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Session 14TS
GAAP Refresher

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Summary: Are you new to GAAP accounting? Have you not been able to keep up with recent FASB activities and their impact on GAAP reporting? If your answer is yes to either or both of these questions, then this teaching session is for you.

The instructors review the actuarial aspects, methods, and consideration of reporting under FAS 60, FAS 97 and FAS 115. Purchase GAAP accounting techniques and considerations are covered. Examples and financial statement case studies are used by the instructors to present this material.

MR. WILLIAM C. HINES: Before I joined Milliman, I worked for about 14 years at John Hancock. I lived and breathed this GAAP stuff in all its gory detail there as well. Joining me on the panel is Rob Frasca. He is a consulting actuary with Ernst & Young. Prior to joining Ernst & Young, he worked at Sun Life of Canada and New England Financial.

We've prepared a presentation that we hope is going to refresh you. Rob and I are going to work as a tag team to take you through the presentation. We've scheduled some time at the end for questions from the audience.

This is a brief overview of where we're going to be headed. I'm going to start with an overview of the goals and methods of GAAP accounting and a quick overview of some sources of guidance. Rob is going to start on the topic of expenses and how they're defined under GAAP. We'll trade off throughout the rest of the presentation.

U.S. GAAP is what I will call a deferral and matching type of accounting system. Nonlevel benefits and expenses are deferred and matched against the associated revenues. In this way, GAAP tries to recognize profit in relation to how complete a contract is. The primary focus in GAAP is really on earnings, and it has an income statement focus.

The balance sheet is essentially made to comply through the operation of such items as deferred acquisition cost assets and unearned revenue liabilities. Generally, GAAP requires the use of best-estimate assumptions when developing financial statement values.

For insurance products, GAAP has specific guidance with regard to revenue definition and recognition and the policyholder liability calculations and recognition. Both of these tend to be product specific. There is also guidance on acquisition costs, taxation, and reinsurance, which are less based on product orientation, although you can certainly make the argument for reinsurance.

I think it's helpful to keep in mind the two major objectives of GAAP accounting with regards to relevance and reliability. These are not always consistent with each other, and you may find situations where you need to trade off between the goals of both of these objectives.

Relevance tends to mean timely financial statements. It's not very useful to get a financial statement many years down the road. If there is a long period between when you're reporting on the information that's contained in the financial statement and the period the financial statement covers, then a lot of things can happen, and there's less relevance to that financial statement.

Consistency is important, especially from accounting period to accounting period; therefore, you can evaluate the progress of management. Comparability between enterprises and an appropriate level of detail is important. A single-line income statement with just income doesn't tell you a lot about how income was actually produced. An appropriate level of detail is necessary.

Reliability, as you can imagine, is just as important. It helps to have an objective standard of accuracy, as opposed to everyone determining how accurate they want to be. It must be verifiable. A third party or an auditor should be able to come in and actually verify how good that number is and be able to reproduce the numbers that are in the financial statement. You tend to avoid being too conservative. GAAP doesn't want you to be too conservative or too aggressive in the range of values. As you can imagine, it takes more time and is more difficult to produce something that is more verifiable and that has a higher objective standard of accuracy.

There are some sources of guidance for accounting. There is a hierarchy to the guidance under U.S. GAAP accounting. Of course, the SEC has ultimate responsibility for regulating public companies, but it tends to leave the accounting standards setting to other parties. The primary body is the Financial Accounting Standards Board, which promulgates financial accounting standards. Next would be the American Institute of Certified Public Accountants (AICPA). It typically publishes their guidance in industry audit guides and statements of position. I believe the AICPA released a new audit guide for the life and health insurance industry in 2000. There's also FASB's Emerging Issues Task Force, and its efforts often result in authoritative guidance as well. There are other sources such as practice bulletins that are published by the AICPA and implementation guides that are questions and answers from the FASB. There's also an actuarial standard of practice that you should be aware of. ASOP 10 really sets out the considerations for actuaries who take part in the preparation of financial statements under GAAP accounting.

There are some major accounting pronouncements and guidance that affect insurance contracts. Because we'll be going over most of these individually, I'm not going to go over them now. It's good to have a listing of the major ones to refer back to. Rob will now discuss the topic of expense.

MR. ROBERT G. FRASCA: When you're dealing with expenses under GAAP, you have to divide your expenses into three main categories. You have to decide whether expenses are acquisition expenses, maintenance expenses, or overhead expenses. Beyond that, you have to make a further distinction within the acquisition expense category regarding whether they are deferrable acquisition expenses or nondeferrable acquisition expenses. Depending on the treatment that you decide upon for expenses, it's going to have a very different impact on your income statement and on your balance sheet.

For deferrable acquisition expenses, you're going to capitalize those expenses and spread them out over a period of time. It'll come through the income statement over many years.

Nondeferrable acquisition expenses will hit income immediately when incurred.

Maintenance expenses, in general, will be brought in via actuarial models. I'll talk a little bit about what that means later on, but essentially the treatment of benefits is going to be similar to the treatment of maintenance expenses. They're treated very similarly.

Finally, overhead expenses are going to come right through your income statement as they are incurred. There are very different treatments that depend on the category, and it's very important to get the categorization right.

FAS 60 gives us some guidance on how to determine what is a deferrable and nondeferrable acquisition expense. It says, "costs that vary with and are primarily related to the acquisition of new and renewal insurance contracts." Those are the deferrable acquisition expenses. The two key phrases to focus on are *vary with* and *primarily related to*.

The term *vary with* is basically saying that you want to have a linear relationship. Think of your acquisition costs on one axis of a graph and the amount of business that you produce on the other axis. You'll want to have a nice linear relationship and that would be a *vary with* criterion.

The most obvious *vary with* criterion would be commissions. In that case, if you get a new premium, you're going to pay commissions. If you don't get the premium, you're not going to pay commissions. That's an acquisition cost that clearly varies with production.

