
2003 VALUATION ACTUARY SYMPOSIUM

September 11–12, 2003

San Diego, California

Session 17OF

GAAP Issues

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Summary: This open forum addresses current issues of interest to actuaries in the application of U.S. GAAP. The major GAAP issues are addressed here. Experts in the application of U.S. GAAP to life insurance companies lead discussions on the theoretical and practical aspects of these topics and other emerging issues.

Topics include:

- *Separate account treatment*
- *Guaranteed minimum death and living benefit reserves*
- *Business combinations*
- *Internal replacements*
- *Derivative accounting.*

MR. ROBERT J. FRASCA: The statement of position (SOP) 03-1 on nontraditional, long-duration contracts has been in discussion for about five years. The irony of the whole thing is that, for something that's been in discussion for so long and has had so much comment, there still could be so much controversy as to how you actually apply it in practice. So what I hope to do is to briefly go over the outline of the SOP and talk a little bit about what I think are some of the most interesting issues with respect to the different sections.

The first section I'm going to talk about is separate accounts. The SOP says that you continue to use a simple treatment for separate accounts: one line treatment provided that the separate accounts meet the four criteria; and the four criteria are that the separate account be legally recognized, that the assets be legally insulated,

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that the contract holder make the investment decisions and the investment allocations decisions, and that the risk and reward pass through to the contract holder.

In terms of those issues, I think some of the most interesting points are with respect to legal insulation. For those companies that are operating overseas and have separate accounts that are backing linked products, say, in Europe, this legal insulation typically is not satisfied. So you're going to have a situation potentially overseas where you're going to have to look through these separate accounts and treat them like general account products potentially with a disconnect between how you're valuing the assets and ultimately how you value the liabilities. I'll talk a little bit more about this disconnect in connection with group pension product contracts because it's kind of the same issue. If you have business overseas, it's really quite an important issue.

The second issue is the pass-through of investment performance. And generally speaking, if you have typical separate accounts under variable annuities, for example, this is going to be met. The place where you could have potential issues in particular is on institutional separate accounts. If you have a floor guarantee in the contract, you'll typically have to break out that floor and value it as a derivative under FAS133, but it won't taint the separate account so that you can still have a separate account treatment if you have a floor.

The problem arises when you're limiting the upside potential. So if you have a cap on the contract, then the SOP would tell you that it's not a separate account, and you're going to have to look through it and treat it as a general account contract. I'd encourage you to look most closely at the contracts. If you have separate account GICs or any other institutional separate accounts, look at the provisions, the passing back and vested earnings, and make sure that there's no way that the contract holder could get anything less than the actual earnings.

The whole issue of seed money is what probably gives the accountants the most consternation. The SOP says that if you have seed money, you have to look through the contract. You have to look at the separate accounts and treat it like it's general account money unless that seed money is less than 20 percent of the interest in the entire separate account, in which case you have to treat it just like separate account money. It's an issue that the accountants had been quite concerned about. There was a relatively late change in the SOP giving that safe harbor.

I'm going to talk a little bit now about the second part of the SOP's valuation of liabilities. And generally speaking, with the valuation of liabilities for FAS97 contracts, you're going to hold the highest accrued balance that's available in cash to the contract holder. And by accrued balance, what we mean is basically the account balance. You're going to have an extra amount that's going to build you smoothly

to that value at the earlier of the maturity date or the interest rate reset date. Generally speaking, that is the account value.

If you have a market-value-adjusted annuity, you're not going to take into account market value adjustments in that process. And, as I mentioned earlier, it's the amount available in cash. So if you have a two-tiered annuity, it's generally going to be the lower tier.

The area that I think is most interesting with respect to valuation liability has to do with contracts in which the investment earnings are passed back with a contractually referenced pool of assets. Generally speaking, these are contracts like IPG, deposit administration, group pension participating contracts. And for these contracts the SOP is telling you that you have to look for the fair value of the underlying assets.

The history of this, I think, is fairly interesting. When FAS133 came up, a lot of people thought that FAS133 would deem these group pension contracts to contain better derivatives, but the insurance industry was pretty successful in demonstrating that the interest-crediting mechanism really was clearly and closely related to the host contract. So most companies said, "No, these contracts really aren't covered under 133." Then the SOP comes out and says, "To the extent these contracts aren't covered by 133, you have to hold the liability in relation to the fair value of the underlying assets."

The potential problem here is that you could have a disconnect between how you're holding the liability and how you're holding the assets. Even if the assets are not held at fair value, you're going to have to hold the liabilities at fair value. They're changing those liabilities. They're going to come through the income statement, whereas depending on how you classify the assets, the change in the value of the assets may come through only on other comprehensive income.

Now, to make matters even more complicated, the big issue, B-36, came along and said, " Maybe these contracts really are covered under FAS133." So the story isn't all done on these, but I think that the bottom line is that no matter which way you turn, no matter which guidance you go to, you're going to end up holding the liability equal to the fair value of the underlying assets for these types of contracts. But for the companies that have them, I think it's a pretty significant issue, and, in particular, if you have contracts that are backed by real estate and other types of assets that cannot be deemed to be trading assets in your asset portfolio, you could have a volatility issue.

The third topic I'd like to talk about is contracts of death or other insurance benefit features. This is the part of the SOP that talks about holding reserves for things like guaranteed minimum death benefits (GMDBs). And there are two criteria that are laid out for when you're going to hold the liability for these types of benefits. First of all, you have to have an insurance contract. If you have an investment contract,

you don't have to hold the liability. And the second is that the benefit feature has to be one such that you expect to have income in your early years that's going to be offset by losses in the later years.

So if we talk about variable annuities as a first example, the first thing you have to do is determine whether or not you have an investment earned insurance contract. And the SOP lays out what it calls rebuttable presumption. It's probably my favorite phrase in the entire SOP. It's a rebuttable presumption that if you have a benefit that rises and falls dramatically with respect to movements in capital markets, then you probably have an insurance contract. So even if you have a return of premium death benefit under a variable annuity, the presumption going in is you have an insurance contract, and now the SOP is kind of saying, "Well, prove to me otherwise that it's not an insurance contract."

And the way you would do that proof is to look at how material the guarantee is to the overall financials of the contract. You do that by calculating it as a benefit ratio. You project all of the benefits that are expected to be paid by using potentially stochastic methods, a range of scenarios, and you divide those projected benefits by the total assessments on the contract. The total assessments are defined generally as like the mortality and expense charges, the surrender charges. I also would argue if you have revenue-sharing agreements with your investment subadvisors, that you'd include those in the denominator as well.

You take the present value of those benefits, you divide it by the present value of the assessments and you come up with a ratio. And if that ratio is anything but nominal, then you have an insurance contract, and you're going to have to value it as such. I think the threshold there is going to be very, very low because you have this rebuttable presumption that you have an insurance contract going in.

