

## SOCIETY OF ACTUARIES

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### Adopting U.S. GAAP for Pre-Need Plans in the Philippines

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### Editor's Note

Please refer to the Appendix at the end of this newsletter for the tables mentioned in this article.

### INTRODUCTION

Significant amounts of pre-need plans are sold in the Philippines. The benefits are designed to meet a number of known future events such as education fees, memorial benefits and payments upon retirement. In return for premiums paid, bene-

fits are guaranteed. In some cases, inflationary increases are covered as well. Surrender values may be available for early terminations. The benefits payable on early death are, in general, modest.

This paper discusses approaches for reporting pre-need plans under the generally accepted accounting principles of the United States ("U.S. GAAP"). It provides an example of applying principles with which U.S. actuaries work daily in situations very different from those

### BACKGROUND

with which they are familiar.

A pre-need contract, as defined in the pre-need regulations, is "a contract which provides for the payment and/or performance of future service(s) or monetary considerations at the time of actual need, payable in cash or installment by plan holders at stated prices, with or without interest or insurance coverage." While the majority of life insurers consider pre-need products to be life insurance, the industry is currently regulated by the Securities and Exchange Commission and not by the insurance commissioner. However, there is a proposal to place the regulation under the jurisdiction of the latter, implying the reclassification of pre-need plans from securities to insurance. Initially, pre-need companies sold memorial plans that guaranteed the payment of interment services. Now pre-need contracts are classified into three major categories: life, pension and education. Some pre-need companies also sell plans that pay for medical expense, travel, weddings and even business expansion.

> Pension plans normally provide fixed payments on specific dates, usually at retirement. They do not provide pension payments contingent upon death. Likewise, education plans provide for fixed payments on specific dates. In both cases the amount of mortality and morbidity cover is small. Premium waiver on death or disability is common, but additional payments on death are usually limited to a return of premiums.

> > The industry has achieved

phenomenal growth since the 1980's. It has consistently outpaced the life insurance industry by a wide margin. Throughout the 80's, the annual growth rate was in excess of 30 percent, more than double the growth rate of the life insurance industry. By 1996, the number of pre-need organizations increased to 83. It is now down to 50 following the failure of several companies.

The total annual premium income for preneed plans is about 30 billion Philippine Pesos (19 million U.S. dollars).

### **U.S. GAAP** ACCOUNTING

Products sold by life insurers in the United States are classified into various types and accounted for according to the relevant statement of financial accounting standard ("SFAS") issued by the Financial Accounting Standards Board ("FASB"). SFAS 60 was the first life insurance accounting standard. It covers traditional business and distinguishes between short-term and long-term products. SFAS 97 modifies the approach to limited payment contracts and deals with investment contracts and Universal Life-type contracts. SFAS 120 addresses participating business sold by mutual life insurers where policyholder dividends are paid in accordance with the contribution principle.

There are accounting standards addressing reinsurance, taxation and investments; and there is other guidance in the form of practice bulletins, statements of accounting concepts, emerging issues task force pronouncements, etc. General industry practice has developed over time.

The approach to accounting for life insurance products is to issue standards and guidance, but not to set out rigid rules. There are areas of interpretation, especially with products that are unusual in the United States.

#### **ACCOUNTING FOR PRE-NEED POLICIES**

Each plan should be considered on its merits and classified according to the appropriate accounting standard. Pre-need contracts are normally of long duration. Contract terms are normally fixed, both in terms of premium payments and benefits, so that it is unlikely that SFAS 97 Universal Life would be appropriate. If there is a significant mortality or morbidity element, SFAS 60 or SFAS 97 limited pay would probably apply. If the mortality or morbidity risk is not significant, the contract should be accounted for as an investment contract under SFAS 97.

Although SFAS 97 paragraph 7 states that "a mortality or morbidity risk is present if, under the terms of the contract, the enterprise is required to make payments or forego required premiums contingent upon the death or disability of an individual or group of individuals", paragraph 40 states that " A nominal mortality risk — a risk of insignificant amount or of remote probability — is not sufficient to permit that a contract be accounted for as an insurance contract." There is no rule which determines whether a mortality risk is significant or not. It is a matter of judgement. If the plan has significant mortality or morbidity, it should be accounted for under SFAS 60 or SFAS 97 limited pay. This treatment is standard and well defined. However, if the mortality risk is insignificant and SFAS 97 investment contract is appropriate, the methodology is less well defined. The balance of this paper describes approaches for reporting under SFAS 97 investment contract methodology.

### INTERPRETING SFAS 97 — INVESTMENT CONTRACTS

SFAS 97 paragraph 15 says that investment contracts should be "accounted for in a manner consistent with the accounting for interest-bearing, or other financial instruments." Further guidance is available in Practice Bulletin 8 issued by the American Institute of Certified Public Accountants. Paragraph 7 states that the FASB 97 UL method for amortizing acquisition costs should be used if there are significant surrender charges or if the contracts yield significant revenues from sources other than the investment of contract holder funds. This approach is normally used where there is a clearly defined account value (for example, SPDA contracts).

Paragraph 7 also says that the alternative to the FASB 97 UL method for amortizing acquisition costs is to use an accounting method that recognizes acquisition and interest costs as expenses at a constant rate applied to net policy liabilities, which is consistent with the interest method under FASB Statement No.91.

SFAS 91 was designed for non-refundable fees and costs associated with loans. The examples in Appendix B of the statement make it clear that the methodology is to: (1) project future cash flows, (2) calculate the equivalent yield such that the present value of future cash flows equals the initial cash outflow, (3) use this interest rate to calculate the carrying amount (equivalent to the "net liability" in insurance terms) at subsequent reporting dates and (4) set the unamortized net fees equal to the difference between the remaining principal and the carrying amount.

