Life insurance asset–liability management & US accounting frameworks

Current practices and opportunities

July 2017
Background

Insurance companies practice asset-liability management to gain assurance that the risks and rewards of long-term contractual performance guarantees in offered long-term products appropriately reflect their risk appetite. Annuities and life insurance are a significant focus of these efforts. Companies have increasingly adopted the economic approach to measuring and managing risks on both sides of the balance sheet. While this approach represents a theoretically ideal path to managing company risk appetite, evolving and somewhat inconsistent US GAAP and Statutory Accounting Principles (SAP) frameworks can make a wholly economic approach to risk management difficult.

The Great Financial Crisis of 2008, as an example, brought to the fore the impact of conflicting accounting frameworks on a purely economic-risk-focused approach to managing variable annuity guarantees. The ongoing, extended period of low interest rates have brought to light the real value of interest rate guarantees in life insurance products and the variance between the accounting recognition of their value and the economic recognition of the same. We discuss current practices in connection with ALM for annuities and life insurance, along with perspectives on how US insurers can adapt to evolving measurement frameworks.

New standards will drive the need for appropriate data and technology infrastructure in support of timely and frequent economic assessments of insurance liabilities and assets.
Variable annuity guarantees

Variable annuities bring:
1) market-risk exposure from fee income on separate accounts,
2) interest rate-guarantee risks in the general account, and
3) the market risk of variable-annuity guaranteed benefits.
The variance in the measurement of guarantee values within US GAAP relative to US SAP has led companies down different paths towards risk-appetite management.

In a 2017 PwC survey of the largest US life insurance companies, we found that most carriers hedge key economic risk aspects of guarantees. The key motivation remains economic-risk neutralization, but US GAAP or foreign parent GAAP financial statement volatility is a clear focus. The insurance accounting treatment of benefits other than withdrawal guarantees is still a motivation for companies to best partially hedge their market risks. It is still rare for companies to directly hedge the fee income on base contracts.

The survey also revealed that interest rate hedging is still used by carriers that tend to have an economic focus on risks, notwithstanding the current unfavorable treatment of interest rate hedging in statutory accounting. In this regard, some carriers have obtained permitted practices or used captives to better align interest rate hedging with the book-value measurement orientation of statutory liabilities.

“Macro” hedges of statutory balances (reserves and risk-based capital) are now more common. These help manage non-economic shifts in balances that are either not addressed or are introduced by GAAP-focused hedges. They largely consist of relatively static positions in equity options and/or interest rate options.

We also have observed a recent shift by a number of insurers from economic-focused, market-risk neutralizing hedges to hedges that mitigate economic risk in tail scenarios. These tail-focused hedges serve the dual purpose of mitigating tail economic risk and managing statutory and rating-agency capital requirements. Finally, we’ve noticed that some insurers cross-trade derivatives internally across product lines in order to meet VA risk management needs.

Decisions on how much economic risk to take can be informed by an overall enterprise risk strategy that is attuned to prevalent market conditions.
**Fixed annuities (FA) & fixed indexed annuities (FIA)**

FA and FIA generate interest rate risks due to 1) the rate guarantees on the underlying contracts, 2) equity participation exposure (for fixed indexed annuities), and 3) additional market risks in respect of optional guarantees. Carriers are motivated to neutralize the economic equity exposure embedded in FIA contracts and match contract liability duration with corresponding asset portfolio duration. A recent PwC survey of leading FIA carriers revealed that it is very common to hedge crediting exposures with well-aligned derivatives that require minimal interim rebalancing.

It is not uncommon for companies to fully hedge each dollar value of crediting exposure upfront and to adjust hedged exposures as policyholder behavior emerges. This practice effectively extends the use of equity derivatives beyond just risk mitigation to the potential enhancement of general-account portfolio returns. We also have observed that interest-rate guarantees are sometimes hedged on a static basis to preserve surplus or manage company risk-based capital in tail scenarios. It is still rare for companies to mitigate the interest rate risk associated with policyholder disintermediation in high interest-rate scenarios.

