

RECORD, Volume 26, No. 2*

San Diego Spring Meeting
June 22-23, 2000

Session 25PD

Generally Accepted Accounting Principles—Current Issues

Track: Financial Reporting

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Summary: The panelists discuss recent GAAP development and practical problems in implementing and maintaining GAAP systems under various FAS accounting models. Panelists cover the following topics:

- *Recent GAAP pronouncements*
- *AICPA Insurance Companies Committee developments*
- *Deferred Acquisition Cost amortization issues*
- *Accounting for derivatives and equity-indexed products*
- *International developments*
- *Modeling and approximations*

Ms. Lisa Femina Markus: I'm from Ernst & Young in Los Angeles and I'm the moderator of this session. We have a very knowledgeable group of presenters for you who will be talking about various GAAP issues.

The first presenter will be Bill Kane. Bill is an audit partner in Ernst & Young's Los Angeles office specializing in the insurance industry. During his 24 years, Bill has served as partner on numerous life and property casualty insurance engagements. He has worked with a variety of companies including Transamerica, Aurora National, Amex, Security First Group, Fremont General, and Golden State Mutual. He has had extensive due diligence and purchase GAAP experience. He has experience in separate accounts including N3, N4, and S6 SEC filings. He has participated in numerous special assignments including those with the Department of Insurance in California, due diligence for acquisitions, and expert testimonies. He is a past president of the Insurance Accounting and System Association, of the Orange County and San Diego chapters, and also of the FLMI Society of Southern California.

Our next speaker will be Gary Falde. Gary is an FSA and MAAA. He is vice president of planning and finance of the Life Division of Pacific Life Insurance Company. In Gary's 20-year career at Pacific Life he has gained extensive experience in pricing,

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financial reporting, strategic planning, and asset/liability management. During his early career he played major roles in the development of Pacific Life's first universal life (UL) and interest sensitive products. Since 1987 he has focused on the financial side of the life operations and is currently responsible for the strategic planning process and associated management reporting, short- and long-term financial forecasting, the investment liaison role, the illustration actuary function, and frequent internal consulting on a wide range of division and corporate projects.

Roger Smith will be our final speaker. Roger is president of Polysystems Incorporated. For almost 20 years Roger has led the design and development of complex actuarial software. He has served as the Chairperson of the Computer Science Section Council and also on SOA research and program committees. He currently serves on the AAA Committee on Life Insurance Financial Reporting. In that role he monitored and contributed to the AAA response to the fair value papers to both FASB and the IASC.

Mr. William J. Kane: One item I want to mention is that an AICPA insurance companies committee was just recently eliminated. They've restructured the AICPA and there is a financial services panel that is going to start October 1 2000 that will probably have a subgroup for insurance products. It is just an organizational change. A couple of years ago the AICPA formed a task force on demutualization accounting. It was a hot topic because about a third of all mutual companies have either announced plans or are in the process of dealing with a mutual holding company structure or demutualization. There is a lot of activity.

There were two objectives of this task force. First, address the accounting for demutualization or mutual holding company formation, and second, challenge or provide support for the past practices related to the demutualization accounting that has taken place. That task force issued their tentative conclusions in early April 2000. The exposure period was over in June 2000 and now it's in continuing deliberation.

One issue relates to closed block accounting. You are probably all aware closed block relates to those participating policies that are issued by the insurer prior to the date of demutualization. The question is whether this closed block should be "one lined" on the financial statements. In other words, should all the assets, liabilities, and income items be combined in just one line or blown up as premiums?

The current practice is combining items into one line. The proposal however, concludes differently. It says identify each item. The next item this exposure draft addresses is whether you should follow 95/1 accounting or *Financial Accounting Standard (FAS) 60*.

With respect to the first item, this exposure draft changes the current guidance and says don't one line all your closed block activity. Integrate it fully into your GAAP-basis financial statements. Because it's not a separate legal entity, there is no legal basis for one lining. With respect to 95/1 or *FAS 60*, this exposure draft concluded that 95/1 guidance is more consistent with participating policies. One of the key items there is that amortization and deferred acquisition cost are based on expected

gross margins rather than premiums. The exception to following 95/1 relates to dividends.

With respect to dividends, 95/1 basically requires accrual on a declared basis and *FAS 60* requires accrual of any undistributed earnings to policyholders. Therefore, current guidance is more of a declared basis. This proposes to change the accounting for dividends. The exposure period to require the accrual of all undistributed accumulated earnings to policyholders was just finalized.

Closed-block accounting or demutualization has been a fairly controversial issue. It relates to whether the periodic results of the closed block, the excess over expected profits, should be recorded in income or as an increase in the policyholder dividend.

The maximum earnings that the shareholders of a demutualized company can earn from a closed block are any excess of liabilities over the assets at the date of demutualization. Essentially the profits on a closed block are locked in for the new company.

The Accounting Standards Executive Committee concluded that the actual earnings in any period that are in excess of the cumulative expected earnings should not be income to the company. Instead, it should be deferred as a policyholder dividend obligation.

This has the impact of greatly smoothing the earnings of a company. That was a bit controversial because remember any actual earnings in excess of expected will not go into income but will be accrued to the policyholder dividend liability. It's going to make things smooth. I think most companies would like that smoothing effect. A number of the accountants said, "Well, wait a second, the expected earnings are arbitrary. They were put together on a projected basis by a group of top-notch actuaries, but nonetheless arbitrary."

