Article from

The Financial Reporter

December 2016
Issue 14

Negative GAAP Term Insurance Reserves—to Floor or Not to Floor?

By Bob Crompton

A question that comes up with a certain regularity is, "Should I floor negative GAAP reserves at zero?" Although this is a common problem, there is little guidance on the issue. The FASB does not address this issue and other guidance is limited. There is no definitive answer to this question. In practice, some companies have chosen to floor these reserves, while others have chosen to allow negative reserves as they occur. This article discusses some of the material considerations in reaching a conclusion to this question.

SOME GENERAL CONSIDERATIONS

There are some general considerations to keep in mind when considering the question of whether to floor reserves.

- Flooring reserves will change the emergence of GAAP profits, but will not affect the total lifetime undiscounted profits. The cash flows of term insurance (or any insurance product) are unaffected by the choice of reserve basis or by any adjustments to the existing reserve basis.
- However, timing of profit emergence may have important effects on profit measures. Flooring results in deferral of profits, so the effect on profit measures will be adverse and may be material.
- Under current GAAP accounting, term reserves are subject to lock-in. If your term reserves were floored, you cannot willy-nilly decide to unfloor the reserves.
- Modern term insurance benefit and premium designs often result in volatility of results due to shock lapse and anti-select mortality in the post-level term period. Any consideration of flooring should be made in light of these issues.

ACCOUNTING GUIDANCE

Authoritative guidance on term reserves is found in the FASB's codification of accounting rules at 944-40-30 which deals with the initial measurement of the reserve. Paragraph 30-7 contains the applicable language:

> "The liability for future policy benefits accrued under paragraph 944-40-25-10 shall be the present value of future benefits to be paid to or on behalf of policyholders and related expenses less the present value of future net premiums (portion of gross premium required to provide for all benefits and expenses). That liability shall be estimated using methods that include assumptions, such as estimates of expected investment yields, mortality, morbidity, terminations, and expenses, applicable at the time the insurance contracts are made. The liability also shall consider other assumptions relating to guaranteed benefits, such as coupons, annual endowments, and conversion privileges. The assumptions shall also include provision for the risk of adverse deviation."

Note that the language does not address exceptions for negative reserves. It is this lack of guidance that often leaves people scratching their heads when they consider the question of negative reserves. Without specific guidance, we have to fall back on general reasoning and consideration of facts and circumstances.

BALANCE SHEET VIEW OF FLOORED RESERVES

One approach to reaching a conclusion on negative reserves is to consider the appropriateness of negative reserves as viewed from the balance sheet. As viewed from the balance sheet, reserves are the value of future obligations, and reserves should be presented in such a way as to reasonably reflect those future obligations.

The balance sheet point of view is discussed in the book, *US GAAP for Life Insurers*, published by the Society of Actuaries (page 106 of 2nd edition):

> "The observer will note that the reserves start positive, then go modestly negative, then become significantly negative. While this phenomenon is entirely consistent with actuarial formulas commonly used for GAAP reserve calculations, these formulas do produce a negative liability. **There is a school of thought that maintains that negative obligations cannot exist. Thus, a reserve so calculated should be floored at zero.**" (Emphasis added)

This is clearly a balance sheet approach since the emphasis is on the function of reserves as a measure of future obligations. If this were the only purpose of reserves, then this view would carry considerable weight. However, reserves also have a purpose in the income statement relating to profit emergence.

INCOME STATEMENT VIEW OF FLOORED RESERVES

The balance sheet view is not the only way to view negative reserves. There is another school of thought that maintains this issue should be viewed from an income statement perspective. From an income statement perspective, the critical function of

GAAP reserves is to produce an orderly emergence of profits. This perspective was important in the AICPA audit guide issued in 1972 as well as in SFAS 60 issued in 1982.

This concept of orderly emergence of profits is discussed in the SOA publication, *US GAAP for Life Insurers*, on page 10 of the 1st edition:

> "The accounting rule-makers have attempted to prescribe methods that cause profits to emerge in proportion to the degree of completeness of the earnings process under the contract or in proportion to services rendered."