Okay, so now you've got an insurance contract. The way you set up the liability for something like a GMDB is you accrue the assessments times that benefit ratio, and you subtract out the benefits that have been paid to date. You bring it forward to the date of valuation. Now, the interesting conceptual issue that arises is how do you do this calculation and at what level do you do it? The SOP is kind of unique in defining a liability that's not with reference to a particular contract. You can't do this calculation on a seriatim basis because you have to take into account benefits paid for contracts that are no longer there. So how do you aggregate? Well, some people could argue that you aggregate at the full company level.

But I guess I would argue, and this is my opinion, that you want to look at two things to determine what's the most reasonable way to aggregate for doing this calculation. The first is, I would look just at the economics, the risks that are being undertaken, and what makes sense with respect to the risk. We talk about a GMDB, and the risk is really buried in the type of GMDB you have and in the market performance. So I would argue that kind of steers you toward aggregating based on product feature, GMDB feature and the issue year when the business was sold.

The other place that I would say you should look is to how you're treating your deferred annuity cost (DAC). And from purely a mechanical perspective, you want to have kind of a nice one-to-one relationship between how you're valuing these liabilities and how you're bringing them into your DAC models. I think it leads you toward product and issue year as the rate breakdown and the most easily and administratable breakdown for this type of calculation.

Now, I would point you to one other issue with respect to these liabilities, and that is that the SOP tells you that you have to bring the change of this liability into your estimated gross profits (EGP) streams. And there's what I would call a technical flaw in the SOP that basically tells you that you don't adjust the EGPs for the interest on the assets backing that liability. So for those of you technical purists out there, there is, in my mind anyway, a technical flaw in the SOP, but it's just something, I think, you have to live with. And I don't think it's particularly material, in effect, anyway.

Finally, I'd like to talk a little bit about life insurance contracts and how they might be covered by the SOP. The SOP is pretty clear that you have to at least consider universal life (UL) and variable universal life (VUL) contracts that have minimum guarantees in them for the application of the SOP. For example, the level cost of insurance (COI) products that are currently available in Canada. It's very hard to figure how you could avoid having to apply the SOP to those types of contracts. But for other UL and VUL, I think that where you have to look is, does the benefit feature lead to losses in the later years that are supported by gains in the earlier years? And if that's the case, then you're going to have to set up a liability. And I think there's some question as to how you would determine those losses versus gains. Do you aggregate across the entire benefit function, the entire life insurance function of the contract, or do you just look at the no lapse guarantee, for example, in making that determination?

Okay, the fourth topic to talk about is annuitization benefits. The SOP lays out a way that you can start setting up a liability for annuitization benefits that are going to be valuable prior to election, and this is a relatively recent development in the SOP as well. The methodology is very similar to what we just talked about for GMDBs. The one exception that I will mention is that you have to do this for insurance contracts and investment contracts. There's nothing that says you don't apply this to investment contracts as well.

The issue that I think is most interesting here is what I call the reinsurance disconnect. Prior to the adoption of the SOP, you could not set up a liability for things like guaranteed minimum income benefits prior to the election of the annuitization. Companies that reinsure those benefits were typically seeing the reinsurance contracts settled in cash, and, therefore, they are deemed to be derivatives under FAS133. So this is a really strange situation. You have the direct contract, but you couldn't set up a liability. But you had a reinsurance contract that

was a derivative under 133, which you have to hold at fair value. So potentially you could have this huge asset in the balance sheet and no offsetting liability.

The SOP now tells you what to do, and, in a sense, that's kind of bad because before we had this obvious sort of inconsistency from neglect. Now you have a situation where the SOP tells you how to set up a liability for these guaranteed minimum income benefits (GMIBs), but it's very much disconnected from how you are going to set up the asset for the reinsurance contract. So you've got to almost institutionalize this potential for volatility. For companies that have this type of situation and are reinsuring the GMIBs, I think it's a very large issue and one that you really should look at closely.

And finally, I will discuss the reserve in annuitizations. Because you've been building the reserve prior to that annuitization, you're going to hold the reserve that will not cause discontinuity. So you should have a reserve that has no pads built into it, for example. Basically as you're building this additional liability, you're kind of prefunding a future premium deficiency. So, again, once you annuitize, there really shouldn't be any pad within that annuitization reserve.

Those are the first four issues under the SOP. The fifth issue is sales inducements. The SOP tells you that you should establish a liability for sales inducements, and those include up-front bonuses as well as persistency bonuses. You should establish this liability either when it's credited to the policy or using some reasonable method up to the point at which the persistency bonus is earned. You should not take into account lapses in developing that liability or surrenders at any time.

The SOP then says that to the extent that you establish this liability, you can defer and amortize. You can establish a sales inducement asset to the extent that the liability has been defined in the contract upfront, to the extent that the liability is incremental to what you would expect from similar products and to the extent it's incremental to what you expect to credit on an ongoing basis. That valued asset should be built and amortized similar to the way you do DAC.

I'm going to discuss a sales inducement example for building the liability. The bottom line here is we're using a simple method to set up to an additional liability at the end of year 5, which is going to equal, in this example, 4 percent of the account value, assuming that the contract holder doesn't lapse. Table 1 shows how you build the liability:

Table 1

	Year 1	Year 2	Year 3	Year 4	Year 5
Account value	105,000	110,250	115,763	121,551	127,628
Installment	840	882	926	972	1,021
Interest	0	42	88	140	194
Additional liability	840	1,764	2,778	3,890	5,105

Table 2 shows how to build the sales inducement asset:

Table 2

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Account value	105,000	99,225	93,768	88,610	83,737	82,296
EGPs	11,000	14,000	17,000	18,000	18,000	10,000
Additional liability	840	1,588	2,250	2,836	3,349	
Inducement asset	355	548	576	519	420	
Incorporated effect	(485)	(554)	(636)	(642)	(612)	(420)

You have your EGPs. You have your best estimate assumptions for lapses and everything that goes into the EGPs as you build the sales inducement asset. And the interesting thing is that you end up still having an income effect even after the liability has been built and you have paid your persistency bonus, for example. You still have an income effect because you're still running off the asset that you established over the entire EGP stream. In a nutshell that's SOP 03-1.

Implementation is for fiscal year beginning after December 15, 2003. So basically it's the first quarter of 2004. Implementation issues include determining whether your in-force business is insurance or investment contracts. You do that determination once on your in-force business, and you have to live with it forever, so it's a good idea to pay particular attention to how you do that. You do have an opportunity to reclassify assets as trading assets, for example, to the extent that it's going to give you a more reasonable result going forward because of the provisions where you're potentially going to be valuing liabilities at the fair value of the underlying assets.

If you have a sales inducement asset, it's probably currently with DAC. You have to pull it out of the DAC. To the extent you've been building it some way other than the SOP is telling you to build it, you can stick with that value on the implementation date, but going forward you're going to have to run it off using the new methods as outlined in the SOP.

