

**1993 VALUATION ACTUARY  
SYMPOSIUM PROCEEDINGS**

**SESSION 6**

**GAAP Issues**

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## GAAP ISSUES

**MR. CHARLES D. FRIEDSTAT:** In putting together the subject matter for this session, it occurred to me that since the adoption of Financial Accounting Standard (FAS) 97 a few years ago, there probably have been more developments dealing with GAAP issues in 1993 than in any year within recent memory. What we have tried to do for this session is assemble a team of panelists who will talk about all of these emerging developments, as well as some of the other issues that seem to keep cropping up when dealing with GAAP accounting.

Randy Schuldt is an associate actuary with Northwestern National. He will be speaking about market value accounting and its impact on the company, as well as some of the management information produced by his company in analyzing FAS 97 results.

Peter Duran will follow Randy. Peter is a partner with Ernst & Young. He will talk about some of the recent FASB pronouncements including FAS 107, and some of the ways that companies have complied with the disclosure requirements, and FAS 114. He will also review recent developments concerning GAAP for mutuals.

Brad Smith will be the final speaker. Brad is a consulting actuary with Milliman & Robertson. Some of Brad's comments will be directed as a follow-up to some issues raised at a panel at the 1992 Valuation Actuary Symposium. Brad will also offer some observations including the need or lack of need for cash-flow testing in reviewing GAAP reserve adequacy and his views on recent purchase accounting developments.



## **GAAP ISSUES**

**MR. RANDALL S. SCHULDT:** I am going to address some of the issues raised by FAS 97 and FAS 115. I will first discuss some features of the FAS 97 implementation at Northwestern National. Then, I will review the considerations in complying with the requirements of FAS 115, including any influence on products accounted for using FAS 97.

### **FAS 97 Implementation Objectives**

When we implemented FAS 97, we had several objectives. First, we wanted to avoid volatile earnings fluctuations. Because of the unlocking provisions of FAS 97, such fluctuations are possible. Second, we wanted to develop management information from the valuation system. In particular, we wanted information that compared actual to projected results.

Third, we wanted to implement the valuation systems in such a way that earnings management would be discouraged. Finally, we wanted to achieve a close linkage between the business plan and the assumptions used in FAS 97, because we use reported GAAP earnings for internal and external measures, and as the basis for incentive compensation payments.

### **Scope of FAS 97 Business and Systems**

We have substantial amounts of business in force. In order to value it accurately, we have established 52 valuation blocks. Each block may contain more than one plan of insurance and more than one year of issue. One of the key items we monitor in each valuation block is the percent of the gross profits used for amortization, or, as we call it, the k-factor.

The size and scope of the business accounted for using FAS 97, and the objectives I have mentioned, meant that we had to develop automated capabilities to calculate the values required for financial reporting and management information. We rely on both mainframe and PC-based systems for the FAS 97 valuation.

### **Unlocking Categories**

In order to comply with FAS 97 and meet our implementation objectives, we defined three unlocking categories. First, we define retrospective truing-up as the replacement of projected year-to-date gross profit elements with actual results. At the end of each quarter, we load actual results for interest, mortality, surrender charge, and expense into the valuation system and use the actual in force to project future values.

Second, we use prospective truing-up formulas to change future assumptions according to a preestablished formula. For example, in the FAS 97 system, the current earned interest rate is used as the projected earned rate for the following quarter. We then grade this rate to an ultimate rate that represents our expected long-term-average earned rate.

Third, we use "prospective unlocking" as anticipated by FAS 97. Prospective unlocking is the change of future valuation assumptions.

### **Advantages to Truing-Up**

There are several advantages to retrospective and prospective truing-up. Using these two procedures minimizes the frequency of prospective unlockings and the fluctuations in earnings because of prospective unlockings. Also, the DAC amortization closely follows actual experience. Finally, the need for corporate oversight is reduced because retrospective truing-up brings the assumptions in line with actual experience and the prospective truing-up formulas are approved in advance.

### **Prospective Unlocking**

When there is a need to unlock prospectively, we have established a formal procedure in our FAS 97 standards of practice. Prospective unlocking is part of the business planning process so that we can take the results into account in setting objectives.

The procedure in our standards of practice requires the business units to validate the revised assumptions. The need for revised assumptions may develop as a result of experience varying

from projections or other influences, such as pricing changes in response to the deferred acquisition cost (DAC) tax.

The business unit revises the assumptions and quantifies the effect on earnings, both the one-time catch-up effect and the future earnings effects. The proposed revisions and earnings effects are reviewed by corporate actuarial, and if approved, they are incorporated in the business plan. Last but not least, the revised assumptions are presented to the external auditors for their review.

### **Realized Capital Gains and Losses**

In our initial FAS 97 implementation, we excluded the effects of capital gains and losses from the gross profits used for amortization. We made this decision for several reasons. First, paragraph 77 of FAS 97 forbids the spreading of capital gains and losses. In effect, including the gains and losses in the gross profits used for amortization does spread them.

Second, most companies (75% by one survey) did not include capital gains and losses in their implementation of FAS 97. Finally, users of financial statements, particularly security analysts, still use operating income as the primary measure of a company's performance. Including the amortization effects of the capital gains and losses in operating income causes distortions, raises questions, and requires us to spend time giving additional explanations.

AICPA Practice Bulletin (APB) 8 was issued in November 1990 and required that realized capital gains and losses be included in the gross profits used for amortization. At March 31, 1992, we changed our DAC calculation and standards of practice to comply with APB 8, and we prospectively unlocked several other assumptions.