At the other extreme, you'll have expenses that don't vary at all with production. Unfortunately, life is somewhat complicated in that most expenses are somewhere in between. Take underwriting expenses, for example. You can visualize that just bringing on one additional policy isn't going to increase your underwriting expenses at all. But if you take a step back, and looked at that graph at a wider level, you'd see that it pretty much has a linear pattern to it. If you're going to put on twice as much business, you're going to have twice as much acquisition expense and twice as much underwriting expense. So that would be an expense that, while not exactly linear, would meet the *vary with* criteria. There's a lot of judgment that goes into determining when that threshold has been passed.

The other item is termed *primarily related to*. That means it's a reasonableness test. Are the expenses really related to the acquisition of new business? The sales and the money you spend on landscaping in your home office might reflect a perfect linear relationship. Landscaping costs are not deferrable acquisition costs because they are not primarily related to acquiring new business. You want to make sure it passes the reasonableness test and that there's a cause-and-effect relationship.

In terms of expense classifications, examples for deferrable acquisition would be underwriting and any commissions that are in excess of ultimate commission levels. For example, if you have a 1% ultimate commission level, and your first-year commission is 10%, then you'd be able to defer 9% of commissions. Things like production bonuses and some agency expenses are deferrable expenses. Agent incentives that are related to production clearly would be deferrable expenses. Issue expenses are another example.

In terms of nondeferrable expenses, market research and advertising are generally not considered deferrable expense. Things like premium accounting or anything that you need to keep the business in force or to keep the business on the books would be a maintenance expense. That 1% ultimate commission level is a maintenance expense. Finally, in the overhead category are items such as executive salaries.

So that's a brief rundown of expenses. The only words of wisdom that I will pass on are, when it comes to classifying expenses and determining what's what, leave it up to the accountants. They like to do that type of thing, and they're good at it. It's important to know what they mean, but don't get involved in deciding what's what.

FAS 60 was a pronouncement of the FASB that was promulgated in 1982. It did three main things. First, it defined two types of business: short-duration contracts and long-duration contracts. In particular, we're going to be concerned with long duration contracts. This would include nonpar whole life insurance, long-term-care insurance, disability income insurance, and traditional insurance where the premium is coming in over a long period of time, and the expectation is that the benefits will be paid out over a long period of time as well.

The second thing that *FAS 60* did is define the revenue stream. It set the definition of revenue to be synonymous with the definition of premium for these types of contracts. If you can at least determine what the premium stream is, you can determine what the revenue stream is. As William pointed out before, GAAP is very concerned with the matching principle of revenue and expenses, and it's important to know what your revenue stream is. *FAS 60* did that for us.

Finally, *FAS 60* talks a lot about deferrable acquisition costs. It gave us the language and the mechanism to defer acquisition costs for these types of contracts. I'll get into how that's done. Again, the matching principle derived things here.

Let's talk about reserves under *FAS 60*. Under *FAS 60*, you use a net level premium method for determining reserves. In determining your reserves, you're going to take into account all material obligations that are necessary in order to mature your business. That includes things like death benefits, health benefits, maintenance costs, and surrender benefits. In the case of a stock life insurance company, there are dividends as well. The only material item that's not included would be federal income taxes. Those are not included in your reserves.

Tables 1–3 are very very basic. You can see the parallel when we get to a DAC discussion. The net premium reserve in Table 1 would take in the present value of benefits and maintenance expenses, divided by the present value of premiums to come up with your net premium ratio. In this example, it is 73.4%. You can just take that ratio year by year and multiply it by your gross premium. You're going to see what the net premium is. The net premium is supporting your benefits and your maintenance expenses.

TABLE 1
Benefit Reserves
Benefit Net Premium

= The portion of gross premiums required to provide for all benefits and maintenance expenses		
	<u>Year 1</u>	<u>Year 5</u>
Gross Premium	\$1,000	\$650
PV Benefits & Maintenance Expenses/PV Premium (at issue) = \$4,847/\$6,606 = 73.4%		
x Gross Premium = Net Premium	\$ 734	\$477

We all know there are two ways to look at reserves: a prospective view and a retrospective view. In a prospective view, you have the present value of future benefits and expenses minus the present value of future premiums. This gives you your reserves. In the example in Table 2, there is \$417 at the end of year one and \$1,140 at the end of year 5. Just bear with the simplicity of this part of the presentation because we'll draw into it when we talk about DAC later.

TABLE 2
Benefit Reserves
Prospective View

	Year 1	Year 5
PV of Benefits & Maintenance Expenses	\$ 4,777	\$ 4,120
– PV of Net Premiums	(4,360)	(2,980)
= Benefit Reserve	\$ 417	\$ 1,140

Table 3 shows the retrospective view. You can build your reserves by starting with the ending reserve from the prior period, adding in the net premium, and subtracting your maintenance expenses and the benefits. You add interest and you get the ending reserve. It is the same number that you come up with when you use a prospective method.

TABLE 3
Benefit Reserves
Retrospective View

	Year 1	Year 5
Reserve B.O.Y.	\$ 0	\$1,065
+ Benefit Net Premiums	734	477
– Maintenance Expenses	(100)	(65)
+ Interest	38	89
– Expected Benefits	(255)	(426)
= Reserve E.O.Y.	\$ 417	\$1,140

Let's talk a little bit about DAC. DAC is a balance sheet item. It's an asset on your balance sheet, and it represents the outstanding balance of deferrable acquisition costs. DAC is amortized against your revenue stream under *FAS 60*. In this context, you can think of it as being very similar to a reserve concept. Reserves are really a means of amortizing your prospective benefits over your premium stream. DAC is amortizing your acquisition costs over your premium stream.

There is one concept about this amortization method that is unusual within the accounting profession. It is the idea of including an interest component into how you are amortizing an expense. Accountants generally don't include interest when they amortize things, but DAC, under *FAS 60*, includes this interest component. It's built in with this whole reserve type of concept. As I say, that's unusual but not unique within the accounting profession.

