Note: This version of ASOP No. 10 is no longer in effect.
It was superseded in 1992 by ASOP No. 10, Doc. No. 039,
which was superseded in 2000 by ASOP No. 10, Doc. No. 068.

ACTUARIAL STANDARDS BOARD

ACTUARIAL STANDARD OF PRACTICE

METHODS AND ASSUMPTIONS
FOR USE IN STOCK LIFE INSURANCE COMPANY
FINANCIAL STATEMENTS
PREPARED IN ACCORDANCE WITH GAAP

Adopted by the
Actuarial Standard Board (ASB)
July l4, 1989

Developed by the
Committee on Life Insurance Financial Reporting
for the
Life Committee of the ASB

August 1989

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July 1989

TO: Members of the American Academy of Actuaries (AAA) and other persons interested in life insurance company GAAP financial reporting

FROM: Actuarial Standards Board (ASB)

SUBJ: Actuarial Standard of Practice: Methods and Assumptions for Use in Stock Life Insurance Company Financial Statements Prepared in Accordance with GAAP

Background

This booklet contains an actuarial standard of practice concerning methods and assumptions for use in stock life insurance company financial statements prepared in accordance with generally accepted accounting principles (GAAP). It has been prepared by the AAA Committee on Life Insurance Financial Reporting under the auspices of the Life Committee of the ASB. This Standard is based primarily on the existing Financial Reporting Recommendations and Interpretations of the AAA and on Statements of Financial Accounting Standards (SFAS) Nos. 60 and 97 of the Financial Accounting Standards Board (FASB). Additionally, Audits of Stock Life Insurance Companies published by the American Institute of Certified Public Accountants, and other related accounting and actuarial literature were used. The Standard sets out the considerations bearing on an actuary's professional work in the determination of police benefit liabilities and deferred policy acquisition cost assets in accordance with GAAP.

The proposed Standard was submitted to the members of the AAA and other interested persons in Exposure Draft form in February 1989. Comments were received into May 1989. The Life Committee has considered these comments in preparing a revised standard for adoption by the ASB. A summary of comments received and the committee's disposition of them follows.

Responses to Comments on Exposure Draft

The Life Committee is grateful to the respondents who submitted comments on the Exposure Draft. A total of twelve individuals responded. All comments have been carefully considered by the Life Committee and a number of changes have been made in the Standard as a result.

A number of the respondents commented on the appropriateness of excluding from the scope of the Standard insurance contracts that are classified as investment contracts for accounting purposes. These respondents generally felt that investment contracts that are accounted for using methods and assumptions appropriate for insurance contracts should be included in the scope of the Standard. The Life Committee agrees with this position and believes that the wording of the Exposure Draft appropriately includes the contracts in question. Therefore, the scope has not been altered. One respondent felt that all insurance contracts accounted for as investment contracts should be within the scope of the Standard. The Life Committee believes that it is not the province of the ASB to promulgate standards related to accounting for contracts that are not accounted for as insurance contracts.

One respondent felt strongly that the Standard should require the actuary to include in the financial statements an actuarial opinion thereon. The Life Committee believes that this Standard and other existing professional standards require the actuary to perform work related to the preparation of GAAP financial statements with the same care and diligence that would be required if an opinion on the financial statements were also being made. However, since the actuary is not always responsible for the preparation of the financial statements, and the requirements of other professions bear more directly on such work, it is not appropriate to require an actuarial opinion on life insurance company financial statements at this time.

Several respondents noted that the Exposure Draft attempted to define the term, “gross profit,” and to use it in the context in which “estimated gross profit” is used in SFAS 97. The Life Committee agrees with these comments and has made appropriate changes.

One respondent noted that the definition of “policy benefit liability” in the Exposure Draft did not make reference to the liability for deferred revenues. The Life Committee believes that it is appropriate to include this liability in the definition of “policy benefit liability” as it is used in this Standard, and the change has been made.

Several respondents commented on Subsection 5.4 of the Exposure Draft. It was noted that the first paragraph incorrectly ascribed to GAAP the practice of selecting the more conservative of two equally likely outcomes. The wording in this paragraph was altered to reflect the actual circumstances.

