

**1996 VALUATION ACTUARY  
SYMPOSIUM PROCEEDINGS**

**SESSION 21**

**GAAP/Purchase GAAP Issues**

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## GAAP/PURCHASE GAAP ISSUES

**MR. CHARLES D. FRIEDSTAT:** I'm with KPMG Peat Marwick in Chicago. I will give a brief introduction of the speakers and leave most of the time for their remarks.

We have a very experienced panel. All three speakers have had many years of experience with the issues we will discuss. In this session, each person will speak about one, two, or three specific topics that they've encountered in their experience with GAAP or purchase GAAP (PGAAP). We expect to have a fair amount of time for questions and answers. We have some prearranged questions that we will be putting into the discussion with the panel, and we want to encourage the audience to ask questions. They can be as specific as you want. We will address each question and have sort of an open forum type of discussion.

Peter Duran is a partner with Ernst & Young in New York City. Dan Kunesh is a principal with Tillinghast-Towers Perrin in Chicago, and Ed Robbins is a principal with KPMG Peat Marwick in Chicago.

**MR. J. PETER DURAN:** I'm going to talk about three different topics in depth that are completely unrelated to each other. These three topics are of interest and affect a number of companies. I'll also talk about some of the issues surrounding those topics. I want to talk about *FAS 115*, so-called actuarial or SEC adjustments, and how practice has been evolving in that area. I will discuss what I believe to be the current practice in this area, although I certainly do think it's mixed.

One could say the same of the next two topics as well. I think there's mixed practice among companies in how they determine the so-called gross margins for mutual GAAP products, and the traditional participating business of mutual companies. I have found there is a fair amount of variety in the treatment of structured settlements. I want to talk a little bit about the various ways

companies have approached those products because they don't necessarily fit neatly into one or the other of the GAAP classifications.

*FAS 115* speaks about valuation of assets only. Here's just a brief review. *FAS 115* applies to marketable equity securities and debt securities -- basically, bonds. It does not apply to mortgages, although it would apply to collateralized mortgage obligations, bonds or mortgage pass-throughs, because those are bonds. Those are securities. It requires that the company classify the assets into one of three categories: held to maturity, available for sale, or trading. It has become very clear that the SEC and the public accounting firms are interpreting the definition of held to maturity in a super strict sense. There is no thought about materiality. If you say you're going to hold a security to maturity, the only reasons that you can sell it are the six reasons that are enumerated in *FAS 115*. And if you sell it for some other reason, you run the risk of tainting the rest of your held-to-maturity portfolio and having to recharacterize these as available for sale.

That has led companies to classify most securities as available for sale, because the criteria for held to maturity are just too onerous. That's going to mean there will be more volatility in GAAP equity than there otherwise would be, if you define the securities of held to maturity. I think most companies have decided that they're willing to accept that volatility rather than be sort of hamstrung by a bunch of accounting rules.

Virtually nobody in the insurance industry has classified a significant portion of the portfolio as trading, at least that I have seen. In practice, the securities are classified, for the most part, as available for sale. Some companies have a significant portion or small portion in held to maturity.

That results in a sort of a schizophrenic approach to GAAP accounting and financial statements. You have book measures used for the income statement, and you have fair value measures used for the balance sheet such that changes to fair value go directly to equity. For purposes of the income statement, we have a situation where all securities are held to maturity, but for purposes of the balance sheet, we recognize changes in fair value, and these changes go directly to the equity section of the balance sheet.

The actuarial adjustments, or as some people refer to them, the SEC adjustments, are intended to make the various changes to the actuarial balances, the deferred acquisition cost (DAC), and the reserves. This also applies to the present value of profits in purchase GAAP situations. You must make those balances consistent with the asset valuation. The reason we call them SEC adjustments is because there is no reference to these adjustments at all in *FAS 115*. *FAS 115* is completely silent with respect to these adjustments. But the SEC has made it clear that, at least public companies must adjust the various reserve DAC and present value of future profit items in the balance sheet to make them consistent with the asset valuation.

What this requires is something called a thought experiment. This is not something that actually happens in practice, but you think through what would happen if we sold all the available-for-sale securities in the current period, even though we have absolutely no intention of doing that.

What would happen is, we would realize gains or losses and that would have certain consequences in the way we would adjust our DAC. These adjustments are also known as *shadow DAC* adjustment. I think Ed Robbins may have coined that term in an article in the *Financial Reporter*, and it has become a widely accepted term.

First, I'll do a reserve example, because I think when the guidance first came out, people really didn't focus on reserves. In fact, the adjustments tend to have a bigger impact for most companies on the DAC side than the reserve side, but there can be impacts on the reserve side as well, depending on the products involved.

Let's suppose that we have a block of single premium immediate annuities (SPIAs) that have significant mortality risks. So they're classified under *FAS 60* and *FAS 97* as limited pay insurance contracts. Let's suppose that they're backed by bonds and we've classified all the bonds as available for sale. Let's also say we bought the bonds in an 8% environment (obviously, this is very idealized). We haven't sold any of the bonds, even though we've classified all the bonds as available for sale. We may have really no particular intention of selling the bonds at a time in the near future. So we've calculated *FAS 60*-type reserves as the present value of future benefits and perhaps administrative

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expenses back when the contracts were issued, and the interest rate that we used was 7.5%. The difference between 7.5% and 8%, essentially provides for recovery of acquisition costs (which may be very small), as well as administrative costs and profit.

We calculated the reserves at 7% and locked them in as *FAS 60* tells us to do but current interest rates have dropped to 6%. Then we go through our so-called thought experiment. We say, "What would happen if we, on December 31, sold all the bonds?" What would happen is we would recognize a large capital gain, because six is less than eight. And we would reinvest the proceeds at 6%. Then I'd have a block of liabilities backed by 6% earning assets, because the liabilities assume 7.5%. Loss recognition would probably be appropriate in my income statement.

That's assuming that the difference between the 6% and the 7.5% more than made up for any future profit that might be inherent in the 7.5% GAAP reserve. So there would be a so-called shadow loss recognition.

What that means is, we would establish, for balance sheet purposes only, an additional reserve that would go directly through equity, and would, in effect, dampen the results of the unrealized capital gain, because the assets were valued with the 6% assumption.

Now let's suppose it's a year later and interest rates have risen to 6.5%, which is still quite a bit less than 7.5%. No bonds have been sold. Let's go through our thought experiment again. We now say, well what if we sold all these bonds in the current period? They're still the same 8% bonds that we bought when the contracts were issued. We haven't sold any of them. We had gone through a thought experiment at the end of the last accounting period. We forget about that one and we do a new one and we say, what if we sold all the bonds today? We'd still have a capital gain. It wouldn't be as large as a year ago because interest rates are higher and the bonds have a year less to go to maturity. But there might still be a shadow loss recognition that would be appropriate.

You might ask, at what point does it stop? When you do loss recognition, you set your reserve level essentially at a gross premium reserve level, using best-estimate assumptions. So if the gross

premium reserve with current best-estimate assumptions for mortality, administrative expenses, and interest (which would come from the current market environment), is equal to the reserve held at that point, there's no longer any shadow loss recognition that's appropriate.

What happens, in effect, is when you have large unrealized capital gains, the shadow loss recognition dampens the effect of those large unrealized capital gains. Unfortunately, because of the lock-in principle of *FAS 60*, it doesn't go the other way. If interest rates had risen to 10%, and we had a large unrealized loss, that would be reported directly in equity, and we would not do our thought experiment. We would say, "Sell the bonds. We have had a big loss." We'd reinvest the assets at 10% and nothing would happen to our reserves because they're locked in. Unfortunately, it dampens the upside a lot more than it dampens the downside.