### **Capital Gains and Losses and DAC**

In complying with APB 8 we modified our FAS 97 valuation assumptions to include a provision for future realized gains and losses and developed methods for allocating actual gains and losses to valuation blocks. For example, future capital losses not passed on to the policyholder are reflected as a reduction to the projected interest spread. Since we have projected capital gains

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and losses as a part of our business plan for many years, we are somewhat comfortable making such assumptions.

The actual gains and losses have to be allocated to the valuation blocks. For some FAS 97 business, the assets are allocated in such a way that we can identify the assets of a valuation block. As a result, we can allocate the capital gains and losses directly to these blocks.

For the business that does not have segmented assets, we first allocate the capital gains and losses between FAS 97 and FAS 60 business using statutory reserves. We then allocate the gains and losses among the FAS 97 valuation blocks using account values.

At each quarter end, we replace the assumed year-to-date gains and losses with the actual as part of the retrospective truing-up.

### **FAS 97 and Management Information**

Since we use GAAP for external reporting, internal reporting, and incentive compensation, we use the FAS 97 system as a source of management information. Each quarter, the business units prepare a Management Discussion and Analysis (MD&A) that includes a discussion of the contribution to earnings of the variance of actual gross profits from those assumed. The discussion highlights both the amount of the variance and its effect on amortization of DAC.

The MD&A also includes a quantification of the catch-up adjustment to the DAC because of the change in the k-factor. For example, if a valuation block's k-factor increases from one quarter to the next, there will be a negative catch-up because we should have amortized more DAC in prior periods.

We have found that the most important sources of a catch-up adjustment are the change in the earned-rate assumption, any prospective unlocking, and variances of actual experience from assumptions.

In the analysis of FAS 97 information, we need to be careful to identify the real cause of the variance. For example, a higher than projected dollar amount of mortality margin may be the result of a growth in business and not improved mortality experience.

### **Recoverability Testing**

Instead of a recoverability test, our FAS 97 standards of practice prohibit the deferral of expenses in excess of those provided for in pricing. This requirement is more strict than a normal recoverability test. Since there are practical advantages to including more than one year of issue in a valuation block, we think that the stricter test is acceptable.

### **Steps in Loss Recognition Testing**

Our standards of practice also include the steps in a loss recognition test. For each valuation block, we establish a benchmark k-factor when we establish the valuation block. To determine the benchmark k we first add margins for adverse deviation to the GAAP assumptions so that the present value of deferrable expense equals the present value of gross profits where both present values are calculated using the assumed earned interest rate. The benchmark k is the amortization percentage calculated using the assumptions with these margins and the appropriate DAC discount rate. The benchmark k is less than 100%.

If at the end of a quarter the actual k factor for a valuation block is greater than the benchmark k, we perform an additional test on the loss recognition block that contains the valuation block. A loss recognition block may contain more than one valuation block. The products combined in a loss recognition block must be managed the same way, and we expect that they will have similar experience with respect to interest spreads, mortality, lapse, and expense.

We compare the present value of the future gross profits to the sum of the current DAC and the present value of the future deferrable expenses, where all present values are calculated using the projected earned interest rate. This test is equivalent to a cash-flow test of the loss recognition block.

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If the loss recognition block fails this test, we may perform additional tests. In the additional test, we would modify the assumptions. For example, we may exclude the fixed portion of maintenance expenses that could be absorbed by other lines of business. We could also modify assumptions to take into account changes to assumptions prompted by events since the last prospective unlocking.

### **Overview of FAS 115**

I'll now switch gears to FAS 115. First, I will give a brief overview of FAS 115. Then, I will discuss some issues concerning the initial and ongoing allocation of assets into the three categories. I will also address how FAS 115 impacts FAS 97. Finally, I will discuss the possible impacts of FAS 115 on investors and other users of financial statements.

FAS 115 is an attempt to resolve several perceived problems associated with the amortized cost method for debt and marketable equity securities. FASB requires that these assets be reported at market, or "fair value," and that they be placed into one of three categories: Held-to-Maturity (HTM), Trading, or Available-for-Sale (AFS).

FAS 115 does not allow for a similar, that is, a "fair value" restatement of liabilities. This inconsistency is the major criticism of the standard. Additional volatility in earnings and equity will be introduced by revaluing only one side of the balance sheet. FASB would have preferred to report certain financial liabilities at fair value, but could not agree on one acceptable method for determining the fair value of liabilities. Therefore, it decided to retain some elements of the amortized cost method and created the three asset categories.

As a result of several requests, FASB, as early as the fourth quarter of 1993, may formally add a project to its agenda to develop a method for determining the fair value of life insurer liabilities. Once an acceptable method is developed, FASB will likely adopt a standard that requires financial liabilities and all debt securities to be reported at fair value.

FAS 115 is effective for fiscal years beginning after December 15, 1993.

### **HTM Securities**

Securities categorized as HTM will continue to be reported at amortized cost.

This category is for securities that the investor has positive intent and ability to hold until maturity. This wording is intended to be stronger than "might hold to maturity."

Sales and transfers from this category are limited to isolated, nonrecurring, and unusual circumstances. FAS 115 lists several events that may acceptably cause a sale or transfer of an HTM security. Some of these are (1) a significant deterioration in a security's creditworthiness; (2) a significant business combination or disposition; (3) a change in regulatory limitations on permissible assets; or (4) a significant increase in regulatory risk-based capital (RBC) risk factors. FAS 115 also lists some unacceptable reasons that include (1) interest rate changes; or (2) the need for liquidity because of higher than expected withdrawals.

