

**1998 VALUATION ACTUARY
SYMPOSIUM PROCEEDINGS**

SESSION 29CS

GAAP ACCOUNTING FOR LIFE INSURANCE ACQUISITIONS

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MR. SCOTT A. MCALPINE: I'm a senior consulting actuary with Ernst and Young. I've been involved in Purchase GAAP (PGAAP) accounting, helping clients with mergers and acquisitions (M&A) activities, and I have been helping them implement their purchase GAAP accounting. Mike Eckman will also be speaking. He is with ReliaStar Financial Corporation and has been involved with helping his company implement pieces of the PGAAP accounting for acquisitions they've made.

There is a lot of interest in PGAAP accounting due to the large amount of acquisitions that are taking place in the industry. I'm going to present an overview of basic PGAAP accounting for life insurance. Mike will take us through a case study of how his company evaluates certain acquisitions as to what implications there might be for PGAAP accounting.

Our objectives are to identify the major steps of implementing GAAP life insurance accounting for acquisitions. There are a lot of items, besides actuarially related balances, that go into the GAAP accounting of acquisitions. In my situation, GAAP accounting is normally handled by the accounting side of the house, so I'm going to focus strictly on the actuarial balances. We're going to provide an overview of the commonly used methods that companies use, and we will provide some insight into the implementation options and their implications that companies have in setting up their accounting.

There is a separate set of accounting rules for business combinations. These rules have been defined more for all industries in total, not specifically related to life insurance. There are some rules that apply to life insurance, otherwise, you're really applying the overall business combination rules. For life insurance they would apply to life insurance companies who are merging or for an acquisition of a life insurance company. They also apply to acquisitions of blocks of business through co-insurance or assumption rules shown. One difference with co-insurance is that, typically, there is no goodwill act, which we'll talk about. There can be in some cases, if you're buying an entire line

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of business, and you're also getting some type of a field force where you might think there is some new business associated.

GAAP principles are fairly complex, as with most life insurance accounting. There are wide variations in practice due to the limited amount of strict guidance as to how to treat various items. There are two major GAAP accounting methodologies that apply to acquisitions and each one of them has different sets of rules. There is purchase accounting and what is called pooling accounting. The theory of purchase accounting is that assets are acquired and a price is negotiated. Assuming that the price that has been negotiated at fair market value is the theory behind acquisitions using purchase accounting. Pooling accounting is used when there is a merger of companies that are uniting interests. A specific price is not stated. The companies are really just merging into one entity.

The types of consideration that apply to purchase accounting can be almost anything. There can be cash, stocks, or bonds. There can be contingent payments in terms of how well the deal performs going forward, so really any type of payment is allowed under purchase accounting. If you're using pooling accounting there really has to be voting common stock since it's a merging of interests. There are no contingent payments allowed. To use purchase accounting, you can have all or part. However, pooling has to be over 90% of the interests. We're going to focus almost entirely on purchase accounting, which is the area that requires more work. It is used most often as companies are acquired, but not merged together.

Some of the major differences in the GAAP accounting methodologies are their impacts on the balance sheet. For purchase accounting, all amounts are reported at fair market value. Balance sheet amounts are restated, created and eliminated at the time of purchase. These fair value balance sheet amounts, such as reserves, value of business acquired (VOBA) and DAC, respectively, have an impact on the income statement as they change or are amortized over time.

Under pooling accounting, historical balance sheet values are retained. Since it is a pooling of interests, these historical values are just added together. Consequently, there is less impact on future

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reported earnings other than those resulting from synergies. In other words, differences in earnings are not driven by changes in accounting items or methodologies.

With purchase accounting on the balance sheet and income statement, start from the day of purchase and move forward. In a pooling, prior years' income statements need to be restated as if the company had been merged two or three years prior to the acquisition.

One of the biggest implications we've seen in the past few years, is that PGAAP has really put the constraints on pricing of the acquisition. It appears that most acquisitions are preceded by some good evaluation as to what a company feels another company is worth. One of the major factors that drives what a publicly traded company will pay for another company is what the impact will be on their earnings and earnings per share going forward. In addition to doing the economic valuation, companies are up front, not just dealing with purchase GAAP after the fact, but looking at what is going to happen to their earnings going forward on the acquisition.

The purchase GAAP rules, which we'll talk about, drive the emergence of earnings whether earnings will emerge very quickly or in later years after the acquisition. Most companies are looking to get as much earnings as they can up front. Although there are other companies that are concentrating more, when they look at PGAAP options, on how they can get a more level pattern of earnings. They're interested in stability of earnings, so we are looking at various options to accomplish that.

The items in PGAAP that drive the different earnings emergence are the VOBA and goodwill. Obviously, you need to set those up and we'll show how you do that. In the reserve, there is some flexibility in terms of setting the initial reserve level and the development pattern. The development pattern will be driven by the assumptions, in the case of *Financial Accounting Standard (FAS) 60* reserves. There is also subjective determination of what the fair market value of assets might be at the time of acquisition. There are also invested assets in real estate and some limited flexibility in terms of reserves that are set up.

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Another important issue in terms of evaluating PGAAP is that a different accounting methodology may have been used than when the deal was originally priced. There can be a disconnect between their pricing approach which is typically a statutory pricing approach.

In terms of the way the earnings emerge from a particular block of business, the price paid for a different business may have a different value associated with it in terms of PGAAP. That will distort the earnings that emerge on a block basis. What I'm referring to is if there are a number of blocks being purchased within a company. Some of the basic PGAAP principles to be talked about are: PGAAP accounting assets and liabilities are acquired or soon to be acquired at fair market value and are restated at fair market value at the date of purchase. One thing to think about is how those values might change between the time the deal is negotiated and the closing period, because the values will be stated as of the closing period. Another principle is shareholder's equity with the purchase price. If someone pays \$50 for a company, that presumably is the value of the business. Therefore, their equity should not change. If they're paying \$50 in cash, the new assets and liabilities that they're putting on should have a value of \$50 in their GAAP accounting. We need to establish deferred taxes as we do under regular GAAP for all tax and book differences and the excess purchase price is established as goodwill. The excess purchase price is the purchase price over the net assets and liabilities. The net assets not only include invested assets, but include identifiable intangible assets such as the value of the business acquired. To set the VOBA, you have to do an evaluation. To clarify, when we say value of net assets and liabilities, we're talking about the value on a PGAAP basis, whatever the appropriate PGAAP accounting would be for the assets and liabilities.

First, we restate all the invested assets to fair market value. The Deferred Acquisition Cost (DAC) asset that has been held on the company's books is eliminated. That's a historical measure of the course of the acquired business. The VOBA is an estimate of the value of business being acquired on a block basis. VOBA replaces DAC. The reserves are restated. You have to restate deferred taxes based upon your new assets and liabilities being set up and a goodwill asset is established, as I indicated. Goodwill is solved for to make your equity the same as the purchase price.

