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Principle-Based Reserves and LTC Insurance Innovation

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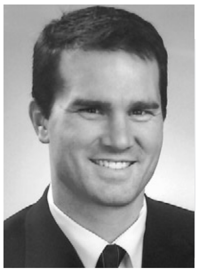

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Is a principle-based approach to reserves for Long-Term Care (LTC) insurance getting closer to reality? Discussion and analysis of principle-based reserves for LTC has been going on for some time. The Academy of Actuaries Long-Term Care Principle-Based Work Group (LTCPB Work Group) has been around since 2005. While the movement toward principle-based reserves for LTC has been relatively slow, it may start to accelerate and be pulled along as the life insurance industry gets closer to implementing principle-based reserves.

As the LTC insurance industry looks to develop (or gets pulled into developing) an innovative approach to reserves, it would do well to recall past innovations in the evolution of LTC insurance. While innovation often comes from the nearest adjacent space—in this case, other product lines—care must be taken since the nearest adjacent space can sometimes lead down the wrong path.

In LTC insurance, the nearest adjacent space has not always led to positive innovation, and as a result, the industry has sometimes had to learn the best avenue for its product the hard way.

For example, early LTC products used the nursing home eligibility definition from the adjacent Medicare space that included a three-day prior hospitalization requirement. It was not until much later that this was determined to be an ineffective and overly restrictive approach. Another example is lapse rates. Early lapse assumptions were taken from experience with other life and health products. However, in the United States, lapse supported products did not exist and the nearest adjacent space mislead pricing actuaries. Interestingly though, the Canadian product term life to 100, was lapse supported and would have provided a better benchmark to develop LTC insurance lapse assumptions. Yet another example of following the lead from another product was some carriers' cavalier treatment of LTC insurance to be like an inflationary health product that is expected to have increases. There was inconsistency in the industry as to how LTC should be priced and managed—at least until rate stabilization was passed.

Other adjacent spaces have and will continue to define LTC insurance. Items such as investment income strategy, shared care (first-to-die life), and combination products that link LTC with life and annuities all borrow ideas from other product lines. However, as we have learned along the way, LTC insurance can be a unique animal and approaches and innovations need to be well thought out and tailored to the unique aspects of the LTC insurance product.

So it goes with applying principle-based reserves to LTC insurance. While life and annuities are relatively far down the path toward principle based reserves, LTC insurance is still determining the best path to take. What can we learn from life and annuities—the nearest adjacent space—to appropriately and effectively apply principle-based reserves to LTC?

PRINCIPLE-BASED RESERVES

What are principle-based reserves? Principle-based reserves, or more broadly, a principle-based approach (PBA) is an effort to create a new framework for reserves and capital for U.S. life insurers. The American Academy of Actuaries (Academy), particularly within the Life and Health Practice Councils, has several work groups dedicated to this charge and has been working closely with the National Association of Insurance Commissioners (NAIC) and the industry to bring the project to fruition. The life insurance and annuity product lines have been leading the charge on PBA, followed closely by health and financial reporting practice areas.

PBA is based upon a conceptual framework published by the Academy's Life Practice Council in March 2007 and then updated by the Academy's Life Consistency Work Group (CWG) in September 2007.[1] This framework, taken from the updated CWG document, is as follows:

A ***Principle-Based Approach*** *of statutory Risk-Based Capital and minimum contract/policy reserve requirements for Life, Health and Annuity products incorporates the following common statements when considered together and not in isolation from one another. Further, these statements should be interpreted in the context of the value being calculated (i.e., reserve or RBC component).*

1. *Captures the benefits and guarantees associated with the contracts and their identifiable, quantifiable and material risks, including the 'tail risk' associated with the contracts, and the funding of those risks.*

2. *Utilizes risk analysis and risk management techniques to quantify the risks and is guided by the evolving practice and expanding knowledge in the measurement and management of risk. This may include, to the extent required by an appropriate assessment of the underlying risks, stochastic models or other means of analysis that properly reflect the risks of the underlying contracts.*

3. *Incorporates assumptions, risk analysis methods and models and management techniques that are consistent with, those utilized within the company's overall risk assessment process. The inclusion of the risk analysis methods and models should consider the original purpose of that analysis. Risk and risk factors explicitly or implicitly included in the company's risk assessment and evaluation processes will be included in the risk analysis and cash flow models used in the PBA. Examples of company risk assessment processes may include economic valuations, internal capital allocation models, experience analysis, asset adequacy testing, GAAP valuation and pricing.*

4. *Utilizes company experience, based on the availability of relevant company data and its degree of credibility, to establish assumptions for risks over which the company has some degree of control or influence.*

5. *Incorporates assumptions that, when viewed in the aggregate, reflect an appropriate level of conservatism and, together with the methods utilized, recognize the solvency objective of statutory reporting.*

6. *Reflects risks and risk factors in the calculation of the PBA minimum statutory reserves and statutory RBC that may be different from one another and may change over time as products and risk measurement techniques evolve, both in a general sense and within the company's risk management processes.*

This framework for PBA will continue to evolve and move forward. PBA will drive insurers to analyze their future liabilities in greater detail (and with more freedom) than before which ultimately give better protection for the insurer and their customers.