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Applying this to long-duration contracts subject to SFAS 97 — Investment Contracts leads to the following: (1) project future cash flows, (2) calculate the equivalent yield such that the present value of future cash flows equals the initial cash outflow, (3) use this interest rate to calculate the net liability at subsequent reporting dates and (4) set the unamortized DAC equal to the difference between the benefit reserve and the net liability. The difficulty is in calculating the benefit reserve where there is no obvious account value.

### EXAMPLE OF A PRE-NEED CONTRACT

The appendix contains an example of a pre-need policy. Using an education plan, the appendix illustrates many of the concepts described above. The assumptions are set out in Table 5, with some explanation in the following paragraph.

The plan has a twenty-year duration and provides four years of education benefits and a maturity value. Level premiums are payable for five years. Benefits are payable whether the policyholder (usually the parent) is alive or dead. In addition, there is a benefit of the return of



premiums upon the death of the policyholder. There is a cash value that grades into 50 percent of premiums paid, but it is assumed that it is collected by only 30 percent of those who lapse through non-payment of premium. Historically, the cash value has not been the emphasis of sales and it is often difficult to maintain communication with lapsing policyholders.

The reserves are estimated and are based on Philippine statutory reserves. The mortality rates are from the 1973-78 Philippine Intercompany Table posted on the SOA Web site. These are for illustration purposes only.

The policy pricing on a statutory basis is shown in Table 6. Net present values of the various cash flow items are calculated. The net present value of the additional death benefit is 1.5 percent of the net present value of the premiums and the net present value of the waiver of premium on death is 0.5 percent of the present value of premiums. In many examples of materiality under U.S. GAAP, a level below 5 percent tends to be considered insignificant. This suggests that the mortality benefit is not significant and that this should be treated as an investment policy. It could also be argued that the substance of this contract is to provide education and maturity benefits and that the death benefit is a minor selling point.

The internal rate of return is calculated in Table 7. If the earned interest rate were replaced with the break-even rate, the present value of gross profits in Table 6 would be zero. This internal rate of return is used in Table 8 to calculate the net liability. This will provide the basis for the U.S. GAAP projections.

### CALCULATION OF THE BENEFIT RESERVE AND DAC

For other products under U.S. GAAP, the benefit reserve and DAC are calculated relatively independently and the net liability is the difference between the two. For investment contracts, the net liability is calculated first and the DAC becomes the balancing item between the benefit reserve and net liability. One approach is to apply the SFAS 91 methodology to the cash flows excluding deferrable expenses. Table 9 shows the calculation of the internal rate of return for the cash flow excluding deferrable expenses. The resulting benefit reserve calculation appears in Table 10. Given the amount of deferrable expenses, the resulting DAC starts at a reasonable level.

The U.S. GAAP income statement that would result is shown as Table 11. It should be noted that the investment income is based on the GAAP net liability, as opposed to the statutory reserves in Table 6. It should also be noted that the present value of gross profit is unchanged. The difference is the emergence of profits.

### USING A PROXY ACCOUNT BALANCE

An alternative approach is to calculate a proxy account balance for the benefit reserve. One method could be to look at the policy from the point of view of a policyholder who keeps the policy in force. This approach is shown in Appendix 2 (Tables 12 and 13). The GAAP earnings are unchanged, but the benefit reserve and DAC are lower.

### USING SFAS 60 / SFAS 97 LIMITED PAY

If it could be argued that there was a sufficient mortality benefit, the appropriate GAAP treatment would be the same as for a traditional plan. Appendix 3 (Tables 14 and 15) shows how this approach would work. DAC would be written off over the premium paying period and, as the premiums are payable over a period less than the benefit period, an unearned revenue reserve would be established. In this example, profits would emerge approximately in proportion to the in force and, although the total profits would be the same, would be higher in the early years.

#### **PRODUCT CLASSIFICATION**

The pre-need business consists of education plans, pension plans and life plans. The current sales are split 60 percent pension plans, 35 percent education plans and 5 percent life plans. Our initial review of current business suggests that there is minimal mortality benefit in the pension plans, a small mortality benefit in the education plans and significant mortality in the life plans. This suggests SFAS 97 investment contract treatment for the pension plans, SFAS 60 / SFAS 97 limited pay for the life plan, and probably SFAS 97 investment contracts for the education plans.

In order to classify products appropriately, a study should be made of the amount of mortality/ morbidity covered by each contract. In the example given in Appendix 1, the present value of mortality benefits, including waiver of premium on death, was 2.0 percent of the present value of premiums. If waiver of premium for disability were added, this would change to 2.2 percent, still an insignificant amount. However, at other ages or in different plans the level could be higher.

#### SUMMARY AND CONCLUSIONS

Reporting pre-need plans under U.S. GAAP will require a careful review of the amount of mortality/morbidity benefit provided. For most education and pension plans, we believe that the mortality/morbidity benefit is minimal and that these contracts should be classified as investment contracts. The life plans do, in general, contain significant mortality/morbidity benefits and would be classified at traditional (SFAS 60 or SFAS 97 limited pay), but they account for a small part of the business.

Investment contracts without a defined account balance, such as these pre-need plans, are rare in the United States; however, the authoritative literature points to the equivalent yield method of SFAS 91, which in turn, shows how to approach the calculation of the net liability.

The GAAP benefit reserve should be set equal to the account balance, if one is readily determinable; otherwise, the approach described above, where a second equivalent yield is used to obtain the benefit reserve, is the suggested approach for these contracts.



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