Article from
Product Matters!
October 2019
Issue 114

Insights Into Life Principle-Based Reserves Emerging Practices (2019 Update)

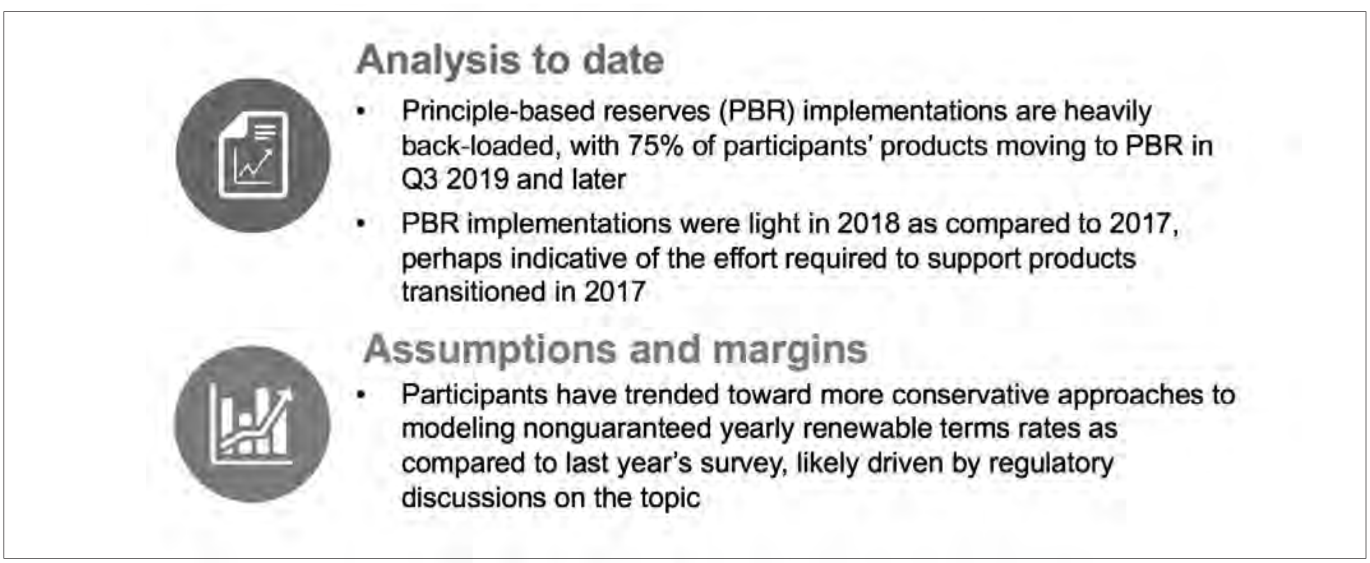
By Kevin Carr II, Simon Gervais, Haley Jeorgesen, Dylan Strother and Chris Whitney

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, including elaborating on implementation trends, analysis to date and recent discussions and decisions on the treatment of nonguaranteed reinsurance.

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



PBR IMPLEMENTATIONS ARE HEAVILY BACK-LOADED

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

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 term writers had moved a term product to PBR. For ULSG, only 23 percent of writers had products on PBR and only 21 percent for indexed universal life (IUL). Excluding term, 75 percent of writers have yet to move their products to PBR.

Planned implementations remain low for 2019, and the data collected show that most products will move to PBR at the very end of the optional phase-in period. This trend is prevalent across all product types but is particularly pronounced for accumulation-focused products (whole life and universal life without secondary guarantees).

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

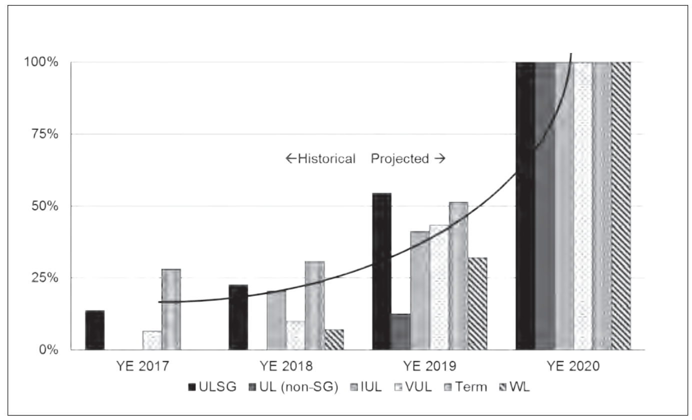
- competitive pressures and prevalence of reserve financing solutions for term and, to a lesser extent, ULSG, for which reserve reductions decrease tax leverage;
- resource constraints and the level of effort required to move products to PBR, including additional reporting and disclosure requirements; and
- 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. Companies must consider the time it takes to reprice, file and launch products and that there will likely be additional strain on both internal and external resources from regulatory changes taking place simultaneously (e.g., Financial Accounting Standards Board targeted improvements, variable annuity reform, IFRS updates). Stakeholders need to be well informed of any required work and expected timelines for remaining implementations.

