# American Academy *of* Actuaries **Essential Elements**

Making complex public policy issues clear

#### **JUNE 2016**

## **Principle-Based Reserving: A New Way to Insure for Life**

Life insurance for purchase in the United States has been going through a sea change in recent years. Insurers have been moving to replace formulas that have been used to calculate insurance reserves for more than 150 years. Of course, much has changed in our economy over that long period of time, including the advent of computers, which allow for better ways to measure a person's insurance risk.

## The current reserving model

Today, regulators in state insurance departments have secured laws requiring insurers to hold certain amounts of reserve funding to ensure that the insurance claims on policies are paid. The level of reserves required affects the overall cost of insurance policies because reserves that are too high can unnecessarily raise the cost of insurance, while reserves that are set too low can raise the risk of an insurer not being able to pay all claims and becoming insolvent.

The current system for calculating the funding that insurers are required by law to keep in reserves is based on every insurer - no matter their size or concentration of business in particular type of insurance or geographical area – using the same formula, and estimates of future mortality and investment experience. The formulas are static and are not adjusted for future events such as economic factors or interest rate fluctuations. This method has worked reasonably well for certain traditional products, but not for those that allow consumers the flexibility to change benefits or premiums. Because they are not able to accurately reflect various product options, like a guaranteed benefit, as well as the associated risks,

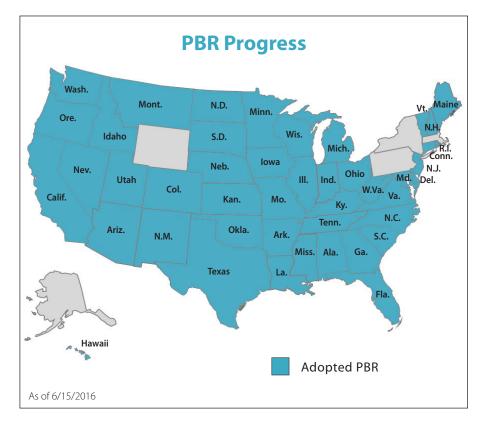
the calculations used to figure out the reserve levels are based on a one-size-fits-all formula, which means insurers could be in a situation where their reserves are either set too high for some products and too low for others.

## **Principle-based reserving**

Principle-based reserving (PBR) is a relatively new method for life insurers to model their reserves based on a set of fundamental principles rather than one-size-fits-all rules. This allows an insurer to reflect its own unique experience and risks in calculating reserves. PBR utilizes simulation models to estimate the level of reserves needed to cover future claims

## **PBR KEY POINTS**

- More adaptable to new products
- Utilizes company experience
- Dynamically adjusts for economic conditions





Objective. Independent. Effective.™

1850 M Street NW • Suite 300 • Washington, DC 20036 • 202.223.8196 • <u>www.actuary.org</u> ©2016 American Academy of Actuaries. All rights reserved.

## **PBR Advantages**

- Better captures the risks of many complex products offered in today's life insurance market
- Utilizes company experience and economic conditions instead of prescribed assumptions
- Leads to more appropriate "right-sizing" of reserves
- Makes reserves self-adjusting based on changing experience and economic conditions to allow reserve requirements to adapt to changes in an evolving financial landscape
- Allows reserve standards to be defined according to principles that will keep the standards in sync with new product designs, rather than having to adapt rules that do not contemplate new product features
- Preserves the long-standing principle of conservative statutory reserve requirements for life insurance

over many possible or potential future economic scenarios. This type of model requires a recalculation of the reserves held by an insurer on a regular basis based on updated company data and economic conditions. PBR will produce reserves more in line with a company's actual risk profile; that is, taking into account the relative age, health and other factors of those people it insures, as well as the overall soundness of the company's investments and financial position. The reserves for some products will increase and will decrease for other products. This "right-sizing" of reserves could make some insurance products more affordable and, for other riskier ones, more appropriately priced.

## **PBR and state regulators**

PBR, which is incorporated into a new model law being considered by all state governments, will require state insurance offices to make changes in how they regulate and monitor life insurers but, under the model law, if adopted, there is a gradual implementation of PBR to limit the a potential impact on regulatory resources. PBR will not affect existing life insurance policies already bought and will only be applied to new products issued after the implementation date. As regulatory experience builds up over time, insurance regulators can focus more of their attention on understanding how insurers are managing risk instead of modifying formulas for new products.

## Safeguards of PBR

While some critics have said PBR gives insurers too much discretion in setting reserve levels, there are many safeguards built into the new law, including certain prescribed limits on how an insurer can apply the principles, at least for the start of the new law taking effect and until regulators are satisfied with the results. Further, each company must evaluate the adequacy of its reserves. If a company's actuary determines that additional reserves are needed beyond the overall reserve level required, the company must hold additional reserves.

## **PBR: Next steps**

The National Association of Insurance Commissioners (NAIC) revised the Standard Valuation Law model law to be adopted by the states, and developed an accompanying Valuation Manual, which contains more explicit rules and guidelines for implementing PBR. Since insurance is regulated by the states and not the federal government, each state must consider adoption of the new valuation standards. Before the Valuation Manual becomes effective, at least 42 states representing at least 75% of direct written premiums (i.e., the overall insurance sold nationwide) must change their SVLs. That threshold was met in the first half of 2016, and PBR is expected to go into effect on Jan. 1, 2017, for prospective business.

## Additional Resources from the American Academy of Actuaries

Academy Presentation on PBR (May 2013) http://www.actuary.org/files/Financial\_Summit\_PBRValuation\_5-30-13.pdf

PBA Perspectives, Spring 2016 http://www.actuary.org/email/2016/pba/PBA\_April\_2016.html