Any sales or transfers from this category must be disclosed. Excessive trading from this category may call into question the investor's intent and ability to hold the securities to maturity and lead to reporting of these at fair value.

### **Trading Securities**

Trading securities are purchased with the intent of selling them in the near term. This category is characterized by frequent buying and selling with the objective of profiting on short-term differences in price.

Trading securities are reported at fair value, with unrealized gains and losses included in earnings.

Clearly, from the definition, there are no restrictions on selling these securities. There are also no restrictions on transferring these securities to another category.

### **AFS Securities**

Any investments not in the HTM or Trading categories are AFS.

AFS securities will be held at fair value, but unrealized gains and losses on these securities are excluded from reported earnings. These unrealized gains and losses will, however, be included in equity on an after-tax basis.

There are no restrictions on sales or transfers from this category, but excessive trading may raise the issue that these assets should be Trading securities.

### **Size of AFS versus HTM Categories**

I will now discuss four reasons for setting up a larger AFS category relative to the HTM category when adopting FAS 115. I assume that the Trading category will be a negligible part of the total securities.

First, assets can easily be transferred from the AFS category to the HTM category -- the reverse is not true. A company may desire this flexibility because it may find its initial allocation out of line with common practice, or it may want the ability to react to interest rate movements or other new information.

A second reason relates to the liquidity component of investment yield. Many believe that the additional yield received on a private placement is compensation for the lack of liquidity in the security. By placing marketable bonds in the HTM category, we give up their liquidity without any compensation.

A third reason has to do with rating agency and security analyst concerns about company liquidity. It is possible that companies will be compared on the basis of their AFS categories, and companies with smaller categories may be penalized for having "less" liquidity.

Finally, early and informal indications are that companies will opt for a greater proportion of AFS securities than HTM securities.

The disadvantage of a relatively larger AFS category is the higher volatility in shareholder's equity. If interest rates rise, unrealized losses will result in a reduction in equity. Although there will be information available to put companies on an equivalent basis, an overly simple analysis may lead to inappropriate conclusions about a company.

### **Informal Survey of Industry Practice**

An informal survey of some of our peer companies yielded the following information. First, few companies indicated they intended to have any Trading securities. For those that do plan to have Trading securities, they will be a small percentage of the total. Second, indications are that most companies will choose to place the majority of their securities in the AFS category. Third, companies that have already adopted FAS 115 either established a large AFS category, or have later wished they had.

### **Allocation Policy for New Investment Purchases**

Northwestern National's FAS 115 allocation policy will be a formal part of the company's investment policy statement, to be reviewed quarterly by our Enterprise Investment Committee. The FAS 115 allocation policy will be composed of three elements, the first of which is the criteria used to allocate new investments into the FAS 115 categories.

Even though we have not yet adopted FAS 115 or established a final policy statement, we have defined the criteria that a security must satisfy to be placed in the AFS category. All remaining investments will go into the HTM category. The criteria used include (1) asset type, (2) public versus private, (3) quality rating, and (4) industry classification. Certain mortgage-backed and asset-backed assets, all marketable equities, all public perpetual securities, and all publicly traded investment grade bonds in selected industries will be AFS. All other securities, most notably private placements and below-investment-grade bonds, will be HTM.

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The second element of our FAS 115 policy statement regards the transfer of assets between FAS 115 category. The only transfer we contemplate making is to move investments from HTM to AFS when a security's credit rating is downgraded. All other transfers will follow the guidelines prescribed in FAS 115. These first two elements of our FAS 115 policy will occur automatically when an investment is purchased or is downgraded.

The final element of our policy statement will address the process for monitoring the categories and changing the allocation or transfer criteria. The asset/liability management department is responsible for monitoring the categories each month and reporting items such as book value, fair value, and duration to management. The department is also primarily responsible for recommending policy changes, that may be modified and approved quarterly by the Enterprise Investment Committee.

### **Impacts of FAS 115 on FAS 97**

How will FAS 115 impact FAS 97? I believe that the unrealized gains and losses from the change in the value of assets in the Trading category should be included in the gross profit stream used for the amortization of DAC. APB 8 requires that realized gains and losses be included in the gross profit stream. Once a gain or loss is reflected in income, it is, in effect, realized. Furthermore, failure to include the gains or losses will result in amortization that does not track with the reported income.

If we do include these gains and losses in the FAS 97 valuation, we must also project future values in the valuation system. Since most of the gains or losses will be the result of interest rate movements, we could develop a formula that linked projected values to the projected earned rates in our system. The difficulty of allocating FAS 115 gains and losses to the FAS 97 valuation blocks and the work required to modify the valuation system are additional arguments for a small Trading category.

**Possible Impacts of FAS 115 on Investors and Financial Statement Users**

Despite the danger that unsophisticated users may draw some invalid conclusions, I believe the impact of FAS 115 will be minimal. FAS 107 already requires disclosure of the fair value of financial instruments that extends beyond FAS 115 to include certain liabilities, including deferred annuities and GICs. Therefore, sophisticated users of financial statements have already incorporated the information required by FAS 115 into their analysis. Another reason why I feel the impact will be small is that security analysts have a long history of focusing on sustainable operating earnings. Even today, most pay little attention to realized gains and losses and are likely to ignore the impacts of FAS 115.