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I've prepared an example of how some things interact (Table 1). If we assume we paid \$50 to purchase the assets and liabilities of this company, by the time we're done, our equity should be \$50. If we look under the PGAAP column, \$50 is the price you paid for the business. We look at the invested assets. They may have had a historical value of a 100, but now they have a mark-to-market where they're worth more, so we write them up on a PGAAP balance sheet. We eliminate the DAC asset, as I indicated. A VOBA asset is the value of business acquired. We say that is \$35. We'll skip the goodwill and go down to the reserves. We see 95. That's another item. We've restated the reserves. We set up deferred taxes based on those items. Now, again, on the bottom, we want to look for goodwill. We want it to be \$50 equity, so we subtract assets and liabilities, excluding the goodwill and find that we need an \$11 goodwill asset, so that is how we would set up goodwill on the balance sheet.

I'll now discuss the fair market value of invested assets. I'm going to go through each of those items, the adjustments that I talked about and speak about some of the issues. Restating the invested assets is primarily a nonactuarial task. Bonds and stocks are pretty straightforward. They come from market values, industry, and what our assets are selling for. There is some limited flexibility in mortgage loans and real estate in terms of impairment reserves that might be set up and how those reserves might be determined.

The value of the assets are based upon current market yields, and those market yields that will then flow through the GAAP balance sheet, because we've set them up at market values. Those market yields will be reflected in reserve calculations and it also impacts the VOBA calculation from the point of what are the gross profits flowing from the business using that market valued earned rate. Also, market yields impact the amortization interest rate to the extent that the market rates affect your credited rate.

FROM THE FLOOR: What would be your amortization interest rate?

TABLE 1
Major PGAAP Balance Sheet Adjustments

	HGAAP	PGAAP	Adjustment
Assets			
Invested	100	110	10
DAC	25	—	(25)
VOBA	—	35	35
Goodwill*	—	11	11
Total	125	156	31
Liabilities			
Reserves	90	95	5
Deferred Taxes	5	11	5
Total	95	106	10
Equity	30	50	20

* Goodwill = 50 - (110 + 35 - 106) = 11

MR. MCALPINE: The amortization rate varies. It is based upon the type of product. We will be discussing that later in the presentation.

The VOBA represents, in keeping with what PGAAP accounting is trying to accomplish, the fair market value of the acquired block of insurance liabilities. It represents the cost of that and the insurance liabilities that you're purchasing. It replaces the DAC asset that has eliminated sort of a replacement. There you are allowed to defer future peak renewal commissions. If there are renewal commissions paid on the business going forward, those items after the purchase can be capitalized and set up as a DAC asset.

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There really is no authoritative GAAP guidance on the calculation of the initial VOBA. There are some general guidelines set out. There are various methods used. One is the purchase price you're allocating between the value of the business you acquired and goodwill. Goodwill may be new business that you think might be purchased. Higher VOBA would automatically lead to lower goodwill as I showed in the example of how we solved for the goodwill. There is some interaction there as to setting up what the level of VOBA is and what the goodwill might be.

One of the methods used for calculating VOBA is the ROI. That is the method Mike will use in his example of how to determine what the VOBA should be. Basically, that method takes pretax GAAP, gross profits, or margins and discounts at a risk/return rate. Risk rates can vary by product lines and I think Mike's example will show that. The rate varies significantly. There is no specific guidance on what the rate needs to be. The rate often exceeds the pricing hurdle rate to reflect risks. When using this methodology, the cost of capital is not reflected. Therefore, if you use the lower discounting, you'll get a much higher VOBA than the actuarial appraisal value for the business. This is because you're not reflecting the cost of target surplus.

Another method is the normalized earnings method which is used when you might project out the gross profits from the business. You determine a Kfactor similar to a DAC amortization ratio. Something like 80% might apply to a business. Eighty percent of the future profits are going to go to amortize this new VOBA asset rather than a DAC asset.

Finally, the last method, which I've had some experience with using in some recent acquisitions, is what I'll call the actuarial appraisal method. After the price of a block of business has been determined through an actuarial appraisal, and looking at the present value of distributable earnings, less the initial target surplus or stated another way, present value of the statutory book profits, less the cost of capital, that is the price you really paid for that block of business.

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To get some consistency between the appraisal and the GAAP accounting, you want to set up the GAAP balance sheet so that the assets and liabilities associated with the block had equity equal to the price you paid. You need to adjust certain values to achieve that final value of equity equal to the purchase price because there are differences between statutory reserves, which are typically used in the appraisal, and the GAAP reserve. The real principle is to get your GAAP equity to equal the purchase price, keeping in mind that your GAAP equity is based upon the new restated GAAP asset values and the new restated GAAP liability values.

I'm trying to compare some of the differences of the different methods. All methods may produce similar results. There are a lot of assumptions and discount rates that go into these things, so by changing those values, you may end up getting a very similar VOBA amount. As I said, ROI and normalized earnings don't reflect the cost of capital. Unless you use a very high discount rate in discounting the gross profits, you would have a higher VOBA, typically, than the actuarial appraisal method. The VOBA based upon the actuarial appraisal method is more consistent with the pricing block.

We talked about how to develop this VOBA asset, but that is really just the first step. You've got that asset. You need to amortize it over time as we would with DAC. The rules for amortizing the VOBA asset basically follows DAC amortization rules. *FAS 97* gross profits use the credited rate. A number of years ago companies were using much higher rates to amortize the VOBA on *FAS 97* products. I don't have the number, but there is a GAAP guidance now that the credited rate is the appropriate rate. The reason for not allowing a higher rate is that the VOBA asset is earning interest. It is being amortized at a very high rate which would make the VOBA asset grow very quickly. For *FAS 60* products, we amortize the VOBA over premiums using the earned rate, including provisions for adverse deviation as we would with *FAS 60* products. DAC unlocking rules apply to *FAS 97* VOBA. In other words, each year you need to do an evaluation of what the future gross profits are, what the actual product was in the last year, and you must redo the amortization schedule to see where you are.

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The new *FAS 60* assumptions are based upon the time of purchase. They can be redetermined based upon your outlook for the block you're buying. Obviously, you would want to reflect the experience of the block, but that may be different than it was at the time those initial historical *FAS 60* reserves were set up. Those assumptions can be reset. Recoverability must be demonstrated on the VOBA asset as it is with the DAC asset. You need to have enough future margins and you need to set up a net GAAP liability that is at least as great as all the present value of the future cash-flows. These cash-flows are both premiums and benefit payments that are expected on the block.

Initial PGAAP reserves are restated account balances at the time of purchase. *FAS 97* products really don't need much for restating, so the account balances are what they are. There is some flexibility when it comes to the *FAS 60* products because you're going to be resetting those assumptions and including some level of provisions for adverse deviation. The flexibility is limited to *FAS 60*. *FAS 97* products may have some reserves for bonus interest or future losses that you might be setting up and there would be some flexibility there.