Let's draw the parallel to reserves. The way you would calculate the amortization of DAC is you would first come up with what's known as a K factor or the DAC amortization rate. You can do this in a way that's very similar to how you calculated that premium reserve. You take the ratio of the present value of the deferrable expenses and the present value of the gross premiums, and that becomes the amount that you're going to amortize against the premiums in every period.

Based on the present value of deferrable expenses of \$1,300 and the present value of gross premiums of \$6,606, we came up with a ratio that was 19.7% (see Table 4). At every point in the future, you can project how much of that DAC you're going to amortize. It's just going to be that 19.7% applied against the gross premium in that period. In this example, it is \$197 in year one and \$128 in year five (see Table 5).

TABLE 4
DAC Amortization Rate (K factor)

= The percentage of gross premiums (calculated at issue) required to provide for deferred policy acquisition expenses	
PV of Deferrable Expenses	\$1,300
PV of Gross Premiums	\$6,606
Amortization Rate	19.7%

TABLE 5
DAC Expense Charge

=	The portion of gross premiums required to provide for deferrable acquisition expenses	
	Year 1	Year 5
	19.7%	19.7%
x	\$1,000	\$ 650
=	\$ 197	\$ 128

If we go back to the retrospective view and the prospective view of a reserve, we know that you can do the same thing with DAC (see Table 6). It's very convenient to think of DAC using the retrospective view because it gives you the means of doing a DAC roll forward and of showing how you got from your DAC from your prior period to your current period DAC. It is very similar to a reserve concept. You take your beginning DAC and add your new deferrable expenses. You take out the DAC expense charge that we calculated in the prior step, add interest, and that gives you your ending DAC balance. The ending DAC for year one is \$1,169 and \$799 at the end of year 5 (see Table 7).

TABLE 6
Rollforward View

	Year 1	Year 5
	\$ 0	\$ 882
+	1,300	0
-	(197)	(128)
+	66	45
=	\$1,169	\$ 799

TABLE 7
Prospective View

	Year 1	Year 5
	\$1,169	\$799
-	(0)	(0)
=	\$1,169	\$799

This is very consistent with what's called the worksheet method of dealing with DAC.

Companies will establish a DAC worksheet when business is sold, and it will show how much DAC they expect to amortize in each accounting period until the business runs off the books. All they have to do is adjust that stream to recognize the actual in-force business. For example, if they originally projected that they were going to have X number of policies five years from now, and it turns out that they have half as many, then they're going to have to adjust the schedule to write off half the DAC. You can't have DAC hanging around for business that you don't have anymore.

The other way to look at DAC is to use a prospective method. Again, the present value of future charges minus the present value of future deferrable expenses, gives you your DAC balance for that period. It is the same number that you obtained from the retrospective method. Many companies like this approach because it ties in very nicely to a reserve approach. You can use your reserve systems to calculate DAC, if you're using a prospective method. A prospective method also automatically adjusts for the in-force business. You're not going to calculate DAC using this method on business that is not in force because it's just not going to be there to do the calculation. The only drawback to developing a DAC roll forward is it can be more difficult. For that reason, accountants tend to like a worksheet method.

Let's talk a little bit about assumptions on *FAS 60* products, and this applies to reserves and to DAC. Under *FAS 60*, you should start with your best-estimate assumptions. They are going to tie in with prior experience. They might not be your pricing assumptions, but they are going to be closely related to them as well. You're going to add a small provision for adverse deviations. A small provision for something like mortality might be 5% or 10%; for morbidity it might be 5% to 15%. Your interest rate assumption will start with your best-estimate and maybe take off anywhere from 25 basis points to 75 basis points. I'm not entirely sure why, but companies don't typically pad their lapsed assumptions.

Assumptions are locked in at issue, and you usually can't change them, with a few exceptions. One of the exceptions we'll talk about later is called loss recognition, and the other exception has to do with things like guaranteed renewable business. It is a relatively small piece of the universe of business that you might be concerned with, but you should be aware that these special cases exist.

Allow me to summarize the *FAS 60* part of this talk and the things that distinguish *FAS 60* type business from other business that we're going to talk about. William is going to talk about *FAS 97* business in a minute. The defining features of *FAS 60* are (1) the premiums define the revenue stream, (2) DAC is amortized against premiums and, as a result, (3) profits tend to emerge as a level percent of premiums. Again, the reserves take your benefit stream, and amortize it against premiums. DAC is being amortized against premiums. Your acquisition costs are being amortized against premiums. Your maintenance expenses are being amortized against premiums. So just about all of the major components of your income statement are being amortized against premiums. So you should expect that your profitability will come out as a level percentage of premium.

There are some reasons why it won't come out that way. There are things like overhead expenses and nondeferrable acquisition costs and those sorts of things. But, generally speaking, and this is what GAAP is trying to get at, you have a revenue stream that's defined as premium, so you should see your profitability coming out in that same pattern.

Finally, the fact that assumptions are locked in at issue is clearly a defining feature of *FAS 60* type business. I'll turn it back to William, and he'll talk about *FAS 97*.

MR. WILLIAM HINES: Rob mentioned that *FAS 60* came out in 1982. There was a whole new type of product, universal life type products, that came out in the 1980s. They provided a lot of flexibility to the policyholders with regards to how much of and when they pay their premium.

It became pretty clear that the *FAS 60* approach of basing the revenue stream, the DAC amortization stream, and the reserve stream on premium was going to be hard to implement for universal life products because of the options the policyholders had with regards to how and when they paid premiums.

So *FAS 97* was put out in 1987 in response to the valuation issues around universal life type contracts and other long-duration contracts, like individual deferred annuities, that had very little insurance protection. It also accounted for a little bit of limited-pay contracts.

FAS 97 introduced a deposit-type accounting method where premiums received were not counted as revenue; instead, they were booked directly to the policyholder's account value directly on the balance sheet. As such, the *FAS 97* policyholder liabilities were essentially set to the policyholder's account value, for a benefit reserve. There were a couple of other provisions for additional liabilities to account for unique features of universal life type products. For example, many different universal life type products had significant front-end loads, as opposed to traditional participating or nonparticipating whole life products, which had a fairly level premium and a fairly level load structure throughout the life of the premium pattern. Universal life type products tended to put more of that load upfront because of the riskiness of the policyholders options. The policyholders could choose not to pay their premiums or to pay a smaller amount of premiums.