## GAAP ISSUES

**MR. J. PETER DURAN:** I'm going to talk about a potpourri of recent GAAP developments, some more recent than others. Randy alluded to FAS 107. That pronouncement was effective for 1992. It talks about disclosures of the fair values of assets and liabilities. FAS 114 is a new standard that applies to accounting for loan impairments. It was just passed by the FASB in June 1993 and will first apply in 1995. Finally, the topic of GAAP for mutuals is one that is still emerging.

FAS 107 became effective for the 1992 financial statement, and requires the disclosure of the fair values of all financial instruments with certain exceptions. Both assets and liabilities that meet the rather technical definition of financial instrument are included within the scope of FAS 107, and it applies to both on- and off-balance-sheet financial instruments. Therefore, the fair values of interest rate swaps, for example, or financial guarantees that the company may have provided, must be disclosed. When you read the definition of *financial instrument*, it's quite clear that insurance contracts are financial instruments, so that without a specific exemption for insurance contracts, FAS 107 would have required the disclosure of the fair value of all insurance contracts. The FASB recognized that, particularly in the area of life insurance contracts, the technology for determining fair value is not very well-advanced. There is no general agreement on how the fair value of insurance contracts is to be computed. Therefore, insurance contracts other than investment contracts are exempted from the scope of FAS 107. FAS 107 requires disclosure in GAAP financial statements of the fair value of investment contracts in the sense of FAS 97, i.e., contracts that do not have a significant mortality or morbidity risk. Deferred annuities are a good example. GICs and payout annuities that do not have life contingencies, are other typical examples of investment contracts whose fair value must be disclosed.

Unfortunately, FAS 107 is not a lot of help on the liability side of an insurance company's balance sheet. It sets up a hierarchy for determining the fair value of assets and liabilities. Quoted market prices are at the highest level within the hierarchy. If available, they are to be used. Quoted market prices for similar financial instruments would be the next rung down in

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the hierarchy. Finally, if neither of these is available, "other valuation techniques" are to be used. Well, that is, in fact, the way companies are calculating the fair value of liabilities. By the way, although a company is required to disclose the fair value of investment contracts, there is nothing that says that it cannot disclose the fair value of all insurance contracts. So there is optional disclosure of the fair value of all insurance contracts. The standard contains a practicability exception, which says that, if it is not practicable to do the calculations, then application of the standard is not required. I know of no major companies that have relied on that exception. Practicable in the accounting sense, does not mean merely "inconvenient."

Ernst & Young has conducted surveys of techniques and methodologies that companies are using to calculate fair values of investment contract liabilities. Specifically, we reviewed the Notes to Financial Statements accompanying the 1992 GAAP financial statements of a number of major companies. One method for contracts with cash-surrender values is to use the cash value as the fair value of the liability on the grounds that it represents the market value from the point of view of the insured, i.e., that's what it's worth to the insured today. Another more actuarial approach would be based on discounted cash-flow techniques applied to the liability cash flows. The question then becomes, "At what rate?" One approach would be to use Treasury spot rates in order to recognize exactly the incidence of payments. Alternatively, one might use Treasury spot rates plus a spread. Another approach would be to use some kind of average market rate, perhaps tied to assets backing the liabilities, perhaps not, that takes into account the average length of the liabilities.

A third type of method, which is essentially a valuation technique that has been used for many years in valuing blocks of business for sale or transfer, is to use discounted statutory profits to form the basis of the fair value. Under this approach, the fair value of liabilities is the statutory value of the liabilities minus the present value of the discounted statutory profits. There are numerous technical questions concerning exactly how that calculation is to be done. Should required surplus be recognized in the calculation? Today, it's very common to value blocks of business that way. Should the calculation be adjusted for the effects of federal income taxes? What discount rate should be used? One of the important features of this particular method is

that the answer depends not only on statutory concepts, but also it depends on the assets that underlie the block of business, because when the future statutory profits on the block are projected, it is necessary to know what is expected to be the earnings on those assets. Some believe that this result is appropriate. Others believe that it is not appropriate, that assets and liabilities should be valued separately.

Dick Robertson of Lincoln National has circulated a paper that takes a different approach. This is the fourth approach, the last approach I'm going to talk about. It is to start with GAAP liabilities, and then adjust them for differences between the rate that underlies those liabilities, the book value rate, so to speak, and today's market rate. When the market rate equals the book rate, the fair value of the liabilities will be equal to the current GAAP liability. The premise here is that we don't want to create anything new. We want today's GAAP to be a special case of the market value calculation.

Needless to say, all these methods give different answers. Some of them give very different answers than others. Except for the fourth method, I believe they were all used in 1992, and there currently exists no guidance as to which of these is "right." I do believe this is an area where actuaries can certainly lend a hand in helping the accounting profession and the insurance industry come to a theoretically sound, workable answer.

The next topic I want to talk about is FAS 114. FAS 114 was passed by the FASB in June 1993. The title is *Accounting by Creditors for Impairment of a Loan*, and it applies to all creditors and all loans with three specific exceptions. First, smaller balance homogeneous loans that are collectively evaluated for impairment are excluded from the scope. These are loans such as credit card receivables, or packages of residential whole loans. Also excluded from the scope are loans that are already measured at fair value, or the lower of cost and market. This is a fairly narrow category of loans and covers loans acquired by a financial institution and held for resale. Insurance companies rarely own such loans. Also excluded are debt securities covered by FAS 115. So, what does that leave? Well, the list carves out big chunks of assets, but it does leave some big categories of assets as well. As far as insurance companies are concerned,

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the major category of assets that are covered by FAS 114 is commercial mortgage loans. The percentage of companies' portfolios invested in commercial mortgage loans varies radically from company to company. For some companies, this will be a nonevent. For other companies, this will have a major impact on their GAAP financial statements. FAS 114 is first effective for 1995.

