RECORD, Volume 29, No. 1*

Spring Meeting, Washington, D.C.
May 29–30, 2003

Session 54OF
The Coordination of Actuarial Assumptions

Track: Financial Reporting

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Summary: Pricing, financial planning and financial reporting are often done separately by actuaries with different knowledge levels, viewpoints and goals. Yet, underlying the work product of each area are actuarial assumptions for the same variables. Issues to be discussed include the unique knowledge that each area brings to the table; shared viewpoints and goals; the process for identifying and resolving significant differences of opinion on assumption levels; and the practices that satisfactorily coordinate assumptions into a coherent, consistent package with similar views of a company's financial picture.

MR. DAVID Y. ROGERS: I'd like to introduce the panelists, who will participate today in a role-play. Playing the role of a financial actuary, by the way she actually is a financial actuary, is Esther Milnes, who is chief actuary at Prudential Financial Individual Insurance. Playing the role of a product actuary is Novian Junus, who is with Milliman USA. I'm an actuary with PricewaterhouseCoopers, and I'm going to be playing the role of senior management. I'm also asking you to play the role of senior management. As we get into the session, I'm going to be asking you to help me make inquiries of your product actuary and your financial actuary, as to the particular issues in front of us.

What we'd like to do now is talk about what each of the roles is going to represent. You'll get a little background material as to where the financial actuary will be coming from and where the product actuary will be coming from. We'll start with the financial actuary.

MS. ESTHER H. MILNES: The financial actuary is responsible for establishing the reserves and related items in the balance sheet. That includes statutory items, tax, and GAAP items, reserves and deferred acquisition costs (DAC). Increasingly, there's more involvement in analyzing and setting levels of required capital. My primary interaction with senior management involves forecasting and explaining the financial results, particularly the latter when the results don't come in the way I forecast them.

There are a lot of regulatory requirements that apply to the work of financial actuaries. Certainly there are valuation and accounting standards in all three of the accounting worlds that we live in: the statutory requirements, the tax requirements and the GAAP requirements. There are very specific financial disclosure requirements that we have to worry about such as actuarial statements of opinion, management discussion and analysis, items in the GAAP statement and other types of disclosures that regulators require.

We've got to do asset adequacy testing to support the actuarial opinion on reserves in the statutory statements. In some situations, the assumptions that we use have to meet regulatory requirements, whether from a regulatory body like the financial accounting standards board or from one of the states, limiting our ability to choose the assumptions.

As far as perspective goes, we're interested in the current accounting period, what happened in the last period and what happened a year ago. We make short-term projections: What are the results going to be in each of the next six quarters? A lot of the work that we do involves long-term projections as well. Certainly in those reserve requirements for GAAP reserves and for statutory reserves, we're looking over the lifetime of the policy. It's also true in DAC, in asset adequacy testing and in required capital. We have to think about assumptions far into the future. Sometimes we're using our best estimate assumptions, sometimes we have to put in provisions for moderate adversity, and sometimes we have to look at very adverse situations, such as in asset adequacy testing. So for different purposes in the financial world, we've got a variety of different types of assumptions.

MR. NOVIAN E. JUNUS: As a pricing and product actuary, I need to balance the market and the company demands, which can be conflicting at times. I have a long-term risk view and a return view. This is how I approach my role in pricing a product. I have regulatory, marketing and systems considerations, which can be quite constraining at times. There's quite a bit of reliance on judgment and best estimate assumptions. . Given that you're relying on projections or future assumptions, you have to have some kind of risk and profitability management tools.

First and foremost is product design, especially when you're designing products that have long-term guarantees such as variable annuities. Pricing is, of course, a risk and profitability management tool. Other tools include how you market and position a product as well as how you service it. You can also develop reinsurance and hedging to minimize volatility. Of course, a lot of experience analysis helps you reprice and redesign your product going forward.

MR. ROGERS: Your role in the audience as senior management is to manage our company to meet or exceed our shareholders' expectations. Are there any mutual company actuaries in the audience? In your case, you can use the word policyholder with respect to the expectations. I'll admit to somewhat of a stock-company bias here.

The second point is to maintain ethical and cultural standards of the organization. You're in a leadership role, so you have to walk the talk as it were. It's very important, whatever your company is doing from the perspective of new product or in terms of the assumptions that underlie its financial projections, that those activities are consistent with the ethical and cultural standards that you have determined to be appropriate.

You also serve as the public face. It seems as though insurance executives are frequently on the front page of the newspaper. They represent their company. So you are responsible for being that public face and for making sure that you feel comfortable and can support whatever is going on in the eyes of the public.

Let me set the stage. We're calling these case studies. In an acceleration of time, your company would like to launch a universal life product with secondary guarantees. We're not being any more specific than that. In your operating procedures, there's a product committee who comes before senior management to present the results of its work. You, as senior management, are charged with the decision as to whether or not you should go ahead with this product. You've made some investment, but it's not too late to pull the plug. You need to get comfortable with what this product is and what it does. You need to satisfy yourselves as senior management that the product is going to be successful, it is priced appropriately and the risks are being carefully evaluated.

Novian, as our product actuary, will start by giving us the groundwork as to why this product is going to be successful and why it supports our profitability objectives.

MR. JUNUS: I'd like to give you a further backdrop of how the assumptions were set and how this has gone through the pricing committee. There is an assumptions committee that has determined that these are the appropriate assumptions to use in pricing these products. From my point of view, it has to be a long-term view on what assumptions are used to determine profitability in pricing this product. The product is designed to be competitive, in the upper quartile, and profitable if the assumptions are realized. There are some design features that minimize the variability of the profitability. So that's how we priced and designed this product. Again, the key consideration here is to be competitive in the upper quartile. In certain instances, the profitability is based on how you manage a product going forward and how the assumptions are going to be realized.