MR. HOWARD ROSEN: Getting into paragraph 26 of the SOP, which is the one that talks about the current income/future loss thing, and adding into that discussion about level COI products, it sounds like we're almost saying this is an unearned revenue reserve (URR). This seems like a redefinition of URR and the stuff that's already addressed in FAS97.

If you look at the SOP, it seems to be internally conflicting in that in the very beginning it says that this SOP does not address items already addressed in prior literature. In another part of the SOP it directly points toward paragraph 7B or 17B of FAS97, which talks about URR.

If you consider that paragraph 26 of the SOP now redefines the calculation of URR, you can have some contracts governed by FAS97, which have something that creates URR but doesn't create future losses. So they would be handled in one way, and you'd have contracts that create future losses that would be handled in a different way. It sounds like it's a mess.

It defines nontraditional benefits as special things, which are not stated URR. I guess it's a longwinded approach to saying it seems more logical to the industry to not have paragraph 26 redefine URR as people consider defining it in FAS97. Otherwise, you have a mess because you have some contracts that generate more URR accounted for using one model and virtually the same contract using another model.

MR. FRASCA: I can't disagree with your comments. The only sort of conceptual comment I'd raise is I think that with the SOP, URR is sort of being defined as a revenue that's covering expenses, for want of a better explanation, whereas this is getting more at the benefits and insurance-type benefits. And that's kind of the conceptual distinction that's behind all of this. Having said that, I don't think it's a completely satisfying answer. There are going to be companies that are going to apply it in many different ways. And, as you pointed out, it's an anomaly that's going to exist. Unfortunately I think there are a number of companies out there that do have products like this and are not reporting in URR. And I think one of the favorable effects of the SOP is that it is actually sort of forcing them to actually establish something to defer some of those revenues.

MS. LAURA J. HAY: I'm here today to bring to life this SOP that has gotten arguably a lot less attention than the SOP 03-1. I've been active on this task force for several years, and it's been around longer than I've been active on it. There's been diversity in the practice that's led to this topic in the first place. The exposure draft, for those of you who didn't know, came out in mid-March and comments were due by mid-May. Not many comments came in, but it does have some far-reaching ramifications, so we should try to understand those ramifications.

The scheduled effective date officially in the SOP says the same as SOP 03-1, which is fiscal year beginning on or after December 15, 2003. I personally think that it's not far enough in the process that that will hold, but that's currently what's in there.

I'm going to talk about the three major elements of this SOP. One is the definition of an internal replacement. We all probably have something in our heads as to what an internal replacement is, and that probably bears some resemblance, but not complete resemblance, to the actual definition in the exposure draft.

Then after we cover the definition of the internal replacement, I want to go through what that means. There are two major categories. If it's substantially different, it has one accounting treatment. If it's not substantially different, it has another. And then I'll cover the accounting treatments. Those are the three topics.

The internal replacements are defined as modifications. They're modifications in product benefits or features that occur by amendment or rider to an existing contract, or by the exchange of an existing contract with a new contract. The legal form of the internal replacement is not a consideration for determining the accounting treatment. In other words, if you, as a company, legally close down one contract and start another contract, that doesn't drive the accounting treatment. The accounting treatment is driven by the inherent risk.

This definition is pretty broad; it's pretty all encompassing. That's the important thing to take away. It covers any modification. Now, there are all sorts of things that don't count under this, but the definition is quite big. For any modification, you have to go through an exercise of deciding the next step, whether it's substantially different or substantially the same. That's a big, big statement.

So you've gone through, and your product development people have come up with riders or modifications, and I need to determine if I even think about this SOP. If it's for modification, then, yes, I have to think about it. That's step 1.

Step 2 is to go through an exercise of determining if that modification is substantially different or substantially the same. You're trying to figure out if it is a continuation of the existing contract or not. They give five specific conditions, all of which must hold true for you to say it's not substantially different. So the underlying premise is every modification is substantially different. It's not a continuation unless you meet all these five criteria.

The first criterion is probably the one that received the most attention in the SOP. It states that the modification does not result in a change of the inherent nature of the contract. What it's trying to get to is, have the risks changed? Have the risks substantially changed from the old to the new? Things that pass this criterion are, for example, a variable contract that's added investment alternatives. If you only add a couple of investment alternatives, that's not deemed to change the inherent risk of the contract.

Another thing that is not considered substantially different is if you move from a fixed annuity to a market-value-adjusted annuity. You're still crediting interest on it. It's not a variable contract.

One thing that fails this criterion is if you move from a fixed annuity to a variable annuity. That topic received a lot of discussion. And currently as it reads, that fails the criterion. Remember, we're trying to figure out if our modification passes all five criteria. I would encourage you to go and look at the SOP. There's quite an extensive appendix with all sorts of examples related to this and the other four criteria.

The second criterion is that additional payments or charges related to the original benefit are not required. In other words, any additional payments you have are commensurate only with the new benefit. So you're not making a premium change that affects the original contract.

The third criterion is that there's no net decrease in the balance available to the contract holder. An example might be that you have a surrender charge, but then you give them an immediate bonus, and so, therefore, you haven't had a net decrease to the contract as you moved from one to the other. That would pass.

The fourth one is that the modification does not result in a change to either the amortization method or revenue classification. This one is kind of an obvious one. If you change from a FAS97 to a FAS91 or 120, it sounds like that would be a different contract anyway. This is just clarifying that when you change FAS classifications or things that change your amortization method, that will fail this criterion.

And the fifth is that the additional benefits do not become the primary benefits of the replacement contract. An example would be to have a major medical plan with a low monthly, weekly or daily benefit, but you add a very significant long-term care rider, and that rider dominates the original contract. That would be kind of a change in the primary benefit.

So for accounting purposes, if you hit not substantially different, that means, effectively, that you're saying this new modification is a continuation of the original contract. And if it's a continuation of the original contract, then you shouldn't be writing off DAC and setting up new DAC. The new contract has to be linked somehow to the original contract. This is probably one of the areas that received the most comments in terms of practical issues. Most of these are FAS97 contracts people are thinking of. It also applies to FAS60, but we often think about it in the FAS97 context.

And what it means is as you set up a new contract you have to link every contract to where it went and where it started from, because you have to append the new EGP stream on the original.

Prospective unlocking also may be required at the time of the replacement. This is an issue in which you have one EGP stream, and then at the point if you determine that it's not substantially different, you might have a new EGP stream to reflect the new risks inherent in the new contract that's considered a continuation. So you have to link the whole stream. Acquisition costs are associated with these replacements to the extent that it's not substantially different. You could have additional acquisition cost and that would come into your EGP stream as well, and also be deferred.

If you're under the other wing, which says it is substantially different, then if you have a new contract, you write off DAC and treat it as a lapse or a surrender. This is particularly interesting if you think about a situation in a rider. Say you set up a rider, and you've determined that it is a substantially different contract by adding the rider. Effectively what that means is you have to write off all your previous DAC, and that could have some fairly significant income effects as well.

