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Non-guaranteed Reinsurance Under Principle-based Reserves

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With the mandatory implementation of principle-based reserving (PBR) for individual life insurance issued in 2020 and later, the requirements set forth in Section 20 of the Valuation Manual (VM-20) are the new reserving standard for directly issued, ceded and assumed reserves.

Due to the modeled reserve components under PBR, the reserve credit for reinsurance may be significantly different than the traditional formulaic approach used by both insurers and reinsurers. This will require a discerning look at both current reinsurance arrangements as well as the assumptions and approach used to model reinsurance cash flows in light of PBR requirements.

Concern from regulators regarding reserve credits across early adopters of PBR led to a large project and industry field test for the modeling of non-guaranteed reinsurance cash flows conducted by the American Academy of Actuaries and supported by the NAIC and Oliver Wyman.

The primary objective of the project was to investigate three proposed revisions to the guidance supporting modeling of non-guaranteed reinsurance under VM-20. In this article, we provide a brief background on the issue and explore how temporary solutions are impacting insurers as well as the journey to a long-term solution.

BACKGROUND

Initially, VM-20 provided only high-level guidance for how writers are to model non-guaranteed reinsurance cash flows to incorporate into reserves. As a result, various practices emerged and a range of reserve credits were observed by regulators who adopted the regulation early. In addition, regulators raised questions over the consistency of reserve credits held by direct writers and reserves held by reinsurers.

Variation in observed reserve credits between direct writers is primarily driven by the level of mortality margin specific to each company and the relationship between company-specific prescribed mortality and negotiated reinsurance premiums. Inconsistencies between reserve credits and reserves held by reinsurers are primarily driven by differences in valuation assumptions (including the modeling approach for non-guaranteed reinsurance premiums) and mechanics of aggregating and computing final reserves.

Due to this range of practice, a temporary formulaic reserve credit (the “interim solution”) was put in place for 2020 valuations. A complete timeline of the journey for a long-term solution, including the events leading up to the industry field test and future expectations of the next steps, is displayed in Figure 1.

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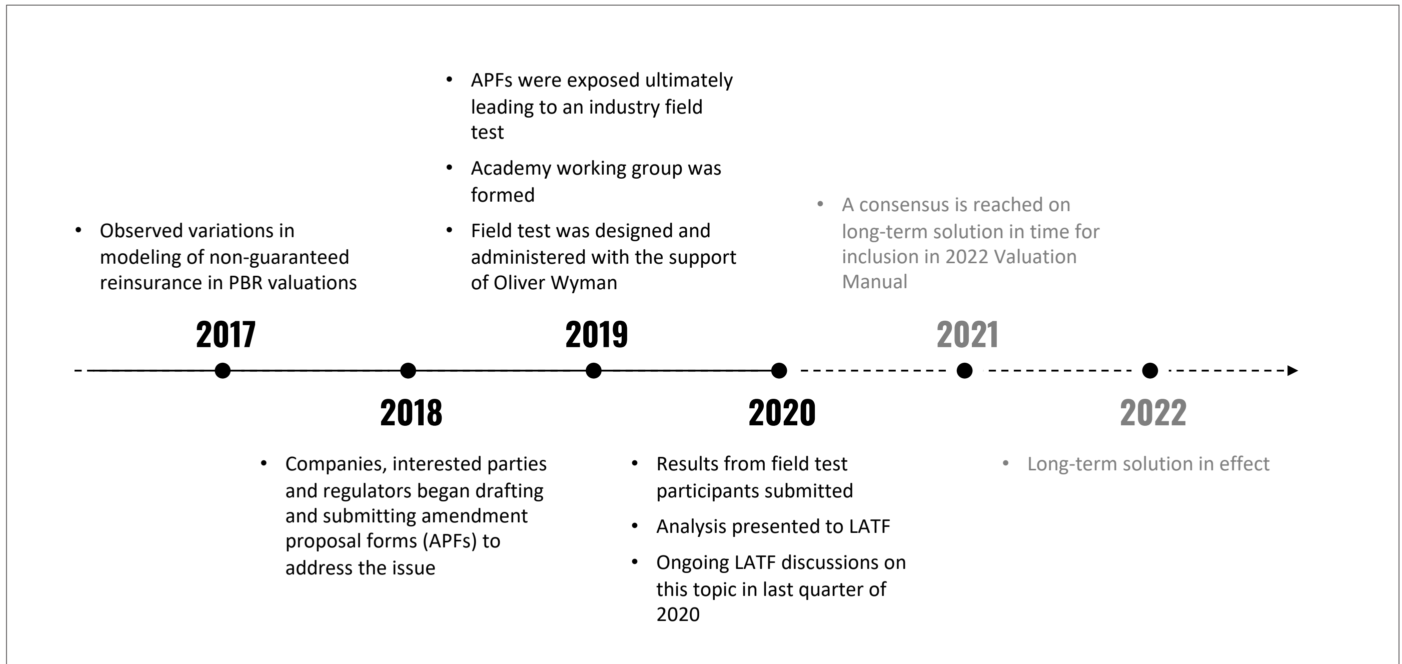
Figure 1
Timeline of Regulatory Discussions on Non-guaranteed YRT Under PBR



IMPACT OF THE INTERIM SOLUTION

The interim solution was put in place for the 2020 valuation manual and is mandatory for contracts issued after 1/1/2020, with an optional grandfather period for contacts issued between 1/1/2017 and 1/1/2020. Oliver Wyman's 2020 PBR Emerging Practices Survey, covering 95 percent of the individual life sales market and including both direct writers and reinsurers, indicated that non-guaranteed reinsurance is material for approximately 84 percent of the industry subject to PBR and 60 percent of those impacted chose to apply the solution retrospectively to all business subject to PBR.

