



Article from
The Financial Reporter
November 2020



Insights Into Life PBR Emerging Practices and Implementation

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After much anticipation and preparation, mandatory implementation of principle-based reserves (PBR) for life insurance has finally arrived, meaning valuation practices must comply with Valuation Manual Section 20 (VM-20).

Oliver Wyman recently completed its 2020 Life PBR Emerging Practices survey, which provides a broad industry perspective with more than 50 companies participating representing 95 percent of the individual life market (by written premium).

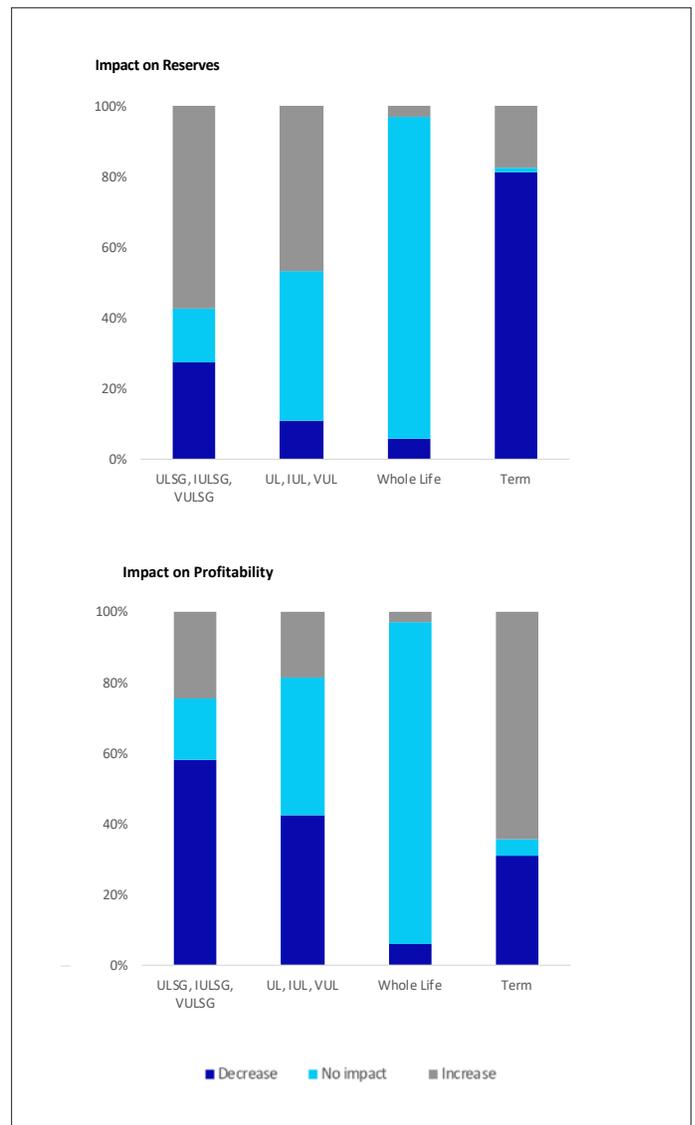


Key survey insights include the impact of PBR on reserves and profitability in addition to emerging practices related to product design, assumption development, and methodology decisions.

IMPACT OF PBR VARIES BY PRODUCT

Figure 1 illustrates the impact of PBR on reserves and profitability by product type.

Figure 1
Impact of PBR on Reserves and Profitability



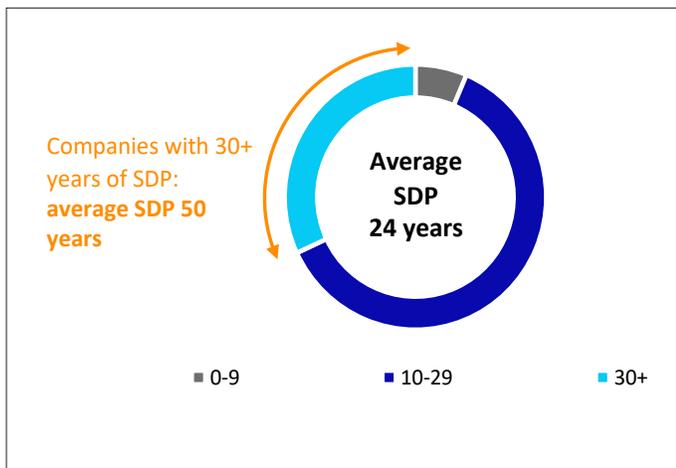


Products most impacted by PBR (protection-oriented interest sensitive life and term) have been the primary focus for robust pricing analysis.

Many term writers have experienced a positive impact on profitability, with more than half of participants reporting an increase to internal rate of return (IRR) in excess of 100 basis points, primarily driven by lower reserves under PBR as compared to pre-PBR. As a result, few writers are considering product design updates beyond updating premium rates.

The opposite is true for protection-oriented interest sensitive products (i.e., ULSG, IULSG, VULSG), where IRRs decreased for most writers, driven by higher reserves under PBR as compared to pre-PBR. Consequently, many writers of these products are considering or have implemented significant updates to their product design and product strategy.