So, in conclusion, since the exposure draft, only 10 comment letters came in. It was a little bit disappointing on the number that were received, but the comments were quite extensive and fairly similar in tenor. The first thing the task force did is to look at that definition of substantially different versus not substantially different, as that's really more important in some ways than the accounting treatment.

And the second thing they're doing is with the accounting treatment. They're reconsidering their position of making you go all the way back to the beginning. They're saying, well, that's theoretically correct, but we'll consider a prospective approach if the first approach that we put in the SOP is not practical. So that was a monumental move since the exposure draft came out. And it's planned that in September we'll be giving a revised SOP to the Accounting Standards Executive Committee (AcSEC). And then after AcSEC, it's FASB, and then it becomes final.

The legal form of the internal replacement is not consideration in determining the accounting treatment. According to the current position, that also holds true for things that pass through corporate lines. That's an awkward position to be in when you've been acquired or acquiring, and there are administrative systems and the nightmare associated with that at the consolidated level.

MR. JOHN F. BEVACQUA: There's much diversity in practice and interpretation as to how companies should go about purchase accounting after an acquisition. The reason for that is there is not a lot of authoritative guidance that specifically addresses many of the issues that we all run into in applying those principles, specifically as they relate to the establishment of the value of business-acquired assets that's required to be established under purchase accounting.

I should comment that there's actually a monograph that's being put together through the Academy of Actuaries, capably led by Ken LaSorella, that does an

excellent job of laying out a good case for the actuarial appraisal method. I'm going to focus the bulk of my comments on the value of business acquired (VOBA) mechanics, comparing a couple of different alternative methods and understanding kind of the differences between them and some of the merits of each one.

Before I proceed into VOBA, I thought I'd start by talking about some general purchase accounting issues and principles that I think do a good job of laying the foundation for why you might follow a certain course of action in terms of laying out the mechanics of calculating VOBA. From that point, I'll then talk about some of the details around VOBA, comparing the two methods that I alluded to earlier. Finally, I'll highlight a few practical issues that I've recently run across.

One of the ways in which purchase accounting is often characterized is as a process of allocating the purchase price paid for a business enterprise. And effectively, this is an extension of the historical cost accounting framework that really characterizes GAAP, in which whenever anybody acquires an asset or assumes a liability that, effectively, those balances are going to be held at the cost of that at the point in time in which that transaction occurs. And to the extent their earnings are going to merge, that will happen after the point in sale. So essentially, it's a profit and loss accounting framework. At the point in time at which the transaction occurs, there's no gain or loss.

For life insurance enterprises, the allocation really falls into four primary buckets. The first category will be net assets. The second one is VOBA. The third one is any other identified and tangible assets that would be associated with the acquired business. The fourth is goodwill.

I'm going to talk about each of these things in a little bit more detail. Net assets are often viewed conceptually as corresponding to the statutory surplus that one might otherwise identify within an actuarial appraisal view of an acquisition. Essentially that represents the excess of the fair value of the tangible assets acquired over the liabilities that have been assumed as a result of the transaction. This is before establishing any of the intangibles such as VOBA, goodwill or any other identified intangibles. We would go ahead and value that based upon the mark-to-market assets that are required to be made upon the acquisition; and to the extent that the acquired entity had any historical DAC, goodwill or VOBA on their books, that would all be eliminated.

Further, on the reserving side, generally speaking FAS97 contracts have historically been carried over at their account balances. FAS120 contracts also historically have had their levels carried over. The one exception to this would be FAS60 contracts, where interpretation 1D more or less lays out two different methods that can be used by an actuary to establish the opening balance of the reserve after an acquisition.

I'd like to talk a little bit about interpretation 1D because I think that there are some other principles that do affect other types of situations. The principle there is that often when you look at the language in interpretation 1D about establishing the reserves, the criterion used to establish the reasonability of that reserve is to look at the subsequent earnings that are expected to emerge after that acquisition.

For example, if a company that's currently selling term insurance acquires another company that has a block of term life insurance, and that company has an expectation of being able to sell term with a 15 percent of premium margin, then it could be a very reasonable assumption that when they acquire this business, to establish the reserves of that acquired entity, assuming that they're going forward and are going to be generating a 15 percent of premium GAAP margin.

This principle has been extended to other situations such as limited pay contracts and contracts that have front-end loads. They've taken this principle and extended it to justify putting additional unearned revenue items and additional reserves on the opening balance sheet that would effectively get back to a reasonable level of profits in line with what an otherwise similar product might generate under current market conditions. So this is an area where there's a lot of variation in terms of practice in the industry, but certainly one that I think is worth talking about.

Next is VOBA, and here I'm going to talk about some of the basic principles of VOBA, essentially trying to reflect the value of the insurance contracts that have been acquired as a result of the transaction. There are a variety of methods, but I think they all can loosely be characterized as reflecting, in some way, the mark to market on the investments. Any type of reserve adjustment that would be made as a result of purchase accounting is, in some way, trying to establish the initial balance by discounting either net cash flows or future earnings using a risk-adjusted discount rate.

However, from that point forward, I think what we find is that most methods tend to vary fairly dramatically when you start to get down to the next level of detail. Regardless of what method you choose to establish the opening balance of VOBA, you will be required to actually amortize it using the same exact mechanics for DAC. So to the extent it's a FAS97 contract, you'll amortize it at the credited interest rate proportionately to expected gross profits. And for FAS60 contracts, you amortize it at the earned rate in proportion to gross premiums.

Now we move on to other intangibles, which, generally speaking, for most life insurance transactions end up not really being a very significant part of the opening balance sheet. Nonetheless, FAS142 does get into some detail around exactly how you go about identifying intangible assets, how they should be valued and how they should be amortized over the lifetime of those assets. Effectively, there are two separate criteria here that are really used to determine whether a particular item would qualify as an identifiable intangible asset or otherwise be included as a component of goodwill to the extent there was a consideration paid for that item.

The first criterion is a contractual/legal criterion, which is to determine whether, as a result of the transaction, the company actually does have a formal sense of ownership over this item that can be demonstrated through some type of contract or other legal relationship.

The second criterion is separability. You meet this criterion if you can take this property, separate it from the rest of the businesses and independently sell it to another party. So to the extent that it can meet this these criterion, it would be identified and simply reported on the balance sheet as an asset. And to the extent it does have a finite lifetime, it will be amortized over that lifetime in a pattern that reflects the manner in which that asset is going to be consumed and add value to the enterprise over that lifetime. If it is not a finite lifetime asset, it will then be held and be subject to a periodic impairment test.

For all the discussion that's happened in the industry around how we're moving away from using goodwill as a plug and trying to do a much more thorough job of identifying intangible assets that were paid for and acquired as a result of the transaction, at the end of the day, goodwill still is a plug. It is essentially the balancing item. It's the balance between the purchase price and net assets plus identified intangibles.