2018 PBR IMPLEMENTATIONS WERE LOW AND TERM WAS NOT A FOCUS

2018 PBR implementations were lower than expected based on the prior year's survey. A comparison of 2018 expectations from that year's survey and actuals from this year's survey is shown in Figure 3.

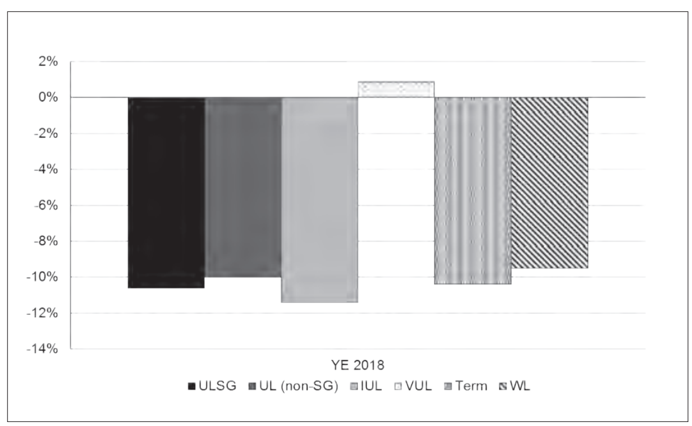
Figure 2
Percentage of Participants With Products on PBR by Year End



Abbreviations: IUL, indexed universal life; UL, universal life; ULSG, universal life with secondary guarantees; VUL, variable universal life; WL, whole life; YE, 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).

Figure 3
Actual Less Expected Number of Companies With Products on PBR by Year-End 2018



Abbreviations: IUL, indexed universal life; PBR, principle-based reserves; SG, secondary guarantees; ULSG, universal life with secondary guarantees; VUL, variable universal life; WL, whole life; YE, year end.

In 2017, the vast majority of PBR implementations were term: 34 of 47 (83 percent) products moved. In 2018, there was a large shift away from term PBR implementations, representing just one of the 23 products moved to PBR. Further information is presented in Table 1.

Although a similar number of companies implemented their first PBR product in 2018 as in 2017 (13 in 2018, 16 in 2017), there was a substantial decrease in the total number of products moved: 23 in 2018 and 41 in 2017. Beyond our general theory on PBR back-loading, we attribute this slower pace of PBR implementations in 2018 to the following:

- effort required to support existing PBR products and additional implementations, and
- focus shifting to more complicated product types.

Regarding the second point, companies capitalized on the opportunities PBR presented for term products in 2017, and in 2018 they moved their focus to other products in their portfolio.

SIGNIFICANT WORK IS STILL NEEDED

Table 2 (next page) summarizes the percentage of participants that have analyzed the impact of PBR across product types as of year-end 2018.

Most term writers and almost three-fourths of ULSG writers have analyzed the impact of PBR on these products. Just over half of IUL and WL writers and less than half of VUL and UL writers have analyzed these products. We believe these results are driven by the following factors:

- **Relief on protection products.** Expected reserve relief on protection-oriented products due to elimination of deficiency reserves and increase in the valuation interest rate (100 basis points) for the revised formulaic reserve floor (net premium reserve).
- **Limited relief on accumulation products.** Accumulation-oriented products (WL, UL and non-SG IUL and VUL) are structured to pass mortality, investment and other margins to the policyholder, making it likely for the net

Table 1
Historical PBR Implementations by Year and Product Type

Product Type	Number of New Companies on PBR		Number of New Products on PBR	
	2017	2018	2017	2018
Term	11	1	34	1
Universal life with secondary guarantee (ULSG)	3	2	5	4
Whole life (WL)	0	2	0	9
Indexed universal life (IUL)	0	7	0	8
Variable universal life (VUL)	2	1	2	1
Universal life without secondary guarantee (UL)	0	0	0	0
Total	**16**	**13**	**41**	**23**
Excluding term	5	12	7	22
% term	69%	8%	83%	4%
% not term	31%	92%	17%	96%

premium reserve (NPR) to dominate. The NPR defaults to pre-PBR methodology for these products; therefore, implementing PBR has little impact on reserves and profitability.