The survey results also indicated that the interim solution has halted adjustments to reinsurance arrangements as a result of PBR, as writers considering changes to their reinsurance strategy as a result of PBR was reduced from 38 percent to 18 percent.

Still, some are considering changes to reinsurance arrangements. We have noted increased interest in coinsurance arrangements that fully transfer risk as well as guaranteed YRT, both of which minimize the modeling challenges introduced by non-guaranteed arrangements.

THE JOURNEY TO A LONG-TERM SOLUTION

The three APFs that were evaluated during the industry field test are summarized in Figure 2. Field test participants were also asked to model specific variations of the APFs which included different mortality improvement assumptions as well as prescribed loss triggers to indicate rate changes.

Figure 2
Field Test APF Descriptions

APF	Description
2019-40	Model non-guaranteed reinsurance premiums using anticipated experience with margins based on clarified modeling principles/guidance and actuarial judgment.
2019-41	Premiums determined using current non-guaranteed reinsurance premium scale with projected adjustments based on what the company actually expects will occur. Claims determined using the company's anticipated experience mortality assumptions including mortality improvement.
2019-42	Use current non-guaranteed reinsurance premium rates, plus a prescribed margin for non-guaranteed rates based on the difference between "baseline credibility" prudent estimate mortality and company experience mortality.

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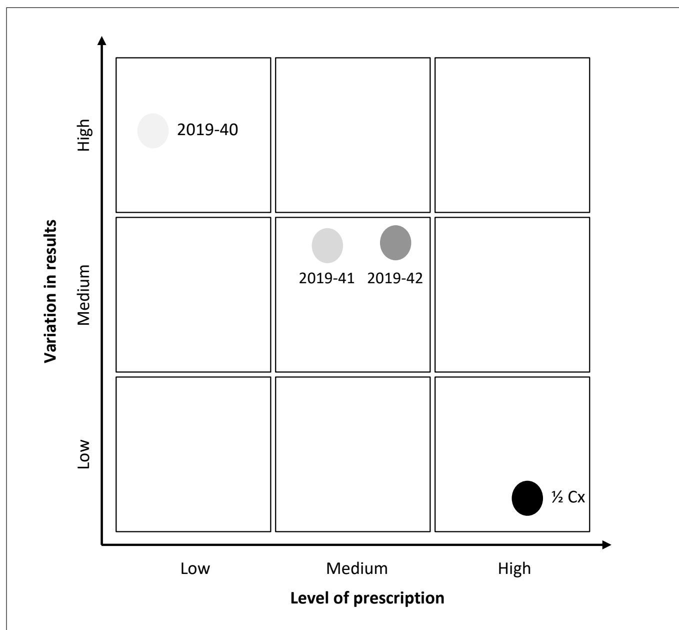
Oliver Wyman analyzed the results of the field test with support from NAIC staff. The analysis included using field test results to understand drivers and key components of YRT issue (e.g., relationship between anticipated mortality & current scale). In addition, field test results were utilized to confirm the results of a representative PBR model, which was subsequently supported analysis of the proposed solutions on a consistent basis.

Each of the three APFs were compared under several different criteria, with the goal of highlighting where and to what degree the various solutions differ. Figure 3 highlights the level of prescription and variability of results within the three APFs. In determining the long-term solution, regulators must balance the desire for a principle-based approach with the level of variation observed between companies.

Figure 3
Level of Prescription Versus Level of Variation in APFs



Other criteria, such as modeling complexity, potential for asymmetry between assuming and ceding interpretations and defined level of risk sharing will influence the long-term solution. Detailed results and analysis produced as part of the field test can be found on the NAIC website.[1]

Discussions around the long-term solution will continue in 2020 with the goal being to adopt a long-term solution ahead of the 2022 Valuation Manual.

LOOKING AHEAD

Regardless of the final solution, companies can expect to revisit their modeling set up for reinsurance under PBR in order to comply with the long-term solution. In addition, there still may be some judgement involved depending on the final solution.

Reinsurance and its relationship to statutory reserves is more complex under PBR. Given this complexity and uncertainty on non-guaranteed reinsurance, we have observed a trend towards agreements with stronger guarantees that transfer all risks. We are eager to track and understand how this trend evolves as discussions on the long-term solution continue. ■

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ENDNOTE

1 *https://content.naic.org/sites/default/files/inline-files/YRT%20%20PBR%20%20Field%20Test%20and%20Interpretation%20Survey%20%20Results%20%20Analysis%20%28Updated%20August%207%202020%29.pdf*

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