According to the standard, a loan is impaired if it is probable that the creditor will be unable to collect all amounts due, according to the contractual terms of the agreement. So, if it looks as though we're going to be able to collect the principal but we're not going to be able to collect the original loan interest, the loan is impaired. A restructured loan, a loan where the terms have been changed presumably to the advantage of the borrower and the disadvantage of the lender, is by definition a loan that was already impaired, because sometime prior to the restructuring, the insurer came to the realization that it would not be able to collect all amounts due on the original contractual terms, and that's why the loan was restructured. So, a restructured loan is one that will already have been evaluated for impairment prior to the restructuring. The definition of the word probable in the standard is "likely to occur," rather than "virtually certain." It does not have to be virtually certain that all amounts due will not be collected, it only has to be probable that that's the case.

To determine the carrying value of the loan, we take the book value of the loan, and we subtract from the book value a valuation allowance. The basic method in FAS 114 is to calculate the valuation allowance or reserve as the recorded value of the loan less the present value of the expected cash flows. In other words, what winds up being the carrying value on the books of the company is the present value of the estimated future cash flows. Such present value is to be calculated at the loan's original effective rate, not today's rate. So if the loan was put on the books at say, 12%, the present valuing is to be done today at 12%. That's the basic method. The concept that FASB had was that it wanted to preserve the book value accounting concept, as opposed to going to a market value basis. When the original loan was put on the books of the company at par, that was equivalent to taking the loan's future cash flows and discounting them at the effective rate of the loan at origination. The basic approach for determining

impairments under FAS 114 says that the impairment is to be evaluated at the original rate as well. In the Exposure Drafts for FAS 114, this was the only method that was permitted, and it caused a tremendous firestorm of opposition, particularly from financial institutions who already were making valuation allowances, recognizing impaired loans, but doing it on a fair value basis. So, in FAS 114 there are alternative methods permitted, and these alternative methods are really more than just alternatives, they're really very different approaches to calculating the loan value. The standard says that, "as an expedient," companies may use the observed market value of a loan, if it has a market value, to calculate the valuation allowance. For a collateral-dependent loan, the fair value of the collateral may be used. FAS 114 contains a definition of *collateral-dependent* which essentially says that the loan is to be paid off through the cash flows on the underlying collateral. Many commercial mortgage loans may be classified as collateral-dependent. If one calculates a fair value of the loan or of the collateral underlying the loan for a collateral-dependent loan, that fair value can be used as the basis for calculating the impairment value. In other words, you take the book value of the loan less the market value, and the difference would be an impairment valuation allowance. If you believe that market values are calculated based on discounted cash flows, either implicitly or explicitly, we're using today's rate to discount the expected future cash flows, rather than the original effective rate of the loan. So, in my view, FAS 114 comes out as clearly stating that, when the cash flows are not likely to be collected according to the original terms, an impairment must be recognized. But it also comes out with two almost contradictory approaches to calculating the impairment. And you're free to choose, on an asset-by-asset basis. It's reasonable to suppose that companies will evaluate which method is most advantageous, and use that.

The last topic I want to talk about, and this topic is evolving as we speak, is GAAP for mutuals. Traditionally, auditors' opinions on the statutory financial statements of mutual companies characterized those statutory statements as being prepared in accordance with GAAP. In other words, they said statutory was GAAP for mutuals. Now, mutuals are exempt from the insurance accounting pronouncements of the FASB, which are statements 60, 97, and 113. That leaves 112 statements that do not exempt mutual companies, and for many of them, the practice that's specified as GAAP is different from the statutory practice. It's easy to find examples of

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divergent practices. For example, invested asset valuation, FAS 114, FAS 115, certainly are not statutory concepts. Even the GAAP-basis calculation of impairments of debts securities based on "other than temporary" decline in value rather than "permanent impairment" is not the statutory approach. Liabilities for postretirement benefits are calculated differently for statutory and GAAP. Statutory accounting does not allow deferred income taxes, in general, although GAAP requires them. The amortization of loan origination fees, which is specified in FAS 91, is another difference between statutory and GAAP.

In April 1993, the FASB issued Interpretation 40, which prohibits auditors from giving "clean GAAP opinions" unless all applicable GAAP pronouncements are followed. Well, as discussed earlier, that will not happen with statutory statements because all applicable GAAP pronouncements are not followed. You cannot have a statutory statement that is in accordance with GAAP for the reasons cited previously. Interpretation 40 is effective for 1995. It's still a little bit up in the air exactly how auditors' opinions will be worded for 1993 and 1994, but the interpretation will be effective for 1995. The 1995 GAAP financial statements will include the 1994 financial statements for comparison purposes, so for a company to have its 1995 financial statement characterized as being in accordance with GAAP, it has to present both 1994 and 1995 income statements and balance sheets on a GAAP basis. So all those 112 FASB pronouncements that do not exempt mutuals will have to be adhered to.