The concept is also discussed in the classic book GAAP: Stock Life Companies (page 66), published by Ernst & Ernst:

> "… the reserve is a kind of balancing account designed to produce a pattern of derivative profits which conform at least roughly to predetermined concepts of services rendered."

Finally, Richard Horn's seminal paper, "Life Insurance Earnings and the Release from Risk Policy Reserve System," 'TSA XXIII (1971), discusses reserves as a timing mechanism for the release of profits in a reasonable way. He makes the following statement:

> "Bringing period costs and period revenues together for life insurance means deferring the recognition of some current income to a later period or anticipating in the current period some of the cost which will emerge in later periods. The mechanics of the policy reserve system accomplishes the matching process whether current income is regarded as being deferred or later costs are regarded as being anticipated."

Clearly the income statement view of reserves is a valid way to consider the question of flooring reserves. This view must be weighed against the balance sheet view of reserves. Both have their merits.

EFFECT OF FASB'S TENTATIVE TARGETED IMPROVEMENTS

The FASB has published several proposed changes to GAAP for insurance products. Although none of these changes has any direct effect on considerations for flooring negative reserves, there may be some indirect considerations.

These proposed changes are contained in an Exposure Draft dated Sept. 29, 2016. The Exposure Draft is available on FASB's website.[1] The changes that would affect term insurance are:

- No provision for adverse deviation
- Assumption updates (annual unlocking)
- Discount rates
- DAC amortization
- Loss Recognition rules

The author flunked-out of both of the schools of thought mentioned above. He has instead enrolled in the night-school version of a view of flooring term reserves—the facts and circumstances view.

These proposed changes do not affect the development of negative reserves, nor do they explicitly address the issue of negative reserves. However, there may be an indirect effect from these tentative changes.

These changes are clearly balance sheet oriented rather than income statement oriented. It is possible that adoption of these accounting rules will signal FASB's view that the balance sheet view of reserves be given stronger consideration than the income statement view of reserves. This is currently speculative, and may be reading too much into the proposed changes.

THE PRACTICAL VIEW OF FLOORED RESERVES

The author flunked-out of both of the schools of thought mentioned above. He has instead enrolled in the night-school version of a view of flooring term reserves—the facts and circumstances view.

Most blocks of term insurance contain a number of issue years, a number of benefit periods and issues that are spread throughout each calendar year. These items tend to mitigate the effects of any negative reserves. If, on balance, the effects of negative reserves in any reporting period are expected to be immaterial, then a company should choose whichever approach is easiest to implement and manage.

However, some companies will find that the effects of negative term reserves are material, in spite of diversification across issue years, benefit periods and other parameters. When this is the case, the practical view says to choose according to the way the company manages the business. A company that takes a conservative approach to the GAAP balance sheet, and loads-up the provisions for adverse deviation to the fullest extent consistent with GAAP, should choose to floor reserves at zero. This is consistent with the way the company manages its business.

On the other hand, a company that manages its business with an eye on the GAAP income statement—a company that has a very tight feedback loop between pricing and valuation—should choose not to floor reserves. Any distortion introduced into the emergence of profits (including flooring reserves), will make it more difficult for this company to properly manage its portfolio of liabilities and more difficult to explain profit results.

CONCLUSION

Negative reserves are an issue that is not explicitly addressed in GAAP guidance. There is no "bright line" that tells us that we should, or should not, floor reserves at zero. There are arguments in favor of flooring reserves and arguments in favor of not flooring reserves. In practice, companies have chosen both.

A reasonable approach to selecting the appropriate approach to this issue is to base the decision on congruence with the company's approach to managing the business. A company that emphasizes the income statement should consider allowing negative reserves in order to preserve the orderly release of profits. A company that emphasizes its balance sheet should consider flooring reserves at zero in order to preserve balance sheet conservatism. ■

ENDNOTE

1 http://www.fasb.org

Bob Crompton, FSA, MAAA, is a vice president of Actuarial Resources Corporation of Georgia, located in Alpharetta, Ga. He can be reached at *bob.crompton@arcga.com.*