pay adequate attention to the requirements early in the adoption process may well find themselves struggling to comply when filing requirements come due.

PBR adds many rigorous disclosure requirements that must be addressed by the appointed actuary and complying will take substantial effort. However, companies should not yet press the panic button, as there is still time to adequately prepare. The first recommendation for a successful completion of the reporting requirements is probably the simplest: read the guidance … and read it early. As companies devise the plan for tackling the reporting requirements under PBR, it is essential to read through the guidance in advance. This will ensure that the company is establishing the calculations and analyses needed to ensure that the information is available to meet the reporting requirements, and to have a proper structure to the report. The last thing a company wants to find as it is preparing its PBR report is that the report requires additional information that involves redoing steps early in the calculation process. For example, the *PBR Actuarial Report* requires companies to document the rationale behind the chosen assumptions. It is critical to document the steps along the way in order to avoid creating additional documentation much later in the process. It is prudent for companies to consider establishing governance and/or risk committees to document decisions and rationales as they work towards getting themselves ready for reserving under the principle-based regime.

VM-20 allows companies to use their own experience, if relevant and credible, to establish their best estimate assumptions for various assumptions. Documenting and supporting assumptions is not new; companies have been doing so since at least the 1980s, when asset adequacy analysis and associated reporting requirements were first introduced. Additionally, cross-border and other companies located in Canada reporting under the Canadian regime have had the added experience of reporting under a principle-based framework for many years now as well, under the Canadian Asset Liability Method and its predecessors. In fact, more recently, such requirements have been introduced in the United States for variable annuities reporting under Actuarial Guideline 43, *CARVM for Variable Annuities* (AG 43). So there are plenty of places to look for examples and guidance for reporting under existing principle-based approaches. However, even an actuary experienced in reporting under these existing frameworks needs to be aware of the specific requirements of VM-31. For example, VM-31 reporting requirements are more stringent than those for AG 43 and require an in-depth discussion of material decisions made and information used by the company in complying with the minimum reserve requirements. As companies try to draw parallels, it is essential that they understand the differences and additional requirements imposed under VM-31.

One fact to consider when implementing reporting approaches is that the success of PBR reporting depends heavily on clarity of communication and transparency between the company and the regulators, as well as other key constituencies such as the management, its board and auditors. Clear documentation that seeks to meet all the requirements under VM-31 is the primary conduit for opening the lines of communication. The PBR Actuarial Report requires that companies explain model results and why they think the results are appropriate. Insight into the results and attribution analyses can demonstrate an understanding and lead to the transparency that regulators seek under the PBR reporting regime. Every year, the appointed actuary must also explain any significant changes from prior years in the methods used to determine the anticipated experience assumptions and margins and rationale for such changes. A comprehensive, clear report establishes an environment of trust and may result in less time answering regulator's questions. The actuary should also consider the applicable Actuarial Standards of Practice (ASOPs) that apply to the reserving process and the VM-31 report, including, but not limited to, ASOP 41, *Actuarial Communications*, and ASOP 23, *Data Quality*.

In deciding how much detail is required, there is no clear answer, but anything that aids in the understanding of results should probably be included. Early feedback received recently from the pilot study for PBR reporting conducted by the NAIC in 2016 revealed that no reports were complete. Various reports contained a wide range of detail, and the regulators felt that many reports needed to be supplemented with additional information. The reports with less details generated a lot more follow up questions from the regulators. The PBR Actuarial Report requires rigorous sensitivity testing around premium patterns, premium persistency, timing and margins, which have again been designed to promote transparency and clarity around these assumptions, and necessarily involve a detailed discussion of all assumptions.

STRUCTURE OF THE REPORT

The NAIC pilot study conducted by the PBR review working group also discussed the structure of the report. The study indicated that most companies displayed results in the same format as the requirements of the guidance, and the regulators felt that the format should be followed as it provides a level of standardization to the reports, and that it may eventually become a requirement in the future. The PBR Actuarial Report starts with an overview section followed by a deeper discussion of the various assumptions and other items. In the overview section, companies must define risks identified for each group of policies, summary of valuation assumption and changes, assumption setting methodology, asset modeling assumptions, and any other material risks which have been identified. The remainder of the report is intended to describe those areas in more detail as they apply to each group's segments.

