



SOCIETY OF ACTUARIES

Article from:

International Section News

October 2004 – Issue No. 34



INTERNATIONAL NEWS

NEWSLETTER OF THE INTERNATIONAL SECTION

contents



Deferred Bonus Reserves by William R. Horbatt & Daniel Stubbs.....	1
Editor's Note by Randy Makin.....	2
International Accounting Corner	7
Republic of China Delegates Meet Insurance Actuaries in Chicago by Tom Herget.....	8
Mexico News for Q2, 2004 Dynamic Solvency Testing has Arrived in Mexico by Jose Berrios.....	13
Aquiring a U.S. Operation—A Primer by Valerie Lopez-Zinzer.....	16
SOA International Experience Survey Embedded Value Financial Assumptions by William Horbatt, Dominique Lebel and Ronora Styker.....	19
Meet the New Kids	23
Opportunities and Challenges in the Korean Insurance Market by Chi Hong An.....	24

Deferred Bonus Reserves

by William R. Horbatt & C. Daniel Stubbs, Jr.

1. Summary

Legal minimum policyholder participation requirements create a timing issue for companies reporting income using United States Generally Accepted Accounting Principles (U.S. GAAP) whenever assets are valued differently under local legal standards from U.S. GAAP. Countries like France, Germany, Italy and Switzerland mandate minimum policyholder bonuses (typically referred to as “dividends” in U.S. terminology) based upon company investment income that frequently differs from the investment income reported under U.S. GAAP.

For example, U.S. GAAP may require that an asset be valued at market value while the local standards specify book value. An unrealized capital gain could artificially increase U.S. GAAP equity by the full amount of the gain unless a provision were made in the financial statement to reflect the fact that a portion of this gain will ultimately be returned to policyholders under minimum bonus requirements. In this case,

companies follow the guidance contained in paragraph 42 of Statement of Financial Accounting Standard (SFAS) 60 that states, “the policyholders’ share of net income ... that cannot be distributed to stockholders shall be excluded from stockholders’ equity” by establishing a reserve.

The appropriate accounting treatment for the opposite case, when local asset values exceed U.S. GAAP, is much less clear. We are aware of both potential approaches being taken—in one case, reducing policy reserves to reflect the probability that less will ultimately be paid—and in the other case, allowing the timing difference to stand until it is eventually settled when assets are liquidated. This article will provide background on local minimum policyholder participation practices, present relevant accounting issues and discuss the two different accounting interpretations and make a recommendation as to which we feel is most appropriate at this point in time.

continued on page 3



2. Deferred Bonus Reserves

Before discussing the special case of negative deferred bonus reserves, it is appropriate to describe the legal constraints that create the need for such reserves and the well-accepted accounting principles that are applied when establishing (positive) deferred bonus reserves.

2.1 Minimum Policyholder Participation

European products subject to minimum policyholder participation are general account products with a significant savings element, thus legal minimum policyholder participation requirements focus on sharing investment income with policyholders. At one extreme, the Italian limits are quite rigid with minimum bonuses set equal to 80 percent of the investment income rate from the prior calendar year applied to every policy. At the other extreme, the French calculation determines a minimum bonus based upon modified statutory net income excluding 15 percent of investment income and permits the company to allocate it to contracts at the company's discretion over a seven-year period. In either case, every contract has a guaranteed minimum interest rate that may not be breached.

The participation percentage varies by country and actual bonuses credited are frequently even higher. For example, Germany set 90 percent of investment income as its threshold and industry practice is to pay about 95 percent.

2.2 Accounting Background: SFAS 60 Paragraph 42 and other Accounting Literature

Paragraph 42 of SFAS 60: *Accounting and Reporting by Insurance Enterprises*, gives explicit guidance on the treatment of surpluses that emerge on funds underlying policy liabilities:

42. *If limitations exist on the amount of net income from participating insurance contracts of life insurance enterprises that may be distributed to stockholders, the policyholders' share of net income on those contracts that cannot be distributed to stockholders shall be excluded from stockholders' equity by a charge to operations and a credit to a liability relating to participating policyholders' funds in a manner similar to the accounting for net income applicable to minority interests.*

Dividends declared or paid to participating policyholders shall reduce that

liability; dividends declared or paid in excess of the liability shall be charged to operations.