With the concept of trying to match expenses and revenues again, FASB kept the deferability, capitalization and amortization of the upfront acquisition expenses, but it did the same thing with the upfront loads. FASB wanted those to be capitalized into a liability and amortized into revenue in a level way over time as well. It came up with an unearned revenue liability that needs to be capitalized and amortized in exactly the same way as the DAC balance.

As with *FAS 60*, there is a DAC. It represents the same thing that Rob was talking about, which is the unamortized capitalization or unamortized balance of the acquisition expenses. This is an asset on the balance sheet. However, unlike *FAS 60*, the amortization stream itself is not premiums. The amortization stream is something called gross profits. Gross profits include such

items as cost of insurance (COI) charges that you might collect off the product, expense charges, surrender charges, and any earned investment spread that you would earn off the product. As long as you could define those things, you could define your revenue stream. With universal life type products, where a lot of those charges are very explicit within the contract itself, it made it fairly easy to define what revenue is under *FAS 97*.

I have some numerical examples that are similar to what Rob used for *FAS 60*. You go through the same process of determining how much of your revenue stream, on a present value basis, you're going to use to amortize your acquisition expenses. Again, you take your present value of deferrable acquisition expenses, divide it by the present value of your gross profits that you expect to get the amortization rate.

The unique thing about *FAS 97* is that, as your actual profits emerge, you put those in place of the estimated gross profits that you calculated at issue and restate your DAC balance today, as if you had always known that information. This is a little different from the lock-in of assumptions that you had under *FAS 60*. It actually requires you to unlock your assumptions retrospectively, which I just described, by replacing the expected gross profits with actual gross profits. It also requires you to reset your prospective assumptions to current best estimates at each valuation date. The entire change in DAC balance resulting from both retrospective and prospective unlocking is reflected in current period earnings. This is a significant source of potential volatility in an income statement. If your actual gross profits emerge much differently than you would have expected, then that's going to impact your current year's income.

I also had a retrospective and a rollforward view of the DAC, which I think I'm going to skip over, but the same idea applies. You'll see capitalization of actual expenses, the expense charge, and the interest accrual that Rob was talking about earlier.

One other key provision of *FAS 97* is the provision for adverse deviation in your assumptions, in setting the reserves, policyholder liabilities, or in your DAC. It's the current best-estimate

assumptions at each valuation point. This doesn't necessarily mean you change your assumptions at every point in time, but you should be evaluating them regularly, so that you are sure that you can support the assumption you're using in your valuation as being the best estimate of what you would expect.

One of the other major issues with *FAS 97* is that the new definition of revenues (not premiums) requires a somewhat different presentation in the income statement. Rob alluded to premium being recognized as revenue under *FAS 60*, and I set up in Table 8 an income statement under a *FAS 60* format, which is the same as the *SOP 95* type of income statement format. Premium is recognized as revenue. You get your investment income, you pay your death benefits, you pay your surrender benefits, and there is a charge for the increase in the reserve. Let me ignore DAC for a moment. Table 8 shows a net income of \$125. *FAS 97* essentially takes away the increase in reserves because you bypass the income statement and book the premium directly to the account value on the balance sheet. There is essentially no increase in reserve to flow through the income statement. As such, there is no premium revenue.

TABLE 8
Presentation for *FAS 60* and *SOP 95-1* Products

Premium	\$ 900
+ Investment Income	90
– Death Benefits	(25)
– Surrender Benefits	(40)
– Increase in Reserves	<u>(800)</u>
= Net Income	\$ 125

FAS 97 essentially broke down the increase in reserves into its component parts and netted them against the other lines of the income statement to provide a new format that recognizes all your revenue margins and the gross profits. Table 9 shows a rollforward approach for the account value or the reserve. For this accounting period, start with \$1,000 of account value, add in the premium, subtract out any front-end loads, subtract out any account value that was withdrawn

because of deaths or surrenders and credit interest. Then subtract out a charge for the insurance protection that was provided. You end up with an account value at the end of the year of \$1,800 or an increase over the year of \$800. If you take each of those components from the roll forward, and net them against the *FAS 60* formatted income statement, you'd end up with something that looks like Table 10.

TABLE 9
Account Value Rollforward

Account Value Prior Year	\$1,000
+ Premium	900
- Loads	(20)
- AV Withdrawn at Death	(5)
- AV Withdrawn at Surrender	(45)
+ Credited Interest	50
- Cost of Insurance Charges	<u>(80)</u>
= Account Value Current Year	\$1,800

TABLE 10
Presentation for *FAS 97* General Account Products

Investment Income	\$ 90
+ Loads	20
- Surrender Benefits	5
+ Cost of Insurance Charges	80
- DBs in Excess of AV Released	(20)
- Credited Interest	<u>(50)</u>
= Net Income	\$125

Your investment income would come through unchanged, the loads would be net of any capitalization and amortization that might be required for the nonrecurring front-end loads, and both would show up by themselves. The surrender charge would show up by itself. You would net the account value released on surrender against what was actually paid to the policyholder. The difference would be your surrender charge, and that would show up as a revenue item.

Cost-of-insurance charges would come out as a revenue item. The charges would be death benefits in excess of account value released because of deaths. There's a new item called credited interest. This is the interest credited to the account value during the period. You'll notice that this magically matches the \$125 of the *FAS 60* formatted income statement.

Does the sequence of how you do things matter? I would say the order doesn't matter for *FAS 97*-type products where the charges that are being assessed to the account value are fairly well-defined and known.