VM-31 identifies the main topics of disclosure. They are summarized as follows:

1. Assumptions and margins summary: The report requires a summary of the valuation assumptions and margins used.

2. Cash flow model: This section must include a description of the modeling system, choice of segmentation, a description of how model calculations were validated as well as how the results compare to actual historical experience.

3. Mortality assumptions: The report requires a detailed explanation of how the anticipated mortality assumption was developed, including a description of mortality segments used to determine company experience mortality rates, the starting and ending period of time used to grade company experience rates to the industry table, and a description of the industry basic table that was used for each segment.

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4. Policyholder behavior: This section includes a description of the source of the data used to develop the policyholder behavior assumptions as well as how these assumptions interact with the non-guaranteed elements (NGE) in the policy.

5. Expenses: The report must include a description of the expense allocation methodology and how the margins are determined.

6. Assets: In addition to disclosing the details regarding the asset modeling assumptions and various margins, if the starting assets do not fall within 2 percent of the final aggregate minimum reserve, this section must include documentation to describe why the company believes that there is not a material understatement of reserves.

7. Revenue sharing: This section must include a description of the revenue sharing agreements and the guarantees underlying the income that is used in the projections.

8. Reinsurance modeling: This section should include a description of the reinsurance agreements as well as the assumptions used to determine the cash flows included in the model.

9. Non-guaranteed elements: This section requires a description of the modeling approach, the margins, and a description of how the projected levels of NGEs in the model are consistent with the experience assumption used in each scenario.

10. Deterministic/stochastic exclusion tests: This section must include documentation of the rationale used for grouping of products for exclusion testing, a summarized view of results of various exclusion tests as well as any relevant documentation regarding the rationale for using the stochastic reserve demonstration method, which is used to demonstrate why a group of policies meet the exclusion criteria.

11. Others: This section focuses on margins. This section must include the impact of individual margins for each risk factor (assumptions such as mortality, policyholder behavior,

expenses, etc.), including the aggregate impact of all margins on deterministic reserves for each segment. Also required is any documentation around approximations and simplifications used in the reserve calculations.

12. Certifications: This section includes certifications for compliance with the Valuation Manual guidance.

While all elements of the report are important and required under VM-31, certain sections appear to present additional challenges in preparation and presentation. These include the sections on mortality, policyholder behavior, assets, non-guaranteed elements, and margins. Each of these five areas is discussed in more detail below.

MORTALITY

Under VM-31, companies must describe the mortality segments used to determine company experience mortality rates, the starting and ending period of time used to grade company experience rates to the industry table, and the description of the industry basic table used for each segment.

Mortality Segments

Description of mortality segments is key and the rationale for including policies into these segments must also be documented. When a company divides its experience into segments or sub-classes, it must provide evidence that the sum of expected claims from these sub-classes is not lower than experience for the aggregated class. Companies should think about this particular requirement at the time of defining the segments, and not after the mortality assumption has been fully developed.

Adjustments To Company Experience Mortality Rates

If any changes in risk selections or underwriting classes are reflected through adjustments to company experience mortality rates, companies must provide justification of those adjustments by citing "published medical and clinical studies" (VM-31 Section 3.D.3.e) to support such adjustments. Also, any other relevant information concerning such adjustments must be reflected.

Source Of Data

Companies can choose to set the mortality assumptions for a segment based on mortality rates which are not based on experience from that segment. However, in such cases, the companies must provide extensive explanation on the source of data and its appropriateness and why they believe that policies from the segment will be similar to those from the selected data source.

The documentation is additionally rigorous when it comes to assumptions developed using company specific experience. Companies must provide "justification to support and demonstrate that the resultant anticipated experience assumption is at least as great as those expected to actually emerge" (VM-31 Section 3.D.3.k). Another challenge is that when the company experience mortality rates for any mortality segment are not based on the experience from that segment, VM-31 imposes strict additional documentation requirements for the source of data, supporting studies and other items to justify these assumptions. Therefore, it is imperative that as companies develop these assumptions, they are diligent at documenting their thought process and supporting studies along the way.

POLICYHOLDER BEHAVIOR ASSUMPTIONS

A major concern regarding policyholder behavior assumptions is the lack of available industry data. The PBR Actuarial Report requires a clear description regarding the sources and credibility of data along with a description of how assumptions were determined and what are the margins used in developing these assumptions.