And I think directionally, where the accountants are trying to go with this is that they really see two different types or components of true economic goodwill that I've laid out. Under an area called conceptual components, that includes any kind of fair value associated with the synergy of the net assets that were acquired. That is the value that causes the aggregate value to be greater than the sum of the pieces. In addition to that, there's also a second component that refers to the fair value of the synergies by combining the net assets of the acquired company with the existing net assets of the acquirer.

I think there could potentially be some VOBA implications. If these things are really the nature of goodwill, then, perhaps, if there are certain ways in which we should be going about establishing our assumptions with VOBA that would more appropriately get back some of the synergistic values and redirect them back toward goodwill. Finally, once you establish the opening goodwill amount, you'll then have to allocate that one level below the reporting unit and subject that to a periodic impairment test.

Okay, now to push on to VOBA. There really are only two authoritative standards that provide any guidance at all as to how we should go about calculating VOBA. They're essentially Emerging Issues Task Force (EITF) 92-9 and FAS142. EITF92-9, which came out before 142, essentially says that we should be calculating VOBA by taking the present value of net cash flows. They should be based upon the work of an actuarial study, and then finally, they should be amortized based upon premiums for FAS60 contracts and EGPs for FAS97 contracts.

In comparison, FAS142 kind of came back and said, I'm not going to pick on VOBA specifically, but in general to the extent that you have a purchase price, you should allocate that purchase price across your assets and liabilities in proportion to their fair values. I think the interpretation of 142 is that you should be establishing the VOBA such that the net carrying value of those liabilities is consistent with the fair value of those items. One of the reasons why there's such a diversity in practice is that GAAP earnings are not equal to cash flow that would be distributable to shareholders. So when we discount our GAAP earnings, it is not the same thing as discounted cash flow, which is how most people tend to think about fair value. We reach this fork in the road in which we need to choose which way we want to go, and, hence, we find a variety of practices within the industry as to how companies go about calculating VOBA.

The first method is the actuarial appraisal method. Chart 1 summarizes my simple view of what this method is trying to do. Essentially you can conceptually view a balance sheet being established for an actuarial appraisal where you would show the invested assets of the backing for the reserves as well as the target surplus of the entity, the statutory reserves of the business, and ultimately arrive at an equity number or net asset number for that balance sheet that's going to equal the present value of the distributable earnings. This is appropriate, given the fact that on our balance sheet we are going to actually be including target surplus.

The appraisal method essentially says that if that's fair value, that's where we want to end up with in terms of the net accounting value on our GAAP financial statements. So we plug for that. For the appraisal part, we write down to their targeted net asset number for GAAP purposes, and then basically work through the algebra to determine what we need to be entering as far as VOBA so that we end up exactly where we want to be and have an end carrying value that's going to more or less match up with the fair value of the business. So this is very much consistent with the requirements of FAS142.

The other method that has been used in practice pretty significantly is called the ROI method or the present value of GAAP earnings method. Essentially here you would go back to your appraisals, change them from a statutory basis to a GAAP book earnings basis, and then discount those earnings back at a risk-adjusted discount rate to arrive at your opening VOBA number. This is something that's viewed to be somewhat consistent with the language of 92-9, which says you should be using premiums and EGPs as basis of your VOBA. If you could actually amortize your VOBA using your discount rate, you effectively get back to this nice result of having level ROEs that are going to more or less back up and be exactly the same as your initial discount rate. However, you can't do that. EITF 92-9 more or less says that you have to use the mechanics of DAC, which means you have to use your credited or earned rate based upon the product classification. Nevertheless, I think it is a phenomenon that's worth noting because when you start to think about a way in which a reviewer of a financial statement will interpret your results, it's

always nice to kind of understand the merits of this result and how explainable they might be.

Chart 2 is an example of a block of fixed UL business where we developed an actuarial appraisal and we have a stream of distributable earnings. And in my simple example, which was going over only a 10-year period, I took the present value of those distributable earnings, plus the present value of my surplus for some terminal value factor, and it came out with a present value of distributable earnings number of \$97 million. And in this hypothetical transaction, we're going to be acquiring a book of business that would include assets equal to the liabilities plus target surplus. So for all intents and purposes, this number would essentially correspond to the purchase price of this business.

Chart 3 walks through the mechanics of the actuarial appraisal method. I won't get into too many of the details on the formulas here, but at the end of the day, to the extent you've done your math correctly, you should end up on the lower right-hand side of having essentially a pseudo-GAAP net accounting value equal to the initial purchase price that was paid for this business. We're coming out correctly, and that's where we ended up. And as you can see, there are a number of different adjustments you have to make to the extent that your reserves and your assets are going on a statutory basis versus what you might have on a GAAP basis.

So what does this look like in terms of looking at the picture of this business on a GAAP basis going forward? In the example in Chart 4, I basically have gone back, and I've used the same projection that we were looking at earlier on the appraisal valuation and converted it over to a GAAP basis. I put in VOBA and amortized that VOBA off under the rules that we described earlier. And as you can see, we started off with a GAAP early in the first year of about 6.9 percent and ended up with an ROE after 10 years of about 15 percent. And the primary reason for this pattern is the fact that we're required to amortize over VOBA using the credited rate, in this case, for a UL contract. This essentially forces a lot more amortization to occur in the earlier years than in the later years, and it's sort of tilting the pattern of our ROEs.

Chart 5 confirms this by going back and recalculating our ROEs using more of the 10 percent type discount rate, which is the same rate we used to come up with our purchase price. And you'll see that we ended up with an ROE pattern that's a bit more level and, perhaps, arguably a bit more reasonable over the lifetime of this business.

Chart 6 lays out the ROI method. To come up with our VOBA using this technique, we had to go back, rejigger our models and calculate future GAAP earnings, and then discount that at 10 percent. Under this example we came up with a VOBA that ended up being a bit too high because it ended up generating negative goodwill. If you find yourself in a negative goodwill situation, what you could do is first check your math, then go ahead and bring down your VOBA and other intangible assets

to effectively absorb that negative goodwill number. If you still find yourself with negative goodwill even after writing off your intangible, which I've never seen before, it could be theoretically possible to record an immediate gain and take that negative goodwill into earnings at the point of transaction. However, that's fairly rare. So because of that, we ended up really at the same place as under the prior example because we had been at goodwill, so the opening balance sheet looks more or less the same using this method.

The next issue is negative VOBA. I thought that might be interesting to talk a little bit about, given the low interest rate environment. If one were to acquire a block of fixed annuities, mark the assets to market and then find that the yield in those assets are actually significantly below the guarantees in those contracts, in theory, it could be possible that mathematically you end up with a negative VOBA. And in many ways, this is saying that there's almost a loss recognition that's appearing on the business because we don't have the yields on assets to adequately support the reserves or the guarantees. Rather than report a negative VOBA, we need to increase our reserves.