The unusual shadow DAC adjustment is evolving as a common practice which may not be theoretically perfect, but sure is practical. The shadow DAC adjustment is usually taken as one minus the amortization rate, times the unrealized capital gain on the available-for-sale securities. But you have to be a little bit careful about what you apply this one minus the amortization rate to. So let's say we have a block of traditional participating business. Each issue year or each product grouping has an amortization rate. We might take an average amortization rate for the whole block of business and do the adjustment of one minus the amortization rate times the unrealized capital gain or loss, but we need to allocate assets properly. We might have assets backing this block of traditional participating business, equal to 105% of statutory reserves, for example. But we may only have a DAC on business that has been issued since 1975. We have to allocate the unrealized capital gain or loss to the portion of the business that has a DAC. And it's that portion that is adjusted through the shadow loss recognition, i.e., the shadow DAC adjustment. That's all I wanted to say on *FAS 115*.

Concerning mutual GAAP, nobody has actually published a mutual GAAP statement yet, but it's going to happen soon. And the practice, I think, is still evolving in this area. I believe Ed is going to speak about one aspect of this. I won't really spend much time on that aspect, but the guidance in Standard of Practice (SOP) 95-1, which gives the rules for traditional participating business in a mutual company, says that the gross margins need to be on a best-estimate basis. We were careful

to get very specific language concerning the particular margin elements into the SOP. The individual margin elements don't have to be on a best-estimate basis, but the overall margin itself has to be on a best-estimate basis.

What are the profit elements that go into the mutual GAAP margin? They're basically laid out in the SOP, but when you do this in practice, you might find that you can run into a number of reasons why the calculations may not be so straightforward. For example, many companies have significant profits from accidental death benefit riders, or from waiver-of-premium riders or term riders. And what do you do with those profits? Should they be included in the margin?

I do believe the practice varies on this. I think that there's a good argument that says, if you're doing your dividend scale and determining your divisible surplus, and taking into account profits on these riders, you can, in fact, recognize those profits as part of the gross margins.

You'll find, in practice, that sometimes it won't be that significant, or you might be able to show that the pattern of profits really doesn't change appreciably by including margins from those coverages. Some companies do it and some don't.

Supplementary contracts is another issue that has come up. I think very few companies include profits from supplementary contracts in their gross margins. This is kind of analogous to a deferred annuity situation, where, when the contract annuitizes, if it actually does, it's considered for GAAP purposes as separate a contract. I think most companies would separate out supplementary contract profits and not include them in their gross margins.

Extended term and reduced-paid-up insurance come mostly from mutual companies. I believe extended term is nonparticipating, although there are certainly companies where it's participating. Reduced paid up tends to be a participating coverage to the extent that it is participating. Therefore, I think, there's a good argument for including profits from those, for most contracts.

Substandard extra premiums. That's kind of a sleeper because if you're going to include profits from substandard extra premiums you better include cost from substandard mortality. Most companies don't expect a very large extra profit on substandard business. Often that's ignored or they try to achieve a balance between the premiums and the cost.

Finally, profits from other businesses, such as group pension business for example, if the company has a philosophy of funneling those profits into the ordinary life dividends, is a very unclear and unsettled area. I believe this is relevant for some companies and I think the practice is unsettled in that area. I know Ed is going to speak about that in a little bit more detail.

The basic principle to keep in mind in doing mutual GAAP margins is that the matching of the experience assumptions and the dividends is absolutely key. If we currently have a subsidy in the dividend scale, or perhaps we have realized a large capital gain and we're actually underpaying dividends as compared to what our long-term profit goals might be, we probably don't want to project that for the next 30 or 40 years, because we'll get a huge mismatch between the experience assumptions and the dividends. It will lead to inappropriate and very volatile results. How each company approaches that issue is going to vary from company to company. It's going to be dependent on how the company actually does its dividend scale. One possibility, depending on how you do dividends, is to use pricing assumptions on a prospective basis.

Structured settlements. There are many questions, and they have been answered differently depending on the circumstances. Are they insurance or investment contracts? To be an insurance contract, there has to be a significant mortality risk. So if the answer to the second question on the slide is yes, the answer to the first question on the slide must be insurance contract, and if the answer to the second question is no, then the answer to the first question must be investment contract. Well that's pretty simple, except that how does one tell whether a particular contract or block of contracts has a significant mortality risk? Do you measure that contract by contract, or do you measure it on a block-of-business basis?

Companies have answered that question in various ways. Different companies have approached that differently. I tend to favor the approach that looks at the entire block of business rather than contract by contract. From a management information point of view, to have your business broken into two different blocks, depending on GAAP rules, makes it very difficult. It's already difficult enough to interpret GAAP financial statements. And if you have a significant block of business broken into two different accounting models, you just make life more difficult for yourself, with really no need to do so. So we tend to recommend using the block basis definition.

But still, how do you determine whether there's a significant mortality risk or not? One approach is to look at the percentage of the total reserve, which is life contingent, and then ask the question, at what point does the risk become significant? Is it 10%, 15%, or 20%? It's probably somewhere in that neighborhood. Some people would argue that looking at the change in reserve for a given change in mortality is what you ought to do.

In any case, how do you account for structured settlements? Well the usual approach, I would say, is to determine a net liability by solving for a rate such that the present value of the future benefits and administrative costs equals the gross premium less the deferrable expenses. And that approach is used, I think, by most companies, whether they classify the business as investment contracts or insurance contracts. If you do that, some companies would stop there and set up only a net liability. That's clearly not in accordance with GAAP, although if the business is not that significant to your total business, your auditors may let you get away with that. In theory, there ought to be a benefit reserve, which is determined by a rate, such that the present value of the future benefits and administrative cost equals the gross premium. Because we're trying to get a higher reserve at issue, that rate is going to be lower than the rate in the first bullet. And then the DAC simply falls out as the difference between the two reserve calculations.

Usually assumptions are locked in at issue, and what you find is that the product classification in this approach really becomes irrelevant to the bottom-line income. That makes one very large assumption that the business is not in loss recognition. There will be different income statement presentations, of course, depending on how you've classified the business. The premiums will be revenue if you

classified the business as insurance contracts and will not be revenue if you've classified the business as investment contracts. The bottom line will really not depend on the product classification. I don't believe in this approach, unless there's loss recognition. And if there is loss recognition, you can do loss recognition for investment contracts, but you cannot do loss recognition for insurance contracts beyond writing off the DAC. So in that situation, there would be a difference.

An alternative approach that I've seen one or two companies use applies to classifying the business as investment contracts. You need a benefit liability. You get a rate such as the present value at issue of the future benefits, and administrative cost is equal to the gross premium. You lock in that rate, and in every period, your benefit liability is equal to the present value of the then future benefits and costs. But now it's an investment contract so rather than take the interest approach, we might be able to take the gross profit approach, and define the gross profit essentially by the two elements: spread on the reserve and administrative costs. So those would be our gross profits. We amortize our DAC based on those gross profits.

Now if everything goes according to assumptions at issue, this approach really isn't going to give anything very different than the approach I mentioned a minute ago, the so-called usual approach. But if things don't go exactly according to plan, then you have the ability to unlock the DAC. So that would happen, I think, primarily because of goings on on the asset side of the balance sheet. For example, if you realize gains or losses, then that would have an impact on the spread in the period in which the gains or losses are realized and the DAC unlocking would actually dampen the income statement volatility that could be caused by those gains and losses. One thing to keep in mind with this approach is that if you classified the business as investment contracts, then you cannot have loss recognition after the DAC is fully written off. So it's something to be thought through if you're getting into this for the first time.