Based on this projection that's done, we're going to smooth earnings instead of having particularly good years when there are excess earnings. There are those that disagree with it. Nonetheless, the conclusion is that any excess earnings above expected would be accrued into the policyholder dividend that results in a very leveled accounting result.

There are also pure accounting issues related to demutualization. Should all those expenses that companies incur to pay lawyers, accountants, actuaries, and others during a demutualization be classified as ordinary expenses in your income statement or as extraordinary expenses? They have to date been classified as extraordinary expenses. Extraordinary under the accounting literature is unusual in nature and infrequent in occurrence.

An example I like to give of that, because it was so bizarre, is in Southern California in 1994 there was an earthquake. It occurred January 17, so year-end companies hadn't yet reported.

The question was, to the extent they had a loss because of the earthquake, was that extraordinary? Should it be one lined on their income statement at the bottom? It meets the test unusual in nature and infrequency in occurrence.

The accounting rule bodies at that point said, "No, wait a second. There are earthquakes all the time in California. That's not infrequent or unusual. If you had a loss, put it in regular operations." They have also concluded in this aspect that although in the past demutualization expenses have been called extraordinary, based on this new guidance and assuming it's adopted, they would be ordinary. The conclusion is that frankly it's not infrequent and unusual that the legal and organizational structure of financial services companies is changing dramatically and who knows what will happen in the future. The cost should be put in your regular operations; you don't get to separate them.

To summarize again, the closed block isn't one lined anymore, it's fully integrated into the financial statements. The earnings are levelized a bit more and expenses incurred are ordinary expenses. When would all this change be effective? It would be effective basically for 2001, and to the extent that it gets issued later in 2000, they would encourage adoption in 2000.

Let's go on to deferred acquisition cost (DAC). In the early 1980s as UL policies were coming out and effectively replacing traditional policies the question arose: if I have DAC on a traditional policy and connect it to a UL policy, what do I do with the existing DAC?

The guidance came out back then said to write off your old DAC. The current guidance under *FAS 97* requires the write off of existing acquisition cost when a *FAS 97* product replaces an existing *FAS 60* product. There is no guidance though with respect to what happens if you replace with the same type of product, i.e., a *FAS 60* product replaced with another *FAS 60* product or a *FAS 97* product with another *FAS 97* product.

There hasn't been any clear guidance on this. With the increased activity going on with respect to new products, whether it's equity indexed, variable, other UL designs, annuities, or even traditional, there has been an increase in replacements. There are three possible ways to treat it. One is to write off the original balance like is currently required when you go from a *FAS 60* to *FAS 97* product. The other is to maintain it. The third is to roll it into the new acquisition cost of the new product and amortize it.

The AICPA prepared a discussion paper in 1999, circulated it to the industry, received comments, and will probably issue a statement of position later in 2000. It will give guidance on how we handle acquisition costs related to replacements. Nothing has come out at this point.

I think that despite the fact that industry came out in favor of rolling over the acquisition cost, that may not be what the accounting rules specify. It will be interesting to see how this one plays out; it is still on the table.

The AICPA also had a non-traditional long duration task force, which has dealt with all types of issues. I'll comment on a couple items related to separate accounts and one that I think will be pretty controversial related to sales inducements or bonus interest.

The tentative conclusion with separate accounts is that the current accounting generally is the right accounting. Right now, unlike the closed block which is going to go away from one lining, separate account assets and separate account liabilities are one lined on a GAAP balance sheet just like on a statutory balance sheet. In addition, they're not separately showing the nature of the assets, i.e., whether they're stock or real estate or bonds. The liabilities are just separate account liabilities, they're not shown as reserves. That would continue as long as the assets legally reside in a separate account. They're insulated from the general accounts.

In other words, they are for the benefit of the separate account so if there is an insolvency, the separate account policyholders get those assets. Another criterion is that the contract holders have control over the allocation of the assets in the separate account. Finally, all the investment performance is fully allocated to the policyholders.

In recent years you've probably seen a number of separate account contracts with minimum guarantees. The policyholder will get the upside, but doesn't fully participate in the downside. The conclusions of this AICPA committee with respect to these contracts are if this last criteria isn't met, i.e., the policyholder doesn't bear the entire investment risk, don't one line it anymore. Instead, put it into the financial statements. The assets would go in the applicable category, bonds, stocks, and so forth, and the liabilities would go in the policy reserves or contract holder deposit liabilities, not in a separate account.

That is a change in practice. In fact, I think one reason they're addressing this is there's a divergence in practice now. Some companies that have separate accounts with guarantees put them in the separate account line. Some companies do reclassify them by component in the general account, but this rule would require it.

Sales inducements or bonus interest have been around 10-15 years, primarily related to annuities. In terms of bonus interest, there are three broad categories.

The day-one bonus typically involves a credit by the insurance company to increase the account value at the inception of the contract by a percent bonus. A second type is a persistency bonus that involves crediting the bonus at later durations in the contract if the policyholder meets certain criteria. A third type is the enhanced interest rate that is typically offered on annuity contracts or maybe a life contract as an inducement. However, it's not directly in the contract and often it's not clear. For example, on the day-one bonus, in many cases the agent can have the opportunity to modify his commission scale and credit bonus interest. There you see total parallel between the interest and the commission. As you move from persistency to just an enhanced rate, it becomes less clear. Is it affecting the commission at all?