Some respondents observed that the Exposure Draft requires the selection of a best estimate scenario rather than, as an alternative, a statistical average of possible outcomes. The Life Committee believes that the Exposure Draft expresses the appropriate requirement, but notes that the Standard does not preclude, for example, the aggregation of comparable contracts for the purpose of determining the best-estimate result with respect to the mortality risk; or, as another example, the selection of the midpoint of a range of possible best-estimate assumptions with respect to future interest rates, provided that such midpoint is also a reasonable best estimate.

One respondent felt that Paragraph 5.5.2 of the Exposure Draft required the redetermination of financial statement items that were determined using assumptions that include a provision for the risk of adverse deviation, if, later, it appeared that the provision for the risk of adverse deviation was inappropriate. The paragraph in question does not impose this requirement. It does require that in determining assumptions which include provision for the risk of adverse deviation, the provision should produce an increase in the net GAAP liability.

Other changes of a grammatical or editorial nature have been adopted, many in response to comments received.

The Standard was adopted by the ASB on July 14, 1989.

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ACTUARIAL STANDARD OF PRACTICE

METHODS AND ASSUMPTIONS

FOR USE IN STOCK LIFE INSURANCE COMPANY FINANCIAL STATEMENTS

PREPARED IN ACCORDANCE WITH GAAP

PREAMBLE

Section 1. Purpose, Scope, and Effective Date

1.1 Purpose and Scope - This Standard sets out the considerations that bear on the actuary's professional work in the determination of policy benefit liabilities and deferred policy acquisition cost assets (DPAC) in accordance with generally accepted accounting principles (GAAP). The recommended practices contained in this Standard are limited to the use of actuarial methods and assumptions in connection with the preparation of stock life insurance company GAAP financial statements.

With respect to the preparation of GAAP financial statements for life insurance companies, actuaries and actuarial judgments are frequently relied on. The purpose of this Standard is to identify the considerations involved in establishing appropriate actuarial methods and assumptions used for GAAP financial statements. For certain investment contracts issued by insurance companies, GAAP requires accounting as for other interest bearing obligations. To the extent that the accounting treatment for these contracts does not involve actuarial methods or assumptions, they are specifically excluded from the scope of this Standard.

1.2 Effective Date - This Standard is effective for all financial statements prepared for fiscal periods beginning after December 15, 1989.

Section 2. Definitions

As used in this Standard, the following terms will have the indicated definitions.

2.1 Costs - All benefits and expenses associated with issuing and maintaining a company's policies.

2.2 Deferred Policy Acquisition Cost (DPAC) Asset - The unamortized portion of those policy acquisition expenses that vary with, and are primarily related to, the acquisition of new and renewal insurance contracts and coverages.

2 3 Estimated Gross Profit - As defined in Statement of Financial Accounting Standards 97, Accounting and Reporting by Insurance Enterprises for Certain Long-Duration Contracts and for Realized Gains and Losses from the Sale of Investments (SFAS 97), paragraph 22.

2.4 GAAP Net Premium - The portion of gross premium that provides for the costs. It contains no explicit provision for profit.

2.5 Gross Premium - Amounts contractually required to be paid or anticipated to be contributed by the policyholder.

2.6 Investment Contracts, Limited-Payment Contracts, Universal Life-Type (UL-type) Contracts - As defined in SFAS 97, Paragraphs 6 through l4.

2.7 "Lock-in" - A GAAP concept which requires the continuing use of original basis assumptions (issue, acquisition, or prior redetermination) unless a need for loss recognition develops.

2.8 Net GAAP Liability - The GAAP policy benefit liability for a book of business less any associated DPAC.

2.9 Policy Benefit Liability - An accrued obligation to policyholders that relates to insured events, such as death or disability; the liability for future policy benefits. The liability for future policy benefits includes amounts accrued for deferred revenues. This "deferred revenue reserve" may be separately identified in the company's financial statements.

2.10 Risk of Adverse Deviation - The risk that actual experience may differ from best-estimate assumptions in a manner that produces costs higher than assumed and/or revenues less than assumed.

Section 3. Background and Historical Issues

Audits of Stock Life Insurance Companies (the Audit Guide) was developed by the American Institute of Certified Public Accountants in 1972, with the cooperation of life insurance company actuaries and accountants. The Audit Guide represented the first effort by the accounting profession to establish GAAP for the life insurance industry. The Financial Accounting Standards Board (FASB) is now responsible for the determination of GAAP for public companies. It does so through the promulgation of Statements of Financial Accounting Standards (SFAS).