**MR. EDWARD L. ROBBINS:** My first topic is going to be the issue of mutual company GAAP, and I'll go into a little more depth. I want to deal with the general theoretical problems of shoehorning the mutual company concept into the GAAP environment. I'm going to be dealing from

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a somewhat less technical perspective than Peter just did; I'm going to take more of an historical perspective.

The original stock life company guide, the audit guides came out in 1972. The way that some of the older audit partners in our firm used to talk about the term GAAP for mutuals, made it a definite oxymoron. The reason was because it was so difficult to fit mutuals into the GAAP mode. The final rules in SOP 95-1 and *FAS 120* basically took some of the problems that were expressed back in 1972 and tried to work through them to reach a reasonable solution. They succeeded in some aspects and didn't succeed in other aspects.

What were the major anomalies back in 1972? I originally come from a mutual background, and the sources of my comments also draw on a telephone survey that I made to some mutual company actuaries just before putting this presentation together. First, for a mutual participating life insurance policy to choose premiums as the revenue base line is quite arbitrary. It is even more arbitrary than for a nonparticipating policy. Even for a nonparticipating traditional policy, premiums, as the revenue baseline, can be considered quite arbitrary.

When you price the participating life insurance policy, you're looking at premiums, you're looking at cash values, you're looking at annual dividends, and, in some cases, you're looking at termination dividends. All these things together give you a priced product. Premiums is just one arbitrary item. That was one of the problems they had back in 1972.

Jumping ahead from 1972 to the present, how did *FAS 120* and the SOP resolve this issue? What actually ended up happening is they came up with something like *FAS 97* for universal life. They took some of the good things about *FAS 97* and threw out some of the things they didn't like about *FAS 97*. They changed the revenue baseline from the 1972 concept of premiums to something very akin to what *FAS 97* calls estimated gross profits. The participating policies have called these estimated gross margins (EGMs).

There are two things that they changed from *FAS 97*. One was they changed the interest rate at which you amortize the deferred acquisition costs from the credited rate to the earned rate. Actually, this is a mathematical correction. It's only when you get the earned rate that book profits are going to emerge as a level percentage of gross profits.

Back when *FAS 97* was first promulgated and they used the credited rate, a bunch of actuaries called the FASB and said, "You know, the credited rate is theoretically wrong." The answer they got back from the FASB was not a mathematical response, but a political response: "That's all you're going to get." Originally, when the original exposure draft for *FAS 97* came out, there was no interest in the amortization of the DAC as many of you'll remember. So the credited rate was a great step forward. The SOP for participating policies really corrects the problem rather well by moving to the earned rate.

The second item that was corrected is that the SOP reverts you back to the traditional income statement presentation. Participating business is not looked at as a deposit liability, unlike universal life under *FAS 97*. So for participating mutual company business, what you're really seeing now is premiums, reserve increases, surrenders and all the old familiar stuff that actuaries are used to looking at.

The next major anomaly between GAAP and mutual company participating lines, according to some people, is that you have to go back to some major philosophical, traditional, mutual company issues as to what participating mutual business is all about. One of the concepts that appears to be very strong in the minds of mutual company actuaries, or at least has been traditionally, is that you look at participating business as kind of a snapshot inventory type of thing. Where is your asset share versus your required assets? Required assets are something like net statutory liabilities, plus some benchmark surplus measure. And some portion of the excess of the asset share over that becomes your divisible surplus. That's how you manage your block of business.

It becomes rather antithetical to GAAP. As an extreme case, you can have situations, for example, in a lot of mutual companies, where you break even, or have a little bit more after the first ten years

or so, and then maybe in years 15-20, you start giving back some surplus. And those "GAAPers" out there know that under GAAP, you cannot defer losses. So you've got a bit of a problem. In a mutual snapshot theory you are asset-wise versus liability-wise in distributing the divisible surplus or a portion of it whereas GAAP really asks, "What have you done for me lately?" It's kind of an annual income, year-by-year, financial-period-by-financial-period approach. That can give you some theoretical problems.

It can also mean that, for a company that manages its mutual business under the old traditional approach, GAAP statements can be somewhat meaningless as a management tool. How did FASB and the AICPA respond to this? Well, they really did not respond to this issue nor did they respond to a third issue, which Peter briefly referred to. A dividend to a mutual company policyholder is really composed of two elements. It's a "customer dividend" and an "ownership dividend." The mutual policyholders are owners of the company. Therefore, the dividend that's returned to the policyholder is a benefit. There's a dividend returned to the company owners as owners of the business. I'm not terribly familiar with this, but New York law has a provision that says that surplus cannot exceed 10% of assets, or something of that nature. Take the company that Peter referred to that has a lot of nonparticipating business, group pension, and so on that is reaping enormous profits. Those profits have to go somewhere. They would naturally go to the mutual company owners.

Now under GAAP, if the dividend class itself did not produce those kinds of profits that are being returned to them in the form of annual dividends and termination dividends, under GAAP, at least on the face of it, you might have some major recoverability problems where you cannot recover your deferred acquisition costs.

What are some of the solutions that companies are using to accommodate this? One of our client companies makes a pretty sincere attempt to bifurcate its dividend into customer dividends versus ownership dividends. This is something the IRS has never quite been able to do over 20 years, although they've tried. The company kind of rests on the paragraph in the SOP that talks about other charges and credits in the gross margins. This is how they get to that.

Another approach you might want to use to get to that position might be that the earnings from those nonparticipating lines are part of the investment income that is attributable to the dividend class. In that way, one could make the deferred acquisition costs recoverable. The SOP and *FAS 120* didn't really respond to this, so those are some of the solutions you may want to be thinking about.

In point of fact, the theoretical problems are not the problems they appear to be. Apparently, the theory is much more difficult than it is in the practical world. It's like the cynical engineer that once said something like, "It works in practice, but will it work in theory?" Apparently, the practical situation is that a lot of mutual companies are really not having problems with these very tough theoretical concepts.

One of the reasons is referred to in a very well-written paper in the 1987 *Transactions of the Society of Actuaries*, "The Report of the Task Force on Mutual Company Reorganization" that refers to two types of mutual companies: the revolving fund organization versus the equity capital organization. They say that a mutual company is one of those two types philosophically. The revolving fund organization basically says that when a person leaves the group, he gets back his temporary contribution to surplus. It's a truly revolving fund.

On the other hand, an entity capital organization says that when a participating policyholder leaves the group, he leaves some permanent surplus behind. So basically what you get is an entity capital organization that operates very much like a stock company over time. Additionally, it used to be, back in the days of life, endowment and term, back in 1972, you had a fairly clear distinction between participating and nonparticipating business. That distinction has been rather muddied over time, with all these nonguaranteed element products that tend to dominate today's market for permanent life insurance.

Furthermore, both mutual companies and stock companies are scrambling for capital these days. Thus, you have the equity capital issue. You have the blurring of product lines, and the scramble for capital. You have the Best ratings. There's a lot of commonality in the problems that both stock

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companies and mutual companies face these days. This is effectively why you don't appear to have the problems that you used to have.

This leads to the last issue I want to address. I chose the topic that's fairly near and dear to my heart, because I've run up against this problem in many different companies, and everybody seems to have a slightly different twist on it. The question is, how do you defer commissions on flexible premium products where you have heavy premium attrition, such as flexible annuities and universal life?

*FAS 97*, paragraph 24 indicates that expenses that tend to be recurring are dealt with as maintenance expenses. So they become netted from gross profits, rather than being capitalized as deferrable expenses. So what is an expense that tends to be recurring?