Well, it was obvious to FASB that it didn't make any sense to require mutual life insurance companies to adhere to 112 statements and not say anything about the accounting for the basic core business of a life insurance company. Therefore the AICPA has taken on a project to define insurance GAAP for mutual companies. The goal is for the new guidance to be effective for 1995 as well, so that Interpretation 40 will become effective in the same year when GAAP becomes defined for the insurance business of mutual companies. The expectation is, and I think this is a certainty, that FAS 60 and FAS 97 will apply to all but the traditional participating business. Therefore, GIC business, for example, other group pension business, disability business, and annuities, in general, will all be accounted for under the rules currently applicable to stock companies. The real issue is, how do we account for the traditional participating

business? In order to resolve that issue, the AICPA set up a task force, the Mutual GAAP Task Force, which is being advised, to a certain extent, by a task force of the American Academy of Actuaries, chaired by Steve White of the Provident Mutual. I am also a member of the AAA task force. The AICPA task force is to make a recommendation to the Insurance Companies Committee of the AICPA, which will accept or reject it, and then, once the Insurance Companies Committee is comfortable with the proposed statement of position, it will be sent to the Accounting Standards Executive Committee (AcSec), which is the highest standard-setting body within the AICPA. Then it will be sent to FASB. There will be a public exposure period, and then finally, an AICPA statement of position, and possibly also a new Financial Accounting Standard will be promulgated (to remove the mutual company exemptions from FAS 60, 97, and 113). As of right now, the AICPA task force has made a recommendation to the Insurance Companies Committee. However, the Insurance Companies Committee did not accept the recommendation in exactly the form in which it was presented.

The task force was charged with considering accounting for mutual company products within the framework of FAS 60 and FAS 97. After considering both FAS 60 and FAS 97, it recommended a "margin-based approach" to the Insurance Companies Committee. As under FAS 97, deferrable expenses are amortized against gross margins. In order to define the gross margin, you have to say what the account value is. Because participating contracts do not have any obvious account value, a statutory-type net level premium reserve was suggested as a proxy for the account value. So, the gross margin would be calculated pretty much the same way that many companies calculate gross profits under FAS 97 currently, namely premiums less investment income less benefits, including dividends, less change in proxy account value, would be the aggregate gross margin. In other words, investment margin, mortality margin, expense margin, and surrender charges are all wrapped up into that single number. However, the approach recommended was not a pure FAS 97 approach. There were some elements of FAS 60 incorporated in the recommendation. One was that premiums would be revenue under this approach. Another was that the DAC would be unlocked prospectively rather than retrospectively. Also, there was a minority within the task force that favored a FAS 60 approach. The most recent development in the area of GAAP for mutuals occurred recently,

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when the Insurance Companies Committee met to consider the task force's recommendation. And what came out of that meeting was really narrowing the possibilities down to two alternatives. One is essentially what the task force recommended, but with the important modification that the DAC would be unlocked retrospectively, rather than prospectively. This is more consistent with a pure FAS 97 approach. The other approach that is not dead yet, although I think it's less likely, ultimately, is a FAS 60 approach with prospective unlocking. So we have, still under consideration, two very different approaches to GAAP accounting for participating business. I think the good news is that it looks as though the Insurance Companies Committee will come to a decision at its November 1993 meeting, so that I expect, after November 4, we'll know a lot better than we know now which way this thing is likely to shake out eventually.

## GAAP ISSUES

**MR. BRADLEY M. SMITH:** I will be discussing two topics: (1) Actuarial aspects of issues surrounding accounting for acquisitions of life insurance companies/blocks of business (i.e., purchase GAAP); and (2) the need for cash-flow testing when determining the adequacy of the net GAAP liability (i.e., benefit reserve plus deferred tax liability minus deferred policy acquisition cost).

Let's review a generic purchase-GAAP balance sheet immediately after the acquisition of a life insurance company and/or a block of business. For purposes of my discussion, there is no need to differentiate between whether a block of business or a company has been purchased:

1. Invested Assets = Net statutory liability transferred plus target surplus established (assets held at market value).
2. Value of in force = Discounted present value of pretax profits.
3. Goodwill is a balancing item used when the purchase price paid for the business exceeds the after-tax present value of projected profits on the business. This usually occurs when a premium price is paid to reflect the new business potential of an acquired company.
4. Benefit reserves = GAAP benefit reserves (i.e., account value for universal life policies as defined by FAS 97).
5. Deferred federal income tax is the present value of the federal income tax to be paid on the business. The discount rate used in this calculation typically equals the discount rate used to calculate the value of in force.
6. Equity equals the purchase price paid plus the target surplus established on the business.

It is important to remember that the balance sheet assets must equal the sum of the balance sheet liabilities plus the equity at all times (i.e., the balance sheet must be balanced).

The FASB has established Issue No. 92-9 (accounting for the present value of future profits resulting from the acquisition of a life insurance company) to be considered by its Emerging

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Issues Task Force (EITF). The next meeting of the EITF is September 23, 1993. This issue is not on the current agenda for that meeting.

Specifically, the task force will be reviewing three specific issues:

1. The discount rate used to determine the initial value of in force.
2. The methodology used to amortize the value of in force.
3. Unlocking mechanisms.

The actuary is currently given some guidance in determining the methodology to be used in establishing the initial value of in-force asset. Actuarial Standard of Practice Interpretation 1-D having to do with purchase accounting states:

The profit allowance . . . used in determining the reserves should be consistent with those which apply to current new business issued by the company which will be assuming the future risk on the acquired business.

While not explicitly directing the actuary, this has been interpreted by actuaries assigned with determining the value of in-force asset as implying that the discount rate used in the calculation of the value of in force be consistent with the return anticipated by the company in its production of new business.