Income-based dividend provisions shall be based on net income that includes adjustments between general-purpose and statutory financial statements that will reverse and enter into future calculations of the dividend provision.

Based upon the first sentence of this paragraph, affected companies establish a deferred benefit reserve (DBR) whenever U.S. GAAP asset values exceed bonus-related values. Frequently the calculation is simplified by applying the participation rate (80 percent for contracts subject to the legal minimum in Italy) to the difference in asset valuations.

Based upon the second sentence of this paragraph, bonuses credited in excess of legal minimums—such as the practice in Germany—are charged to income in the year they are credited.

The final sentence providing guidance draws an analogy to the approach then used for calculating income tax provisions in U.S. GAAP statements; the discussion of SFAS 109 in Section 3.2 below points out that the approach for calculating income taxes subsequently changed.

One decade after this statement was issued, SFAS 115: *Accounting for Certain Investments in Debt and Equity Securities*, was issued in 1993. SFAS 115 effectively required life insurance companies to bifurcate their treatment of assets having separate treatment in the income statement and balance sheet with the differences flowing through equity. The specific treatment of the DBR reserve depends upon management's classification of the assets using the bifurcation treatment under SFAS 115:

- For assets designated as trading assets or as assets held to maturity, the DBR is a policyholder benefit reserve in balance sheet liabilities and changes in the reserve are reflected in the income statement.
- For assets designated as being available for sale, the reserve is split into a DBR and a "shadow DBR," the sum of which is held as a liability in the balance sheet. The DBR reflects differences between the local fund value and the U.S. GAAP book value, while the shadow DBR reflects differences between the U.S. GAAP book value used for income statement purposes and the market value of

European products subject to minimum policyholder participation are general account products with a significant savings element, thus legal minimum policyholder participation requirements focus on sharing investment income with policyholders.

continued on page 4

assets in the U.S. GAAP balance sheet. Changes in the DBR are reflected in the income statement, while changes in the shadow DBR are included in other consolidated income (OCI) in the reconciliation of equity between year-ends.

Notice that although accounting treatment of insurance policies has also evolved with the promulgation of SFAS 97: *Accounting and Reporting by Insurance Enterprises for Certain Long-Duration Contracts and for Realized Gains and Losses from the Sale of Investments* issued in 1987 and SFAS 120: *Accounting and Reporting by Mutual Life Insurance Enterprises and by Insurance Enterprises for Certain Long-Duration Participating Contracts* issued in 1995, both of these more recent statements of financial accounting standards are silent on this subject, so the direction provided by SFAS 60 paragraph 42 remains in effect.

2.3 Examples of DBR and Shadow DBR

A simple example, shown in Figure 1, illustrates the treatment above. Let us assume that we are looking at an Italian company with a mature bond portfolio and all contracts subject to the 80 percent legal minimum policyholder participation for investment income.

Figure 1

	Italian Fund Accounting	U.S. GAAP Book Value	U.S. GAAP Balance Sheet Value
Assets	1,000,000	1,000,000	1,100,000
Policy Reserves	1,000,000	1,000,000	1,000,000
DBR	N/A	0	0
Shadow DBR	N/A	N/A	80,000
Equity	0	0	20,000

Figure 2

	Italian Fund Accounting	U.S. GAAP Book Value	U.S. GAAP Balance Sheet Value
Assets	1,000,000	1,010,000	1,100,000
Policy Reserves	1,000,000	1,000,000	1,000,000
DBR	N/A	8,000	8,000
Shadow DBR	N/A	N/A	72,000
Equity	0	2,000	20,000

