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# Implementation and Modeling Emerging Practices for Life PBR

By Kevin Carr II, Simon Gervais, Haley Jeorgesen and Chris Whitney

andatory 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 related to implementation status and model simplifications.

#### PBR IMPLEMENTATIONS ARE HEAVILY BACK-LOADED

Figure 2 (pg. 19) shows actual PBR implementations through 2018 and planned implementations through the remainder of the optional implementation period.

Figure 1 Key Findings From the 2019 Oliver Wyman PBR Emerging Practices Survey



## Implementation status

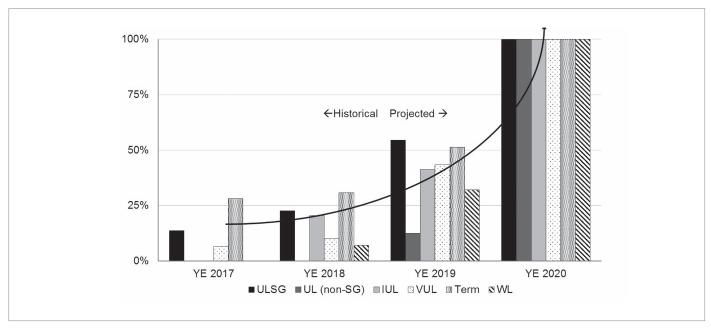
- · PBR implementations are heavily back-loaded, with 75% of participants' products moving to PBR in Q3 2019 and later
- Participants with reserve financing solutions tend to see a decrease in profitability as a result of PBR and are moving their products at a slower pace than those without



### **Model simplifications**

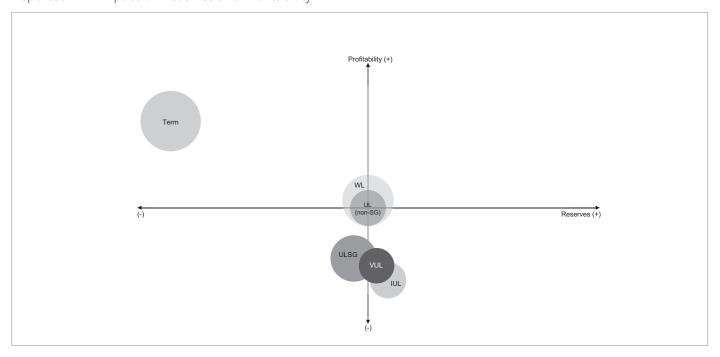
- · Only 25% of participants have integrated asset-liability models for PBR, driving widespread use of simplifications related to asset modeling
- Liability modeling capabilities are more advanced than assets; the most common simplification being the exclusion of riders

Figure 2 Percentage of Participants With Products on PBR by Year-End



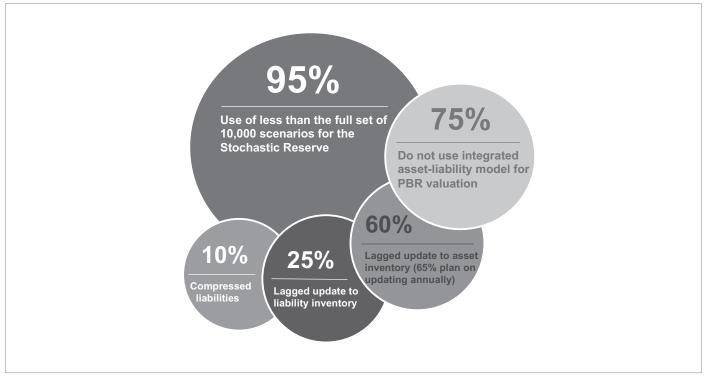
The percentages were calculated as (number of participants with at least one product in category on PBR) / (total participants with products in category). IUL: indexed universal life. UL: universal life. ULSG: universal life with secondary guarantees. VUL: variable universal life. WL: whole life. YE: year-end.

Figure 3 Reported PBR Impact on Reserves and Profitability



The size of the bubble represents the percentage of respondents who write these products.





Aside from an influx of term and universal life with secondary guarantees (ULSG) products moved to PBR in 2017, few products have moved to PBR during the optional three-year phase-in period. As of year-end 2018, approximately 30 percent of writers had moved a term product to PBR as compared with 25 percent for ULSG and 20 percent for IUL. Excluding term, 75 percent of writers have yet to move their products to PBR. Planned implementations for 2019 will primarily occur in the fourth quarter, followed by an influx of the remaining products at the start of 2020.

Figure 3 (pg. 19) shows the anticipated impact on reserves and profitability by life product type and sheds some additional light on drivers for delayed implementation.

Most term writers expect large decreases in reserves under PBR. The corresponding impact on profitability is mixed because of the use of reserve financing solutions and the reduced tax leverage that comes with a reduction in reserves. Writers not using financing solutions had an incentive to move to PBR early on, whereas those using solutions had an incentive to delay implementation.

Most ULSG writers expect small decreases in reserves under PBR. The use of financing leads to a similar (mixed) impact on profitability as term as well as an incentive to delay implementation for those using a reserve financing solution.

Most writers are expecting minor impacts to reserves and profitability for the remaining product types (WL, UL, VUL and IUL), leading to the most delayed PBR implementation for these product types.

Competing regulatory and accounting changes (e.g., Financial Accounting Standards Board targeted improvements for long duration contracts, variable annuity reform, IFRS updates) are likely causing companies to prioritize and delay portions of their PBR implementation while making use of interim modeling simplifications.

#### PBR MODELING SIMPLIFICATIONS REMAIN WIDESPREAD

PBR modeling simplifications are widespread, especially with regard to assets. Figure 4 shows that modeling 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 (i.e., deterministic reserve and stochastic reserve), as shown in Table 1 (pg. 21).

Table 1 Treatment of Riders in Modeled Reserves

Treatment of Maers in Modeled Neserves	
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 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.



Kevin Carr II, FSA, is a senior consultant at Oliver Wyman, located in Hartford, Conn. He can be reached at kevin.carr@oliverwyman.com.



Simon Gervais, ASA, is a consultant at Oliver Wyman, located in Hartford, Conn. He can be reached at simon.gervais@oliverwyman.com.



Haley Jeorgesen is a consultant at Oliver Wyman, located in Atlanta, Ga. She can be reached at haley. jeorgesen@oliverwyman.com.



Chris Whitney, FSA, MAAA, is a principal at Oliver Wyman, located in Hartford, Conn. He can be reached at christopher.whitney@oliverwyman.com.