The bottom line is the AICPA tentatively concluded in early 2000 (and again it's not final but I suspect it will be) that you should follow a debt accounting model. What

that basically means is that day one bonus interest is expensed immediately. If you give them a 5% credit, it will hit earnings. I'm going to guess if we raised hands, most companies are deferring that right now, but it would be expensed if the new rules are finalized. A persistency bonus would be expensed through the crediting rate. The enhanced interest rate bonus would be charged to expense as the amount that's credited to the policyholder account value. In other words, it's a liability related item versus an acquisition cost. I think that's a significant change from what most companies have been doing. This could impact companies with a lot of bonus interest. I think it should probably get finalized later in 2000.

I will touch briefly on minimum guaranteed death benefits. This relates to annuity contracts where there is a minimum guaranteed death benefit. This was also addressed by the long duration task force simply because there was such diversity in practice. Some insurance companies simply recorded the annuity account value regardless of the guaranteed death benefit. Others recorded the same for GAAP and statutory and others recorded a GAAP reserve different than statutory. Practice was all over the board. There are five issues relating to this that I'm going to go through.

Should the variable annuities with the minimum guaranteed death benefit be accounted for as a UL contract or as an investment contract under *FAS 97*? Because investment contracts do not incorporate insurance risks such as mortality or morbidity, the answer may require some analysis. In other words, it's not going to be clear because your basic annuity contract is obviously an investment contract, and this brings in a mortality feature. This is going to be sorted out and maybe bifurcated between the two.

Should the significance of a death benefit be measured? If so, how should it be? The answer is based on the projected cash flows of the whole product related to the death benefit and the investment aspect of it.

Issue three is how should the direct writer of a variable annuity contract with a death benefit feature account for it? There were three basic methodologies looked at. If it's an investment contract only, there'd be no additional liability. If it's an insurance contract, there would be an additional liability. You'd have to record something under *FAS 60*, or it could be a situation where you recorded the deficiency reserves. They're grappling with how to deal with the accounting for the minimum death benefit. One thing that was clear at this point in their recommendations is that a reinsurer of the minimum guaranteed death benefit is going to record a liability for the minimum guaranteed death benefit that is assumed.

I will hit on a few things related to life insurance primarily on Statement 133. I don't know if many people have been involved with 133 at this point. Statement 133 was the statement requiring new accounting for derivatives. It was amended by Statement 137. Statement 137 basically says for any companies with year-ends after June 30 2000, it's effective. For insurance companies on December 31 2000, it's going to be effective for 2001.

There are a couple of issues to highlight with respect to 133. It defines what a derivative is but we're not going to go into that too much. Most insurance companies

do macro hedging. They do macro hedges where they try to reduce the reinvestment risk for mismatches in their duration of assets and liabilities. Under 133 it's pretty clear that macro hedging does not qualify. A macro hedge does not qualify for hedge accounting. Just for clarity, if you don't have hedge accounting, that means any derivative change in fair value must be marked-to-market every quarter, and put into the income statement. Therefore, you're going to get a wildly fluctuating income statement if you don't have hedge accounting. If you do have hedge accounting, then essentially the change in the fair value is deferred until a later date when the derivative instrument matures or is disposed of. Macro hedging is not allowed, or at least the pool of securities is much more limited. With respect to imbedded derivatives, 133 states if you have convertible debt, you really have a derivative imbedded in the debt, the conversion feature. You have to bifurcate that and account for the imbedded items separately.

I will go right to the impact on insurance products. The question is: is a variable contract a derivative? In general I think the answer is no. A guaranteed death benefit is not an imbedded derivative, it's insurance.

There are some exceptions, but a variable contract is generally not a derivative. If you have a minimum investment guaranty, then that minimum guaranty may be an imbedded derivative. Equity indexed annuities are clearly going to be derivatives. In fact, companies that have them now are hedging them with derivatives.

Synthetic GICs written by companies for pension plans have been analyzed and determined clearly to be derivatives. The change in the fair value of the synthetic GIC would be recorded as a charge or credit to income each year.

I'd like to summarize. As I said, minimum debt benefit guarantees are not derivatives. With respect to variable annuities and imbedded derivatives, there is a host contract and the imbedded contract. A variable annuity is the host and the question is whether there is an attachment to it that may be a derivative.

I want to comment on Statement 133 in general. A few companies, which did not include many insurance companies, did early adoption in 1999. The biggest change that's occurring out of 133 relates to the 80% rule. The existing guidance on derivatives and hedge accounting, although very limited in the accounting literature, said to the extent historically a derivative was a hedge and was deemed to be at least 80% effective, then any change in the value of the underlying asset or liability in the derivative was deferred.

Under Statement 133 it has a much more exacting requirement. You must determine the extent (frankly, it's hard for me to imagine how as an auditor I'd audit it) a derivative is not a perfect hedge. For example, let's say it turns out to be 92% effective instead of 100%. You get hedge accounting on the 92%, but the 8% that's ineffective is a hit or a credit to the income statement. You don't get complete deferral just because it's at least 80% effective. You get deferral only for the effective piece and it has to be at least 80% to get that. If it's only 82%, 18% is ineffective and gets charged to operations.

The other aspect is documentation. It requires contemporaneous documentation when you enter into the derivative transaction as to what you're hedging and the effectiveness of it. If that documentation is not timely, then you don't have hedge accounting. That's one of the requirements. I think it puts company people and auditors into a difficult situation.

In reviewing early adopters, the SEC challenged them significantly on both the effectiveness and the timeliness of the documentation. To the extent it wasn't documented timely, it said, "Well, here's what the rules. You don't get hedge accounting, even though it might have been effective, because you didn't document it timely."