GAAP for stock life insurance companies is primarily established by SFAS 60 and SFAS 97. In 1982, FASB issued SFAS 60, Accounting and Reporting by Insurance Enterprises, which generally codified the concepts in the Audit Guide. In 1987, FASB issued SFAS 97, which a) established GAAP for certain forms of insurance contracts not specifically addressed by SFAS 60, primarily universal life (UL) insurance; b) established GAAP for investment contracts not involving a significant insurance component, and c) revised GAAP for limited-payment contracts.

Other standards are also relevant, as is prevailing accounting practice in areas not specifically addressed by a SFAS. The practicing actuary should be familiar with the above documents as well as other pertinent accounting and actuarial literature.

The American Academy of Actuaries (AAA) has previously promulgated Financial Reporting Recommendations and Interpretations applicable to GAAP for insurance companies, thus establishing actuarial standards of practice in this area. Because of their specificity, as well as changes in GAAP resulting from SFAS 97 and evolution in actuarial practice, it is appropriate to replace certain existing guidance and to promulgate a more generally applicable standard of actuarial practice with respect to stock life insurance company GAAP financial statements. Where there is a conflict between this Standard and existing AAA Recommendations and Interpretations, this Standard will supersede the earlier.

Section 4. Current Practices and Alternatives

Current practices related to the preparation of GAAP financial statements for life insurance companies have been generally consistent with existing Financial Reporting Recommendations and Interpretations applicable to GAAP for insurance companies, as promulgated by the AAA. Application of these Recommendations and Interpretations to certain life insurance contracts (primarily UL-type contracts) has led to various methods being used for the proper reporting of the net GAAP liabilities for these contracts. The methods incorporated into SFAS 97 are similar to those used by some insurance companies prior to its issuance. However, in certain respects, SFAS 97 requires the use of methods not previously used for GAAP financial reporting.

STANDARD OF PRACTICE

Section 5. Analysis of Issues and Recommended Practices

5.1 Preparation of Financial Statements - An actuary who participates in the preparation of a stock life insurance company GAAP financial statement should be familiar with the Audit Guide, SFAS 60, and SFAS 97.

5.2 Actuarial Judgment - Except as required by SFAS 97, it is appropriate to select the assumptions used to establish net GAAP Liabilities based on the judgment of the actuary.

The Audit Guide suggests that an actuary's judgment be relied upon in those areas of an actuary's expertise.

5.3 Categories of Assumptions - Two categories of actuarial assumptions are principally utilized in the preparation of GAAP financial statements. Best-estimate assumptions as of the financial statement date are required in certain instances. In others, assumptions which provide for the risk of adverse deviation are required. Best-estimate assumptions must be periodically reviewed and updated to reflect current experience, whereas assumptions with provision for risk of adverse deviation are subject to "lock-in." The actuary should exercise care to assure that the proper category of assumptions is used.

5.4 Best-Estimate Assumptions - GAAP requires that best-estimate assumptions reflect the most likely outcome. Best-estimate assumptions must be reasonable and realistic. Accounting practice usually follows the convention that given two choices which are deemed equally likely, the one that should be selected is the one that produces the larger liability or smaller asset.

5.4.1 Items to be Considered - In establishing best-estimate assumptions, items which should be considered include: the characteristics and magnitude of the company's business; the age of the company and its rate of growth; the prior experience of the company to the extent considered relevant and the trends in that experience; and medical, economic, social, and technological developments which might affect costs. There is no necessary relationship between the best-estimate assumptions and those used for product pricing.

5.4.2 Most Likely Outcome - Best-estimate assumptions should reflect the actuary's judgment at each valuation date as to the most likely future outcome with respect to each assumption made.

5.4.3 Internal Consistency - Taken together, a set of best-estimate assumptions should reflect all pertinent areas of expected future experience and should be specific to the particular product, line of business, or block of business being valued. The set of assumptions should be comprehensive and internally consistent.

5.4.4 Sources of Data - In forming a judgment as to the appropriate assumptions, the actuary should consider available pertinent data. To the extent possible and appropriate, data specific to the company for which the assumptions are being made should be considered. Where such data are not available or are not credible, it is appropriate to consider industry data or data from other similarly situated companies, suitably adjusted.