In addition to absorbing the future losses, perhaps it's even more important to increase the reserves more than you would through a traditional loss recognition exercise. You'll want to actually include some margins for future profits that would be established by looking at the manner in which you have determined the fair value of the business and, ultimately, get back to a pattern of earnings that would be in line with that fair value. Using the actuarial appraisal method, I think, it is a technique that would effectively allow you to deal with that issue in a fairly straightforward manner. One could essentially go through the full negative VOBA calculations and come up with an amortization schedule. And instead of putting in negative VOBA on the assets, you actually call that an increase in reserve and have that come through the lifetime of the business.

The ROI method will probably give you an insufficient answer because you're discounting those losses at a very high discount rate. So you almost find yourself immediately in a loss recognition situation, and, effectively, that technique really doesn't work in this type of a scenario. So this is, obviously, an area that is fairly new, and others might have some interpretations.

Finally, I think there's also some discussion and debate as to whether VOBA is really an intangible asset or not. But I think at the end of the day, the way in which people generally are comfortable with understanding VOBA is that it's the agent that you need to use that gets you back to a fair value for that liability. So whether you call it a separate asset and call it VOBA or you otherwise lower your reserve to effectively go back to the same position, many people get comfortable just conceptually understanding there's a mechanism that's used to fair value your liabilities.

There is some gray area in terms of whether a particular transaction might be reinsurance or an acquisition under GAAP. I think you need to be careful and understand the exact terms of what's going to happen with the transaction, who's going to control the business and who's going to administer it. Ultimately, use that as your guiding principle as to whether this, in fact, is an acquisition of a business or really nothing more than a transfer of risk as characterized by a reinsurance transaction.

MR. DAVID C. SCHEINERMAN: I'm going to continue and talk a little bit about FAS133. I'm going to cover the basic conceptual framework of 133 and derivative accounting. I'm also going to talk a bit about applications to insurance. Then I'm going to get into this very current issue of the Derivative Implementation Group (DIG) issue B-36 and how modified coinsurance and experience-rated pension contracts are being looked at as having an embedded derivative that needs to be fair valued.

Within FAS133 lies the definition of a derivative. It doesn't define it by pointing to a class of financial instruments; rather, it's principles based because in the financial markets and in our industry there's a lot of innovation. If they defined it as a class of instruments, then people would have figured out ways to get around it. So instead, it's principle based. It talks about there being one or more underlyings related to one or more notional amounts. An underlying might be the Standard & Poor (S&P) 500 Index or an interest rate, or pork belly futures, etc. The notional amounts would be the reference quantity, so if it's a futures contract, it might be related to \$100,000 worth of the S&P 500 or Treasury bonds or whatever.

It requires no or a very small initial investment. For a put option on IBM stock, you pay a small portion of a dollar relative to the overall price of the stock. When you put in a futures position, you're not really putting out an initial amount of money other than, perhaps, a margin account. So you're not buying the instrument itself directly; rather, you're putting a small amount on a relatively large notional amount.

And the last item is that a derivative requires or permits a net settlement, which basically means that when you terminate the contract or you want to cash in that instrument, you can get your amount of money in cash or in something that's readily convertible to cash. It doesn't require you, for example, to put your money into the contract, pay the notional amount and then receive the amount back over time. The reason why I mention that is related to the insurance contract, a GMIB feature within a variable annuity. Upon implementation of 133, there a group called the Derivative Implementation Group that looked at various issues that weren't answered in 133 or there were questions about. The DIG looked at the question around GMIB on a variable annuity and if that is a derivative or not. There's clearly an underlying because the variable annuity is related to equities, but the benefit is kind of a fixed payout. There's a difference there. It's kind of like a put option on the variable account balance, and it doesn't require any significant initial investment

as part of the fee structure that you pay over time, but it's not net settled. In order to get the GMIB benefit, you need to take your variable annuity balance and leave it with the insurance company and get it back over time. So that's why that particular feature of an insurance contract is not considered a derivative for 133.

The basic rule of 133 relative to derivatives and how they're carried on in your financial statements is at fair value. That's relatively easy when it's an instrument traded on a market. You can just look it up in the paper or on your Bloomberg. But when it comes to insurance contracts, if there are derivatives within them, you're not going to find the traded amount. You have to develop a model and use assumptions that are market-based and look how to represent fair value. One of the key principles in validating that model is that when you initially value a derivative, you would expect no gain or loss upon acquisition. So that's a way if you're fair valuing GMIB reinsurance, for example, which is a derivative, that you can get a level of comfort that your model is reasonable. At time 0, when you're valuing the revenues and the benefits, you end up balancing to zero.

Now, if a derivative is part of the hedge and you get hedge accounting treatment, which is not an easy task, then 133 allows you to basically account for both the derivative and the item that's hedging on a similar basis, and you don't get volatility income. They're both recognized in a manner that would be intuitively appealing. But if it's not a hedge, then you're going to end up with the derivative, the fair value of that fluctuating going through income, and the other item being accounted for as it would for GAAP. Then you may well get some volatility.

In terms of the insurance contracts, 133 has a general exclusion, but it doesn't relate to investment contracts. It really relates to contracts in which the benefits are being paid related to mortality or morbidity. So if you have a life insurance contract where the death benefit is related to the S&P 500, even though it looks like a derivative, because it's paid upon death, it would not be considered a derivative and is not be subject to 133.

Similarly, if you had a participating whole life insurance contract and you could make the case that it looks like there's a derivative because of the relationship between the performance of the assets and the dividends, that would be excluded. But 133 says that an insurance contract may have a derivative within the contract. An example of that would be a UL insurance contract in which the account balance has a derivative component to it, such as an equity-indexed component.

Let's get into the definition of an embedded derivative. FAS133 says that you have a financial instrument in which some of the cash flows would be a derivative and, if they were on their own, would be valued as a derivative and modified based on one or more underlyings. If within that embedded derivative, within the overall contract, there's a concept described such that the derivative would not be clearly and closely related to the host contract, you have an embedded derivative.

An example of that would be if you had a UL insurance contract, which is kind of a fixed account, and the interest rates were indexed to an external interest rate index, that's a derivative, because it's an underlying and there's a notional amount, but interest rates and debt hosts are considered to have a clearly and closely related relationship. So you would not be required to bifurcate and separately value the embedded derivative from the host contract.

There are a few tests that you need to follow within the insurance contract to determine if you have an embedded derivative that needs to be separately valued and valued at fair value. And there are various DIG issues that specifically talk about equity-indexed annuities, which give you guidance on how to do that.

The common derivatives for life insurance companies would include equity-indexed annuities and guaranteed minimum accumulation balances. When GMIB is reinsured, the typical contract provision is that the reinsurer will pay the direct company a lump sum that recognizes the value of that GMIB benefit when the present value of the annuity benefit exceeds the account balance. The reinsurance would pay that amount in a single payment. That provision is considered net-settled, and therefore the reinsurance of GMIB is a derivative and would be required to be fair valued. We've got a mismatch in the accounting there, but we basically have to live with that.

A DIG issue that occurred at the end of 2002 references both modified coinsurance, or coinsurance with funds withheld as having an embedded derivative, as well as experience-rated participating pension contracts.