Figure 3

	Italian Fund Accounting	U.S. GAAP Book Value (Conservative Approach)	U.S. GAAP Balance Sheet Value (Best Estimate Approach)
Assets	1,000,000	990,000	990,000
Policy Reserves	1,000,000	1,000,000	1,000,000
DBR	N/A	0	-8,000
Shadow DBR	N/A	N/A	0
Equity	0	-10,000	-2,000

In this case, the market value of the assets exceeds their book value since market interest rates have declined after most of the assets were purchased, thereby creating an unrealized gain that is recognized in the U.S. GAAP balance sheet (the assets are considered to be “available for sale” as is normally the case). Fully 80 percent of this unrealized gain is held as a shadow deferred benefit reserve (shadow DBR) and the balance increases stockholder equity.

The example can be modified slightly to create a DBR. Under Italian fund accounting conventions, assets are recorded at the average value of all similar assets purchased during the same calendar year. On the other hand, U.S. GAAP permits each asset to be valued at its own individual purchase price. Assuming that certain assets have been sold that result in U.S. GAAP book value exceeding Italian fund accounting values by 10,000, the following situation occurs, as shown in Figure 2.

Notice that U.S. GAAP balance sheet equity remains the same (since the market value of the asset portfolio did not change), but that 2,000 of the equity has now flowed through the income statement as a result of the change in U.S. GAAP asset book values (offset by 2,000 less flowing through OCI in the reconciliation of equity).

3. Accounting Approaches when U.S. GAAP Asset Values Exceed Local Values

Two approaches have been taken when the opposite situation occurs, U.S. GAAP assets being exceeded by local country basis asset values.

- The “conservative” approach is to follow the treatment of minority interests explicitly mentioned at the end of the first sentence of paragraph 42 of SFAS 60, which is to ignore differences that result in a negative adjustment to liabilities. This posture goes to the heart of the conservatism principle: never understate liabilities.
- The alternative approach, more consistent with the conservatism principle, is to reduce liabilities whenever it is demonstrable that the asset valuation difference will be reversed by payments at values that are lower than the liability held. This approach is referred to as the “best-estimate” approach in this article.

Another simple example can be created from the Italian situation resulting from the practice of not recognizing impairments in Italian policyholder fund accounting. Assume that U.S. GAAP has recognized an impairment in asset values due to a credit rating downgrade of certain bonds in the previous example, and that this impairment will be recovered by reducing policyholder bonuses in future years after the bonds are sold. This is shown in Figure 3.

Stockholder equity is temporarily reduced by the 10,000-asset impairment under the conservative approach, but is reduced by only the 2,000 stockholder’s share of the loss under the best-estimate approach. Note that the example assumes that the difference in equity caused by the difference in asset valuations is temporary and will be eliminated once assets are liquidated and investment losses are reflected in reduced policyholder bonuses. If this difference were not temporary, for example if the losses could not be recovered due to the effects minimum interest guarantees, then both approaches would result in the same equity values, -10,000.

3.1 Conservative Approach Toward Temporary Timing Differences

Under the conservative approach to situations that would otherwise result in a negative DBR, the DBR is set at a “floor” value of zero.

A justification for this approach starts with the reference to minority interests in SFAS 60, paragraph 42. This leads one to Accounting Research Bulletin (ARB) 51: *Consolidated Financial Statements*, which governed minority interests at the time when SFAS 60 was issued. In particular, paragraph 15 of ARB 51 states:

15. *In the unusual case in which losses applicable to the minority interest in a subsidiary exceed the minority interest in the equity capital of the subsidiary, such excess and any further losses applicable to the minority interest should be charged against the majority interest, as there is no obligation of the minority interest to make good such losses. However, if future earnings do materialize, the majority interest should be credited to the extent of such losses previously absorbed.*

One can then construct the argument that the policyholder’s equity capital in the company is zero, so that any losses applicable to the policyholder’s interest should be charged against the company’s equity.