Well, you've got a product that starts out with, for unit purposes, \$100 of premium in the first year, and it trickles down to \$20 of premium in renewal years. Some actuaries have expressed the opinion that if you have a level commission on such a product, you must simply look at the percentage commission, (let's say it's a level 5% commission on all premiums), and take the excess percentage commission. You're really not being continuous and consistent with the single premium situation.

One of the earlier drafts of Practice Bulletin 8 indicated that with a single premium product, you defer all percentage-of-premium expenses. On annual premium business where annual premiums are required, you only defer excess initial percentage expenses. And on flexible premium products, on other types of business like the type we're talking about, it's the accountant's favorite term -- facts and circumstances. This language wasn't much help and they dropped this issue from the final Practice Bulletin 8 that came out a couple of years after *FAS 97*.

Anyway, the question is, what are companies doing? How do you provide continuity with single premium business? How do you reflect what FASB really wants you to reflect? Or did it know what it wanted to be reflected? Certainly, it's a very real issue, because your attrition rate on premiums is extremely high on an awful lot of flexible premium deferred annuity business.

There was a survey written by an accounting firm back in 1991 that talked about what companies were doing in this area: "Fifty percent of the surveyed companies follow the practice of deferring only first-year commissions in excess of renewal commissions on annual or flexible premium products. And the other 50% defer all commissions." This was a survey of 25 very large companies.

The comment that they made was that *FAS 91* appears to provide for the deferral of all amounts relating to the acquisition of new deposits. And renewal commissions seem to meet the *FAS 60* requirement that they be directly related to and vary with our production of new deposits. So that was, I take it, the justification for deferring all commissions on such products. Certainly, if you had a very, very heavily attritioning premium, that would appear to make a lot of sense. It provides continuity and consistency with the single premium case.

The excess percentage commissions is to some companies the path of least resistance. There's a middle ground that is also referred to and that I've seen many of our own clients use. Many clients favor that middle ground. It seems to make sense. Assume you have \$100 of first-year premium, and let's say your tenth-year premium is kind of your seasoned renewal point; it comes after your surrender charges are gone. You take the amount of tenth-year premium, per surviving policyholder, and you take your first-year premium, and you figure out your commissions on each one of those. You figure out the excess dollar amount of commission over the fully surviving dollar amount of commission in that tenth year, and that's the capitalizable expense.

You do this recursively through the second year, third year, and fourth year. For example, in your fourth contract year, you take a look at your dollars of commission, and you take a look at your expected dollars of commission on fully surviving cases in that tenth year. The excess of the former over the latter becomes your deferrable expense; the balance is your maintenance expense.

One problem with that approach is that the amount initially capitalized over time is extremely dynamic and unlocked. Your capitalization is unlocked each year when you do this. Is that GAAP? Well maybe not. It's probably not materially wrong, depending on how volatile the unlocking effect is.

I want to close by simply saying that the Committee on Life Insurance Financial Reporting for the Academy has begun a project called GAAP Practice Notes. I think it's a very worthwhile topic. The practice notes currently refer only to statutory practices. We think that there's a major need for GAAP practice notes as well.

**MR. DANIEL J. KUNESH:** We live in a world of change, and it seems like almost daily or at least weekly, you can pick up the *Wall Street Journal* and find out that somebody is being acquired by somebody else. Business combinations are a fact of life. Many of you have probably already experienced a business combination. Your company may have been acquired or perhaps you were the acquiring enterprise. Before your career ends, if you haven't already done so, you will be involved in a business combination at some future date. Therefore, we thought it would be appropriate to provide some basics about purchase accounting, which I will call purchase GAAP, or PGAAP for short.

Early on in the purchase transaction, there's a decision to be made. Will the transaction be treated as a purchase or a pooling of interest? Under a purchase, one company is clearly dominant and control generally is passed from one company to the next. Purchase transactions are the most common form of business combination.

A purchase may involve the distribution of assets, the accrual of liabilities or the issuance of stock. Under a pooling, by contrast, generally there is only an exchange of voting stock. There is no newly invested capital. No assets are withdrawn or disbursed from the group; instead, the net assets of the constituent shareholders remain intact and, in effect, are combined. Under a pooling of interest, all accounting remains unchanged, on what we call historic GAAP (HGAAP).

The problem is that there are several very demanding conditions that have to be met before a purchase transaction can be considered a pooling of interests. Thus, in almost every situation, the transaction will be treated as a purchase. I won't cover all of these conditions, but will mention three or four to give you a flavor of the difficulty of qualifying a transaction as a pooling.

First, both companies in a pooling have to be autonomous for at least two years prior to the combination. They have to be totally independent of each other. Next, the business combination has to take place in the form of a single transaction, within one year. Third, there has to be an exchange of all or substantially all of the voting shares between the companies. What's probably most important is there cannot be any dilution of the interests of the shareholders. In other words, while there's a trade-off in shares and in the value of the shares, it's an equal trade-off. And as I stated, HGAAP is retained for poolings, and there's no restatement of the financial statements.

Now, just a bit about accounting literature. Unfortunately, there has not been a lot of authoritative literature about PGAAP released over time. Actually, the most authoritative pronouncement was issued by the Accounting Principles Board (APB) way back in 1970 (APB Statement 16). This has been the guiding light and the primary source for all aspects of purchase accounting. All subsequent interpretations more or less stem from APB 16. In 1997, the American Academy of Actuaries released Interpretation 1-D, now the Actuarial Standards of Practice Interpretation 1-D. This document really defined two different methods for reserving under PGAAP.

In 1981, a draft position paper was issued by the Insurance Companies Committee of the AICPA. The paper went into some extensive detail about how to account for reserves and assets under purchase GAAP. Since that time, there have been a number of actuarial papers and presentations and formats like this that have addressed the topic. Still it is a relatively unknown topic among actuaries. Perhaps one of the best recent papers, which was really a panel discussion, can be found in the *Record*, Volume 20, pages 187-214, if anybody is interested in the topic.

In general terms, the accounting methodology for purchase GAAP follows that for historic GAAP. Traditional life products, disability income, and most group life and health products will follow *FAS 60*; *FAS 97* will embody all interest-sensitive products; *FAS 109* still applies for deferred taxes; *FAS 113* applies for reinsurance, and *FAS 115* does apply although at purchase, it really has no impact. However, it's generally believed that if a company has been on an historic GAAP basis, they have an opportunity to reclassify their investment portfolio between then available-for-sale and held-to-maturity investment classroom. It's arguable, and I've heard that you can do that.

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Other recent accounting activity has come from the Emerging Issues Task Force (EITF) of the Financial Accounting Standards Board. This group looks into various technical issues over time, and on occasion issues definitive pronouncements or "Issue Statements," that are intended to clarify other authoritative accounting literature.

There have been a number of EITF issues statements of importance to the subject of PGAAP. The most significant one, Issues Statement No. 92-9, has had a significant impact on purchase accounting. Simply stated, in most purchase situations, the purchase price will exceed the market on fair value of assets over the fair valuation of liabilities. This excess will generally be distributed between two items of intangible assets. One is the so-called value of business acquired (VOBA). There are different names for it. The second item is goodwill.

For many prior transactions, the VOBA value historically had been calculated on a "return-on-investment" or "risk rate-of-return" basis. It was also amortized on a risk rate-of-return basis. The beauty of this approach was that you had an opportunity to show a post-purchase profit stream based on the assumed risk rate of return. We'll see that in one of the examples presented a little bit later.

Issues Statement 92-9 still allows you to calculate the initial VOBA on a risk rate-of-return basis. However, when amortizing VOBA for *FAS 60* business, you have to use the assumed GAAP earned rate (less for adverse deviation) margin. For *FAS 97* products, you have to use the assumed credited rate. What this tends to do, as we'll see in another example, is that it delays the PGAAP earnings stream. Thus the risk rate of return is depressed in the early years after purchase.