DIG Issue B-36 was originally issued in May 2002 but wasn't viewed as an issue for modified coinsurance. It was for credit-linked derivatives for regular financial instruments. But during the course of last year, the SEC reviewed one company's financial statements, and, I guess, the company worked with the SEC and with their auditors to determine that their modified coinsurance arrangement did represent and did contain an embedded derivative. And so the DIG issue was exposed.

There was discussion with it, and then it was ultimately promulgated in April 2003 to provide some guidance and some direction that the typical modified coinsurance (modco) reinsurance agreement would be considered to have an embedded derivative that would require 133 accounting. Should you be a ceding company in the situation where now you're going to bifurcate your modco reinsurance agreement, you're going to have assets that are supporting that modco agreement. B-36 promotes kind of a mulligan, a one-time transfer of those assets if you've been holding them on an available for sale basis to trading. It allows for that to be done without tainting the available for sale designation of the rest of your portfolio.

It said that this would become effective the fourth quarter of 2003. So those of you who have modco reinsurance agreements should really be actively working on

this to ensure you've examined your agreements and understand what the derivative is or isn't. You should be working on the valuation and disclosure elements to it.

Conceptually, why is this modco reinsurance contract considered an embedded derivative? Basically it's as if the ceding company has borrowed back the assets from the reinsurance company. And they're going to credit to the reinsurer the underlying performance of those assets, and the borrowing directly is as if it's a debt host. But if it was a fixed interest rate, then it wouldn't be any kind of derivative. It would be an interest rate that was debtlike. But, because the interest rate references these underlying assets, which have credit risk and other exposures, it's considered an underlying that is not clearly and closely related to the debt host.

One can think of it as if the reinsurer is paying the ceding company a fixed rate, and the ceding company is paying to the reinsurer this underlying return, and view it as if it's a swap. That swap is being interpreted as the embedded derivative. A lot of modco reinsurance agreements related to surplus relief would have experience-rating features, and those experience-rating features could essentially pass the underlying performance of the assets back to the ceding company. So that may provide for somewhat of an offset to the derivative.

When you implemented 133, you were allowed to grandfather certain contracts if they were initiated before January 1, 1998, or January 1, 1999. If you did elect that kind of grandfathering, your modco reinsurance could potentially have a similar grandfathering.

Some of the ways in which people are thinking about this embedded derivative is that it could be a variable interest rate swap. There are different combinations. It could be a variable rate debt host, which means the ceding company has borrowed the money from the reinsurance company, and there's a notional variable rate indexed to London Interbank offered rate, and instead of paying that, they swap that or pay the variable rate related to the underlying assets. Or it could be a fixed rate debt host. They're swapping a fixed rate for the duration of the liabilities for this underlying return.

Depending on how you interpret it, and there's not a lot of guidance here, the B-36 says you have to look at the characteristics of the contract to evaluate it. So that's an implementation issue that people are working on interpreting. But you could view it as such that the embedded derivative either has a fixed rate debt host or a variable rate debt host. And that could be considered a total return swap or a credit derivative. That's really how people are working on this now and working on valuing it.

MS. HAY: I would love to ask a question about purchase GAAP. You pointed out that the cost of capital was an important issue in comparing and contrasting

method 1, the appraisal value method, to method 2, the more traditional method. Would you say, in general, that the cost of capital might be the biggest difference between the two VOBAs relatively, or are there other items that would net out to that difference?

MR. BEVACQUA: I think that's certainly a big consideration and does have a fairly significant effect on the answer. However, the other item here that's worth paying a fair amount of attention to would be the reserve differential. And specifically, I think when you compare, let's say, a FAS97 variable product, which generally will have a higher GAAP reserve than stat reserve, as well as potentially a fairly low cost of capital because of very little C-1 risk, you can have one answer in terms of their relationship of VOBA versus goodwill under one technique, while if you look at a FAS60 general account product in which you have a fairly large cost of capital and the relationship of the reserves are kind of flipped around, I think what you can find is that which technique gets you higher or less goodwill can very much change depending upon those two parameters. So at least those are the things that I've seen that probably collectively tend to have some larger effects on the answer.

MR. ROLAND ROSE: On a typical ceded surplus relief agreement, would you expect that to be a fixed rate debt host or a variable rate debt host?

MR. SCHEINERMAN: I think you probably would want to look at the specifics of the nature of the liabilities and so forth. I think it's going to be difficult in practice to determine that it's clearly a fixed or a variable rate host. I think that companies are likely to be going with the variable rate host. When you value that swap, you'll likely get that the derivative will end up marking the liability to the value of the assets, and then, similarly, you'll be able to carry the value of the assets at kind of fair value. So I think that's the direction people are going to want to head generally. But I think we're still figuring out whether they'll be able to fully support that and what it will take to get there.

FROM THE FLOOR: One of the things that I started looking at is that in typical surplus relief ceded, the higher the modco interest rate, the more rapidly the surplus relief has paid off. And so you have an offsetting, and yet the guidance says that you have to do both sides. You can't just say they offset.

Chart 1

Alternative Methods of Deriving Initial VOBA

1. Actuarial Appraisal Method

	Actuarial Appraisal	GAAP	
Invested Assets	\$500,000	\$550,000	→ Solve for X
VOBA	40,000	X	
Total Assets	\$540,000		
Reserves	\$450,000	\$475,000	
Def Tax Liab		\$ 8,750	
Total Liabilities	\$450,000		
Net Assets	\$ 90,000	\$ 90,000	

= Implied Fair Value
(PV Distributable Earnings)

Chart 2

Example – Actuarial Appraisal of Fixed UL Business

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Premium	42,350	35,032	28,974	23,959	19,810	16,375	13,533	11,180	9,234	7,623
Net Investment Income	23,967	23,606	23,007	22,182	21,154	19,995	17,921	15,757	13,502	11,277
Death Benefits	13,158	13,519	13,728	13,891	14,031	14,178	14,292	14,373	14,410	14,418
Surrender Benefits	19,863	19,763	19,167	18,168	16,839	15,239	13,421	11,432	9,312	7,093
Change in Reserve	7,753	815	(4,678)	(9,097)	(12,641)	(15,495)	(17,701)	(19,348)	(20,497)	(21,237)
Expenses	5,103	4,569	4,097	3,680	3,309	2,979	2,684	2,420	2,184	1,971
FIT	7,154	6,990	6,883	6,825	6,799	6,814	6,565	6,321	6,065	5,829
After Tax Statutory Earnings	13,285	12,982	12,783	12,675	12,626	12,655	12,192	11,739	11,263	10,826
Distributable Earnings	17,000	15,500	15,000	15,000	14,500	14,500	14,000	14,000	12,500	12,500
Invested Assets	277,204	281,243	279,539	272,644	261,223	246,708	229,369	209,859	188,250	166,516
Statutory Reserves	240,230	247,983	248,798	244,120	235,024	222,383	206,888	189,186	169,838	149,341
Statutory Surplus	36,974	33,260	30,741	28,524	26,199	24,325	22,481	20,672	18,412	17,175
RBC Ratio	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%