3.2 Best-Estimate Approach Toward Temporary Timing Differences

Although few changes were implemented during the 23-year period after ARB 51 was issued in 1959, U.S. GAAP principles have evolved rapidly since the release of SFAS 60 two decades ago in 1982. For example, SFAS 109: *Accounting for Income Taxes* issued in 1992 addressed temporary (timing) differences relating to income taxes by providing for deferred tax assets. This SFAS transformed the calculation of income tax provisions from an income statement-based approach to a balance sheet-based approach. When explaining the basis for their conclusions in this statement the Financial Accounting Standards Board (FASB) referred to Statement of Financial Concepts, *CON 6: Elements of Financial Statements*, published in 1985.

The temporary timing differences that occur due to the different asset valuations for local accounting versus U.S. GAAP accounting appear to be quite similar to the timing differences that are the subject of SFAS 109. As such, it may be appropriate to consider the same sources used by the FASB for their conclusions. In particular, paragraph 26 of CON 6 defines the essential elements of an asset:

continued on page 6

26) An asset has three essential characteristics:

- (a) it embodies a probable future benefit that involves a capacity, singly or in combination with other assets, to contribute directly or indirectly to future net cash inflows,
- (b) a particular entity can obtain the benefit and control others' access to it, and
- (c) the transaction or other event giving rise to the entity's right to or control of the benefit has already occurred.

Assets commonly have other features that help identify them—for example, assets may be acquired at a cost and they may be tangible, exchangeable or legally enforceable. However, those features are not essential characteristics of assets. Their absence, by itself, is not sufficient to preclude an item's qualifying as an asset. That is, assets may be acquired without cost, they may be intangible, and although not exchangeable they may be usable by the entity in producing or distributing other goods or services. Similarly, although the ability of an entity to obtain benefit from an asset and to control others' access to it generally rests on a foundation of legal rights, legal enforceability of a claim to the benefit is not a prerequisite for a benefit to qualify as an asset if the entity has the ability to obtain and control the benefit in other ways.

The timing differences in policyholder bonuses caused by local asset values exceeding U.S. GAAP asset values appears to satisfy the three criteria above whenever it can be demonstrated that the eventual liquidation of assets (by sale or asset maturity) will result in policyholder bonuses being reduced by a similar amount.

3.3 Example of Best Estimate Approach

Continuing the prior example, let us assume that the fund earns 6 percent and that the guaranteed minimum interest rate for all contracts is 4 percent. The company could liquidate the assets causing the temporary timing difference, incurring a capital loss that would reduce the fund yield to 5 percent, which is above the 4 percent contractual minimum guarantee. In other words, a 1,000,000 current reserve is not required to meet contractual requirements since 992,000 would suffice when bonuses are reduced to recover the policyholder's 80 percent share of the 10,000 unrealized capital losses. Applying the three criteria in CON 6 to this situation yields:

- a) Once the 10,000 timing difference reverses, which could be as soon as the next year, bonuses would be reduced in the subsequent year by 8,000, which—in turn—reduces future cash outflows from surrenders, etc. This is definitely a future benefit.
- b) The insurer alone obtains the benefit from the reversal of the timing difference (by crediting less bonus) and the insurer alone controls access to it by its ability to eliminate the timing difference (by disposal of the assets involved).
- c) The asset sale that generates the timing difference has already occurred.

Note that the facts of the situation determine whether an economic benefit can be demonstrated. For example, if the fund were earning only the minimum guarantee of 4 percent in the previous example, then minimum contractual guarantees would result in the company, rather than the policyholders, bearing the cost of realizing the capital loss in the portfolio. In this case, a reserve reduction would not be warranted.

Note also that the timing difference is being reflected as a reserve reduction instead of holding an asset, since this more accurately reflects the fact that it will reduce the ultimate payout of cash.