5.5 Provision for Risk of Adverse Deviation - In certain instances GAAP requires a provision for the risk of adverse deviation in setting actuarial assumptions.

5.5.1 Degree of Risk - Assumptions that include provision for the risk of adverse deviation should be established in consideration of the degree to which the assumption is subject to such risk in total, and at each future duration. The provisions for the risk of adverse deviation should be reasonable in the circumstances.

5.5.2 Relationship to Best Estimates - Assumptions that include provisions for the risk of adverse deviation should bear a reasonable relationship to the best-estimate assumptions. Under GAAP accounting, the net premium resulting from assumptions that include a provision for the risk of adverse deviation should not be greater than the gross premium. It may be less than the gross premium, provided that due provision has been made for the risks of adverse deviation.

The actuary should establish that the aggregate net GAAP liability determined using assumptions that include provision for the risk of adverse deviation equals or exceeds a similarly determined net liability determined using best-estimate assumptions without provision for the risk of adverse deviation.

5.6 Methodologies - One purpose of GAAP is to achieve matching of revenue and expenses. For insurance contracts, this matching is accomplished primarily through establishing policy benefit liabilities and DPAC assets. For insurance contracts which are subject to the requirements of SFAS 60, premiums are included in revenues, while benefits and other expenses are included in expenses. For UL-type contracts subject to SFAS 97, amounts assessed against the policyholder are included in revenue; benefits in excess of the policy value and other expenses are included in expenses.

5.6.1 Simplification - It may be appropriate to use assumptions which simplify the calculation of policy benefit liabilities and DPAC amortization. For example, it may be appropriate to assume that policy anniversaries occur on July 1 of each calendar year. Simplification should not distort the results, and should be appropriate to the circumstances.

5.6.2 Policy Acquisition Expense - Acquisition expenses associated with contracts issued by insurance companies are usually significant in relation to ongoing maintenance and administration expenses. GAAP for life insurance companies requires that certain acquisition expenses be deferred and recognized in proportion to anticipated gross premiums, estimated gross profits, or some other appropriate basis. The amount of DPAC must be separately disclosed in the financial statements.

5.6.3 "Lock-in" Adjustment - Policy benefit liabilities and DPAC not associated with UL-type or investment contracts are subject to "lock-in" under SFAS 60. DPAC and the amortization thereof for UL-type and investment contracts must be adjusted as conditions warrant.

5.6.4 Recognition of Loss - Regular reviews of the adequacy of the net GAAP liability should be conducted when experience indicates that the recognition of a loss may be required. GAAP requires the recognition of a loss when it is probable and can be reasonably estimated (SFAS 5, Accounting for Contingencies).

5.6.5 Matching with Premium - Methods used to determine net GAAP liabilities for non-UL-type and non-investment contracts must be structured to produce a reasonable matching of costs with expected premiums. The reserve methodology should reflect all aspects of the contract and related agreements for which the reserve is established.

5.6.6 Universal Life-Type (UL-Type) Contracts - The GAAP policy benefit liability for a book of UL-type contracts is determined as the aggregated policyholder accounts, plus one or more additional items which may or may not be actuarial in nature. The calculation of any such actuarial items should reflect all contractual provisions and anticipated differences in the incidence of revenue and the associated costs.

5.6.7 Basis of Amortization - Methods utilized to amortize DPAC must be structured to produce a reasonable matching of expenses with revenue, estimated gross profits, or some other appropriate basis. Where "lock-in" is applicable, the amortization should be based on the same assumptions as those underlying the calculation of the GAAP policy benefit reserve.

5.7 Materiality - This Standard of Practice should be applied with due regard for materiality, as covered in Recommendation 9 of the AAA Financial Reporting Recommendations and Interpretations.

Section 6. Communications and Disclosures

6.l Conformity with Standard - The actuary should be prepared to describe the actuarial work performed for inclusion in the GAAP financial statement, and to demonstrate that such work conforms to this Standard of Practice.

6.2 Documentation - The actuary should maintain adequate documentation of the assumptions and methods supporting the net GAAP liabilities that he or she provides.

6.3 Deviation from Standard - An actuary who uses a procedure which differs from this Standard should include, in the actuarial communication disclosing the result of the procedure, an appropriate and explicit statement with respect to the nature, rationale, and effect of such use.