Consequently, there are going to be issues for those companies, particularly in the asset management pension businesses that are instituting it. Documentation is going to be a key part of that.

Let me focus on business combinations and goodwill. You're probably aware under current guidance for business combinations you can either have purchase accounting or pooling accounting.

There has been a lot of discussion about pooling accounting. Under pooling accounting the old basis of the company being acquired is carried over as the new basis and there is no goodwill.

Under purchase accounting we all know that the assets and liabilities are marked-to-market and you have a new value of business acquired (VOBA) balance. Typically, the new VOBA balance replaces DAC and goodwill. The accounting profession fears that you could have a pooling transaction get a totally different answer than under purchase accounting with goodwill.

Analysis has been done over the last couple of years to determine how we should go forward. The major difference presently between purchase and pooling accounting is under pooling there is no goodwill, because you carry over your old assets and liabilities.

Under the new rules, which are expected to become effective in 2001, there are no more poolings. They will all be purchase accounting. We didn't see that many in the insurance industry; it's more often seen in the high-tech area where there were huge valuations which would have resulted in huge goodwill. Under pooling, you have to do stock for stock, which avoids that.

With respect to goodwill, the key thing I want to highlight is that presently you can amortize goodwill up to 40 years. Those of you who work in the financial area of companies know if you're doing an acquisition, a lot of effort is put into the VOBA versus goodwill. You can amortize goodwill potentially up to over 40 years and your VOBA, depending on your products, is going to be amortized over a shorter life. The more put into goodwill, the better the earnings stream in the future. Not anymore. Twenty years is the maximum life to amortize all intangibles.

Having said that, I'm going to make one change. You're probably thinking, "Why would VOBA be amortized over 20 years?" VOBA isn't. To the extent you have an intangible asset that has identifiable cash flows like the policy cash flows, you amortize that asset over the cash-flow period. Therefore, VOBA will remain unchanged. The goodwill of any other identifiable intangibles like customer lists are amortized over no more than 20 years. That's going to significantly change the earnings impact with respect to intangibles.

I want to mention another item on negative goodwill, which you don't see that often. If you allocate all your purchase price, all your assets and liabilities and you have a bargain purchase, you have a negative goodwill. Presently you defer that and bring it into income over some period of time. Under the new rules there is no negative goodwill. It's an extraordinary gain when the acquisition occurs.

If an intangible is actually identified as having an indefinite life and there is an observable market for it, you don't have to amortize the asset. For example, in New York a taxicab has to have a metal or a medallion. I think that might be an intangible with a market value. If it has an indefinite life, and there's an observable market for it, you don't have to amortize it.

There is obviously going to be some impact on purchase accounting for life companies. I think what it's going to mean is that there may not be as much of a pressure in the future to allocate between goodwill and VOBA because the goodwill will be amortized over 20 years.

Mr. Gary Falde: You're going to hear a lot about Pacific Life with this meeting's keynote speaker, Jim Benson, that's really going to reflect some of our experience with GAAP. You might think that GAAP and *FAS 97* are not exactly new current topics and they have been around awhile. But for many of you who are practicing in this area, keeping current is always a very relevant and very current problem.

Those of you who might be new to GAAP or your companies are new to GAAP, I assure you that the updating of DAC will become a real interesting problem for you. I chose this topic out of a deep-seated belief that I can't be the only actuary, and we at Pacific Life can't be the only company that struggles with and is constantly amazed by the complexity and the kind of illusive wild nature of DAC under *FAS 97*.

I wanted to share some of our successes and some of our struggles with you and hopefully you can relate to some of these things. Maybe you're dealing with those issues, maybe you've already gotten through them or maybe they're still coming around the corner.

I encourage you to go back and take a look at your own processes. Maybe you can take some of our approaches. Maybe you'll go back and decide you can improve on them or maybe you have something better. But I hope that you can take something of practical value with you.

Certainly you're going to have to adapt them to your own company's situation. You're going to have different reporting requirements, maybe different turnaround

timetables at quarter end or different staffing levels that you're going to have to take into account. Those are usually going to be directly correlated with the company structure that you have, whether you've been doing this for a while and you're already a public company, whether you're brand new to this as a demutualizing company or maybe it's a mutual company who still has to do some GAAP. In my case, we have a mutual holding company structure with a public company reporting atmosphere even though we don't have to do all of the formal SEC filings at this point.

I'll make a few comments about Pacific Life GAAP so you know where I'm coming from. We started doing GAAP back in the mid to late 1980s, really as an internal management tool and for determining incentive compensation for most of our work force. It's really blossomed into fully audited financials and is the main communication of our financial results for all internal and external purposes.

Since the early 1980s we have sold almost exclusively UL and variable UL products. Recently we have started a very rapidly growing variable annuity division, which I'm not in, but I'm somewhat aware of some of the GAAP issues they come across.

All of these businesses are *FAS 97* related so that's my context here. I think there are some counterparts in mutual GAAP that you may have to do on more traditional products with respect to the updating process. I need to paint a picture of our quarterly process because I'm actually getting some hands-on experience by explaining exactly how we go through this process.

We maintain DAC schedules by product. We don't do issue year anymore. We used to do that, and I'll be talking about that a little bit further.

Each quarter we update our DAC for each of these blocks by calculating the actual deferrals and the actual gross profits that we've had. We accumulate the DAC in that fashion: interest on a beginning balance and then minus amortization. We don't change the amortization factor, or the K-factor as it's technically called, except for one time a year at this point. We tend to over-adjust our amortization a little bit because of not actually going through a restatement process each quarter.

