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PBA Corner

by Karen Rudolph

The principle-based reserve pot continues to simmer. Dec. 31, 2008 has come and gone. Unfortunately (or fortunately, depending on your position) the working groups did not finish discussion and drafting of the Valuation Manual prior to the NAIC Winter meeting. This issue's update focuses on continuing discussions related to the discount rates used in the PBR process and the introduction of a net premium approach, whose methodology is not unlike current formulaic processes.

NET ASSET EARNED RATES AND DISCOUNT RATES

The critical issues with respect to interest rates within a company's principle-based model are (1) the recognized rate of earnings on the assets in force on the valuation date and (2) the assumed rate of interest to be earned on modeled assets assumed to be purchased with investable cash in future projection periods. Because the Deterministic Reserve calculation uses a company's net asset earned rate as a basis for discounting future cash flows, regulators are particularly sensitive to this element of the process. The composition, quality and earnings ability of the company's asset portfolio on the date of valuation are unique to each company. The regulators are concerned, however, that one company's investment practices may lead to lower reserves when compared to another company with otherwise similar liabilities, but with an investment philosophy that may have given rise to lower quality assets in force at the valuation date. Likewise, these same regulators are concerned about future asset earnings rates being influenced by, for example, a company's enthusiasm with respect to anticipated credit spreads. This is a timely concern in today's economic environment. Recent discussions within the VM-20 working group of LHATF finds the regulators leaning toward an approach which indeed recognizes the company's current in force asset portfolio, its composition, quality and earnings potential. The charges for default on the in force pool of assets is expected to be prescribed. The prescribed levels will likely be some published minimum default charges plus published guidance around additional charge amounts by quality, credit rating and form (public, private, etc.)

The second critical issue was addressed by the Life Reserves Work Group of the Academy (LRWG) during the Winter National Meeting. There, Gary Falde and Alan Routhenstein presented the results of research performed by this group related to historical net spreads. This research was necessary in light of the current VM-20 language regarding what the company is to assume as earnings on assets purchased in future projection periods. Current language in VM-20 suggests using a reinvestment asset which reflects a prescribed net spread equal to 4 percent of the appropriate U.S. Treasury spot path plus 0.25 percent. Based on current rates for a 10-year asset, this represents approximately 40 basis points of net spread (net of default charges and 10 basis points of investment expense charges) over corresponding Treasuries. This requirement is admittedly a placeholder until better guidance could be given.

The research of the LRWG in this area demonstrated that, together with the 70CTE metric, historical net spreads on assets of 10 years in maturity have been roughly 55-85 basis points (net of default charges and 10 basis points of investment expense charges) over 10 year Treasuries. The conclusion of the research is that a more principle-based approach is called for in the VM-20 requirements. In short, the LRWG's recommendation for VM-20 requirements are:

i. To vary the prescribed net spreads by quality, rating and by maturity.
ii. To include an implied margin in the prescribed net spread. LRWG suggests the 70CTE level as an appropriate level of implied margin. However, in setting the 70CTE, LRWG recognizes that if each component of the net spread (i.e., gross spread, default charge, investment expense) were set at 70CTE, the resulting net spread may include duplicative margins.
iii. To include prescribed adjustments for other assets such as private placements and commercial mortgages. This recommendation recognizes that a company's in force asset portfolio may not be composed entirely of publicly traded corporate bonds, for example. LRWG feels any prescribed adjustment should take into account the relative risks and expenses associated with these other asset types.

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iv. To include prescribed adjustments for securities with optionality. For example, if the call option of a bond is being modeled along the scenario path, then an option premium should be recognized in the prescribed spread.
v. To recognize a transition of current net spreads into the prescribed level of net spreads over a short grade-in period.

NET PREMIUM APPROACH

You may have heard fleeting reference to the net premium approach during recent actuarial meetings or quarterly webcasts. This methodology is indeed in the works. The concept was first presented to regulators at the Winter NAIC meeting as an addition to the VM-20 requirements. Admittedly in its early stages, the ACLI is spearheading the proposal to incorporate this methodology which attempts to meet the objective of providing a straightforward calculation with prescribed assumptions that works together with the principle-based components of VM-20. This net premium reserve would serve as a minimum floor to the Deterministic Reserve amount. Exactly how it is presented (before or after aggregating results, for example) is yet unknown.

The net premium methodology works particularly well for companies whose mortality credibility does not meet minimum levels required by VM-20. Without it, the company's gross premium valuation (GPV) reserve would use assumed mortality tables inclusive of margins where those margins are likely excessive for the purposes of GPV. For companies without minimum credibility, the valuation mortality assumption required by the current version of VM-20 includes a CSO-type margin. The GPV approach is a critical component of VM-20's Deterministic Reserve. Preliminary evidence provided by ACLI for term insurance shows the GPV approach combined with a CSO mortality assumption produces reserves greater than current statutory requirements. In an effort to address this situation, and recognizing that margins are critical to statutory accounting principles, ACLI proposed the net premium approach. This approach will be applicable to fixed and flexible premium products. It will not require calculation of various types of reserves (unitary, segmented, etc.) but rather only one type. Lapse rates will be allowed, though prescribed in pattern and level of lapse. Mortality is also prescribed as is the expense allowance and interest discount. The expense allowance amount will be an expanded version of the traditional CRVM allowance with a prescribed amortization pattern. Like CRVM, interest rates to be used in valuation will be prescribed by year of issue, but may be based on a formula different from today's Moody's averages.

In considering this approach, the following observations are made:

i. A net premium approach with prescribed assumptions provides an auditable result. Regulators are likely to view this as a component of principle-based reserves for all policies they can review and actually calculate.
ii. For companies with limited credibility in mortality experience, this methodology removes the time-consuming task of finding and blending company experience with industry experience.
iii. If minimum reserves are based on assumptions that are prescribed, regulators can be confident they know the risks that are being considered by such reserves, and companies can be comfortable their margin determination is influencing only the excess of the Deterministic Reserve (or Stochastic Reserve, if applicable) over the net premium reserve.
iv. Because the net premium approach has no provision for premium deficiencies, the net premium approach alone will not be the answer to minimum reserve levels. This is why the approach is being considered as a floor to the Deterministic Reserve. It is conceivable that a company may be able to demonstrate premium adequacy once, and calculate only the net premium approach to reserves from then on. This is not yet part of the proposal, however.

This is an interesting development and I will be keeping tabs on this element of PBA in the months to come. ■