In addition to completing this analysis, these companies need to optimize, relaunch and support these products under PBR starting Jan. 1, 2020.

REGULATORS ARE WEIGHING IN ON AREAS WHERE DISCRETION CAN BE APPLIED

As noted earlier in this article, the continued evolution of PBR requirements is a driver of delayed implementation. The National Association of Insurance Commissioners (NAIC) Life Actuarial Task Force (LATF) increased the frequency and length of its calls during the first half of 2019 to finish any high-priority changes to PBR requirements for inclusion in the 2020 *Valuation Manual*; it approved 55 changes through June 30, which will be formally adopted into PBR requirements at the summer NAIC meeting.

The treatment of nonguaranteed yearly renewable terms (YRT) was extensively evaluated in Oliver Wyman's 2019 survey. Compared to 2018, the industry was slightly more conservative in its approach to modeling nonguaranteed YRT rates, but more aggressive approaches are still prevalent (e.g., 30 percent assumed immediate increases to YRT rates).

In June 2019, LATF adopted an amendment to VM-20 that sets the reinsurance credit to one-half c_x in response to the wide variation in modeling of nonguaranteed YRT reinsurance arrangements. Reference to the amendment proposal form and applicability are summarized in Table 3.

Regulators agreed that this solution is only temporary and not principles based. In light of this, a field test is underway with a goal of determining a permanent solution in time for inclusion in the 2021 *Valuation Manual*.

Before the LATF decision, a third of the surveyed companies anticipated making changes to reinsurance agreements as a result of PBR. Of those, half were looking to guarantee the current scale for a period of time, and a third were looking to reduce the guaranteed maximum rates. Possible reasons for these changes include:

- supporting modeling approaches;
- taking judgment out of modeling decisions; and

Table 2

Percentage of Participants That Have Analyzed the Impact of PBR by Product Type and Year End

Product Type	12/31/2017	12/31/2018	Change
Term	86%	90%	4%
Universal life with secondary guarantee (ULSG)	62%	74%	12%
Whole life (WL)	33%	56%	23%
Indexed universal life (IUL)	54%	53%	−1%*
Variable universal life (VUL)	27%	45%	18%
Universal life without secondary guarantee (UL)	30%	35%	5%

* Drop in IUL attributable to new participants in this year's survey.

Table 3

Details on June 2019 LATF Decision on Nonguaranteed YRT Reinsurance

Feature	Description
Link to amendment proposal form	*https://naic.org/documents/cmte_a_latf_exposure_apf_2019-39_revised.docx*
Applicability	Business issued in 2020 and beyond
Modeling of reinsurance	Not required
Reserve credit for reinsurance	½ c_x
Solution	Temporary

As evidenced by the recent discussion on reserve credits for nonguaranteed YRT reinsurance rates, PBR continues to evolve.

Kevin Carr II, FSA, is a senior consultant at Oliver Wyman, located in Hartford, Connecticut. He can be reached at *Kevin.Carr@OliverWyman.com.*

Simon Gervais, ASA, is a consultant at Oliver Wyman, located in Hartford, Connecticut. He can be reached at *Simon.Gervais@OliverWyman.com.*

Haley Jeorgesen is a consultant at Oliver Wyman, located in Atlanta. She can be reached at *Haley.Jeorgesen@OliverWyman.com.*

Dylan Strother, FSA, MAAA, is a senior consultant at Oliver Wyman, located in New York. He can be reached at *Dylan.Strother@OliverWyman.com.*

Chris Whitney, FSA, MAAA, is a principal at Oliver Wyman, located in Hartford, Connecticut. He can be reached at *Christopher.Whitney@OliverWyman.com.*

- reducing or eliminating regulatory risk in light of anticipated changes to requirements.

As the recent temporary prescription on nonguaranteed YRT rates sets a precedent of regulatory intervention in which significant discretion existed, carriers gain to understand areas where their practices are less conservative relative to industry.

THE ROAD AHEAD

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

As evidenced by the recent discussion on reserve credits for nonguaranteed YRT reinsurance rates, PBR continues to evolve. We expect the discussion on nonguaranteed YRT reinsurance reserve credits to continue as a more permanent solution is determined. It is possible that companies who were unfavorably impacted by the decision will aim to adjust products, but there is very little time to do so.

As everything comes together, it will be important to skillfully manage all impacted areas—product, modeling, pricing, assumption setting—and to build in optionality that allows swift reaction to potential changes in regulations. ■