There are two basic methods that have been defined for determining the GAAP reserves: the defined initial reserve method and the defined valuation premium method. The defined initial reserve method (Table 2) is basically as the name says. You decide what you believe the initial reserve should be. It may be the historical GAAP reserve to keep it simple. It could be the statutory reserve, but you set what the initial reserve should be. The next step is to then calculate what net premiums are necessary to pay out the future benefits.

In the first column, 55 is the present value of all the future benefits and expenses. This is GAAP, so we do include expenses of the business. We take away the initial reserve, divided by the present value of the gross premiums, and that gives us our ratio of GAAP net premiums to the gross premiums. Then you would, basically, just do a typical reserve calculation, where you take the present value of future benefits, minus the present value of future net premiums, to obtain these reserve values. It is fairly simple and not much different than typical reserve calculations.

TABLE 2
Example: Defined Initial Reserve Method

Set Initial Reserve Value: 25

Calculate Net as % of Gross: $(55-25)/40$: 75%

Calculate Reserves as PV (Ben & Exp) Less PV (Net Premiums)

Reserves	Initial	1	2	3	4	5
	25	20	15	10	5	—
Policy Data						
Gross Premiums		8	8	8	8	8
Net Premiums		6	6	6	6	6
Death Benefits		10	10	10	10	10
Expense		1	1	1	1	1
PV* (Benefits and Expenses)	55	44	33	22	11	—
PV* (GP)	40	32	24	16	8	—
PV* (NP)	30	24	18	12	6	—

* Example assumes no interest, mortality or lapse

The next example is the defined valuation premium method (Table 3). You might instead set what you believe is the correct ratio of the net premium to pay the benefits and expenses to the gross premium, leaving the rest to go towards profits. You set that ratio at 87.5. You miss one step now, and you can calculate the reserves by looking at what the present value of future benefits are and expenses and subtracting the net premiums. Obviously, in these examples I made it very simple. There is no mortality other than the death benefit. There is no lapse included in the example. You would include all that as a typical *FAS 60* reserve would.

What is the impact of PGAAP reserves? We talked about how all these items, VOBA, goodwill, and reserves will impact the emergence of earnings. If you set high initial reserves, you'll have less steep growth, meaning you'll have to have a lower net premium because you have higher initial reserves and higher earlier earnings. You'll also have larger gains on surrender. The level of growth pattern

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of the reserves is also influenced by the assumptions and the paths as I indicated and higher reserves will lead to higher VOBA. Again, we need to balance it out to make that equity number the same. If we increase reserves, there needs to be a balancing item either in the VOBA or the goodwill. It could be somewhere else if another item is being restated. If we go for higher reserves, we need to keep the same equity number, so one of those items or another item will go up. We also need to reflect deferred taxes in these values when we restate them.

I have prepared an illustration of what I was trying to describe (Table 4). Although it shows reserves, it really illustrates the interaction of how the initial balance sheet could look differently based upon the different values we have for items. In all cases, the equity is 50. We assumed the market value, so there's not much flexibility there. We have a VOBA of 35, and we set the initial reserves at 96, so we're going to start off with a goodwill asset of 11. If through our determinations we have different values for the VOBA (in the second example I have 30), we've determined that through whatever method we're using we have different reserves. Basically, we're trying to get equity to be 50 in all cases, and we can see the interaction of how the balance sheet has to balance.

Deferred taxes are not really any different than on a regular GAAP balance sheet. We have to set up GAAP deferred tax assets and liabilities for differences between the book value, the GAAP value, and the tax value of assets. It's established for all temporary differences. Usually it is shown as a net item on the balance sheet. Deferred tax assets and liabilities are not shown separately. It is basically 35% times the difference in the GAAP and tax values.

One issue here is the goodwill. Goodwill is regarded as a permanent difference, so no deferred taxes are set up for that. In a number of the examples I showed that the goodwill is an item that is solved for. Because there is no deferred tax set up on that, it is not a complete offset. In other words, if we take \$10 out of VOBA, it doesn't go directly into goodwill because there will be some deferred tax interactions.

TABLE 3
Example: Defined Valuation Premium Method

Set Net Premium as % of Gross Premium: 87.5%
Calculate Reserves as PV (Ben & Exp) Less PV (Net Premiums)

Reserves	Initial	1	2	3	4	5
	20	16	12	8	4	—
Policy Data						
Gross Premiums		8	8	8	8	8
Net Premiums		7	7	7	7	7
Death Benefits		10	10	10	10	10
Expense		1	1	1	1	1
PV* (Benefits and Expenses)	55	44	33	22	11	—
PV* (GP)	40	32	24	16	8	—
PV* (NP)	35	28	21	14	7	—

* Example assumes no interest, mortality or lapse

I have a couple examples of deferred taxes. You get a deferred tax liability in these two examples of invested assets. The GAAP value is greater than the tax basis. We get a deferred tax liability on the VOBA similar to what we would have on DAC. You have a deferred tax asset to the extent that the PGAAP reserves are greater than the tax basis reserves. Another example of a deferred tax asset would be on unamortized DAC tax. That is no different than regular GAAP.

Goodwill is the balancing item in all this. Repeating what I've said many times, the initial GAAP equity needs to equal that purchase price. Negative goodwill is not permitted. Through some evaluation, you may determine that the VOBA is very high and that would be more than the purchase price. You couldn't have a negative goodwill. You would have to reduce the VOBA to eliminate negative goodwill. The maximum amortization period for goodwill is 40 years, and it is a straight-

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TABLE 4
Illustration of Impact of Initial PGAAP Reserves

	Reserve 1	Reserve 2	Reserve 3
Assets			
Invested	110	110	110
DAC	—	—	—
VOBA	35	30	35
Goodwill	11	11	14
Total	156	151	159
Liabilities			
Reserves	95	90	100
Deferred Taxes	11	11	9
Total	106	101	109
Equity	50	50	50

line amortization. Therefore, in most cases, you would find that goodwill amortizes much slower or slower than VOBA. Therefore, some companies will try to get their goodwill number as high as possible, so earnings would be as high as possible in the early years.

There is some current work at the FASB discussing the allocation of goodwill. It is not focused specifically on the life insurance business but on all industries. They are working on rules that fit for all and we'll need to interpret how that works for life insurance. There are obviously, some concerns about how goodwill assets are set up, so they are going to create rules that limit the amount of goodwill and the amortization period. These rules will target what the goodwill asset is and whether the amortization period can be estimated.

Mike is going to walk through a case study.

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MR. MICHAEL V. ECKMAN: As Scott mentioned, I work in the corporate actuarial area of ReliaStar Financial. I've participated in reviews of several potential acquisitions and have worked on GAAP accounting for the two life insurance acquisitions we've done. Scott has consistently used the term VOBA. I may use the term present value of future profits (PVFP). The two terms mean the same thing. I don't know if these are copyrighted, but I apologize to any consulting firms.

MR. MCALPINE: There are probably three or four other names that people use to describe the asset to value of the business.