4. Comparison of Approaches when Local Assets Exceed U.S. GAAP Asset Values

The two different approaches yield different financial statement values only when (a) local asset values exceed US GAAP asset values and (b) some of this difference is recoverable by reducing future policyholder payments, so the focus of this discussion turns to precisely this situation. Next, since the difference arises from the reference to minority interests in paragraph 42 of SFAS 60, the first (and perhaps only) question that arises is to what degree the policyholder interest in accumulated surplus is analogous to a minority stockholder's interest. APB 51, which was referred to in section 3.1 of this article, provides extensive guidance on accounting for minority interests.

Most of APB 51 concentrates on practical issues when allocating financial results back to the majority owner of an enterprise that also has minority owners (for example, a publicly traded company where another enterprise has purchased a controlling stake on the open market). The argument behind the conservative

approach relies upon the following portion of the quote from APB 51 in section 3.1 of this article (emphasis added):

15. In the unusual case in which losses applicable to the minority interest in a subsidiary exceed the minority interest in the equity capital of the subsidiary, such excess and any further losses applicable to the minority interest should be charged against the majority interest, as there is no obligation of the minority interest to make good such losses...

This situation could occur, for example, if an insurance company purchased 90 percent of the shares of a third party administrator (TPA) and then marketing expenses outstripped all equity in the TPA. Clearly, the insurance company would be hit with the full amount of any loss after writing down the minority owner's stake in the enterprise. In many cases the majority owner could even be expected to recapitalize the TPA in order to meet other business objectives, but business failure remains a realistic possibility.

The negative deferred benefit reserve situation is dramatically different from the draconian situation anticipated in paragraph 15 of APB 51. In particular, the conditions that would generate negative deferred benefit reserves occur in healthy ongoing operations where it is most likely that the policyholders will be obligated to repay the loss through reduced future bonuses. In such cases, one may argue that the statement "there is no obligation of the minority interest to make good such losses" is not appropriate and thus the treatment in the paragraph is not applicable.

This interpretation is consistent with later accounting guidance arising from the Financial Accounting Standards Board's (FASB's) Emerging Issues Task Force (EITF). For example, EITF 95-2 states (emphasis added):

The Task Force observed that if the net equity of the operating partnership (after the contributions of the sponsor and the REIT) is less than zero, then the initial minority interest is zero unless there is an obligation of the minority interest to make good those losses.

This statement confirms that a negative minority interest can exist and, consequently, that a negative deferred bonus reserve can exist. The question that remains is whether the policyholders have an obligation to "make good" on the asset losses in question and this is a question of fact, not accounting theory.

5. Conclusion

Although the authors of this article believe the "best-estimate" approach is preferable to the "conservative" approach for situations that could develop a negative deferred bonus reserve, we offer our recommendation to the accounting and actuarial communities to obtain their concurrence or to hear their objections.

The "conservative" approach is a subset of the "best estimate" approach to negative deferred bonus reserves. Thus the two approaches naturally coexist. The requirement to demonstrate that the difference in asset valuations will result in a difference in future policyholder payouts increases the burden of proof on the statement issuers, and ultimately becomes the determinant for accounting treatment. □



William Horbatt, FSA, MAAA, MIAA is a consulting actuary with Actuarials Consortium in Short Hills, NJ. He is a member of the International Section Council. He can be contacted at Horbatt@ActuarialConsortium.com.

C. Daniel Stubbs, Jr., CPA is the chief financial officer at Rockefeller Philanthropy Advisors, Inc. in New York City. He can be reached at dstubbs@rockpa.org.

International Accounting Corner



International News is starting a new newsletter column that will be published periodically to allow international actuaries to share their thoughts on practical accounting issues that they face. The topics could

relate to U.S. GAAP, IAS, national accounting standards or any other financial

reporting framework. The only criterion is that the issue be important to someone. We encourage readers to send articles, letters and comments on prior columns so that this becomes a forum for discussion. Knowing that an actuary's views may differ from his or her employer's, confidentiality will be respected if requested [contact information will be withheld]. For more information, contact William Horbatt at Horbatt@ActuarialConsortium.com. □