For those of you who aren't familiar with a K factor, that is simply the percentage of gross profits that's used each year to amortize the DAC. It represents the present value of lifetime deferrals divided by the present value of gross profits. We do this K factor restatement process once a year currently. We perform that work during the fourth quarter mainly because that's when we have resources available to do it, which often is the practical consideration. We'll do our modeling as of September 30 and then reflect the results in our year-end financials.

Actual gross profits have been compared to what the model said they were going to be for the past year. In addition, we substitute in the new volume and mix of business that we now have. Then we also go through unlocking of any future assumptions to the extent necessary. It's been particularly challenging the past three years. Each time we've had several of our existing products that have been repriced for both new business and in force. We've generally had lower cost of

insurance charges implemented along with more favorable mortality pricing assumptions.

That's really given us a thorough challenge each year in doing this process. Doing this in fourth quarter is scary because it's right at the end of the year. We are working towards getting that done earlier in the year. I'm sure that very soon we'll be working toward a quarterly updating process, at least for reflecting all of the past experience. That's where we are now with the staffing that we have, spending time and resources with this is an issue.

Let me define just a couple of terms the way that I'm going to use them as we go through this. When I say DAC I'm talking about the net of the expense DAC, the commission DAC, and then minus the deferred revenue. That's the way I like to look at it most of the time. When I say a K-factor or amortization factor, I'm going to be talking about the net of expense plus commission minus revenue.

It is important to look at the revenue and expense items separately as well because you can get some wild swings in revenue and expense line items even if the bottom line is fairly stable. For example, in a really front-end loaded product that has a lot of deferred revenue, you can see fairly wild swings over time in the revenue versus the expense. It's something you have to be aware of.

My problem is also that I am our planning person. Around the third quarter or early fourth quarter of every year, I'm supposed to project earnings for the end of the year and also project earnings forward for three years. I'm very comfortable with that. I've been doing it for quite awhile and we've got an excellent business plan that we start the year with. We have a quarterly variance analysis that we have a lot of confidence in, so we know where we are compared to plan at any point in time. We feel pretty comfortable projecting at least a range of those variances to the end of the year. What's the problem? It should be easy to get to a bottom line that you're really comfortable with.

Well, the problem is this DAC related updating, and what it is going to do to the earnings. In spite of spending a lot of time with this over the years it can still be mystifying. I tend to give more caveats in my projections to management on that issue than anything else.

Why is the result of this updating so hard to predict? I want to say a couple of basic things before I give some examples. Really two things came to mind when I was thinking about this. The most fundamental is the continual updating of the DAC back to the inception of the block. That certainly creates the most instability.

A second one has to do with how current practice has emerged, which I think is a lot more subtle. Current practice takes actual results of each DAC block very literally. You replace model gross profits, which might have been based on an overall mortality assumption that you thought would be good across a block of business, and replace it with the literal actual results. Then you project gross profits going forward which gets back to this pricing or expected basis.

For example, mortality over the whole line of business might only vary a little bit, 5–10% from year to year as far as normal fluctuations. However, within any one DAC block the mortality could vary significantly, i.e., 50% in one block and 150% in another block because the books are not big enough. Due to the unique nature of gross profits in each of those blocks, you can get very different results than if you had just a small percentage variance across the board.

Over the years we've collected a wide range of product designs and the real driver of how DAC is amortized and how earnings are recognized is the shape of the gross profit stream. You can have a stream that's very long or very short. For example, there are high front-end loads and low gross profits versus low front-end loads and high gross profits. You can have a wide variety of reactions to variances and experience on these different products.

The K factors can be all over the map, based on their absolute amount. You can also have situations with different ages of your blocks of business. If you now have a UL product that's been around 10–15 years, that product is going to absorb the shock of experience variances within its current DAC.

If you have morality variance, a lot of that is going to get reflected in some unlocking or updating in the past, and we'll have more of an effect on today's DAC. On a new product, the effect on DAC is usually determined more by the future and how your future earnings are going to emerge. Therefore, it's real important to look at how much of the gross profits on any block are in the past versus in the future.

You probably have different types of reinsurance within each of these blocks. Reinsurance ceded has gone up substantially in the past few years in terms of volumes and the different types of structures that are involved. Data issues come into play when you're connecting the past and a future where you have this literal actual result. You better know how your reporting and accounting works on the actual side to make sure that it connects up with the modeling.

It's very easy to double count acquisition expenses if you're relating them to some kind of a target premium or you could double count commissions. A lot of those kinds of perils can come into play. These seem to come up more often with products that are very new in their life cycle. They may be 1–3 years old and you don't have that much data on them.

Some of the early results can be misleading in terms of how the product was sold. What's the premium pattern on this block going to be? You have to be careful in looking at that. Then there's the experience itself: whether it's mortality or swings in the returns on your separate accounts (having a 30% total return on your separate accounts in one calendar year and maybe minus 10% another year). Without watching what you assume in the future growth rate of your funds, you can get real wild swings in the DAC. These are just a few of the potential items.

How do you gain control of this process? I'm going to talk a little about each of these. One, and even though this isn't a sports talk, mental preparation, being ready for the process and knowing what has been going on, is really important. This involves

communication with those that provide you information, and also with your eventual audiences, especially your auditor and your management.