I'll switch now to Standard of Practice (SOP) 95. For a long time, mutual companies were exempt from complying with GAAP accounting pronouncements like *FAS 97* and *FAS 60* because of the uniqueness of the ownership structure of participating policies. The statutory financial statements for mutual companies were considered GAAP. But, with the issuance of *FAS 120* in 1995, mutual companies were required to comply with all the accounting pronouncements. At the same time, they were told to value the participating business products under the AICPA's statement of position 95-1, which I will talk about now.

The *SOP 95* has some similarities to *FAS 97* and *FAS 60*. As you can imagine, a participating product has combinations of fixed components, fixed premiums, and fixed cash values, but it also has a participation component that is more like a *FAS 97* product. Some of the similarities to *FAS 97* are that best-estimate assumptions need to be used, prospective unlocking and retrospectively unlocking would apply, and a DAC amortization is based on a gross profit revenue stream.

Similarities to *FAS 60* include the income statement presentation. Even though the DAC amortization is based on a gross profit type of approach, the premium is still recognized as a revenue item in the income statement. It's a little confusing. The reserve calculation method required under *SOP 95* is a net level premium method, although the assumptions are a little different. As I mentioned, the net level premium method is the required method for benefit

reserves, but you are required to use valuation assumptions that are not necessarily the best estimate, and that are essentially the guarantees underlying the product. The interest rate is officially the interest rate used in determining the dividend fund, which is often the same as the guaranteed interest rate. Mortality to be used is the mortality that underlies the cash value of the product. No lapse assumption is to be used. There's an additional liability for terminal dividends.

In terms of the DAC, the net investment rate is used as the discount rate, which is sometimes considered a distinguishing feature. Retrospective and prospective unlocking is required. As with *FAS 97*, there is no provision for adverse deviation allowed.

I'm going to turn the discussion back over to Rob who will start with recoverability and loss recognition.

MR. FRASCA: Recoverability and loss recognition are two very closely related concepts that are not identical but are quite often mistaken for one another. Recoverability is an issue-year test. It is a test that usually applies on a block of business, and it's applied on an issue-year basis for new business. It basically says that if you want to defer acquisition costs, you can only do so to the extent that you are projected to have enough profitability in the future to recover those acquisition costs. To the extent that those acquisition costs are not going to be recoverable in the future, you have to expense them immediately. In other words, the deferrable costs are limited to the present value of premiums, less the present value of the maintenance expenses and the benefits you have to pay.

Under *FAS 60*, the most convenient way to figure out whether your expenses are recoverable at issue is to take a look at that K factor that you calculated. Take the percent of your gross premium that's going to be used to amortize DAC and add it to the K factor that's associated with your net premium. It is the portion of the gross premium needed to cover your benefits and expenses. Make sure that when you add them together, they don't exceed 100%. If they do that, it means you don't have enough money left over to amortize your costs.

It's a little bit simpler under a *FAS 97* product. You can just look at your K factor and determine whether it's less than 100%. If it is greater than 100%, it means you don't have enough revenue in the future to amortize your costs, and you're going to have to expense them immediately.

Now loss recognition is an in-force test, and it is applied against even larger blocks of business. It's a test that is applied periodically on an as-needed basis. Some companies will apply it annually. Some will do it more frequently. Some will only do it when they think there might be a problem in the profitability of a line of business. What it basically says is, if you're projecting at any point that this line of business is not going to be profitable, you need to recognize that today. You would recognize it in two pieces. If it's a *FAS 60* type of contract, you would first write off DAC. If by writing off DAC immediately, you will reduce your future expenses enough, such that you'll turn profitable, then that's all you have to do. You would write off the DAC under *FAS 97* business as well.

If you're still not profitable after you've written down the DAC, then under *FAS 60* business, you would have to revalue the reserves. You would actually unlock those assumptions that you had locked in on *FAS 60* business. You would substitute your current best-estimate for future experience, and that would become your new reserve. In fact, that would become your new locked-in reserve basis under *FAS 60*.

FAS 97 doesn't have that same reserve mechanism, so if, after writing off DAC, you still don't have enough profitability to show profits going forward, then you just leave it there. You just realize losses on an ongoing basis on the block of business. There is one other point with respect to the lock-in principle on *FAS 60*. Once you have had to revalue or reset your assumptions, you can't unlock them again. If things turn around and get better, you can't go back to your original assumptions that are locked in once again.

There is one other kind of technical point with respect to loss recognition. Let's say you look forward and the business looks like it's profitable over its lifetime, but the profitability is kind of front-ended. If you project that at some point in the future, you are going to run into a situation

where you're projection of the business will be unprofitable going forward. What you have to do is start accruing additional reserves today, so that by the time you hit that point where the business is projected to be unprofitable, it will be profitable, or at least breakeven at that point. It is a requirement as well. That's it for loss recognition. We'll now move on to *FAS 115*, "Accounting For Certain Investments."

FAS 115 is really the accounting profession's first baby steps towards fair valuation of assets and liabilities in financial statements. What it forces a company to do is to classify all of its assets into one of three categories. The first category is "held to maturity," and this is probably the least popular category. This is available only for fixed-income assets, and it's your assets that you truly believe you're going to hold until maturity. There is a reason that companies don't like to put assets in this category. If, for some reason, you call them held to maturity, and you end up selling them prior to maturity, some bad things happen to you. They require you to do all sorts of restatements, and recategorize assets and so forth. You don't want to do that. For that reason, companies generally classify very little as held to maturity.

On a held-to-maturity asset, the asset is held at cost, and there's no change in the basis of the assets that would flow through the income statement. Trading assets, the second category, are at the other extreme. These are assets where you can sell them, buy them, or do whatever you want with them. There are no limitations. These assets are carried at market on your balance sheet, and any changes in unrealized gains or losses on these assets flow directly through your income statement and directly through operating income above the line.

Now companies tend to put less into trading because they fear the volatility that this category might introduce. If the liabilities that are associated with these assets are tracking market values as well, then there is some appeal to having trading assets. You have a nice matching between how your assets and liabilities are moving.

