The Financial Reporter

March 2016
Issue 104

FIA GAAP Reserving Practices—Survey Highlights

By Emily Cassidy, Nicole Kim and Laura Gray

The views expressed in this article are those of the survey participants (on an anonymous basis) and do not necessarily reflect the views of KPMG nor are they intended as methods of regulatory or tax compliance.

Sales of Fixed Indexed Annuity (FIA) products have increased rapidly over the past 15-20 years. These products provide the safety of a minimum crediting rate while still allowing policyholders to participate in an equity index and benefit from gains in the market. After multiple financial crises and a persistent low interest rate environment, it is no surprise that policyholders place value in the safety of a minimum guarantee combined with the upside potential of equity markets. The inclusion of guarantee minimum death and/or living benefits further enhances the attractiveness of FIA products and has helped drive the increases in sales. This preference for safety and relative conservatism is also seen in the growing sales of other indexed products such as indexed universal life.

Valuing FIA products has presented many challenges for the life insurance industry. The complexity and variety of the benefits and product structures leads to many unique valuation situations for which U.S. GAAP is not prescriptive. While for deferred annuities GAAP reserves are held equal to account value, the indexing features on FIA products make this practice inappropriate. According to U.S. GAAP, the indexed benefit(s) must be bifurcated into one (or more) embedded derivative(s) (ED) and valued on a fair value basis. This is typically done according to FAS 133. The fixed portion of the contract (the "host") is typically calibrated at contract issue to the premium less the initial ED and then accreted at a fixed rate determined at issue such that it accrues to the minimum guaranteed value at maturity. Furthermore, the attachment of GMxB riders adds another layer of complexity as these benefits are subject to separate reserve requirements, most frequently under SOP 03-1.

While the basic mechanics of the valuation described above are fairly consistent, variations in product features, sophistication of valuation tools and materiality of blocks of business have resulted in a number of areas where practice has diverged. In order to benchmark current industry practice, KPMG performed a survey of 15 companies in June 2015. The survey covered multiple elements of FAS 133 and SOP 03-1 valuation.

This article will summarize the findings of the survey.

HOST & ED

One challenge of FIA valuation is determining an approach to adjusting the host contract when the contract holder makes changes to the contract after issue through either additional premium or a partial withdrawal. When asked about the treatment of partial withdrawals and subsequent premiums in the FAS 133 calculations, survey participants' responses showed a wide range of practices. For treating partial withdrawals, about one-third of respondents indicated that they apply prospective adjustments while others use the methodology of simulating the at-issue calculation retrospectively. Several other responses included making various pro-rata adjustments, or using a combination prospective and retrospective adjustment for the ED and host, respectively. Several participants also indicated that they assume no partial withdrawals are made. There was a similar range of practice for accounting for future premiums. The primary responses were to apply prospective adjustments or to simulate the at-issue calculation retrospectively. The remaining participants either only offer single premium policies or use a different methodology.

Setting and unlocking assumptions is a key element of the FAS 133 valuation. While there is some variation, the survey demonstrated that there are several common practices in place.

- The majority of participants indicated that they do not recalculate the at-issue equation during the unlocking process.

- The discount rate for the ED is a key assumption in the FAS 133 calculation. About two-thirds of participants indicated that they used the risk-free rate plus a spread for non-performance risk as the discount rate. Other responses included not reflecting a spread for non-performance risk or also reflecting an additional spread for a risk margin.
- The decision to include the rider fee is another place where there is not a widely used convention. This was demonstrated by the survey with about half of the participants including the rider fee in the FAS 133 calculation through an explicit charge and the other half not including the fee at all.

There are a variety of choices for the aggregation level at which to determine the host and ED. A few possible options are transaction level, policy level, and cohort level. Most survey participants calculate the host and ED at the same aggregation level with policy level being the most popular choice.

RIDER VALUATION

When asked about various types of guarantee riders sold with FIA products, participants primarily indicated GMDBs and lifetime GMWBs (i.e., GLWBs), with more than 70 percent of the survey participants offering lifetime GMWBs. All survey participants issuing FIAs with GMxB riders indicated that they use SOP 03-1 to value the Lifetime GMWBs and GMDBs.

There was a wide range of practice around the nature and number of scenarios used in the SOP 03-1 benefit ratio calculation. Slightly more than half of the survey participants use stochastic scenarios with an even split between those that use equity only scenarios and those that use equity and interest rate scenarios. The remaining participants use deterministic scenarios to calculate the reserves.

Of those companies using stochastic scenarios, only one-quarter of them use 1000 or more scenarios. Coincidentally, long model run times is a significant issue for some companies as well.

While use of dynamic lapse assumptions is fairly common for VA business, the survey results showed that only about half of the participants use the refinement of a dynamic lapse assumption for their FIA business. Among those that use the dynamic lapse factors, more participants appeared to have a two sided factor (as opposed to one sided factor) in the model.

In the determination of the benefit ratio, the contract components included in assessments were pretty standard across the board with all participants including rider fees, as expected. There were a few participants that did not include an interest spread or surrender charges, but the vast majority of participants did include these elements. In addition, the vast majority of participants calculate the benefit ratio at the issue-year cohort level with a few companies using an alternative level of aggregation.

SUMMARY

Based on the results discussed above, the survey results showed that there is a varying range of practice in the following areas:

- Treatment of partial withdrawals and subsequent premiums in the host and ED calculations
- The aggregation level at which the host and ED are calculated for the base contract
- Inclusion of the rider fee in the FAS 133 calculations
- Scenarios used in the SOP 03-1 calculations
- Inclusion of dynamic lapse adjustments in the SOP 03-1 calculations

As the popularity of FIA products continues to grow, companies will continue to develop unique benefits to differentiate themselves from others in the industry. The wide range of product designs can lead to a variety of interpretations of the accounting guidance as well as the need for valuation systems that can appropriately reflect these benefits. The survey results showed that there is a range of practice on certain components of the calculations, but mostly companies appear to have a fairly consistent application of the FAS 133 and SOP 03-1 guidance. ■

Emily Cassidy, ASA, MAAA, is a manager at KPMG. She can be reached at emcassidy@kpmg.com.

Nicole Kim, FSA, MAAA is a director at KPMG. She can be reached at nicolekim@kpmg.com.

Laura Gray, FSA, MAAA is a principal at KPMG. She can be reached at lgray@kpmg.com.