MR. ECKMAN: The case study I'm presenting is the acquisition of one stock life insurance company by another stock life insurance company. I'll call the company that is acquired "the target" and the acquiring company "the enterprise." I'm going to focus on nonparticipating life and annuity products. I want to follow a timeline from what I call the preliminary review to the final opening balance sheet. I'll ignore most of the integration activity that goes on except to the extent that it might affect the value that we're dealing with here. For example, if the enterprise is going to change one of the target's systems, like putting in a new valuation system, you may end up with a different amount of reserves, so enterprise will want to take the change into account. The numbers I'm going to present are illustrative and not related to any particular acquisition.

The preliminary review begins when you're approached by an outsider who has a company you or your management might be interested in. The sources of the preliminary review include anything you can readily get your hands on (annual reports, annual statements, the 10K and 10Qs, and cash-flow testing results) even though they may have a disclaimer that says it shouldn't be used for anything else. When you're asked to try to put a value on a company, you're going to use anything you have. There will be an offering memo from the organization trying to sell the target, and an actuarial appraisal from an outside source. The objective of this preliminary review is to determine an actuarial appraisal value and the impact of the acquisition on the enterprise's profit. The profit measures include ROI, GAAP profit (both the dollar amount and earnings per share), and ROE. As

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Scott pointed out, we're looking for something that's going to be accretive or, at worst, nondilutive over the short-term. We are definitely looking for something that will be accretive over the long-term.

If the acquisition looks desirable, you proceed to the next step which is due diligence. Due diligence is an intensive review of the target involving a visit to the target or a neutral site where information is available. In order to perform due diligence, you really need to develop a checklist of all the items you're interested and assign teams that cut across the company—actuarial, law, accounting, sales, administration, product development—and outside consultants that go in and review the documents and interview the people at the target to get the answers.

I'll concentrate on the actuarial items and due diligence items. Tables 5, 6 and 7 are sample lists of questions split into three parts. First is actuarial financial which is statutory, tax, and some GAAP valuation; the second is some detailed GAAP valuation questions; and, the third, are some actuarial product development questions.

My only advice is that you have to ask the important questions several times to several different people. You can talk to the valuation people and they'll tell you this is how they handle a product. Then you talk to the product development people and they'll tell you that that product doesn't require that type of reserve. You talk to the reinsurance administration people and they tell you this is what we do. Then you talk to the valuation people and find out you don't have reinsurance on that product. You have got to ask the important questions from many different people in many different ways.

Another thing you're going to be doing during this process is sizing up the staff of the target to judge the possibility of the success of any transition and integration that is going to occur. Finally, you need to document all your answers to the questions and all your conclusions in writing. Note any problems that require attention and quantify the potential expense of any resolution. Do not comply with Actuarial Guideline XXX and setting up these reserves is going to be this amount of money.

TABLE 5
Actuarial Financial Due Diligence Issues

Reinsurance	<ol style="list-style-type: none"> 1. Copies of agreements 2. Description and workpapers for statutory, tax, and GAAP valuation 3. Retention schedule 4. DAC tax elections 5. Copies of 12/31/XX and most recent in-force and new business statistics by reinsurer 6. Experience studies 7. Details of any reinsurance accepted
Experience Studies	Most recent mortality, lapse, premium persistency, and expense studies
Section 7702	<ol style="list-style-type: none"> 1. Description of testing procedures in place for failed contracts 2. List of failed contracts
Projections	Statutory and GAAP financial projections for 19XX-20YY
Litigation	Details of any current or pending litigation and impact on profitability and financial reporting
Other Liabilities	<i>FAS 106</i> liability and workpapers
GAAP	<ol style="list-style-type: none"> 1. Schedule of reserves, DAC, and PVFP at 12/31/XX and latest available date for direct and reinsured business indicating the reserve basis and methodology by valuation cell and identifying the amortization and percent of gross profit margins used for amortization at most recent quarter end 2. Any changes in reserve methodology over the past three years 3. Identification of software used for valuation 4. Handling of negative projected profits in DAC and reserve calculations 5. Description of <i>FAS 115/FAS 97/FAS 60</i> interplay with respect to unrealized capital gains (losses) 6. Definition of acquisition, deferrable, and nondeferrable expenses 7. Definition and calculation of <i>FAS 97</i> actual and projected gross profit margins used for amortization 8. Handling of realized capital gains (losses) in <i>FAS 97</i> calculation 9. Analysis of <i>FAS 97</i> gain by force 10. Detail and description of <i>FAS 97</i> DAC deferred revenue liability calculation 11. Amount and description of any completed or pending <i>FAS 97</i> assumption unlockings 12. Procedure and results of any recoverability tests 13. Amount of any loss recognition and description of loss recognition testing 14. PGAAP workpapers 15. Description of <i>FAS 107</i> fair market value of liabilities and 12/31/XX calculation

TABLE 5 (continued)
Actuarial Financial Due Diligence Issues

<p>Business Planning and Analysis of Financial Results</p>	<ol style="list-style-type: none"> 1. Description and example of business planning process 2. Discuss and give an example of variance analysis of GAAP financial results on a quarter only and year-to-date basis where variances are measured from plan and from prior period
<p>Statutory</p>	<ol style="list-style-type: none"> 1. Copies of 12/31/XX and latest available statements 2. Most recent triennial examination 3. Three most recent cash-flow testing results, Actuarial Opinions, and Memoranda 4. Identify cash-flow testing software 5. A.M. Best correspondence and rating questionnaire 6. Details of RBC calculation 7. Details of internal target surplus calculation 8. Impact of proposed actuarial guidelines 9. Schedule of reserves at 12/31/XX and latest available date for direct and reinsured business indicating the reserve basis and methodology 10. Identification of software used for valuation 11. Any changes in reserve methodology over the past three years 12. Discuss any reserve strengthening or weakening within the last three years 13. Discussion of use of continuous CARVM, reserves held for nursing home waivers, and Guideline IX 14. Correspondence with state regulators 15. Amount and description of any discretionary reserves held
<p>Tax</p>	<ol style="list-style-type: none"> 1. Schedule of reserves at 12/31/XX and latest available date for direct and reinsured business indicating the reserve basis and methodology 2. Identification of software used for valuation 3. Any changes in reserve methodology over the past three years 4. Schedule of any reserve strengthening or weakening 5. Discussion of use of continuous CARVM, reserves held for nursing home waivers, and Guideline IX 6. DAC tax calculation workpapers 7. Unearned premium 20% haircut calculation 8. Schedule and description of any adjustments to tax reserves made as part of a tax audit 9. Any outstanding reserve issues in an unsettled RAR 10. Any actuarial opinion letters with respect to tax reserve matters