Anti-selection

If adjustments to lapses and mortality assumptions are made to account for anti-selection, the company must document the rationale for such anti-selection assumptions.

Premium Payment Pattern Sensitivity Testing

A key policyholder assumption is the pattern of premium payments. Companies will be required to document sensitivity testing completed for choosing flexible premium payments. Sensitivity testing is required for policies that give policyholders flexibility in premium payment, as well as for different premium patterns including minimum premium payment, no further premium payment, pre-payments assuming single or level premiums. Thus, companies should incorporate sensitivity testing in their implementation plans.

Every three years, the result of an actual to expected analysis must also be included in the PBR Actuarial Report. Companies should start thinking about the template and items to be incorporated for this analysis as part of the implementation process. Competitor rate definition and usage must also be included in the report so companies should monitor competition in light of the disclosures required in the documentation.

ASSETS

Companies must document in detail the method used to allocate the total asset portfolio into segments, and a description of the asset portfolio which discusses types of assets, their durations, credit ratings and other features. Also, companies are required to document rationale for allocating assets to policies which are subject to PBR and those that are not.

The guidance requires a description of the investment strategy as well as reinvestment and divestment assumptions, and how well those strategies compare to the actual investment policy of the company. VM-20 has a prescribed asset investment strategy, and companies need to demonstrate that their modeled investment strategy does not produce a reserve that is less than what would be produced by this prescribed investment strategy.

It is important to think of a company's own investment policy in light of these disclosure requirements. Any investment strategy used to model these reserves, must be comparable to the company's actual investment policy, and must produce reserves higher than the prescribed alternative. It is both a challenge and an opportunity for companies to take a step back, and revisit their investment policy in light of the principle-based reporting regime.

NON-GUARANTEED ELEMENTS

NGEs are defined as either dividends under participating policies or other elements affecting life insurance costs that are established by the company and can be subject to change (VM-20, Section 1), such as cost of insurance charges for universal life products. VM-31 asks for detailed descriptions on how the projected levels of NGEs are consistent with experience assumptions in each modeled scenario.

Reference To Prior Year Practice

The company must describe its prior year NGE practices and previously established NGE policies as well as how they are being reflected in the projected NGE amounts.

Dividend Schedule And Changes To Projected NGE Amounts

The documentation requires a detailed description of the approaches to modeling NGE assumptions such as policyholder dividends, as well as how the margins of conservatism were established. In addition, any changes to projected NGE amounts to account for changes in experience, and a lag in timing of any changes to NGE relative to date of recognition of that change must also be reported and discussed (VM-31, Section 3.D.9.a).

As companies document their NGE assumptions, the challenge for companies is to demonstrate the relationship between policyholder behavior assumptions and the NGEs assumed in the model as well as to be able to explain the consistency between the two sets of assumptions. This is another example of how the documentation promotes transparency and understandability of results for the regulators.

MARGINS

Companies are required to document the impact of individual margins and an impact of all margins in aggregate on the deterministic reserves for each model segment. Also, they are required to summarize "the impact of aggregation on stochastic reserves" (VM-31, Section 3.D.11.f).

Margin Impacts

In order to comply with the requirements of reporting the estimated aggregate impacts of all margins on deterministic reserves, there is a specific approach for the prescribed assumptions such as interest rates, equity assumptions, etc. These prescribed assumptions must be considered as the prudent estimates. For the purposes of reporting isolated impacts of margins, companies can elect to establish their own best estimates for these assumptions; however, they must provide the rationale and methodology for establishing such assumptions.

Companies should be mindful of how model segments are established and make sure to note impacts of margins for each segment. When completing the attribution analysis to understand the impact of margins, order of operations is key, and companies may find that a change in order of attribution may have markedly different effect on the magnitude of these margins. Also, companies should pay special attention to sensitivity testing performed as they are now also required to demonstrate what actions were taken and how the assumptions and their margins were developed from the results of this sensitivity testing.

VM-31 introduces multiple requirements that companies must adhere to in writing the PBR report. Due to the high number of requirements, companies must plan ahead in order to have all the necessary support, rationale and documentation to become PBR-ready. Effective, clear disclosure is key to operating successfully in a PBR world, as it enhances the transparency between company and regulator on which PBR depends. ■

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