Figure 2
Sufficient Data Period



ASSUMPTIONS AND METHODOLOGY IN LIGHT OF EXPECTED MARGINS

Eighty nine percent of writers report aggregate margin levels (i.e., margin over a best estimate liability) are higher than what they feel is appropriate.

As a result of this deemed excess conservatism, many writers are applying additional scrutiny in areas where more judgment can be applied and supported, such as the use of historical data in setting sufficient data periods for mortality assumptions and modeling decisions around non-guaranteed elements. As seen in Figure 2, 30 percent of participants report a sufficient data period (SDP) over 30 years with an average SDP of 24 years indicating that many participants are rationalizing the use of mortality experience from prior product and underwriting generations in the derivation of their PBR mortality assumption.

Many participants are modeling active management of non-guaranteed elements. Specifically, the portion of participants modeling changes to credited rates and cost of insurance charges increased from prior years, as writers have likely vetted their assumptions and methodology decisions upon moving to PBR. Figure 3 illustrates the proportion of respondents who are making adjustments to common non-guaranteed elements.

LENGTHY RUN TIMES RESULT IN MODELING SIMPLIFICATIONS

Model run time is a growing concern for most writers. The time to complete a full valuation process can range anywhere from a few hours to an entire day, causing writers to resort to run time reduction techniques in order to expedite lengthy model runs. Some insurers are performing nested modeling for the first time in order to project VM-20 reserves, which contributes to the need for more horsepower compared to prior valuation regimes. As seen in Figure 4, expanding grid or cloud computing

Figure 3
Modeling Approaches for Non-guaranteed Elements

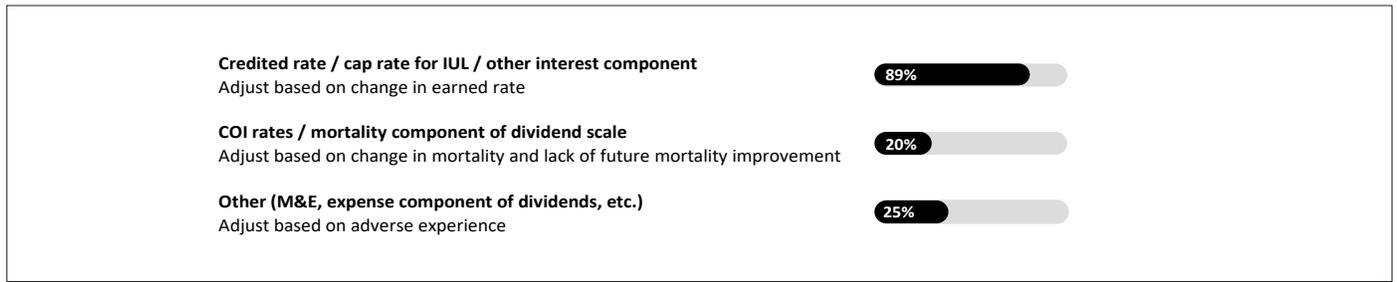
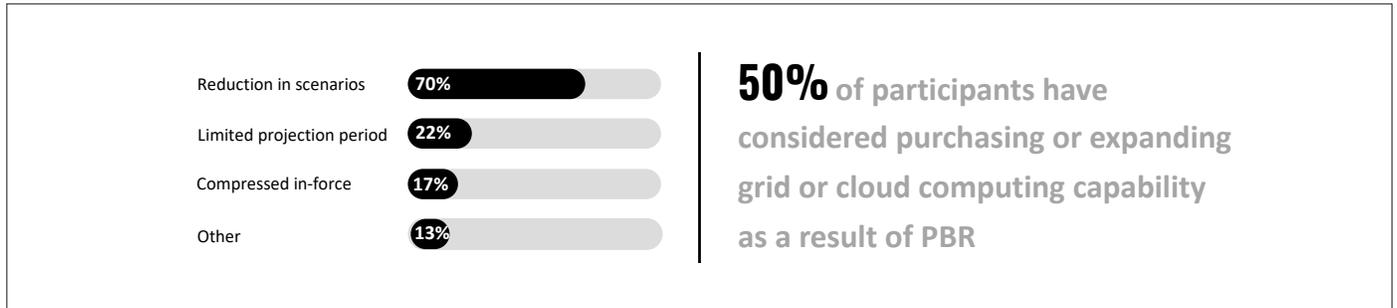


Figure 4
Runtime Reduction Techniques



capabilities, reducing scenario set size, and limiting projection length are the most common run time expedients.

LOOKING FORWARD

Participants still have a long road ahead of them on their PBR journey as every participant anticipates making significant refinements to their PBR implementation. As blocks of business subject to PBR grow, a scalable, controlled production process capable of supporting deep analytics and ad-hoc analysis will be increasingly important to not only support strong financial reporting and strategic decision making, but to also monitor and assess the impact of emerging topics. ■



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