Lifetime income riders on fixed and indexed annuities are not treated as embedded derivatives but are subject to divergent accounting measures. Their much-reduced volatility (due to the lower-risk accumulation proposition in base contracts) is much more supportable relative to VAs. The policy duration-lengthening impact of income riders is addressed via the traditional duration-matching process.
Life insurance & secondary guarantees

Life insurance products are long duration contracts that present a range of interest rate risk profiles. Insurers aim to mitigate exposure to the interest rate risk via traditional duration-matching techniques. Flexible premium products in particular can present unique challenges as to the level of future premiums that should be hedged. The current book-value statutory measurement and the GAAP measurement frameworks for universal life secondary guarantees provide income and capital stability but have the potential to either obscure economic risks embedded in secondary guarantees or account conservatively for the same. Some companies have nonetheless placed economic interest-rate risk hedging programs for secondary guarantees (notwithstanding the historically limited credit for these hedges) in both statutory and GAAP accounting frameworks.

Asset-liability management in reporting frameworks that are in better harmony with economic measurement principles will require an operating model that allows for optimal coordination among business underwriting, capital management, treasury, and ERM functions.
Evolving accounting standards: Threats & opportunities

To the extent that an economic measurement framework drives ALM, the real impact from evolving accounting standards remain both non-economic reserving or capital redundancies and the interactive effect of asset-liability matching practices on divergent balance-sheet accounting measures.

**US GAAP and IFRS updates**

The proposed FASB GAAP targeted improvements for long-duration contracts will effectively result in the classification of all variable annuity guarantees as embedded derivatives. It will also require that insurance liabilities be discounted using a measure of current interest rates. These changes are likely to enhance the value of economic risk management to investors, but insurers will need to carefully assess within their enterprise risk management frameworks both the timing of execution and the extent to which hitherto unhedged economic risks should be defeased.

The near or medium term IFRS 17 accounting standards adoption will have an impact on reported results for US companies with foreign parents. The potentially higher volatility of reported results (in certain instances) may have such companies assess economic risk management objectives previously calibrated to other accounting frameworks.

**US statutory accounting**

Ongoing NAIC reviews of US regulatory reserving and capital for variable annuities are not expected to result in a change to the quasi book-value measurement framework for variable annuity guarantees, but a number of proposals (currently subject to a quantitative impact study) could incentivize interest-rate risk hedging and also provide broader incentives for economic risk management in general.

The recent US statutory Principles-Based Reserving (PBR) requirements for life insurers also provide incentives for reflecting economic risk management, but the absence of a corresponding principles-based capital framework is unlikely to promote a purely economic approach to market risk management.

*The timely and insightful reporting of economic exposures and their interaction with accounting measures will require both technology and information flow to support modern finance and enterprise risk management organizations.*
Conclusions

Regulatory and GAAP reporting standards for life insurance and annuities are evolving in ways that are likely to provide greater incentives for economic risk management. Accordingly, insurers will be well positioned to benefit from these changes by setting up asset-liability frameworks that can flexibly adapt to these anticipated accounting regimes. The new standards will drive the need for appropriate data and technology infrastructure in support of timely and frequent economic assessments of insurance liabilities and assets under multiple reporting frameworks.

The evolving measurement frameworks do not necessarily present a choice to either avoid, defease, or continue to retain market risks. As a result, decisions on how much economic risk to take can be informed by an overall enterprise risk strategy that is attuned to prevalent market conditions. For example, risk-management solutions with a built-in bias for higher interest rates could be considered for a low-interest rate environment.

Finally, asset-liability management in reporting frameworks that are in better harmony with economic measurement principles will require an operating model that allows for optimal coordination among business underwriting, capital management, treasury, and enterprise risk management functions. In this regard, the timely and insightful reporting of economic exposures and their interaction with accounting measures will require both technology and information flow to support modern finance and enterprise risk management organizations.
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