TABLE 6
GAAP Financial Due Diligence Questions

GAAP Liabilities	<ol style="list-style-type: none"> 1. Description of <i>FAS 60</i> benefit reserve calculation and net-to-gross premium ratios. 2. Are there any <i>FAS 97</i> deferred revenue liabilities and how are they calculated? 3. How are riders attached to <i>FAS 97</i> products accounted for? 4. How is the impact of unrealized (<i>FAS 115</i>) capital gains and losses on any GAAP liability calculated? 5. How is reinsurance accepted or ceded accounted for?
Business Planning and Analysis of Financial Results	<ol style="list-style-type: none"> 1. How often is a business plan produced and who prepares it? 2. Describe and provide an example of the business planning process. 3. What MD&A analysis is required on a quarterly and annual basis? 4. Discuss and give an example of variance analysis of GAAP financial results on a quarter only and year-to-date basis where variance are measured from plan and from period.
DAC and PVFP	<ol style="list-style-type: none"> 1. Overview of <i>FAS 60</i> and <i>FAS 97</i> valuation systems, including identification of software used. 2. What is the definition of acquisition, deferrable, and nondeferrable expenses? 3. Discuss and quantify any nondeferred acquisition expenses. 4. Provide a schedule of DAC and PVFP by major valuation blocks as of 12/31/XX and most recent quarter end showing capitalization, interest, and amortization. Include the amortization factor for each <i>FAS 97</i> block (portion of gross profit margin used to amortize DAC or PVFP) and net-to-gross premium ratios for <i>FAS 60</i> DAC. 5. What is the definition of gross profit margins for <i>FAS 97</i> business? Include a discussion of overhead expense, renewal commissions, and premium tax. 6. Provide examples of <i>FAS 97</i> earnings by source analysis. 7. What procedures are in place to true up assumed gross profit margins by replacing them with actual results? 8. How are actual <i>FAS 97</i> gross profit margins extracted from the company's accounting system? 9. Provide analysis of the impact of the true up separately for each gross profit margin element on current period amortization and prior period amortization (catch up). 10. What is the timing and mechanics of any periodic recoverability analysis? 11. How are realized capital gains (losses) handled in the <i>FAS 97</i> amortization calculation? Is the amortization related to these gains (losses) separately calculated and disclosed? 12. How is the impact of unrealized (<i>FAS 115</i>) capital gains and losses on <i>FAS 97</i> DAC calculated? 13. Do any <i>FAS 97</i> products have negative gross profit margins projected for significant periods of time? If so, what modifications have been made to the valuation system because of the negative gross profit margins? 14. Are any valuation blocks currently exposed to a recoverability or loss recognition problem? 15. Has there been any loss recognition in the last three years, and if so, what was the amount? 16. What are the procedures and standards for unlocking future <i>FAS 97</i> assumptions? 17. Have <i>FAS 97</i> assumptions been unlocked or has unlocking been considered in the last five years? 18. Have the external auditors had any management letter comments regarding DAC or PVFP calculation in the last three years? 19. How is reinsurance accepted or ceded accounted for?

TABLE 7
Actuarial Product Due Diligence Issues

Products	<ol style="list-style-type: none"> 1. Copies of policy forms 2. Description of products 3. Actuarial memo filed with product 4. Description of modifications of products and policy forms for New York market 5. Recent product changes prompted by NAIC Model Illustration Regulation 6. Description and progress report on products under development for introduction in current and future years
Pricing and Product Development	<ol style="list-style-type: none"> 1. Identification of software used for pricing and product development 2. Description of product development staff, process, and time to develop products 3. Target surplus used in pricing 4. Pricing documentation and competitor analysis for current and developing portfolio 5. Experience studies supporting pricing assumptions 6. Other field compensation outside the basic contract (e.g., any special deals) 7. Underwriting rules 8. Reinsurance assumptions used in product development
Results and Pricing	<ol style="list-style-type: none"> 1. Historic sales for each company's product including monthly sales for most recent year 2. Description of philosophy and practices regarding interest crediting rates and other nonguaranteed elements 3. Interest crediting rate history 4. Earned interest and interest spread history 5. Interest rate actions for current year 6. Repricing opportunities present in products, including any regulatory considerations

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That's the type of documentation you need. You also need to note any differences between their practices and yours. The target standards are different from the enterprise standards, so it's going to cost us something to change it. By changing it, you may be creating a liability or you may be reducing a liability but there's going to be some cost to changing practices.

The preliminary calculations you're going to do is an actuarial appraisal and these numbers will be based on any information available from the preliminary review and from due diligence. You want to include the cost of capital. I've prepared a sample actuarial appraisal of a company (Table 8). Basically, if you look at the top of the table you see the value of the company as it is now. This value is the sum of the adjusted statutory book value, the value of existing business, and the value of the new business from the target's business plan. Then you have a total value, and I've calculated that value per target share. In this example, at a 13% discount rate, the value per target share is \$38.37. We think we can buy this company for \$40 a share, which would imply that if we paid that amount of money for the company as it stands now, we would have an ROI of 12.6%.

What are we going to do to this company in order to make it more attractive? We figure that we're acquiring a sales force, so we'll plan that they're going to sell some of our products. That will produce a value for sales synergies of the enterprise product. We're acquiring some new products, so our existing sales force can sell their products or because we're going to put capital in this company, they're going to sell more business. We're going to have massive expense savings, which could require some restructuring costs. At the bottom of the sheet I have room for other changes and put in a million dollars that we may experience. In the end, the ROI at the \$40 per share purchase price is 14.7%. You can see that if we paid only \$38.51 for the company, we'd have a 15% ROI. If the company demands about \$42, we're going to be closer to 13%. This is the kind of testing you can do with the actuarial appraisal. Just what does it take to produce a value that is acceptable? Table 8 and Table 9 are examples of the type of information that goes to your board as a way to sell this acquisition.

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**TABLE 8
Sample Actuarial Appraisal**

Project Target

Summary of Actuarial Values (\$millions)

12/31/98

Assumes \$40.00 per Share Purchase Price

Component	Discount Rate				
	11.00%	13.00%	15.00%		
Adjusted Statutory Book Value	150.0	150.0	150.0		
Existing Business	155.0	130.0	110.0		
New Business	30.0	0.0	(20.0)		
Roll Forward	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>		
Total Value	335.0	280.0	240.0		
Existing Target Debt	(50.0)	(50.0)	(50.0)		
Exercise of Options*	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>		
Total	290.0	235.0	195.0		
Per Target Share	\$47.35	\$38.37	\$31.84	==>	12.6%
Sales Synergies					
Enterprise Products Sales of 1999-2003	19.5	10.0	3.8		
Enterprise Products Sales of 2004-2008	18.0	9.0	3.3		
Target Products Sales of 1999-2003	5.5	2.2	0.0		
Target Products Sales of 2004-2008	<u>5.0</u>	<u>2.0</u>	<u>0.0</u>		
Total	48.0	23.2	7.1		
Expense Savings	50.0	40.0	35.0		
Restructuring Cost	<u>(2.2)</u>	<u>(2.2)</u>	<u>(2.2)</u>		
Net Expense Savings	47.8	37.8	32.8		
Other Expense Savings	0.0	0.0	0.0		
Other	0.0	0.0	0.0		
Other	1.0	1.0	1.0		
Total	386.8	297.0	235.9		
Per Target Share after Options	\$63.15	\$48.49	\$38.51	==>	14.7%
Number of Target Shares before Options (000)		6,000			
*Option Detail					
Target Options (000)		250			
Strike Price		\$20			
Number of Target Shares after Options (000)		6,125			
Addition to Value from Exercise of Options		5.0			

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The next step is to determine what type of accounting you're going to use for the GAAP result. Scott covered the options. We've decided we're going to go with PGAAP, so we make the preliminary calculations (Table 9). This table shows you an example of what you can do to illustrate, to your management and board, the effect that this business is going to have on your bottom-line.

