

By Timothy C. Pfeifer, FSA, MAAA

Introduction

Two highly significant regulatory requirements have been adopted by state regulators in recent years which will have substantial impact on the development of new life insurance products in coming years. The two requirements are the adoption of a new standard mortality table, called the 2017 Commissioners Standard Ordinary (CSO) Table, and Principles-Based Reserves (PBR).

2017 CSO Mortality Table

The last standard industry mortality table was completed sixteen years ago in 2001, and was known as the 2001 CSO Table. Since that table was developed, the industry has changed in many ways. Examples include much greater experience with preferred risk mortality, more accelerated underwriting, more experience at larger face amounts, more older-age experience, and more knowledge relative to causes of death.

What's different with the 2017 CSO Table?

The structure of the new 2017 CSO Table is very similar to the 2001 CSO Table, in terms of base tables and the ability to apply multipliers for different risk profiles. However, generally speaking, mortality rates under the 2017 CSO Table are lower. This reflects a continuation of general population and insured lives historical mortality improvement.

Like the 2001 CSO Table, the base 2017 CSO Table contains some conservative padding that is important in the calculation of reserves and cash values.

Why is the adoption of the 2017 CSO Table important?

When the 2017 CSO Table becomes effective, it becomes the mortality standard for calculating minimum cash values, minimum statutory reserves, and the minimum death benefit to premium/account value relationship for federal tax law compliance as life insurance.

The impact of the adoption of the 2017 CSO on product design is a major driver of when insurers will elect to adopt the new table. All else equal, adoption of the 2017 CSO Table will lower statutory reserves at most durations and will lower tabular cash values. Accordingly, price sensitive products like term and universal life secondary guarantee contracts will generally benefit from the lower reserves, and carriers selling such products will choose to move to the 2017 CSO quickly, since prices can be dropped. (An exception to this can be carriers who use reserve financing arrangements to support term reserves, as certain tax benefits can be more advantageous if the 2017 CSO Table is not used.)

When should we expect to see these new changes rolled out by the insurers?

The rules surrounding the effective date of the 2017 CSO Table are interesting. All life policy forms must use the 2017 CSO to calculate minimum statutory reserves, minimum cash values, and tax law factors starting on or after January 1, 2020. Between January 1, 2017, and January 1, 2020, insurers can elect to develop new policy forms using the 2017 CSO, or can retain the 2001 CSO Table until January 1, 2020.

For products built around cash accumulation and the payment of as large amounts of premiums as possible per \$1 of death benefit, the impetus to adopt the 2017 CSO Table for such policies is lower, and for such products, insurers may wait until January 1, 2020, to introduce the 2017 CSO. This is because under the new table, the maximum premium that can be paid per dollar of death benefit is lower.

Although the general pattern of adoption is expected to be early for price sensitive products and later for heavily funded contracts, many policies will fall in the middle, and companies will sequence product launches to smooth out their product development efforts.

Principles-Based Reserves (PBR)

What is PBR and what factors are considered in its calculation?

For over 150 years, life insurance companies have calculated statutory reserves (reserves reported to state insurance regulators) using fairly basic actuarial formulas. These formulas have used conservative variables, so the resulting reserves were often very conservative.

About fifteen years ago, both insurers and regulators began an effort to change the formulaic approach to reserves and replace it with an approach that involves sophisticated actuarial modeling of a company's projected liabilities in light of its own experience. This approach has been utilized in Canada for many years with much success. This Principles-Based Reserves (PBR) method was viewed as having the following advantages:

- Modern technology software has enabled insurers to create sophisticated financial models that can handle large amounts of data and calculations, which had not been available before.
- Innovative product designs can be accommodated, unlike formulaic reserve structures.
- PBR reserves permit a better picture of the reserves that should be held by a given insurer, in light of its own mortality, experience, lapse, and investment experience.
- PBR methodology will be more likely to “right-size” statutory reserves, and eliminate some of the conservatism in the formulaic reserves.
- As is appropriate, two companies offering the same product may be required to hold different reserves for the same insured, unlike the prior formula approach.

The guidance for how to calculate PBR values is defined very precisely by regulators in a document called VM-20 (Valuation Manual-20). This document is a living set of guidance that can be easily changed as new experience and methods emerge. The required modeling is very sophisticated and requires much actuarial manpower.

Under PBR methods, the reserve that must be held by an insurer is actually the greatest of three separately calculated values; one is a formula-based value, and the other two result from sophisticated models that can reflect the insurer's own relevant experience. These models must reflect a specific company's credible recent company experience, where it exists, plus a provision for conservatism. Small companies and certain types of products are exempted from the modeling approach. Given the VM-20 reserve structure, use of a company's own experience is important, because much higher conservative padding is added to mortality, expenses, etc., if company experience is not reliable. Thus, PBR will heighten the importance of a company's own experience studies.

What is the expected impact of PBR?

The general consensus is that term reserves will be reduced, especially if adoption of PBR is coupled with adoption of the 2017 CSO Table. Thus, term prices for many companies should decline. Since the cash value still acts as a floor on statutory reserves, PBR for heavily cash value-oriented life products (VUL, UL, IUL) should not change much. For products like UL Secondary Guarantee (ULSG) or Current Assumption UL, the outcome is a function of the individual product and company. In a higher interest rate environment, the PBR is likely to be lower than a formulaic reserve for ULSG and Current Assumption UL.

When is PBR expected to take effect?

This may sound familiar, but all products must use PBR methods for new life business issued on or after January 1, 2020. If a company adopts PBR for a policy form, it must also adopt the 2017 CSO Table for that policy form at the same time. The converse is not true. Between January 1, 2017, and January 1, 2020, life insurers can selectively choose which policy forms to migrate to PBR. Once they have migrated a policy form to PBR, they are not allowed to migrate back. As might be expected, a material number of companies have developed term life products using PBR methods and the 2017 CSO Table since January 1, 2017, in an effort to lower prices. A much smaller number of insurers have moved to PBR for ULSG or any other products.

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