Other relevant EITFs deal with the recognition of liabilities and the disposition of assets in purchase business transactions and define proper accounting for those two areas. For example, Issues Statement 95-21 deals with assets to be disposed of on or after a purchase transaction, and how to report them on the transaction date.

Now, the purchase GAAP balance sheet might be very simplistic, as in Table 1. Table 1 illustrates this format of PGAAP, although it purposely doesn't have any numbers in it. One important aspect

of purchase accounting is that assets will be marked-to-market value or fair value, if market is not available. That means stocks and bonds have available market quotations. Not unsurprisingly, real estate may require appraisals. Many other investments have no market values available and require fair-value approximations. This becomes the new cost basis for all assets at the date of purchase.

**TABLE 1**  
**Illustrative PGAAP Balance Sheet**  
**PGAAP Balance Sheet as of Purchase Date**

<b>Assets</b>		<b>Liabilities</b>	
Investments	A1	Policy reserves	L1
Value of Business Acquired	A2	Claim reserves	L2
Goodwill	A3	Deferred taxes	L3
Other Assets	A4	Other liabilities	L4
		Total liabilities	L-Sum
		Equity (purchase price)	PP
<b>Total Assets</b>	<b>A-Sum</b>	<b>Total liabilities and equity</b>	<b>L&amp;E-Sum</b>

Comments:

1. At the time of acquisition, all investments (A1) are marked to market or fair value. This becomes the new book-value basis for subsequent reporting.
2. Liability items L1 and L2 are restated using appropriate PGAAP assumptions and methodology as of the date of acquisition. The *FAS 60, 97 or 120* accounting models apply, in the same manner as for historic GAAP reporting.
3. The value of business acquired asset (A2) is similarly calculated, reflecting the acquiring company's profit profile for similar products and the same assumptions used for reserves. The asset is generally gross of federal income taxes and is often similar to the company's appraisal value.
4. The deferred tax liability, L3, (which may be an asset, if a credit) reflects the applicable tax rate times the temporary timing differences between the PGAAP and tax basis entries for investments, reserves, and the value of business acquired.
5. The purchase price, net of certain adjustments, (PP) becomes the equity of the acquired company as of the date of purchase.
6. Goodwill (A3) is the balancing item and reflects the acquiring company's perceived value placed on certain intangibles believed to have an ongoing value to the organization, like new business capacity, reputation and management experience.
7. Post acquisition, all new business is treated under normal historic GAAP accounting rules.

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Another significant thing is that at the time of purchase, assuming a 100% acquisition, shareholders equity of the acquired entity becomes the purchase price. In addition, when we cast the balance sheet, all actuarial liabilities must be restricted to a current assumption (CA) basis; that is, using assumptions current at the time of acquisition, and consistent with the historic GAAP assumptions used for other new business of the acquiring or acquired entity.

Then you have the intangible assets VOBA and goodwill (excess purchase price). Generally, the excess purchase price is defined as the amount by which equity (purchase price) investments at market less liabilities at fair value, on a current assumption basis. Total excess purchase price is split generally between the goodwill and the VOBA elements.

Now let's discuss PGAAP reserves and how they are calculated. As stated earlier, the calculations must be made in accordance with *FAS 60* or *FAS 97*, as appropriate. There were two methods defined by Interpretation 1-D: the "defined initial reserve method" and the "defined valuation premium method." Reserves under the defined initial reserve (DIR) method can be values like statutory reserves or historic GAAP reserves. Valuation net premiums and the initial VOBA amount must be balance measured from that reserve. The DIR method has been the least popular method by far.

By contrast, the most popular method has been the defined valuation premium method (DVP). Subsequent to the issuance of *FAS 97*, a variant of the DVP method was defined for interest-sensitive business called the defined gross profits (DGP) method. If you recall, when Interpretation 1-D first came out, *FAS 97* was not in existence.

Basically, for *FAS 60* products, most companies use an unloaded gross premium approach, and current assumptions, which really are based upon a best estimate of what's going to happen in the future in addition to a reflection of what the acquiring company expects for that business based on recent experience. The percentage that companies will use is in the air. This is what makes PGAAP so interesting. I've seen these percentages vary anywhere between 50% and 70% for traditional business. On *FAS 60* products, you still have the requirement for a provision for adverse deviations

(PADs) in the assumption. Under *FAS 97* products, you don't use PADs and the reserve is the same as or equal to historic GAAP reserves, that is generally the account value. Thus, generally no adjustments are made to reserves for *FAS 97*-type products. You may have an additional liability as you would under HGAAP for any policyholder bonuses and deferred revenue items.

Let's move on to the value of business acquired (VOBA). Generally, this asset is reported on a pretax basis. I'm told that's the way auditors want it, although it could be on an after-tax basis. In many respects, when determining how much VOBA to report on the balance sheet, there are many factors to consider. How much did we pay for this entity? What's the appropriate relationship among goodwill, VOBA, and equity? How will the rating agencies react? What are the investment bankers going to think? How will the investment community react to share values, subsequent to purchase?

In many situations, if there has been an appraisal of the company, the initial VOBA value will be comparable to the pre-tax appraisal value. But it's certainly not the same for a number of reasons. One reason is that appraisal value is generally done using statutory reserves and VOBA is calculated using PGAAP reserves.

Another is that VOBA includes *FAS 60* products, whereas appraisal value does not. Thus, the values will be necessarily different. However, there is a commonality between the two values and it makes sense, especially given that, like VOBA, appraisal value should represent the value of the business acquired.

An important concept in defining VOBA is that it allows for a reasonable profit to flow from the business, post purchase. Reasonable is often defined as a profit level that is consistent with the acquiring company's profit margins in business being sold today.

There are two ways you can estimate the initial VOBA. Let's consider a simple example for a *FAS 60* product to demonstrate the two methods. Let's say for the moment that the reserve, the PGAAP, equals the present value of future benefits and maintenance expenses based on current assumptions, minus 60% of the future gross premiums. Let's also say that you determine that a reasonable profit

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to flow from the business is 10% of premium, on a pretax basis. Then, you would establish a VOBA as 30% of the present value of future gross premiums. A 10% of premium profit will flow out plus, of course, the release of any margins or PADs in the assumption and any variations in your experience from the assumptions.

A second approach calculating VOBA is to discount all premium not going into reserves for benefits and maintenance costs, or 40% in our example (100% less the 60% valuation premium), at a risk rate of return (15% in our example). In fact, there is a risk rate of return that would match that 10% profit level of the first approach. So you could come to the same initial VOBA amount under the two approaches. Many companies test their calculations for reasonableness by using both methods. Generally, however, companies that I've seen favor the second approach because it's easier to understand among nonactuaries, such as investment bankers who understand the concept of a return on equity better than percentage of premium profit margins.

However calculated, you still have to amortize the initial VOBA as defined by EITF Issues Statement 92-9, in relation to premium for *FAS 60* products and estimated gross profits for *FAS 97* products, using either the assumed earned rate or the assumed credited rate.

I would like to refer to two examples. The first is in Table 2. This is a 10-year *FAS 97* product. If you discount the stream of estimated gross profits at 15%, you would get what's shown in the third column. Column 4 in the top section shows how PGAAP profits would flow under the old method, prior to the issuance of EITF 92-9. After providing for deferred federal income taxes, it can be shown that a 15% return on equity (ROE) is the result if experience matches the assumptions.