Another aspect is to develop reporting and analysis tools that reduce the clutter of hundreds of pages of output of future projections of profits. This goal is to get down to a couple of essential pages that can easily be reviewed and point to the real drivers behind the results. This way you'll be able to really see patterns across products. Maybe all your variable products showed a decrease in DAC, and all your non-variable products showed an increase.

Maybe all your products that you are currently selling went up and the ones that are in force only went down or vice versa. Getting information very summarized helps you to find those things and delve into what's behind them. In terms of unlocking philosophy itself, keep a very measured approach to it, taking a big picture view. Take into account all the experience factors and the possible pricing actions that you'll be taking. Then, of course, document.

I want to really emphasize that when you have all these good reports in front of you, spend the necessary time with them. Make sure that you're really learning from them and delving into the issues that are going to pop up.

In terms of preparation, get involved in discussions with your product development people and know your products. Knowing the structure of the loads and related profits, how new products compare with products that you've sold before and the potential earnings impact to your line of business are all very important.

Maybe you can even have some interaction with the pricing area and educate them on how this will work. You should also know how the product is sold or how it's expected to be sold so you're not necessarily just driven by early results. That might be a little misleading, especially for a new product.

Talk to your profit planning folks. With us that's integrated into the same area as well as the illustration actuary functions. So there is a lot of discussion about experience, emerging experience and trends within our planning process, since we do emulate the GAAP updating.

We've done this for several years and so sometimes when doing the plan we'll be able to see that there's going to be an issue with respect to the updating of DAC because we'll capture it in the plan. Often, that's when we look at a new product to see if there are some alternatives with respect to the GAAP. We can work that out during the planning process and learn from it. Know what's expected from the planning people.

Also, know what's actually happening on a regular basis. Talk to your accounting and reporting people. Know when there are large case surrenders that are either coming up soon or have occurred. Make sure you're aware of those kinds of developments or be involved with expense issues, deferrable expenses and so forth. Certainly be in touch with your outside auditor who can be your window to the world. We're on the

West coast, so we don't often get out and talk with all of you. It really is helpful to have a strong, good relationship with your auditing actuary.

Know what questions your management will ask and develop your recording and analysis tools to answer their questions. It will take a lot of effort to make them understand this updating process, but it's important that they at least get the basic idea.

Now on to some specific issues or specific ways we've done things at Pacific Life. One I mentioned is maintaining DAC by product group. Another is when we do this true up and unlocking process, we do it in stages so that we see the impact of each change that we've made along the way, and the impact of past experience.

For each stage of the process, we break that down further into summary reports that break down the key components of how the current DAC changed. For several years we have processed DAC by product group. This originated with wanting to get actual gross profit information directly from our ledger system instead of other analytical type systems.

We needed to get the gross profits put together quicker. I know a lot of companies are involved with implementing new ledger systems that are better than the one that we put in a few years ago. Those systems are going to get you the information even faster. Data warehouses are used as well. This will speed up your gross profit collection process, allowing you to have more time for analysis and maybe more frequent updating of your amortization factors. Certainly it results in far fewer schedules that you have to master, i.e., not having all these product and issue year schedules.

Now you have to be a little careful because combining issue years creates some new problems, but they're not insurmountable. It may become necessary at some point to start a new block if the product has been on the shelf for a long time.

You can see differences emerge in profitability of different time periods of the same product. For example, maybe one product has had good mortality. You would still view that it's just like another product sold in that issue year that happened to get the claims. However, that product might literally have lower mortality. For the newer business that you are bringing on, you're probably going to assume the average pricing mortality in the future. The way the product sold might have changed over a few years. Maybe it's gone into less profitable or more profitable cells since you first started GAAPing the products. You have to be careful.

In terms of the way that we update one stage at a time, we found a lot of value in what we call a zero run. It may sound on the surface like a waste of time. We have done this run using the prior year's model date, and let's say that it is September 30, 1999 and now we're going to do work as of September 30, 2000. We'll use last year's model date with the same in force and the same assumptions that we used last year.

Hopefully, in many cases we'll get the same projection that we had last year. That is a very good thing especially if you do a lot of different modeling projects in your area

and the same people are running different applications. You'll make sure that you're starting off where you left off last time.

You may have made changes to the granularity of your model. It's the same in force, but the model is a little better. Maybe you've changed some of the projection coding and you're going to have a different result just from modeling effects. You can isolate that in this zero run.

Our true up run would be as of the current date and we would be capturing the effect on the K factor of plugging in the prior 12 months actual profits and actual deferrals. We would also capture the effect of a new model run, with the new in force with its own characteristics of mix of business and so forth. Finally, we would unlock future assumptions one stage at a time.

Interest spread, mortality, or a pricing change if cost of insurance rates has changed, might be something that you're unlocking or at least changing for the first few years of your model going forward. The crediting rate would probably be done within the spread. Analyze the DAC one stage at a time. Then within each stage really look at what drives the change in the DAC. The change in the DAC at least in the way that we're approaching this, is going to be the change in this K-factor times the accumulated value of the past gross profit. A 10- or 15-year old product that developed a lot of history is going to be affected a lot more by something that happens today.

I chose what I consider to be drivers of profits in our products: account value or benefit reserve, face amount and target premium. I want to see how those inventories have changed. Really what you're measuring is in a zero run a year ago, what in force did you think was going to be in effect today? Then compare that to what actually is in effect today in your true up run.

Run zero represents what you projected a year ago to be the accumulated value of gross profits today, and then what they actually are. Consequently, you would be able to determine what the variance was between your model a year ago and what you actually got.