Everything else falls into the other category, which is called available-for-sale assets. This is by far (at least in my experience), the most popular category. In this category, the carrying value of the assets on your balance sheet is market value. It's actually fair value, to be more technically correct. That's the value that you would have on your balance sheet, but changes in the unrealized gains or losses on those assets would flow through below the line. They wouldn't come through operating income; they come below the line in your income statement.

Realized capital gains and losses, on the other hand, would flow through income as normal operating income. The most interesting thing, from an actuarial perspective, about this whole idea of categorizing assets and the way the income flows through is its impact on DAC. It introduces a concept known as shadow DAC. Shadow DAC forces you to consider what would have happened if you had recognized those unrealized gains and losses that are flowing below the line on your income statement. If you had recognized those gains and losses in your gross profit streams that are being used to amortize DAC under *FAS 97* business, how would your DAC balance have changed? Let's say that you had bonds. When you marked them to market, there was a capital gain. Since it's an unrealized capital gain, it wouldn't ordinarily flow through your gross profit stream. For the purpose of calculating your shadow DAC, you want to pretend that it did flow through your gross profit stream. In the current period, you would have had this gain from the market value increase in the bonds. That would have come through with additional income as additional revenue against which you would amortize DAC. You would end up with what's called the shadow DAC adjustment. You'd end up reflecting the difference between the DAC you're currently holding and the DAC you would have held if you had shown those unrealized gains or losses in your gross profit stream. You hold that below the line as a change in your shadow DAC or as a shadow DAC adjustment. It offsets the implications of having those assets marked to market on your balance sheet.

That's the most obvious place where there's an actuarial implication to *FAS 115*, and it applies to *FAS 97* type business. There are other shadow type elements as well. The shadow loss recognition could apply to *FAS 60* business. In other words, maybe you're not in loss recognition right now, but maybe you have enough projected income to amortize the DAC that you have on

your balance sheet. If you had marked your assets to market, maybe then you would have entered loss recognition. If that's the case, then you would have to establish shadow loss recognition on your balance sheet.

It gets pretty complicated. It's kind of an esoteric topic, but again, it's an important element of *FAS 115* and of GAAP reporting that you need to be aware of.

That's it for *FAS 115*. Now we're going to move on to purchase GAAP. This session is called the GAAP Refresher, which might be kind of synonymous with basic GAAP treatment. This is a little bit beyond basic GAAP. Purchase GAAP is an emerging area. There are a number of pronouncements that dealt with purchase GAAP and the landscape is changing some. That's a caveat to keep in mind as we move into this section. What I'm going to talk about is how purchase GAAP has worked in the past. I'll give you a little bit of a sense of how it's changing now, as well.

There is some new terminology under purchase GAAP. First, you have a concept called the value of business acquired (VOBA). It goes by a whole bunch of other names, but I like VOBA. There is also goodwill and some other accounting concepts as well, such as deferred taxes. The message to take out of purchase GAAP, and out of what you have to do with the point of purchase is, that there should be no gain or loss at the point of purchase because you have acquired new business, a new company, or an in-force block of business from an existing company. There are a lot of accounting entries but they should all add up to zero.

Let's walk through the steps that are needed for purchase GAAP. The first thing you need to know is how much you paid for a block of business that you acquired. The second thing that happens, and this is what the accountants get into, is you've got to mark all your assets to market. The next item, which is the real actuarial item, is that you have to PGAAP or purchase GAAP your reserves. A better way to put it is you have to convert your reserves to a market-value basis or a fair-value basis. Then you'll have consistency between the assets and the liabilities.

The next thing that happens is you eliminate DAC. Any DAC that was on the books of the company that you acquired the business from just disappears. It disappears and is replaced by VOBA, which you can think of as market value of DAC that you're going to establish on your own books.

There are a couple of other items that get added. There's a deferred tax liability that the accountants will post. Then you'll end up with an intangible asset which, in the past, was just called goodwill. This is an area in which some of the guidance is changing now. You would calculate goodwill to be the balancing item in this equation. At the point of purchase, you'd have no gain or loss from having acquired the business.

Let's talk about the reserves under Purchase GAAP. For traditional life business, you're going to use your current best-estimate assumptions at the point of acquisition, with some small provisions for adverse deviations. There are a couple of methods for doing this. You have to recognize that it's a midstream block of business. There are two ways to do this. One is a defined initial premium method, and the other is a defined initial reserve method. I'm not going to go into how you do each of them, but what you do to the actual calculation is descriptive. I'll just leave it at that. After having done that, you've essentially marked your reserves to fair value.

For *FAS 97* type business, you'll typically just establish the account value as the reserve. There are situations where account value would not be considered the fair value of a *FAS 97* liability, but those are relatively rare instances. I think it's convenient to just think of the account value as being the reserve that would be carried over.

As I said before, you'll establish a VOBA, which can be thought of as replacing DAC. In that context, you can think of it as a fair value of DAC for the acquired business. It's probably more technically correct to think of it as what it stands for—the value of the business acquired (VOBA). There is no real GAAP literature that tells you how you calculate that, although there is literature that tells you that you amortize it essentially the same way that you amortize DAC.

While there is no specific guidance as to how you calculate it, two methods have evolved over time. I'll mention both of them briefly. The first is called the return on investment (ROI) method. It was probably the first method and the one that was most commonly used. It essentially says that you project what your emerging GAAP profits are going to be on the in-force business acquired. You take the present value of that projected profitability, and that becomes the value of the business acquired. It's an intangible asset. It's what you expect to make on this business that you acquired.

Having done that, there will be a deferred tax liability that the accountants will calculate. There would be a balancing item which, for our purposes, is goodwill. That's the way things pretty much used to work.

The second method is what I'll call the actuarial appraisal method. There is some emerging guidance pertaining to this method. The best way to think of this method currently is that you would take a look at your projected statutory book profits, and you would just make adjustments to bring them in line with GAAP. You'd try to recognize all the areas in which projected statutory results differ from GAAP methodology. You would make adjustments for that and you'd come up with the value of business acquired. It would take an hour and a half to go through a method to demonstrate this concept. Let's just suffice it to say that there are these two methods in practice to determine VOBA.