We have the target's plan, and they've projected it for three years. We'll assume that profits increase 10% per year in 2002 and later. As Scott said, you take out their DAC and any of their existing intangibles, like an unearned revenue reserve. They may have had an acquisition in the past, so they already have a VOBA on their books and may have some goodwill on their books. You remove the existing intangibles and replace them with the new VOBA and the new goodwill. In this illustrative example, just changing from GAAP to PGAAP increases the bottom-line profit significantly in the first three years. By the year 2004, it is just about the same as the target's original plan.

We can look at what else we need to do and where we're going to have expense savings. We're going to have the synergy sales we talked about. If you look at the bottom-line, the additional sales are going to have a nice impact if we have this amount of money. You can take into account the way you finance the acquisition to determine your ROE and earnings per share. The factors to consider in these preliminary calculations are the value of the target, the impact of any synergy sales, the impact of any expense savings, the cost of the acquisition (\$40 a share), and the methods of financing. *Methods of financing can include stock, debt, and reinsurance.*

Assume you've made the purchase and now you have to start accounting for it. PGAAP restates the opening balance sheet: reserves, PVFP or VOBA, the goodwill and, of course, the invested assets. Scott mentioned the two different ways of determining the initial benefit reserves for *FAS 60* business. For practical reasons, when you're doing these PGAAP calculations, you assume the PGAAP benefit reserves are the historic benefit reserves unless you have some hard evidence that a different value should be used.

TABLE 9

Project Target									
PGAAP Estimate (\$000)									
After FIT Tax Rate	35.00%	Growth Rate 2002+						10.00%	
	12/31/98	1999	2000	2001	2002	2003	2004	Notes	
+	Target Plan (AFIT)		30,000	32,000	37,000	40,700	44,770	49,247	
Adjust Target Plan									
	Target DAC	390,000	347,100	308,919	274,938	244,695	217,778	193,823	
	Amortization	11.00%	27,885	24,818	22,088	19,658	17,496	15,571	
	URR	25,000	22,250	19,803	17,624	15,686	13,960	12,425	
	Amortization	11.00%	1,788	1,591	1,416	1,260	1,122	998	
	Net DAC	365,000	324,850	289,117	257,314	229,009	203,818	181,398	
+	Amortization		26,098	23,227	20,672	18,398	16,374	14,573	
	Other Liability	0	0	0	0	0	0	0	
-	Amortization		0	0	0	0	0	0	
	Target VOBA	7,000	6,500	6,000	5,500	5,000	4,500	4,000	
+	Amortization		325	325	325	325	325	325	
	Target Goodwill	8,000	7,600	7,200	6,800	6,400	6,000	5,600	
+	Amortization		400	400	400	400	400	400	
=	Adjusted Plan		56,823	55,952	58,397	59,823	61,869	64,545	
PGAAP Adjustment									
	VOBA	275,000	247,500	222,750	200,475	180,428	162,385	146,146	
-	Amortization		17,875	16,088	14,479	13,031	11,728	10,555	
	Goodwill	75,000	73,125	71,250	69,375	67,500	65,625	63,750	
-	Amortization	40	1,875	1,875	1,875	1,875	1,875	1,875	
	New Debt	50,000							
-	Interest Expense	7.00%	2,275	2,275	2,275	2,275	2,275	2,275	
-	PGAAP Adjustments (AFIT)		(22,025)	(20,238)	(18,629)	(17,181)	(15,878)	(14,705)	
	PGAAP Earnings		34,798	35,714	39,768	42,642	45,991	49,840	
+	Expense Saves		1,625	3,348	3,448	3,551	3,658	3,768	50% in 1999, Inflated at 3%
+	Other		0	0	0	0	0	0	100% in 1999, Inflated at 3%
+	Enterprise Product Synergies		270	850	1,700	2,980	4,600	7,040	
+	Target Product Synergies		(60)	790	1,900	3,100	4,600	6,100	
=	PGAAP & Saves & Synergies		36,633	40,702	46,816	52,273	58,849	66,748	

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We calculate VOBA as the present value-at-a-risk rate of the before-tax GAAP profits, excluding the amortization of the VOBA. For *FAS 97* products, this is equal to the present value of the estimated gross profits (EGPs), less any deferred expenses. You want to include the impact of any reinsurance ceded. You want to include any additional liabilities for any limited pay contracts. In the calculation, you want to use any provisions for adverse deviations that you will use for the *FAS 60* business.

The goodwill is the balancing item. Goodwill has to be recoverable. This raises a question in my mind, because I see the goodwill as the price you pay for the opportunity to enjoy the benefits of a larger enterprise, the synergy sales, and the expense savings from the acquisition. In a sense, I would allocate the goodwill amortization to the new business. You might consider the amortization of the goodwill as an expense of the entire enterprise because the enterprise is benefiting from the acquisition. In the past we have put goodwill in the corporate account and that is where the amortization shows up.

In the calculation of the VOBA you have two objectives. You want to slow the amortization of the VOBA because that will give you higher short-term profits and a better chance of accretive or nondilutive earnings from the acquisition. You want to minimize the adverse impact or take advantage of the favorable impact of any other items: benefit reserves, mark-to-market asset adjustments, and tax. Tax doesn't impact the amount of the VOBA. It will, however, affect the GAAP reported earnings.

Depending upon the length of the amortization period and the assumption used, the VOBA will probably amortize more quickly than goodwill. The strategy would be to get more of the purchase price into goodwill and less of it into VOBA. Because of the more normal back-end loading of *FAS 97* EGPs that are interest margin dependent, *FAS 97* VOBA might amortize more slowly than *FAS 60* VOBA. That would encourage you to put more VOBA into *FAS 97* business. Of course, you're going to find an exception to a general rule like that and some *FAS 60* VOBA may amortize more slowly in the early years than some *FAS 97* VOBA.

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The tax considerations that I mentioned don't affect the VOBA, but they will affect the reported GAAP profits. You want to make sure in your modeling, if you're projecting GAAP profits, to take the relationships of tax and statutory reserves into account. You want to reflect the amortization of the DAC tax asset that exists at the date of acquisition in your GAAP and statutory profit projections.

PGAAP deliverables include the information needed for financial reports and disclosure items. You're going to be filing an earnings report on the first quarter end after the acquisition is complete, so you need to say what the VOBA is, how you calculate it, and what discount rate you used. You're going to have to report benefit reserves, financial statements, and internal management reports. I call these the quantitative items. The qualitative items are to implement systems and processes to enable these calculations to be completed and documentation and support of everything you've done. The disclosures and accounting entries are subject to review by your internal and external auditors.