PV of Distributable Earnings @ 10%: \$96,779,000

Chart 3

Alternative Methods of Deriving Initial VOBA

1. Actuarial Appraisal Method

	Statutory	GAAP
Invested Assets	\$277,204	\$302,139
Reserves	\$240,230	\$251,879
Net Assets	\$ 36,974	\$ 50,260

- Purchase Price = \$96,779
- $Assets_{GAAP} - Assets_{STAT} = 302,139 - 277,204 = \$24,935$
- $Reserve_{GAAP} - Reserve_{STAT} = 251,879 - 240,230 = \$11,649$
- $VOBA = [96,779 - 36,974] / [1 - .35] + 11,649 - 24,935 = \$78,722$
- $Defd Tax Liab = .35 * [24,935 - 11,649 + 78,722] = \$32,203$
- $Goodwill = 96,779 - 50,260 - 78,722 + 32,203 = \0

Assets		Liabilities	
Invested Assets	\$302,139	Reserves	\$251,879
VOBA	78,722	Deferred Taxes	32,203
Goodwill	0	Shareholder Equity	96,779
Total Assets	\$380,861	Total Liab & SH Eq	\$380,861

Equals Purchase Price

Chart 4

GAAP ROE of Acquisition – AA Method

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Fee Income	29,821	30,147	30,170	30,119	30,053	30,039	30,006	29,955	29,869	29,776
Investment Income	18,128	18,211	17,942	17,354	16,486	15,425	14,185	12,850	11,427	10,036
Incurred Death Benefits	12,910	13,260	13,464	13,627	13,772	13,930	14,061	14,164	14,231	14,274
Credited Interest	14,711	14,701	14,375	13,811	13,063	12,176	11,184	10,117	9,003	7,865
Expenses	5,103	4,569	4,097	3,680	3,309	2,979	2,684	2,420	2,184	1,971
VOBA Amortization	4,956	5,893	6,616	7,232	7,782	8,308	8,798	9,265	9,713	10,159
Incurred FIT	3,594	3,477	3,346	3,193	3,014	2,825	2,612	2,393	2,158	1,940
After Tax Income	6,675	6,458	6,213	5,930	5,598	5,246	4,852	4,444	4,008	3,603
Distributable Earnings	17,000	15,500	15,000	15,000	14,500	14,500	14,000	14,000	12,500	12,500
Invested Assets	302,139	303,516	299,032	289,232	274,772	257,079	236,412	214,164	190,444	167,261
VOBA	78,722	73,767	67,874	61,257	54,025	46,243	37,935	29,137	19,872	10,159
Goodwill	0	0	0	0	0	0	0	0	0	0
Total Assets	380,861	377,283	366,906	350,489	328,797	303,322	274,347	243,301	210,315	177,420
Policyholder Account Balance	251,879	258,990	258,533	252,258	241,453	227,149	210,144	191,169	170,836	149,873
Deferred Taxes	32,203	29,762	27,171	24,397	21,401	18,147	14,603	11,011	7,374	3,700
Total Liabilities	284,082	288,751	285,704	276,656	262,854	245,296	224,747	202,180	178,210	153,373
Equity	96,779	88,531	81,202	73,834	65,943	58,027	49,600	41,121	32,106	24,047
ROE	6.90%	7.29%	7.65%	8.03%	8.49%	9.04%	9.78%	10.81%	12.48%	14.99%

- Statutory book yield = 7.5%
- New money rate = 6.0%
- Assets marked-to-market
- Investment yields marked-to-market

Chart 5

GAAP ROE of Acquisition– AA Method & Amortize VOBA @ 10.00%

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Fee Income	29,821	30,147	30,170	30,119	30,053	30,039	30,006	29,955	29,869	29,776
Investment Income	18,128	18,211	17,942	17,354	16,486	15,425	14,185	12,850	11,427	10,036
Incurred Death Benefits	12,910	13,260	13,464	13,627	13,772	13,930	14,061	14,164	14,231	14,274
Credited Interest	14,711	14,701	14,375	13,811	13,063	12,176	11,184	10,117	9,003	7,865
Expenses	5,103	4,569	4,097	3,680	3,309	2,979	2,684	2,420	2,184	1,971
VOBA Amortization	3,381	4,592	5,594	6,514	7,404	8,317	9,244	10,202	11,203	12,273
Incurred FIT	4,146	3,933	3,704	3,444	3,147	2,822	2,456	2,065	1,636	1,200
After Tax Income	7,699	7,304	6,878	6,397	5,844	5,240	4,562	3,836	3,039	2,229
Distributable Earnings	17,000	15,500	15,000	15,000	14,500	14,500	14,000	14,000	12,500	12,500
Invested Assets	302,139	303,516	299,032	289,232	274,772	257,079	236,412	214,164	190,444	167,261
VOBA	78,722	75,341	70,749	65,155	58,641	51,238	42,921	33,677	23,475	12,273
Goodwill	0	0	0	0	0	0	0	0	0	0
Total Assets	380,861	378,857	369,782	354,388	333,414	308,317	279,332	247,842	213,919	179,534
Policyholder Account Balance	251,879	258,990	258,533	252,258	241,453	227,149	210,144	191,169	170,836	149,673
Deferred Taxes	32,203	30,313	28,178	25,762	23,016	19,895	16,348	12,600	8,635	4,440
Total Liabilities	284,082	289,302	286,711	278,020	264,470	247,044	226,492	203,769	179,471	154,113
Equity	96,779	89,555	83,071	76,367	68,944	61,273	52,840	44,072	34,448	25,421
ROE	7.95%	8.16%	8.28%	8.38%	8.48%	8.55%	8.63%	8.70%	8.82%	8.77%

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Chart 6

Alternative Interpretations of VOBA

2. ROI Method

	Statutory	GAAP
Invested Assets	\$277,204	\$302,139
Reserves	\$240,230	\$251,879
Net Assets	\$ 36,974	\$ 50,260

- Purchase Price = \$96,779
- $Assets_{GAAP} - Assets_{STAT} = 302,139 - 277,204 = \$24,935$
- $Reserve_{GAAP} - Reserve_{STAT} = 251,879 - 240,230 = \$11,649$
- $VOBA = \$85,413$ (from discounting GAAP profits @ 10%)
- $Defd Tax Liab = .35 * [24,935 - 11,649 + 85,413] = \$34,545$
- $Goodwill = 96,779 - 50,260 - 85,413 + 34,545 = < \$4,349 >$
 - Set to zero, reduce VOBA, and adjust DTL

Assets		Liabilities	
Invested Assets	\$302,139	Reserves	\$251,879
VOBA	78,722	Deferred Taxes	32,203
Goodwill	0	Shareholder Equity	96,779
Total Assets	\$380,861	Total Liab & SH Eq	\$380,861

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