Now the last comment I'll make on purchase GAAP is just a little bit about the emerging guidance that's coming out. Goodwill used to be the balancing item in these equations, and companies could establish a relatively large goodwill on their balance sheet, to the extent that VOBA was not a large portion of the purchase price that they used to acquire in-force business. In other words, if what you were really buying was distribution force or something else other than in-force business, you might have a very large goodwill. That was pretty much okay because the way you amortized goodwill in the past was often not materially different from the way you amortized VOBA.

However, the accounting profession doesn't want you to have a large amount of goodwill. It wants you to identify other intangibles or other things that you bought, and put them on your balance sheet instead. You'll end up with a very small number for goodwill. There's a good, practical reason for that as well. The accounting profession is essentially saying that goodwill doesn't get amortized in the future. You just keep it on your balance sheet forever. In that context, it's very desirable, from a company's point of view, to have a lot of goodwill because you never really have to pay for it in a sense. So that's a little bit of a diversion on GAAP. I'm going to turn it back to William who will talk about reinsurance.

MR. HINES: *FAS 113* was issued in 1992 to address some of the perceived shortcomings of the accounting for reinsurance transactions that were being done under *FAS 60* and *FAS 97* to that point. Two of the major perceived shortcomings were in the areas of netting. Many companies netted their reinsurance receivables against the direct liabilities and showed a net value on their statements that violated one of the underlying concepts of GAAP by giving more disclosure rather than less disclosure. A second shortcoming was how surplus relief reinsurance or financial reinsurance was reported.

FAS 113 established a definition of reinsurance that you needed to comply with, in order to get the reinsurance accounting that was put in the rest of the document. They talked about establishing minimum or meaningful amounts of risk transfer in order to qualify. They gave guidance on how to measure it but not necessarily a threshold for what was meaningful. You often hear people say that a significant probability of a significant loss is something like 10% probability of 10% loss of revenue from the transaction. As long as the reinsurer was exposed to that type of probability of that size loss, then it probably qualifies as risk transfer for the purposes of *FAS 113*.

Some of the other things that *FAS 113* talked about was that the cost of the reinsurance agreement needed to be reported over the life of the contract, and liabilities and assets should be shown on a gross basis, with reinsurance receivables and payables being established separately. Many companies with financial reinsurance transactions or other transactions were netting them together and obscuring the true exposure that the companies had to reinsurers.

FAS 113 specifies different accounting treatment based on whether the reinsurance contract itself is classified as a short-duration or long-duration contract. Short-duration contracts are contracts in which either side has the right to cancel the contract unilaterally or within a period of short notice. Examples of short-duration contracts are like stop-loss or catastrophe coverages. Long-duration contracts tend to be the noncancellable variety, such as yearly renewable term (YRT) contracts, coinsurance, modified coinsurance (modco), partially modified coinsurance or comodco, and funds withheld. I'm not going to get into the specifics of what the valuation is. Just know that there are differences, and further research on them is available.

I also wanted to touch on *FAS 133*, "Accounting for Derivatives." This was amended in 2000 by *FAS 138* as well. This is another step in FASB's movement toward fair value. Rob mentioned earlier that *FAS 115* was sort of a baby step. This is another step. *FAS 133* and *FAS 138* were put in place to provide some guidance on the treatment of derivatives. Many derivatives were recognized outside the balance sheet. Some were on and some were out, and there really was no consistency. *FAS 133* established some basic principles about accounting for them deciding. It showed that the characteristics of assets and liabilities really applied to derivatives. The characteristic that assets and liabilities create rights and/or obligations that have value did apply to derivatives. Those derivatives should be shown on the balance sheet.

They also said that the derivatives should be reported at fair value on both the balance sheet and the income statement. It gave some special hedge accounting to reflect offsetting positions. One of the key issues in GAAP, and in any accounting system, is how well earnings reflect the actions of management. If you're measuring your assets in one way, and you're measuring your liabilities using another accounting paradigm, you're not really going to get meaningful earnings results. Perhaps you're using derivatives for hedging activities, where you want to hedge the economic value of changes in an asset or changes in a liability. *FAS 133* recognizes the ability to show the true economic impact of those types of arrangements on income. It did exempt specific things from derivative treatment, including insurance contracts, regular securities, and even company stock.

The special hedge accounting treatment required certain criteria to be met in order to qualify for that hedge accounting. There are three basic criteria. There are some real documentation requirements that are required upfront to make sure that when you enter into the hedging arrangement, you really did intend to do that. You didn't just decide when the value of your derivative changed to try to find some arrangement that fit the definition.

You need to measure the effectiveness of the hedge periodically. How effective is the hedge? Does it continue to provide the protection that you originally intended? Are you actively managing that? So it is effective throughout the life of the arrangement, and that must be continued to get the accounting treatment. There are specific disclosure requirements of any derivatives you value under these criteria.

I want to touch on a few emerging issues that might be of interest to people. This is certainly not a complete list, but we thought some of these issues deserved some mention. The first one is demutualizations and how they are impacted by GAAP accounting. What are the unique challenges of GAAP accounting with them. There are really two big areas where additional guidance is needed: in the treatment of closed blocks and in how you treat the demutualization expenses themselves.

For those of you who are not familiar with a closed block, it is a mechanism that is set up by a demutualizing company in order to protect reasonable dividend expectations of the participating policyholders. You would wall off a certain set of assets with a certain set of liabilities. All of the experience from those assets and liabilities will be paid out to those participating policyholders.

You get a better-than-expected gain on the assets. None of that experience can inure back to the shareholders. It all has to be paid out to the policyholders. Any reductions of the value of those assets will be absorbed by those policyholders as well as subject to the policies' guarantees. If, in fact, experience is so bad that there are not enough assets to pay the guarantees provided under the contracts, the shareholders still have to kick in money to pay those benefits.