Another qualitative deliverable is a knowledge transfer. You will want to learn everything you can about the target and the target has to learn everything it can from you about managing this business in the future. In order to do this, you need to do some planning and summarize these key objectives: identify an initial approach and alternatives, develop the plan and timetable, identify the information needs and sources, and form a project team.

The best way to illustrate this process is a calculation. You want to construct a model that can be tested under several scenarios. You need to be able to change the assumptions to see what the impact is on the amount of the intangibles and the incidence of reported profits. You could use an asset/liability model, but I think a liability model is sufficient as long as you take into account the profit impact of any mark-to-market adjustments. The model must be representative of the in-force as of the date of acquisition. You want it to have sufficient granularity. You want to validate it to recent experience, and you need to determine who controls the model. Is the modeling done in the enterprise or is it done in the target? I suppose there is the possibility that you hire somebody outside to do it. The target has the most knowledge of its own company. The enterprise has the most at stake in the calculations and the ongoing maintenance of this model into the future.

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Determining the VOBA blocks on which you'll calculate the present value of profit is a balance between the desire for simplified accounting and sufficient granularity to produce the most valid results. The blocks are probably different from what the target used in its DAC calculation. For one thing, you're going to combine all the years of issue. You could start with some major blocks and break them down if you have to. You could put all universal life (UL) in one block, term in another, and establish separate blocks for limited pay, whole life, single premium deferred annuities (SPDAs), flexible premium retirement annuities (FPRAs), and single premium immediate annuities (SPIAs). You can then see if you need to divide any of those blocks using significant differences among products and how the in-force is managed, or you could combine blocks based upon materiality and the desire for simplicity. You could combine term life and whole life, or a few kinds of UL. Even though the contracts are somewhat different, the amount of business may be so small that it doesn't make a lot of sense to calculate each VOBA separately. Finally, you could just say a block is so small that you're not going to bother with it.

Assumptions are based upon knowledge at the date of acquisition. You'll hear that question frequently in an acquisition—What do you know as of the date of acquisition? The investment income, as I mentioned, would include any mark-to-market impacts. In calculating your investment income assumption, consider if you're going to do anything to those assets. After you acquire them, are you going to dispose of some, acquire others, or reallocate them among the lines of business? The interest crediting rates would be based on the strategy of the enterprise and not necessarily that of the target. What are you going to do in managing the business in the future? The mortality, lapse, and expense assumptions need to take into account recent experience, what target is assumed in pricing, and what target is assumed in cash-flow testing. All of this must be adjusted for any management change you're going to make, particularly with respect to expenses. Any acquisition is going to assume some expense savings.

One thing I'd warn you about is don't forget that target is going to have a new enterprise to support, so its overhead expenses may change. It is probably universal that everyone who has been acquired felt that any expense savings have been quickly replaced by allocation of overhead from the acquiring enterprise.

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Next you will want to review these results just as you did back with the simple actuarial appraisal and the simple GAAP earnings projection. What is the amount and incidence of the GAAP profits? What are the ROEs, and is there any dilution? Given these answers, should we consider alternative methods of financing? Maybe you'll want to enter into a reinsurance agreement that would get rid of a line of business you really don't want or that would provide you surplus relief to finance this acquisition.

As you work with this model, you're going to be able to vary many assumptions and values. Consider a different initial reserve for *FAS 60* business and see what effect it has. Try changing the assumptions, the discount rate, or the risk rate you use for the VOBA.

In my example, I have three blocks: term, annuity, and UL. I've prepared an example of what an input page for a PGAAP worksheet would look like for the three blocks of business (Table 10). Reading across, I've put the model name, the description, and then I have the earned or credited rate that is used for the amortization of the VOBA. Then I have a column labeled Initial VOBA and the next one is Present Value of GAAP Profits. The Present Value of GAAP Profits is the calculated number and Initial VOBA is an input item. If you look at the next example, you can see it was calculated using discount rates of 19% for term, 16% for annuity, and 13% for UL (Table 11). I show the present value of GAAP profits at the overall rate and the present value at the specific rate.

For term block, the VOBA at 19% is \$84 million. If we were to calculate it at 15%, it would be \$100 million. The only reason I calculated at 15% is to develop a total number of \$284 million that is the same as the sum of the present values at the specific discount rates. For disclosure purposes, I could say the present value of profits was calculated at 15% which gave me the \$284 million. Actually, for term it was 19%, annuity is 16%, and UL is 13%, reflecting the different risks in the business.

On Table 10, one of the things you want to do is experiment with this calculation. We have \$84 million of term VOBA, but look down at another measure of profitability—the amortization factors. You can see that for term, even if I increased the VOBA to \$90 million, my net profit percent is still 12%. I might arbitrarily adjust my VOBA to \$90 million to bring profits more in line with what I

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expect term insurance to make. I take the difference out of the annuities, reducing their VOBA. You can play around with this. You can go back and forth and come up with assumptions and discount rates that will eventually calculate this VOBA for you.

Another criterion is at the bottom of Table 11. For the three blocks I show the VOBA balance, the decrease in VOBA, and the decrease in VOBA as the percentage of the beginning of the year. These would be other criteria you want to use. As we said at the beginning, you want to slow the amortization of VOBA. If by reallocating VOBA among these lines of business you can change these amortization percentages and slow amortization a little bit, you'd want to explore the possibility. Again, you can change the rate of amortization by changing initial reserves, by changing assumptions, and by changing discount rates.

The next examples (Tables 12 and 13) correspond to Tables 10, and 11, respectively. These exhibits show the effect of better lapses and mortality on the calculation of the VOBA and its amortization. As expected, the more favorable assumptions increase the present value of GAAP profits. This would result in a higher VOBA and a lower goodwill. Table 13 shows that the more favorable assumptions result in a lower VOBA amortization rate in the early years of the projection.

In all of this work you're probably going to find errors and problems, and you might be able to find some opportunities that will help you produce a better result. There are probably errors in the actuarial appraisal, target's plan, the valuation systems, and the cash-flow testing model that you're using. There are probably problems with some tax compliance or reinsurance accounting. There are probably opportunities to improve profits with proper management of interest margins, mortality margins, contractholder and agent retention efforts, and changes to accounting policies.

Due diligence is the first chance you have to review these problems. Constructing the VOBA model is the second chance once you get down to asking detailed questions about the block of business to be acquired. Running the model is your third chance, because you're going to be validating that to other results such as the original actuarial appraisal, the target's plan, or your original estimate of the GAAP profits. If you put together a post-merger plan, you will have another chance. One of the nice things about putting together a detailed model that produces statutory and GAAP results is that you can use it in post-merger planning and in financial reporting.