How do your future gross profits vary from what you thought a year ago? Compare those changes in inventories and those issues you need to explain will come forward.

I have a final word on unlocking philosophy. A cool and clear head may reduce unnecessary volatility. You're not going to take all the volatility out of DAC, since it has an unstable nature. However, you certainly don't want to introduce things into the calculation this year that you could very well have to take out again next year.

Maybe you made a change in experience assumption, but you didn't realize that the crediting rate were going to change, and you didn't anticipate the product management side at the same time as you reflected the experience. How do you keep control of this process? One way is to be sure to maintain a written policy so that you aren't just going to go off willy-nilly making changes to your process.

You've really got to prove to yourself in writing that this change should be done and followed. Be consistent with the same kind of issue from one period to the next in order to build credibility of this process. Document any reasons that you have for deviations from this written policy or changes that you do make to the written policy. It's certainly an active document. Consider all assumptions together. Keep a long-term perspective. This might relate to my comment earlier about returns on variable separate accounts.

Document why you did unlocking on mortality and interest spread and what product management issues were surrounding the decisions. Make sure that you list the inevitable follow-up issues that you're going to have and make sure that they get attended to before the next time you do this. Perhaps you will take care of some of these cleanup issues in an interim reporting period.

Mr. Roger W. Smith: In the time that we have remaining, I want to bring you up-to-date on some of the activities that have been happening with fair value. It's not directly related to current GAAP, so it's a little departure from the title of the session. I want to explain a little bit about what is happening, offer some thoughts about what might happen, and offer a couple of my opinions on what some of the implications might be as the documents exist right now.

In late 1999, there were two papers released dealing with the issue of fair value. One of them was released by FASB. The official title is "FASB's Preliminary Views Document" released on December 14. There was also an issues paper that was released by the International Accounting Standards Committee, issued in November. Both of these papers were soliciting comments from interested parties and they put a May 31 2000 comments receipt date.

These two documents did come out and the IASC paper was quite a bit longer than the FASB document; it dealt with a lot more issues. I'm going to speak mostly from my comments, which relate to the FASB document. I'll also bring up a couple of points on the international one where there are major departures. Now why were they concerned about fair value? There have been some moves previously to express the asset values in fair value, and in the FASB document they posed a simple example. The example I'm going to share is very close to it, but not exactly the same. They pointed out the incongruous nature of a bond. Perhaps you have two bonds where the participation value is to be repaid on the same date, but they were issued at different points in time when interest rates were at different levels. One was at a 6% coupon. The second one was at a 10% coupon.

Let's say we have a current market rate of 8%, resulting in two different market values on these instruments. The old book value accounting method would have held the value to be \$1,000 for both. The point that they were making is this didn't make a whole lot of sense and it would be better to reflect these market values to give more and better information to the investing public.

I think that if you read the FASB paper in particular, the objective is to give better, more complete information to the investing public. They certainly felt that there was an opportunity to give more and better information.

The FASB paper went on to define what was subject to fair value. Financial instruments such as cash, an ownership interest in an equity, a contractual obligation to deliver a financial instrument, a contractual right to receive a financial instrument, and a contractual obligation to exchange financial instruments should be stated at fair value. I think this is a definition exactly out of the FASB paper. There was a group of individuals that worked actually very, very hard. It was a task force assembled of life actuaries and property and casualty actuaries. The chairperson was by Burt Jay.

For those of you who may have been privileged to be on the e-mail list of that body, I would estimate somewhere between 500-600 e-mails have gone out across the country. They all had rather large attachments to them as the comments went back and forth among the various groups. I believe that the Omaha Internet capacity was profoundly affected by this one project alone.

As far as what was considered to be subject to fair value, the group raised the issue of a lot of service contracts. The definition focuses on cash or the ability to receive some cash as a key of the definition.

Later in the FASB paper it excluded service contracts and warranties as something that should not be fair market valued. The Academy group that made the response pointed out the similarities between paying a service, i.e., medical benefits or some casualty coverages, rather than cash. They coined the term "accounting arbitrage" as something that should be avoided and urged that some of those service contracts be included.

I want to move to what FASB describes as a fair value. It coined a term of an "exit price" and it is defined somewhat. How much would you pay for something in a third-party arms-length transaction involving people with similar information? It expressed it as, "How much would another insurer either demand or pay to change places with you with that insurance liability?"

There was a very strong preference in the FASB paper for observable market values and that is really what they would like to have throughout if possible. It would obviously be possible if you want to know the value of a share of IBM stock. It's fairly easy to find out what that market value is. The question that the people on the committees and task force worked on is, are there observable market prices or values in the insurance business for blocks of business?

Some of the questions that came up that I believe would be relevant are: how many transactions might occur? How many details of the transactions are made public? Do we think that there is truly a market present? I don't think anybody on the task force or committees would offer the opinion that there was an active enough market that you could observe what prices should be for insurance liabilities.

I didn't state earlier, although perhaps I should have, that we all concluded that insurance liabilities met the definition of what should be valued on a fair value basis. The preference was for observed market values if we can find them. If we don't believe that there are any observable market prices to base our fair values upon, what do you do then?

In the FASB paper, it suggested several alternatives and we'll find something very similar to it that has an observable market value and use it. For example, if you can't find a market value for a Ford but you can for a Chevy and you think they're similar, you'd use the Chevy market value. However, that didn't seem to be available to us either.