Let's look at a simplified example that will help us illustrate the issues. In this example a block of universal life business (as defined by FAS 97) was purchased. To simplify the example, the tax reserve equals the statutory reserve which equals the account value. Additionally, no target surplus has been imputed to the line of business, and the purchase price was equal to the after-tax present value of profits (gross and statutory) (Table 1).

Assuming an after-tax purchase price return objective (hurdle rate) of 17% and a tax rate of 34%, the present value of the gross profit stream is \$18,149 (the initial value of in force), and the present value of federal income tax is \$6,171 (set equal to the initial deferred tax liability). Therefore, GAAP equity, which is equal to the purchase price paid for the business, is \$11,978, the difference between these two items.

**TABLE 1**

**Purchase GAAP Example**  
**Purchase Price Return Objective: 17% FIT Rate: 34%**

<u>Year</u>	<u>Gross Profit</u>	<u>PVP @ 17%</u>	<u>Pretax GAAP Earnings</u>	<u>Deferred FIT</u>	<u>GAAP Equity</u>	<u>After-Tax GAAP Earnings</u>	<u>ROE</u>
0		18,149		6,171	11,978		
1	3,400	17,835	3,085	6,064	11,771	2,036	17%
2	3,425	17,441	3,032	5,930	11,511	2,001	17
3	3,450	16,956	2,965	5,765	11,191	1,957	17
29	620	359	142	122	237	94	17
30	420	0	61	0	0	40	17
<b>Present Values @</b>							
7%	34,228						
17%	18,149						

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Using the level ROE approach to the amortization of the value of in force, its balance is redetermined each year as the prospective present value of gross profits. The pretax GAAP profit equals the gross profit plus the increase in the value of in-force asset. The after-tax GAAP profit equals the pretax GAAP profit times one minus the tax rate ( $1 - .34$ ). The ROE equals the after-tax GAAP profit divided by the GAAP equity at the beginning of the year. As you can see, if gross profits emerge as anticipated, a level ROE equal to the discount rate used to produce the value of in-force asset is produced.

Table 2 uses the same example but amortizes the value of in force using principles implicit in FAS 97 methodology. As you can see, the balance sheet immediately after the acquisition is the same. The initial balance of the value of in-force asset and the deferred federal income tax liability were calculated using the purchase price return objective (i.e., 17%). The difference between this example and the previous example is the methodology used to amortize these initial balances. In this example a gross profit ratio is determined by dividing the value of in force (i.e., the present value of the gross profit stream using the 17% purchase price objective) by the present value of the gross profit stream using the credited rate.

The retrospective deposit method as defined in FAS 97 is used to amortize the value of in-force asset, producing a faster amortization than does the level ROE method. Thus, after-tax GAAP profit is deferred into the later years, producing a nonlevel ROE, which is less than the purchase price return objective in the initial years increasing beyond the purchase price return objective in the later years.

This particular example, due to its simplified nature, is not necessarily indicative of the level of difference these two methodologies will produce in the years immediately after the acquisition of a block of business.

Nonetheless, Table 3 illustrates the effect that the difference in methodologies has on our example.

**TABLE 2**

**Purchase GAAP Example**  
**Purchase Price Return Objective: 17% Gross Profit Ratio: 53%**  
**FIT Rate: 34% Credited Rate: 7%**

<u>Year</u>	<u>Gross Profit</u>	<u>FAS 97 PVP</u>	<u>Pretax GAAP Earnings</u>	<u>Deferred FIT</u>	<u>GAAP Equity</u>	<u>After-Tax GAAP Earnings</u>	<u>ROE</u>
0		18,149		6,171	11,978		
1	3,400	17,617	2,868	5,990	11,627	1,893	15.8%
2	3,425	17,034	2,842	5,792	11,242	1,876	16.1
3	3,450	16,397	2,813	5,575	10,822	1,857	16.5
29	620	208	326	71	137	215	65.1
30	420	0	212	0	0	140	102.2
Present Values @							
7%	34,228						
17%	18,149						

TABLE 3

## Purchase GAAP Example

Year	After-Tax GAAP Earnings		Cum Add'l Earnings	% of Cum Earnings
	Level ROE	FAS97		
1	2,036	1,893	144	7.6%
2	2,001	1,876	269	7.1
3	1,957	1,857	369	6.6
4	1,903	1,804	468	6.3
5	1,847	1,751	564	6.2
10	1,553	1,479	982	5.7
15	1,223	1,191	1,237	5.2
20	840	887	1,171	4.1
25	402	536	647	2.0
30	40	140	0	0.0

Both of these methodologies are currently acceptable to the accounting profession. However, this inconsistent accounting treatment of the same block of business based upon whether the business was purchased from another company or was produced directly by the company creates an unlevel playing field between those companies that produce their own business and those companies that grow through acquisition. This inconsistent treatment may affect a company's access to additional capital as the equity market's view of a company is driven largely by the level of a company's earnings (i.e., price/earnings ratio) as well as its growth in earnings per share. I do not believe that the difference in accounting treatments acceptable in each circumstance is recognized/appreciated by the capital markets.

The unlocking mechanisms used when actual results deviate from expected when accounting for purchased business are not well-defined, and the approaches taken by different companies vary widely.

Tables 4 and 5 illustrate the affect on the emergence of GAAP profit due to the unanticipated termination of 10% of the business in year three. In the first example, the loss of business and the loss of future profit is reflected immediately at the end of year three through a reduction in the level of the value of in force. Pretax GAAP profit falls precipitously in this year, lowering that year's ROE. The ROE in following years returns to its prior level assuming no other unanticipated events. This is analogous to what happens to companies using a GAAP factor approach for their purchased and/or produced business.