EITF 92-9 changed that. Let's assume for the moment that the future credited rate will be 6% and will remain 6% in all future years. You will get a VOBA stream as indicated in the middle of the page, in the third column. Note that the initial VOBA is the same in both cases because it was calculated using a 15% risk rate of return, the desired ROE percentage in this example. You amortize that VOBA by taking the previous year's VOBA and adding 6.5% interest and subtracting a constant

**TABLE 2**  
**Illustrative PGAAP Earnings and Equity Patterns**  
**FAS 97 Product**  
**Old ROI method versus the EITF 92-9 Method**

		Method 1 - Old ROI Basis					
Year	Estimated Gross Profit	VOBA @ 15%	GAAP Pre-Tax Profit	Deferred FIT	GAAP Equity	After-tax Earnings	GAAP ROE
0		\$4,634		\$1,622	\$3,012		
1	\$800	4,529	\$695	1,585	2,944	\$452	15%
2	850	4,358	679	1,525	2,833	442	15
3	925	4,087	654	1,431	2,657	425	15
4	1,000	3,700	613	1,295	2,405	398	15
5	1,050	3,205	555	1,122	2,083	361	15
6	1,075	2,611	481	914	1,697	313	15
7	1,040	1,963	392	687	1,276	255	15
8	980	1,277	294	447	830	191	15
9	860	609	192	213	396	125	15
10	700	0	91	0	0	59	15
		Method 2 - EITF 92-9					
0		\$4,634		\$1,622	\$3,012		
1	\$800	4,379	\$545	1,533	2,847	\$354	12%
2	850	4,073	544	1,426	2,648	354	12
3	925	3,695	547	1,293	2,402	356	13
4	1,000	3,241	545	1,134	2,106	354	15
5	1,050	2,722	531	953	1,769	345	16
6	1,075	2,152	505	753	1,399	328	19
7	1,040	1,569	457	549	1,020	297	21
8	980	990	401	347	644	261	26
9	860	457	327	160	297	212	33
10	700	0	243	0	0	158	53
Comparison of Earnings					Comparison of Equity		
	Method 1	Method 2	Difference	Cumulative Difference	Method 1	Method 2	Difference
0					\$3,012	\$3,012	\$0
1	\$452	\$354	\$(97)	\$(97)	2,944	2,847	(97)
2	442	354	(88)	(185)	2,833	2,648	(185)
3	425	356	(69)	(255)	2,657	2,402	(255)
4	398	354	(44)	(299)	2,405	2,106	(299)
5	361	345	(16)	(314)	2,083	1,769	(314)
6	313	328	16	(299)	1,697	1,399	(299)
7	255	297	43	(256)	1,276	1,020	(256)
8	191	261	69	(187)	830	644	(187)
9	125	212	88	(99)	396	297	(99)
10	59	158	99	0	0	0	0

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percentage of the estimated gross profits in that year. It's the typical amortization pattern than you would find for DAC under *FAS 97*. The significant thing here is that EITF 92-9 speeds up the amortization process and reduces PGAAP earnings in the early years as shown in the final two columns.

There's a similar example given in Table 3 for a *FAS 60* product. In this example, I didn't show the ROEs. However, I added one to Table 3 based on a fairly broad assumption. Column 2 shows the estimated PGAAP profit stream for a 20-year product, based on premium. It represents all premium not needed for benefit and maintenance expense reserves. Column 3 is the discounted value of that profit stream at 15%. Actual profits each year would be Column 2 plus the release of PADs and experience variations. Column 5 shows the value of business acquired (VOBA) asset at a 7% discount rate, the assumed earned rate. The broad assumption used in this example is that the purchase price would be based on the 7% discounted value of the profits in Column 2 (\$132,703 at purchase). Obviously, that's not the way things are done in practice, but for demonstration purposes, it allows us to define it as goodwill. Thus the initial VOBA is \$90,996 (the result of discounting Column 2 profits at 15%) and goodwill is \$46,707 (or \$132,703 less than the \$90,996 initial VOBA). In reality, other adjustments will impact goodwill like "marked to market" asset adjustments.

Goodwill in a transaction is normally amortized using a straight line method over the amortization period, which is generally 20-25 years in a life insurance company. Since profits are more front-ended on business, you can slow down amortization of the excess purchase price and improve PGAAP earnings by putting more into goodwill. Ideally, you would like to get excess purchase price into goodwill, if you could, because it's going to be amortized over 20-25 years using the straight line method. But you know you can't do that, because of the accounting rules and it would look bad on the initial balance sheet to investors and rating agencies.

TABLE 3

**PGAAP Pre-Tax Earnings Comparisons  
Old ROI and EITF 92-9 Methods  
FAS 60 Product**

End of Year	Gross PGAAP Profit	VOBA @ 15%	VOBA @ 7.0%	VOBA Under EITF 92-9	Before Goodwill Amortization		After Goodwill Amortization	
					Pre-Tax Inc. ROI Method	Pre-Tax Inc. EITF 92-9	Pre-Tax Inc. ROI Method	Pre-Tax Inc. EITF 92-0
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0		\$90,996	\$132,703	\$90,996				
1	\$21,400	83,246	120,592	82,692	\$13,649	\$13,095	\$11,564	\$11,010
2	20,200	75,533	108,834	74,629	12,487	12,137	10,402	10,052
3	18,400	68,463	98,052	67,236	11,330	11,007	9,245	8,922
4	16,900	61,832	88,016	60,354	10,269	10,018	8,184	7,933
5	15,400	55,707	78,777	54,018	9,275	9,065	7,189	6,979
6	13,800	50,263	70,491	48,337	8,356	8,118	6,271	6,033
7	12,400	45,402	63,026	43,218	7,539	7,281	5,454	5,195
8	11,300	40,912	56,138	38,494	6,810	6,577	4,725	4,491
9	10,300	36,749	49,767	34,126	6,137	5,932	4,052	3,846
10	9,400	32,862	43,851	30,069	5,512	5,343	3,427	3,258
11	8,600	29,191	38,320	26,277	4,929	4,808	2,844	2,722
12	7,900	25,670	33,103	22,699	4,379	4,322	2,293	2,237
13	7,200	22,320	28,220	19,351	3,850	3,852	1,765	1,766
14	6,600	19,068	23,595	16,180	3,348	3,429	1,263	1,344
15	6,000	15,928	19,247	13,198	2,860	3,018	775	933
16	5,500	12,817	15,094	10,350	2,389	2,652	304	567
17	5,000	9,740	11,151	7,646	1,923	2,296	(163)	211
18	4,600	6,601	7,332	5,027	1,461	1,981	(624)	(104)
19	4,200	3,391	3,645	2,499	990	1,672	(1,095)	(413)
20	3,900	0	0	(0)	509	1,401	(1,577)	(685)
Ratio 15% to 7% Present Values			68.571%					
Set goodwill = (4) - (3)		41,707						

This example simply assumes that the purchase price is equal to the present value of PGAAP profits, discounted at the assumed PGAAP earned rate of 7%. The PGAAP profits represent a level percentage of premiums plus release of margins.

The initial VOBA is defined as the same PGAAP profit stream, discounted at 15%. Note that the amortization of the VOBA at the ROI rate is no longer permitted under EITF Issue 92-9.

Goodwill is assumed to be amortized straight line over 20 years.

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The idea is to get a proper balance between the value of the acquired business and goodwill. The last four columns of Table 3 show PGAAP profits before and after goodwill amortizing on both the old ROI approach and the EITF 92-9 approach. Columns 8 and 9 demonstrate that goodwill reduces PGAAP earnings. You can also see that under EITF 92-9, the earning stream is slowed down (Columns 7 and 9).

Just a couple more things. Goodwill is that portion of the excess purchase price paid for the true intangible value of the company. It represents reputation, future marketing capability, the quality of management, and other things.

