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Insights Into Life Principle-Based Reserves Implementation and Modeling Practices

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Mandatory implementation of life principle-based reserves (PBR) is just around the corner and there is no shortage of work to do, as most products have yet to be moved to PBR.

Oliver Wyman recently completed its 2019 PBR survey, with more than 40 participants covering 85 percent of the individual life market, including 23 of the top 25 life writers and five reinsurers. This article will expand on the key survey findings shown in Figure 1, elaborating on implementation trends, analysis to date, model robustness and common simplifications.

Figure 1
Survey Key Findings

Analysis to Date

- PBR implementations are heavily back-loaded, with 75% of participants' products moving to PBR in Q3 2019 and later.
- PBR implementations were light in 2018 as compared to 2017, perhaps indicative of the effort required to support products transitioned in 2017.

Actuarial Models

- Only 25% of participants have integrated asset-liability models for PBR, driving widespread use of simplifications related to asset modeling.
- Liability modeling capabilities are more advanced than assets; the most common simplification being the exclusion of riders.

PBR IMPLEMENTATIONS ARE HEAVILY BACK-LOADED

Figure 2 shows actual PBR implementations through 2018 and planned implementations through the remainder of the optional implementation period.

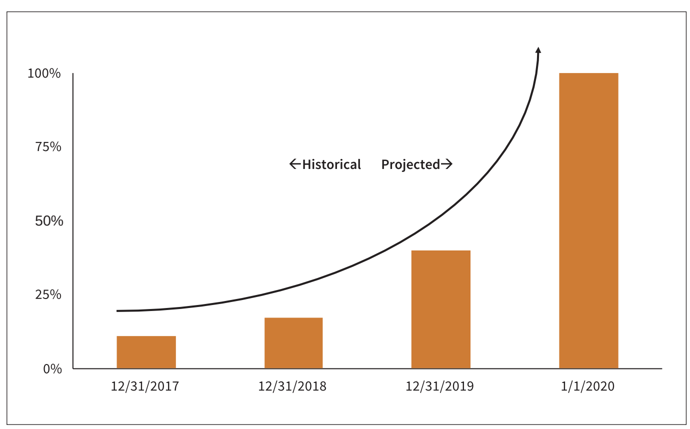
Aside from an influx of products moved to PBR in 2017, few products have been moved to PBR during the optional three-year phase-in period. Planned implementations for 2019 will primarily occur in the fourth quarter, followed by an influx of the remaining products at the start of 2020.

We believe the back-loading of PBR implementation is driven by the following:

- Competitive pressures and prevalence of reserve financing solutions for term and, to a lesser extent, universal life with secondary guarantees (ULSG), for which reserve reductions decrease tax leverage
- Resource constraints and the level of effort required to move products to PBR, including additional reporting and disclosure requirements
- Evolving PBR requirements, which have material impacts on profitability

Keeping implementation timelines on track will be crucial in the final stretch of the optional phase-in period, which is becoming increasingly difficult as preparations for other regulatory changes (e.g., Financial Accounting Standards Board targeted

Figure 2
Percentage of Products on PBR



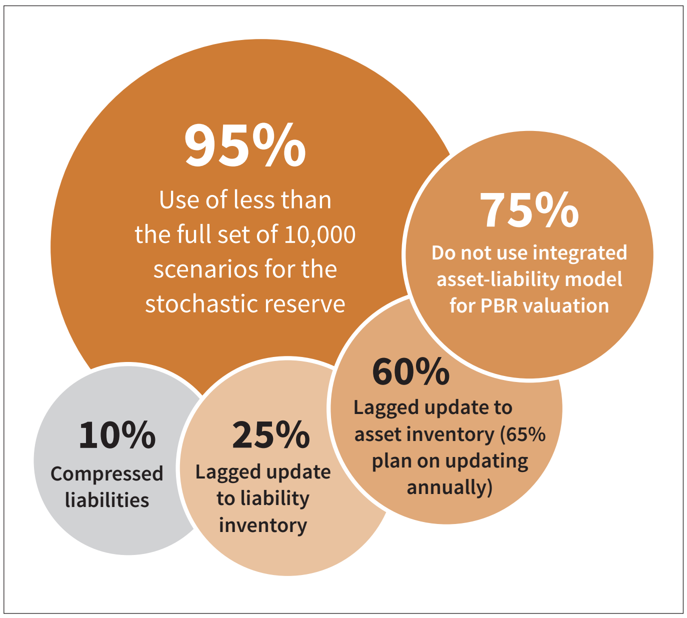
Note: The percentages were calculated as (number of products on PBR)/(total products expected 1/1/2020).

improvements for long-duration contracts, variable annuity reform, International Financial Reporting Standards updates) are underway.

PBR MODELING SIMPLIFICATIONS REMAIN WIDESPREAD

In light of the considerable pressure from accounting and regulatory changes on modeling teams and heavy backloading of PBR implementations, PBR modeling simplifications remain widespread, especially with regard to assets. See Figure 3 for additional details on common simplifications.

Figure 3
PBR Model Robustness and Simplifications



Model simplifications related to assets and scenarios are most prevalent, as this is the area where PBR required most new functionality.

The most common model simplification for liabilities was the exclusion of riders from modeled reserves,[1] as shown in Table 1.

Table 1
Treatment of Riders in Modeled Reserves

Rider	Exclude
Waiver of premium	80%
Other riders and supplementary benefits	59%
Acceleration of benefit (non-zero-cost)	37%
Long-term care	34%
Acceleration of benefit (zero-cost)	32%

THE FINISH LINE?

Mandatory PBR implementation is upon us, and many products remain to be moved to PBR by Jan. 1, 2020. As stated, we believe the back-loading is largely conscious, but that many implementations are effectively behind, requiring additional focus and resources to reach the finish line.

The extent of model simplifications indicates that many carriers are taking a “smart compliance” approach where they try to leverage existing infrastructure to meet the PBR implementation deadlines, in effect deferring necessary model and process improvements until after the mandatory implementation date.

As the finish line approaches, it is important for companies to skillfully manage the regulatory and accounting changes in order to be prepared and accurate on “day 1,” while also establishing a modeling and reporting foundation that is sustainable. ■

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ENDNOTE

1 Deterministic reserve (DR) and stochastic reserve (SR).