TABLE 11

Target PGAAP Model (\$000)		Scenario: Initial											
Start Date	12/31/98												
	Overall PVFP Discount Rate: 15.00%												
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
<u>Present Value GAAP Profit</u>													
	Model Name	Description	Calculate VOBA?	Specific PVP Rate	Overall Rate	Specific Rate	Overall Less Specific	Initial TAS Face Amount	Initial TAS Statutory Reserve	Initial TAS Tax Reserve	Initial TAS Account Value		
Test 1	TERM	Term	Yes	19.00%	100,654	83,897	16,757	28,033,992	45,802	45,021	45,802		
Test 2	ANN	Annuity	Yes	16.00%	28,321	27,319	1,002	230,091	253,399	253,399	267,475		
Test 3	UL	UL	Yes	13.00%	154,993	172,560	(17,566)	6,705,752	192,186	173,533	274,696		
Test 4			Yes		0	0	0	0	0	0	0		
Test 5			Yes		0	0	0	0	0	0	0		
Subtotal					283,968	283,776	192	34,969,835	491,387	471,953	587,973		
VOBA Balance				1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Test 1	TERM	Term	90,000	88,114	86,658	84,495	81,622	78,026	73,669	68,551	62,568	55,614	
Test 2	ANN	Annuity	21,700	19,760	18,180	16,533	14,836	13,171	11,577	10,080	8,672	7,353	
Test 3	UL	UL	172,000	166,679	161,834	157,393	153,192	149,244	144,909	139,593	133,215	125,700	
Test 4													
Test 5													
Subtotal			283,700	274,553	266,672	258,421	249,650	240,441	230,155	218,224	204,455	188,667	
Decrease in VOBA													
Test 1	TERM	Term		1,886	1,456	2,163	2,873	3,595	4,357	5,118	5,983	6,954	
Test 2	ANN	Annuity		1,940	1,580	1,647	1,697	1,665	1,595	1,497	1,409	1,319	
Test 3	UL	UL		5,321	4,845	4,441	4,201	3,948	4,335	5,316	6,378	7,515	
Test 4													
Test 5													
Subtotal				9,147	7,881	8,251	8,771	9,209	10,286	11,931	13,769	15,788	
Decrease in VOBA as Percent of BOY													
Test 1	TERM	Term		2.1%	1.7%	2.5%	3.4%	4.4%	5.6%	6.9%	8.7%	11.1%	
Test 2	ANN	Annuity		8.9%	8.0%	9.1%	10.3%	11.2%	12.1%	12.9%	14.0%	15.2%	
Test 3	UL	UL		3.1%	2.9%	2.7%	2.7%	2.6%	2.9%	3.7%	4.6%	5.6%	
Test 4													
Test 5													
Subtotal				3.2%	2.9%	3.1%	3.4%	3.7%	4.3%	5.2%	6.3%	7.7%	

TABLE 13

Target PGAAP Model (\$000)				Scenario: Better Lapse and Mortality									
Start Date: 12/31/98				Overall PVFP Discount Rate: 15.00%									
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
Present Value GAAP Profit													
	Model Name	Description	Calculate VOBA?	Specific PVP Rate	Overall Rate	Specific Rate	Overall Less Specific	Initial TAS Face Amount	Initial TAS Statutory Reserve	Initial TAS Tax Reserve	Initial TAS Account Value		
Test 1	TERM	Term	Yes	19.00%	121,603	100,736	20,867	28,033,992	45,802	45,021	45,802		
Test 2	ANN	Annuity	Yes	16.00%	28,559	27,540	1,019	230,091	253,399	253,399	267,475		
Test 3	UL	UL	Yes	13.00%	159,932	178,372	(18,440)	6,705,752	192,186	173,533	274,696		
Test 4			Yes		0	0	0	0	0	0	0		
Test 5			Yes		0	0	0	0	0	0	0		
Subtotal					310,094	306,648	3,447	34,969,835	491,387	471,953	587,973		
VOBA Balance				1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Test 1	TERM	Term		110,000	108,416	107,319	105,315	102,375	98,464	93,517	87,523	80,342	71,829
Test 2	ANN	Annuity		21,700	19,805	18,262	16,647	14,975	13,327	11,741	10,243	8,824	7,487
Test 3	UL	UL		175,000	170,314	166,039	162,093	158,319	154,729	150,687	145,601	139,373	131,915
Test 4													
Test 5													
Subtotal				306,700	298,535	291,619	284,054	275,670	266,520	255,945	243,366	228,540	211,231
Decrease in VOBA													
Test 1	TERM	Term			1,584	1,097	2,004	2,940	3,911	4,947	5,994	7,180	8,514
Test 2	ANN	Annuity			1,895	1,544	1,615	1,671	1,648	1,587	1,498	1,419	1,338
Test 3	UL	UL			4,686	4,275	3,946	3,774	3,591	4,024	5,086	6,228	7,458
Test 4													
Test 5													
Subtotal					8,165	6,916	7,565	8,385	9,150	10,575	12,578	14,826	17,309
Decrease in VOBA as Percent of BOY													
Test 1	TERM	Term		1.4%	1.0%	1.9%	2.8%	3.8%	5.0%	6.4%	8.2%	10.6%	
Test 2	ANN	Annuity		8.7%	7.8%	8.8%	10.0%	11.0%	11.9%	12.8%	13.9%	15.2%	
Test 3	UL	UL		2.7%	2.5%	2.4%	2.3%	2.3%	2.6%	3.4%	4.3%	5.4%	
Test 4													
Test 5													
Subtotal					2.7%	2.3%	2.6%	3.0%	3.3%	4.0%	4.9%	6.1%	7.6%

GAAP ACCOUNTING FOR LIFE INSURANCE ACQUISITIONS

You have a year between your first financial report and when you have to lock in the amount of VOBA and other initial balance sheet items. During this year, you want to correct any errors. You can't make changes helter-skelter and say, "Gee, if we would have known then what we know now, we would have used different assumptions." There has to be evidence existing as of the date of acquisition that we didn't take into account in the initial opening balance sheet that we now have to include in our calculations. For example, you misinterpreted a contract and the benefits should be assumed at a higher level and the VOBA should be lower.

After reviewing the work involved in PGAAP, we would have to agree that pooling looks a lot simpler. With pooling, you jamb the two companies together and you're done. So why do you want to go through the PGAAP process? The benefits of PGAAP include, frankly, the rereporting of profits and the ability to exert a degree of control over the emergence of profits. The rereporting comes about because you write-off the old balance sheet and you write up the new balance sheet and you may be rereporting some profit.

Going through the PGAAP process is very helpful in developing a planning model for the company that you've just acquired. Going through the PGAAP process will cause you to learn an awful lot about the target company. As I mentioned, there will be surprises. You'll probably uncover some errors. If a group of about a dozen people came into any one of our companies and started to analyze our valuation systems, they would probably find some errors, too. Unfortunately, after the acquisition, there will be turnover of staff and some knowledge and history will be lost. However, the PGAAP process will document the information to allow you to manage and report on the acquired business in the future. Done correctly, purchase GAAP can help the enterprise reach its objectives.