An important question is what should goodwill be associated with? Can it be or should it be associated with the business acquired, or should it be associated with the other items mentioned above? It is generally felt, and it's also my belief, that goodwill should not be associated with the existing business in force. It should be associated with *future* intangibles, contributing to price and the purchase decisions, such as the target company's established marketing capabilities in desired market segments.

Goodwill, however, does have a "price." It leads to reduced PGAAP earnings, at least in the early years immediately following purchases. The hope is that, as time passes, earnings will improve as the leverage gained from the intangible items acquired take effect (increased sales, reduced unit costs, broadened markets, improved profit margins).

At the end of the day, your PGAAP profits will be your planned for-profit margin flowing out of the business, plus the release of any PADs on *FAS 60* business, plus any variances from the expected experience (which is basically for all GAAP), minus federal income tax and minus goodwill amortization. If you're doing line-of-business analysis of profits and returns, you will probably exclude goodwill from the analysis, for the reasons listed above. The PGAAP return on equity, however defined, should probably not be affected by amounts paid for future intangible items that have nothing to do with the existing business in force.

Next let's discuss taxes. This is a very difficult area and I'm next to two very qualified tax actuaries. Therefore I'm going to be very careful and only say simple things so I don't get in trouble. Taxes often drive transactions, as you know. The tax structure of an organization, both before and after a transaction, is very important and, in most cases, is quite complex. The tax accounting rules of *FAS 109* apply.

Simply stated, there are two types of transactions -- "taxable" transactions and "nontaxable" transactions. The so-called "nontaxable" transactions generally involve the straight purchase of the stock of the targeted entity. The tax basis of the acquired assets remains unaffected. Any deferred tax asset or liability results from applying an appropriate tax rate to the temporary timing differences, just as under a regular tax return. But in this case, timing differences are between PGAAP and tax basis items. The calculation is fairly standard, similar to the determination of deferred taxes under HGAAP.

Under a "taxable" transaction, you treat the transaction as a purchase of the acquired company's assets. Under this type of transaction, you will hear of things like the IRC Section 338h(10) election, where you "step up" the basis of the company's assets and liabilities. Thus, the purchase price is allocated to the tax basis of the assets and the liabilities. Section 197 of the 1993 Tax Act applies to all tax-basis intangible values. This includes both tax-basis VOBA and tax basis goodwill. A straight-line 15-year period of amortization is provided for under Section 197.

It's important to note that deferred taxes are not required on a PGAAP balance sheet for any nonamortizable GAAP goodwill. The rules defining amortizable and nonamortizable goodwill are complex and will not be covered here.

Let me close by referencing three additional tables. Tables 5 and 6 show what the balance sheet might look like at purchase, under a statutory, historic GAAP and purchase GAAP basis under two situations. The first situation in Table 5 is the most common, where you have positive goodwill. The second is a bit more technical and complicated and involves negative goodwill (Table 6).

**TABLE 5**  
**Balance Sheet Comparisons**  
**Situation of a Positive Goodwill**  
**As of Date of Purchase**

Balance Sheet Item	Statutory Basis	Historic GAAP	Purchase GAAP
Investments	\$6,000	\$5,800	\$6,300
Other Assets	200	125	125
Deferred Acquisition Costs	0	800	0
Value of Business Acquired	0	0	750
Goodwill	0	0	199
<b>Total Assets</b>	<b><u>\$6,200</u></b>	<b><u>\$6,725</u></b>	<b><u>\$7,374</u></b>
Reserves	\$5,125	\$5,250	\$5,200
Other Liabilities	375	150	150
Deferred Income Taxes	0	137	224
Shareholders' Equity	700	1,189	1,800
<b>Total Liabilities and Equity</b>	<b><u>\$6,200</u></b>	<b><u>\$6,725</u></b>	<b><u>\$7,374</u></b>
	<b>Allocated Purchase Price</b>		
	<b>PGAAP</b>	<b>Tax Basis</b>	<b>Temporary Differences</b>
Investments	\$6,300	\$6,000	\$300
Other Assets	125	125	0
Value of Business Acquired	750	150	600
Reserves	(5,200)	(5,000)	(200)
Other Liabilities	(150)	(150)	0
Identifiable Net Assets	<b><u>1,825</u></b>	<b><u>\$1,125</u></b>	<b><u>\$700</u></b>
<b>Allocation:</b>			
Tangible Assets	6,425		
Value of Business Acquired	750		
Reserves and Other Liabilities	(5,350)		
Deferred Tax Liability	(224)		
Goodwill	199		
Purchase Price	<u>1,800</u>		

Both have identical fact situations except that in Table 5, you buy the company for \$1,800 and in Table 6, you buy the company for \$1,400. Thus, positive or negative goodwill come from the relationship of the purchase price to the related value of investments and liabilities. The thought flow included in these tables is similar to that presented by Art Schneider, of KPMG, in the *Record* discussion on "Purchase GAAP Issues," referred to previously. I structured my analyses on the content of his discussion. So if you want to get a more complete treatise on how taxes work in a purchase business combination, I refer you to his discussion.

I would like to add that when you get negative goodwill, you really end up showing zero goodwill on the PGAAP balance sheet. The accounting rules require you to eliminate negative goodwill against other noncurrent assets, such as the value of business acquired. The way you write it down is through the use of a simultaneous equation.

In Table 7, I show you how the simultaneous equation works for the example in Table 6. Try to follow these examples on your own, and if you have any problems, contact me or any one of the panelists.

**MR. FRIEDSTAT:** What we tried to do in these presentations is hit basically a half a dozen subjects, all of which could have been entire sessions. From this potpourri of topics, we have given you a flavor for GAAP and purchase GAAP. What I want to do now is give people an opportunity to ask questions. At some of the earlier sessions that I attended, I promised that we would deal with some GAAP issues relating to a separate account question. I want to start off with the question and answer session by asking the panel to talk about the appropriate credited rate on variable products for purposes of discounting the estimated gross profits (EGPs) in the amortization process. What have they seen in practice? Is it some sort of PAD to the assumed gross earnings rate? Is it reduced by mortality and expense (M&E) charges? Is it something other than that? What do you use when you combine it with a general account option?

**MR. ROBBINS:** Generally, I've seen the net investment income rate defined in the variable contract as the crediting rate. The net investment income rate is accruing to the policyholder.

**TABLE 6**  
**Balance Sheet Comparisons**  
**Situation of a Negative Goodwill**  
**As of Date of Purchase**

Balance Sheet Item	Statutory Basis	Historic GAAP	Purchase GAAP
Investments	\$6,000	\$5,800	\$6,300
Other Assets	200	125	125
Deferred Acquisition Costs	0	800	0
Value of Business Acquired	0	0	548
Goodwill	0	0	0
<b>Total Assets</b>	<b><u>\$6,200</u></b>	<b><u>\$6,725</u></b>	<b><u>\$6,973</u></b>
Reserves	\$5,125	\$5,250	\$5,200
Other Liabilities	375	150	150
Deferred Income Taxes	0	137	223
Shareholders' Equity	700	1,189	1,400
<b>Total Liabilities and Equity</b>	<b><u>\$6,200</u></b>	<b><u>\$6,725</u></b>	<b><u>\$6,973</u></b>
<b>Allocated Purchase Price</b>			
	<b>PGAAP</b>	<b>Tax Basis</b>	<b>Temporary Differences</b>
Investments	\$6,300	\$6,000	\$300
Other Assets	125	125	0
Value of Business Acquired	750	150	600
Reserves	(5,200)	(5,000)	(200)
Other Liabilities	(150)	(150)	0
<b>Identifiable Net Assets</b>	<b><u>1,825</u></b>	<b><u>\$1,125</u></b>	<b><u>\$700</u></b>
Initial negative goodwill (\$1,825 less \$1,400 purchase price)			\$ 425
Initial net temporary difference (\$1,400 purchase price less \$1,125)			\$ 275
Factor from simultaneous equation (see Table 7)			0.8126
Required adjustment (0.8126 x 275); value becomes the deferred tax liability			<u>\$223</u>
<b>Allocation:</b>			
Tangible Assets			\$6,425
Value of Business Acquired (\$750 PGAAP VIF less \$425 negative goodwill plus \$223 adj.)			\$548
Reserves and Other Liabilities			\$(5,350)
Deferred Tax Liability			\$(223)
Goodwill			(0)
<b>Purchase Price</b>			<b><u>\$1,400</u></b>