Recent discussions surrounding the PBA framework for life insurance include a floor reserve definition, and the use of a common set of interest rate scenarios (rather than allowing each company to generate and use their own) to be used for PBA calculations.

PRINCIPLE-BASED RESERVES FOR LTC INSURANCE

While the NAIC's PBA initiative has focused primarily upon life insurance and annuities, it is expected to eventually include health (including LTC) and property/casualty products. The Academy's LTCPB Work Group is monitoring and responding to regulatory developments with respect to reserve regulations, with a goal of ensuring that any changes made include reasonable accommodations for LTC products.

In addition to monitoring the progress at the NAIC, the LTCPB Work Group has been making progress in an effort to address how PBA will work for LTC. Key discussions and issues addressed by the subgroups include:

1. *Discussion on stochastic review.*
   The LTCPB Work Group has discussed which variables should be reviewed stochastically for LTC. In contrast to life products, many of the LTC liability assumptions, including morbidity and mortality, should be analyzed stochastically. The life/annuity work to date applies stochastic modeling to interest rates and equity returns only. Different approaches to developing an LTC model that handles liability assumptions on a stochastic basis have been analyzed. The Work Group has settled on one approach to be used in a model prototype.

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2. Address potential premium rate increases. The LTCPB Work Group has decided to address the potential for including future premium rate increases in the modeling of future LTC cash flow. Rate adjustments are part of the product risk profile, and therefore, the capability to model this contingency is needed. Determining what premium rate increase levels, if any, should be reflected in PBA will require significant modeling analysis and open discussions with all interested parties, including the NAIC.

3. The need for a standardized morbidity table. Currently, LTC insurance does not have a standardized morbidity table. Such a table may prove to be important, as movement is made towards developing appropriate benchmarks. It would also be vital in providing a baseline for companies that do not have credible experience to develop their own assumptions. To date, the life insurance working groups involved with principle-based approaches have struggled to develop a reasonable method for recognizing company mortality experience to the extent it is relevant and credible, while satisfying regulator concerns regarding auditability.

The potential implications of a PBA for LTC are far reaching. It will not only influence reserves, but also product development, pricing and strategic decisions.

An update of the progress of the LTCPB Work Group was presented at the December 2008 NAIC meeting. The update included a discussion of the above items and other issues surrounding LTC under PBA, including a discussion of the stochastic modeling approach to LTC. Regulators at the meeting reacted very favorably to the direction of the work group, noting the importance of the work and encouraging continued progress.

WHAT CAN INSURERS DO TO PREPARE?

What will PBA do to the LTC insurance product? Will it increase reserves, decrease reserves, and/or do as its name suggests and result in a more appropriate principle-based approach? The answer is unknown and may vary from company to company and depend on upcoming decisions with respect to the framework of PBA for LTC. Many of the innovations with respect to PBA for LTC may be drawn from the adjacent spaces of life and annuity products, or be influenced by International Accounting Standards. It will be important to analyze these innovations with respect to the resulting implications for LTC to ensure effective innovation. Three important steps LTC insurers should take toward this end include:

1) Ensure experience analysis systems are in place to monitor results. Currently, for reserve calculations, companies generally use their own assumptions of morbidity and persistency assumptions based on either their own data, data from reinsurers and consultants, or some combination thereof. Under a PBA regime, the use of a company's own data will become even more critical as it may potentially influence the reserve calculation more directly.

2) Review the company's position with respect to actuarial projection systems. The basic framework of PBA as adapted by Academy's Life CWG requires utilization of "risk analysis and risk management techniques to quantify the risks and is guided by the evolving practice and expanding knowledge in the measurement and management of risk." A company's ability to effectively implement risk management techniques and PBA in general can be enhanced by the actuarial projection systems.

3) Monitor and participate in the ongoing discussions of PBA and its potential implications for LTC. While implementation of PBA for LTC may be years away, critical intermediate decisions are being made today. Important issues and questions are being discussed and addressed by the Academy's LTCPB Work Group. These discussions and resulting opinions have the potential to leave lasting implications on LTC reserves. Updates of progress can be found on the Academy[2] and NAIC[3] Web sites.

The potential implications of a PBA for LTC are far-reaching. It will not only influence reserves, but also product development, pricing and strategic decisions. Your increased participation and awareness in the development of a PBA framework for LTC will help ensure that careful consideration is given to the future implications for LTC. This will ensure that innovations created by adapting ideas and approaches from other product lines will result in the best long-term course of action for LTC. ■

FOOTNOTES

1 The Academy's Life Consistency Work Group report to the NAIC's Life and Health Actuarial Task Force, dated Sept. 5, 2007. *http://www.actuary.org/pdf/life/consistency_sept07.pdf*

2 *http://www.actuary.org/*

3 *http://www.naic.org/*