How do you deal with the fact that experience within the closed block goes to the policyholders, and none of it can come back to the shareholders? Say that there is a gain in the closed block that has not yet been passed on through the dividend scale. There's a statement of position that the AICPA put out that says you have to establish a liability on your books in which to put that experience because you know you're going to be paying that out in the form of dividends in the future. That's called the policyholder dividend obligation (PDO).

With regards to closed-block accounting, you would continue to report the closed block or the results of the closed block with your ongoing business. It's not part of discontinued operations. You don't put it in anything like that.

The other area that needed guidance was on how to report demutualization expense. You do report those separately, but you should only be reporting the incremental expense because of demutualization. If you would have incurred those expenses anyway, you should include those in your operations and not report them separately as a demutualization expense.

Another emerging topic I wanted to cover is the whole concept of fair value. FASB, in its concept statement 7, and probably in a number of other places, has said that fair value is the most relevant measure of a financial instrument. FASB has decided to try to utilize or move the GAAP accounting more towards the use of fair value as we move forward. As Rob eluded to earlier, *FAS 115* is a baby step in that direction, and *FAS 133* is a further step. A definition of fair value that has been used is, how much would you get if you sold an asset to a third party in an arm's-length transaction today? It's the market value, if you will. How much would you have to pay someone to take over a liability in an arm's-length transaction? When you apply that type of definition to insurance contracts, it's much harder to figure out what that is.

There is an international movement, under the auspices of the International Accounting Standards Boards (IASB), to start talking about international accounting standards under a fair-value paradigm. It will apply to a number of countries, including some in Europe. The European

unit has voted to adopt international accounting standards that are promulgated by the ISB, starting in 2005. Up to this point, there hasn't been any international accounting standard developed for insurance contracts. That is currently in development. There have been talks about a fair-value type of concept. This is a whole new paradigm for us in terms of how you might calculate a reserve balance. What would that really be in an arm's-length transaction? How much would you have to pay someone to take over your liability? It's a little different concept than what is the present value of future premiums at various rates of interest?

I want to mention one more thing before we take questions. We mentioned that the AICPA has a Long-Duration Contracts Task Force. They have been looking into and discussing a few issues on how to value separate accounts and how to handle bonus interest, features of contracts, and other nontraditional product features of long-duration contracts that we have been talking about.

MR. JAMES R. THOMPSON: I was curious as to how single-premium life and single-premium annuities are handled under *FAS 60*. I'm referring to things like traditional participating and nonparticipating annuities as well as single-premium universal life (SPUL).

MR. HINES: Under GAAP, the most important distinction is to try to figure out what that revenue stream is. What is driving the revenue? A traditional type of product, like a single-premium type product that does not have an account value mechanism with it, would fall under a *FAS 60* type of treatment. The valuation would be relatively simple because you wouldn't have any future premium coming in, but it would be very clearly a *FAS 60* type of approach. If there is an account value mechanism, and your revenue stream is coming from making charges against that account value, as would be the case in any type of UL type of product, then you're going to be looking at a *FAS 97* type treatment. The revenue and the amortization of DAC and related items would follow that approach instead.

FROM THE FLOOR: I have a question about the timing of the acquisition costs versus the timing of the revenue. My company frequently has a lot of marketing costs that precede the business that actually comes in force. Sometimes it's very hard to tell people that, even though

they spent a dollar on day X, they realize that revenue on day Y. It can vary by product, and I'm just wondering if you knew any industry trends or can throw out any sort of guidance with regard to how you'd amortize the DAC in that scenario. That is, of course, assuming it's recoverable.

MR. HINES: Did you say that was a direct marketing arrangement?

FROM THE FLOOR: Yes, it is.

MR. FRASCA: My first thought on this would be to go back to my suggestion, which is to leave it up to the accountants to determine what is deferrable and what isn't. In terms of the timing of things, you can run into some interesting situations when you have expenses being incurred before year-end. It's for business that's going to be on the books starting in the next year. It's always going to follow the revenue stream of the product itself in terms of how you recognize it for amortization and so forth. You're going to want to look to when the revenue stream is being recognized for that product to determine when the amortization of it is going to happen. If, for whatever reason, it is determined to be a deferrable acquisition cost that's incurred well before the actual premium stream happens, the amortization is still going to have to follow when the revenue stream is actually happening.

MR. HINES: I've seen situations in a direct mail campaign where there are a number of campaigns going out. There will be a lot of mailing costs, marketing costs, and preparation materials for the policies that are coming down the line. I think it boils down to whether you can track it closely enough. Can you make a good enough argument or connection that the expenses of this campaign created a certain set of policies? Can these expenses then be amortized or matched up against the revenues in those policies? I certainly have seen it done. In the situation where I've seen it done, there was a big effort to connect each campaign's results with the expense of that campaign. It isn't always administratively feasible.

FROM THE FLOOR: My question pertains to recoverability. How far do you write the DAC down on a recoverability problem on a block of business? Do you write it down so that your future expected profits are now zero, or do you write it down to the point where they're back to their original profit expectations? How far do you go?

MR. FRASCA: Say you're talking about a loss recognition situation, in which you're testing an in-force block of business. Now it looks like it's not going to be profitable in the future. You would just write the DAC down to the point where you are going to break even going forward. You might have to do loss recognition testing again to see if the experience has deteriorated beyond that. Generally speaking, you're just going to bring it down to where it's a breakeven sort of situation.

FROM THE FLOOR: When you're dealing with really small companies or a small acquired block of business, and you get into a loss situation, can you assign credibility to the loss experience or weight it somehow against an industry experience when you do the unlocking?

MR. HINES: Are you asking about the level at which you would test loss recognition? Can you combine it with some other blocks and determine loss recognition at that level?

MR. FRASCA: So it's the credibility assumptions you use to determine the loss recognition in the first place. What can you do in regards to that?

In general, you just want to make the case that your prospective assumptions are based on your best estimate. If your best estimate involves bringing in industry experience because it's a reasonable thing to do, you probably will be fine. That's the concept that should always guide you in determining what the right set of assumptions would be for a particular situation.