**TABLE 7**  
**Derivation of Simultaneous Equation**  
**For Negative Goodwill Situation**  
**In Table 6**

Facts	
1. Tax rate on income	0.35
2. Tax rate of capital gains	0.28
3. Pre-tax value of business acquired, PGAAP basis	\$750
4. Pre-tax value of business acquired, tax basis	\$150
5. Purchase price	\$1,400
6. PGAAP net identifiable assets (from Table 6)	\$1,825
7. Tax basis net identifiable assets (from Table 6)	\$1,125
8. Initial negative goodwill (5 - 6)	-425
9. Initial net temporary difference (5 - 7)	\$275

Let  $x$  = the required adjustment, which also represents the final deferred tax liability

Let  $y$  = the final adjusted value of business acquired

Let  $f$  = the adjustment factor to the initial temporary difference to get the required adjustment  
=  $x$  / the initial temporary difference; i.e.,  $f = x / 275$

Then the final deferred tax liability,  $x$ , can be expressed as follows:

$$\begin{aligned} x &= 0.35 * (y - 150) + 0.28 * \text{net capital gains (losses) on the revalued assets, or 300 from Table 6} \\ &= 0.35 * (y - 150) + 84 \end{aligned}$$

Thus, the first equation is  $x = 31.5 + 0.35y$

But to end with a zero goodwill, we also know that  $y - x$  must equal the sum of the pre-tax value of business acquired and the initial negative goodwill.

Thus,  $y - x = 325$ , and we have two equations and two unknowns.

Solving, we get  $x = 223$ , and  $y = 548$

Therefore,  $f = 0.8126$

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**MR. KUNESH:** I think that is right, but I don't think it's as clear cut a decision as one might think. Let's assume you expect to earn 9% on the assets in a separate account. You have 125 basis points of spread which is M&E. It's not simply the investment advisory fees involved. There has been an argument that in determining the spread, you take away only the investment advisory fee portion. Yet when I had this situation come up, I called the technical staff of the FASB plus a number of accounting firms, and everybody unanimously agreed that the rate should be 7.75% (in my example), a rate which fully removes all of the M&E fees.

**PANELIST:** I guess I would add that, under *FAS 97*, you have an option to lock in the rate used for discounting future gross profits in amortizing DAC at issue, based on your expectation at issue. Or you can let that rate float. If you take the second option, then this question is more important than if you take the first option. If you take the first option, you lock in your rate at issue. It's very subjective to determine what you think the assets in a separate account are going to earn. Basically you need to come up with a reasonable "expected" credited rate under that approach.

I also think that there's an advantage to that first option in terms of earnings emergence. Under the second option, you can have a lot of volatility in your DAC. Under the first option, the volatility is more controlled.

**MR. FRIEDSTAT:** And I'd agree with that. I strongly recommend that you consider using some sort of fixed rate, however it is defined.

**MR. DURAN:** By January of 1994 and then subsequently in July of 1994, they realized that if there was a major actual realization of those unrealized gains and losses, there would be a whole lot of other effects in the balance sheet. The SEC wanted those "as if" effects actually made and kind of netted against that separate component. That was that concept. The unrealized gains and losses and all of the consequences of those unrealized gains and losses, if they had been realized, would have ended up netting against each other in the separate component. There's a deferred tax applied to that.

**MR. ALLAN W. RYAN:** There is an article I wrote, as a matter of fact, for the August 1995 *Financial Reporter*. It sort of followed up from what Ed Robbins had written, and it talks about the *FAS 60* type adjustments. It's pretty consistent with what you said, Peter. And I think the key comment that was made before is, it should be viewed as a temporary balance sheet adjustment. The next year it's going away. So don't get confused with it being a long-term adjustment. It's viewed as purely a short-term thing that follows the accounting rules of *FAS 60* or whatever.

**MR. R. THOMAS HERGET:** I have a question for Dan or the other two panelists on purchase accounting. When we create the VOBA, that has an impact on goodwill. We eventually have two intangible assets set up on our balance sheet, and there's exhaustive recoverability and loss recognition rules for the VOBA, the deferred acquisition type asset. But I wondered if you could comment on the theory and practice of testing for recoverability of the goodwill? What should we do about goodwill and from what sources do we get revenue that support it?

**MR. KUNESH:** I will defer to the accounting types here, but in my view, because goodwill is to be associated with future value, I know of no reason to do recoverability testing on the goodwill item itself. I wouldn't do it.

**MR. ROBBINS:** I think I agree with that. Once VOBA is established, prospectively, you generally treat it like DAC. It is subject to normal recoverability testing.

**MR. FRIEDSTAT:** I would basically agree with that. I would just add one other observation. In my experience with VOBA purchase accounting, there has been a general shortening of the number of years over which you're amortizing your goodwill. It used to be almost commonplace to use a 40-year amortization period. As you heard, 20 years is getting to be much more common. There's a much greater emphasis I think, in making the period shorter, making it more reasonable, making it represent a period over which you could theoretically recognize some earnings related to these goodwill type items.

**MS. DIANE HEIM CHUN:** I have a couple of questions for Mr. Duran. On the loss recognition reserve for the benefit reserves, is there any literature out there on this that we can read? My second question is, when you look at *FAS 115*, are loss recognition adjustments on the balance sheet and not the income statement. Setting up a loss-recognition reserve is something that reflects real money on your balance sheet. My understanding was, when you set up a loss-recognition reserve, you have to amortize it over the line of the business and the whole length of the business. Do you have to bring the income or the expense into the income statement as well?

**MR. DURAN:** Let me answer your first question about whether there is any literature. Beyond the SEC pronouncements, I'm not really aware of any literature on the shadow loss recognition. There have been a number of articles on DAC.

**MR. FRIEDSTAT:** Let me refer you to something that is the basis of most of the interpretation. Emerging Issues Task Force Topic No. D-41 (EITF 41) is going to be the only thing that you will find. Frequently we are asked, as actuaries, to give the accounting support. But most of the interpretation that you'll find will lead back to that EITF. You can ask one of your accounting brethren for that.

**MR. DURAN:** As to your second question, I think the answer is no; the shadow-loss-recognition adjustments go directly to equity. You do recover them every time as if the previous time they had never happened. I call this a thought experiment because it's not what would actually happen. You didn't sell the assets in my example. So every time you do it again, it only affects equity.

**MR. FRIEDSTAT:** I think it's important to keep that in mind. It is only a shadow-loss-recognition calculation. Once you take loss recognition in the normal course of GAAP, that is the starting point for your GAAP going forward. The so-called shadow loss recognition is the picture at a point in time. And the so-called shadow loss recognition only goes through a surplus. It is something that is basically ignored at the end of the next accounting period. And maybe the confusion here is the term shadow loss recognition. It is not defined. You should use the term shadow in front of it because it's not truly like loss recognition, as you would normally encounter in GAAP.