In Table 5, rather than recomputing the value of in-force asset using a discount rate equal to the purchase price objective, the value of in-force asset is held at its anticipated level, and the discount rate is recomputed such that the present value of prospective gross profits equals the anticipated value of in force. Thus, the loss is not entirely absorbed in the year of occurrence but is "amortized" in future years through a reduction in prospective ROEs.

The level to which this discount rate can fall before loss recognition must occur is also an issue. I have heard arguments for the minimum acceptable ROE being the net investment rate (which is what I believe), the credited rate and zero.

This ends my presentation on the issues surrounding purchase GAAP.

My second topic is whether cash-flow testing (defined here as analyzing cash flows under varying interest rate environments) is necessary to determine the adequacy of the net GAAP liability (benefit reserve plus deferred tax liability minus deferred policy acquisition costs) established by a company.

**TABLE 4**

**Purchase GAAP Example**  
**10% Reduction in Business In Force in Year 3**  
**Purchase Price Objective: 17% FIT Rate: 34%**

<u>Year</u>	<u>Gross Profit</u>	<u>PVP @ 17%</u>	<u>Pretax GAAP Earnings</u>	<u>Deferred FIT</u>	<u>GAAP Equity</u>	<u>After-Tax GAAP Earnings</u>	<u>ROE</u>
0		18,149		6,171	11,978		
1	3,400	17,835	3,085	6,064	11,771	2,036	17.0%
2	3,425	17,441	3,032	5,930	11,511	2,001	17.0
3	3,105	15,261	924	5,189	10,072	610	5.3
4	3,038	14,818	2,594	5,038	9,780	1,712	17.0
5	2,970	14,367	2,519	4,885	9,482	1,663	17.0

**TABLE 5**

**Purchase GAAP Example**  
**10% Reduction in Business In Force in Year 3**  
**Purchase Price Objective: 17% FIT Rate: 34%**

<u>Year</u>	<u>Gross Profit</u>	<u>PVP</u>	<u>Pretax GAAP Earnings</u>	<u>Deferred FIT</u>	<u>GAAP Equity</u>	<u>After-Tax GAAP Earnings</u>	<u>ROE</u>
0		18,149		6,171	11,978		
1	3,400	17,835	3,085	6,064	11,771	2,036	17.0%
2	3,425	17,441	3,032	5,930	11,511	2,001	17.0
3	3,105	16,956	2,620	5,765	11,191	1,729	15.0
4	3,038	16,442	2,523	5,590	10,852	1,665	14.9
5	2,970	15,919	2,447	5,413	10,507	1,615	14.9

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Section 5.1 of Actuarial Standard of Practice 14 (When to do Cash-Flow Testing) lists examples of actuarial work for which cash-flow testing should be considered. Included in that list is:

- Long-term financial projections and forecasts (GAAP, statutory, or tax) and
- Reserve testing

At last year's symposium, it was concluded by Stephen Sedlack that:

The inclusion of GAAP in Section 5.1 indicates that if cash-flow testing should be done for statutory purposes, it should almost always be done in regard to GAAP as well. In particular, for lines or products where asset adequacy analysis must be used to demonstrate reserve adequacy, cash-flow testing should probably accompany any determination of the adequacy of the net GAAP liability.

He goes on to conclude:

In particular, this would include gross premium valuations done to establish that no loss recognition or unrecoverable condition exists.

I believe an inconsistency exists between GAAP, documented for practicing actuaries in Actuarial Standard of Practice 10 (Methods and Assumptions for Use in Stock Life Insurance Company Financial Statements Prepared in Accordance with GAAP) and the conclusion reached by Mr. Sedlack.

Section 5.3 (Categories of Assumptions) of Actuarial Standard of Practice 10 states:

Two general types of actuarial assumptions are used in the preparation of GAAP financial statements. Best-estimate assumptions as of the financial statement date are required in certain instances (policies accounted for using SFAS No. 97 and business for which loss recognition has occurred). In others, assumptions which provide for the risk of adverse deviation are required.

Best-estimate assumptions should be periodically reviewed and updated to reflect emerging experience, whereas assumptions with provision for adverse deviation are subject to lock-in until a loss recognition situation arises.

Section 5.4.2 (Most Likely Outcome) of Actuarial Standard of Practice 10 states:

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

Do we believe that the accounting profession will allow companies to set its net GAAP liability based upon stochastically generated interest scenarios? Do we believe that the accounting profession will allow a company to alter its net GAAP liability because it has failed two of seven statutorily required scenarios? We are talking about a profession that is debating whether it should allow (in industries other than insurance) amortization/discounting with interest. If we are not going to use the result of testing, why should we be required to do it? I believe Mr. Sedlack reached an incorrect conclusion due to the confusing/inconsistent wording contained in Actuarial Standard of Practice 14. I have discussed this issue with a member of the Life Insurance Committee of the Actuarial Standards Board (ASB) that drafted Actuarial Standard of Practice 14, and he said that it was not the intent of the committee to require such testing in the determination of the adequacy of the net GAAP liability established by a company. Rather, a gross premium valuation (a form of cash-flow testing) using a deterministic approach to the interest rate environment is acceptable when assessing the adequacy of the net GAAP liability.

I urge the ASB to alter Actuarial Standard of Practice 14 to eliminate this confusion and maintain consistency between GAAP as accepted by the actuarial profession in Actuarial Standard of Practice 10 and other Actuarial Standards of Practice.