The next preferred approach is to develop some models and discount the cash flows, using assumptions that you can readily pull out of the marketplace where you can observe market levels of assumptions. Use those in your models of discounted cash flows. Everybody considered that, and we would consider that. The least preferred technique that they mentioned was to use a model with discounted cash flows with internally generated assumptions. There were several remarks scattered throughout the paper that led me to believe that the FASB viewed that as definitely the least desirable position to be in.

In the work that I saw, participated in, read and contributed to, I think we clearly find ourselves in a situation where insurance liabilities will have to be based on discounted cash flows with internally generated assumptions. I don't believe that there are any market values. So we find ourselves in the very least desired end of the spectrum for determining what fair values ought to be.

There were a couple of suggestions in the paper that some of the assumptions might be found in the marketplace. There was a reference to current reinsurance transactions as perhaps a source for focusing in on what the mortality levels might be. In some of the conversations and in some of the discussions, I asked a couple of reinsurance actuaries who were in our group, "How do you set the mortality for a reinsurance proposal?" The first thing you do is ask the company what their mortality assumptions are. It seems pretty clear that underwriting practices and policy provisions influence all mortality and morbidity. You need to make all those company specific.

Perhaps interest is the one assumption we might be able to lift from the market. If you follow through all the discussions, there are a lot of points of view about exactly how to discount and with what.

Another point, and I think this was brought up quite well by a Dutch actuary in the international arena, that insurance products do have some inherent profitability. We have to put ourselves in position where even though there is no market, we have to pretend there is and figure out what it would look like. Consider a term policy that we would sell in a secondary market if one existed. For example, a very simple 20-year term level premium, with simple assumptions. I calculate margins at issue of \$325 for this one policy.

Now if we're going to fair value this, how might we approach this? Well, if the \$325 is all of the margins and someone is going to come in and buy the policy, how much might they pay for the policy? If the total margins are \$325, I'm going to suggest that they pay less than \$325 because otherwise they wouldn't make any money. It wouldn't make any sense to buy something and then not make any money.

How do you reflect that there are a couple of ways to calculate fair value? I came up with my fair value #2 and #3. The differences are I kept a portion of the premium in fair value #2. In fair value #3 I invented a different mortality view. The mortality costs were a little bit higher which may be a way that we might reflect this.

Assume we're pretending that there is a marketplace (which again there isn't), and we have a value of \$190 or \$215. In other words, \$190 or \$215 might be what somebody would pay, assuming this kind of a basis. I went a little further and developed what the earning streams might be if we chose either of those two assumptions.

In the U.S., we've always had a principle that you should not recognize profits at issue. Both statutory and GAAP accounting have those principles built into them. However, that principle is not admired uniformly throughout the world. There are a lot of actuaries internationally that feel you should recognize profits at issue.

If the business that you're selling is truly profitable, that is, if there is some value, and we continue this thought process of pretending to find a market that doesn't really exist, I think we will see a lot of profits recorded up front. It will be a natural result of applying the thought process.

Under my fair value basis after changing the numbers a little bit, all the profits come at issue and are followed by zeroes. There are a couple of alternatives in which we had different amounts of profits being recognized up front. I think that will be a logical result if the business is truly profitable. Irrespective of how you might discount it or exactly what techniques you might use, if it is profitable, then somebody would pay something for that stream of profits which means you'd recognize that up front.

There are some varying patterns of earnings, some going down and some going up. I don't take great comfort in this. I find it strange how I seemingly easily came up with some different views on what the assumptions ought to be and I can tilt and twist the profit stream.

Eliminating DAC was really stressed in the international discussions. They really don't like DAC. They were uncertain and unclear about a lot of things, but were certain about having no DAC. I think it would mean you would need to go through unlocking assumptions all the time. You will also be reconciling because you may be changing assumptions or will have the opportunity to change assumptions. Potentially reconciling fair values at one period to another could be extremely challenging. I think you will need to be able to break down and identify all the sources of the assumptions.

Some of the questions that we raised were related to *FAS 97* accounting, purchase accounting, and reconciliation. Since *FAS 97* is based on margins, it seems likely that something would have to change with respect to fair value. Purchase accounting was not addressed and would need to be mentioned.

With respect to reconciliation, the FASB paper did mention one possible way of breaking down the total change in fair value. There were also a couple of other approaches.

I have a couple of very last comments, one that normally gets an actuary's blood boiling. The FASB paper talked about defining discount rates as risk-free rates with appropriate risk adjustments. Of course, our standard practice is to use higher discount rates to reflect some measure of risk, but you don't want to do that.

Finally, there is this principle of using an entity's own creditworthiness to discount your own liabilities. If you have an asset and the lender that owes you the money has a drop in creditworthiness, you might have to discount that or reduce the value of that asset for assumed default risk.

This implies that if I don't think I'm going to be able to pay off my benefits, I can reduce the liabilities. There are a lot of aspects to it that are not quite as simple and cut and dried. However, it definitely sparked some real emotions and passions. Actuaries aren't supposed to be very passionate, but this really got people going.

In conclusion, I want to mention where this is likely to be going. I think the FASB is taking this under advisement. There will be a lot of things that will have to happen before anything is ready to be done.

I believe that it said that it reserves the right to do anything in terms of doing nothing, perhaps footnoting what fair value of liabilities might be, or maybe reflecting them completely into income. Anybody's guess is probably as good as anyone else's in terms of when that might happen. There has been a lot of activity in the first half of 2000 regarding fair value.