MR. ROGERS: In my experience, Novian, our company is not upper quartile in much of anything these days. I'm wondering how you can develop a product that both supports our profitability targets and is upper quartile in its competitiveness. Esther, as our financial actuary, have you had a chance to review the profitability of this product?

MS. MILNES: We've taken a look at the assumptions and analyzed the profitability. The long-term assumptions that were used are somewhat different from our actual current experience, primarily because our expenses are higher right now than what were assumed in the product design. That's one of the differences between the current experience that we see in our financials and the product assumptions.

FROM THE FLOOR: As far as reinsurance is concerned, I assume that since these reserves are no doubt excessive or redundant, basically more than we can hold, have you arranged for an off-shore reinsurance facility?

MR. ROGERS: I would like to state that one of our standards is mutual respect. As a result, I'll ask about the risks. The product undoubtedly involves some sort of reinsurance transaction. Novian, can you tell me how critical a component reinsurance is in this product and how you evaluated the type of reinsurance?

MR. JUNUS: There are not too many reinsurers who want to take on this risk. But the pricing assumes some level of hedging to temper the severity of the tails. There has been quite a bit of risk return analysis performed to ensure that the hedges are available in the risk return profile. It's acceptable, but there's going to be variability in the results. The cost of hedges are factored into pricing and it's still competitive. In the design of the product, some degree of pricing flexibility is built into the rate crediting strategy, as well as inclusion of features that minimize some of the anti-selection risk. There will be some variability.

MR. ROGERS: Esther, what's the worst that could happen here? Are you satisfied that we understand this product well enough to launch it? I'm concerned.

MS. MILNES: We have done a lot of analysis of the level of reserves that we're holding and whether they will be adequate. The assumptions that we're using do reflect our current experience. One thing that's somewhat in flux here is that the reserve standards aren't finalized for these types of products; there are some uncertainties in how to establish the reserves. But given those uncertainties, we've done a lot of sensitivity testing on the assumptions to make sure that the level of assets that we're going to be setting aside relative to reserves is going to be adequate under a lot of situations. We take the mortality reinsurance into account when we look at the mortality assumptions that we're using.

FROM THE FLOOR: I want to ask two things. First, was the product priced with marginal expenses, and is that the difference in the level of expenses between assumed and expected? If marginal, what type of production is required to make that reasonable? Do you think that production can be hit relative to what you've experienced in the past, or do you need to see a tremendous leap in production?

Second, on the reserves Novian mentioned that you had to use hedging in some of your pricing. Were the assumptions that you used to come up with that hedging cost similar to what was used in the reserving, or is there going to be a discontinuity there, especially between GAAP and stat results?

MR. JUNUS: Theoretically, I would have priced this on a marginal basis, essentially long-term, going concern expense assumption, which are targets that need to be met by the company as a whole. In terms of getting to that target, Esther can explain that. Yes, there are assumptions in terms of productivity level. They're strict, but there are steps in place company-wide to manage to long-term expense unit cost targets. I think that's appropriate. In terms of pricing this product on a long-term basis, we're pricing it not to cover today's expenses, but tomorrow's expenses.

To answer the second point about hedging, when you're pricing this type of product you're going to have to assume a certain amount of hedging cost in the future. It is going to be different than what it is right now, because you can't hedge the future cost completely. So you have to build in some kind of assumption in terms of what the future hedges are going to cost you.

MS. MILNES: Also on the hedging costs, since there was a long-term cost of hedging factored into the pricing, the current cost of the hedges is going to be different from those long-term assumptions. From period to period, we're going to have to monitor the actual cost of those hedges. We'll see how that is going to position us, whether we're going to need to re-price as we go along depending on what happens with hedging costs, and the tradeoff between that and our competitive positioning at the time. But there's going to have to be ongoing monitoring of what's happening in the marketplace for hedging.

FROM THE FLOOR: You may have just answered my question, but is there anything different about this product with respect to the target distribution that may justify a difference in the expense allocation between this new product and the balance of your in-force?

MR. JUNUS: I think it's more of the fact that we're pricing with future assumptions more so than pricing it with current assumptions.

MR. ROGERS: You're talking about hedging and forward-looking expense assumptions, but when this product is out there are the earnings that we're reporting going to be consistent with our profitability targets? Esther, can you tell me that I'm going to get a 15 percent return on equity with this product next year?

MS. MILNES: Our current experience actually has been somewhat better than what we assumed, except for our expense experience. So that's going to depend partly on how the various factors come together in the current period, and the cost of that hedge at the current time. There is some latitude in how we set the GAAP assumptions, which could affect the timing of earnings from year to year in the lifetime of the product. So we will be able to exercise some judgment about how those GAAP assumptions should be established, considering both the current experience and what we're expecting in the future.

Another uncertainty is the policyholder behavior with regard to exercising the secondary guarantee. We have to make some assumptions about that, because there isn't any good data to look at. So we really have to look at our sensitivity testing to see if we're satisfied about the adequacy of the reserves that we're setting up. It's possible that we won't get the ROE at the beginning especially because of the expenses.

FROM THE FLOOR: Regarding the product structure, you've included a secondary guarantee. Many secondary guarantee premiums are calculated assuming current cost of insurance and some low interest rate. So what is the low interest rate? Also, how does a policyholder maintain eligibility? In other words, if a person gets far behind, can the policyholder catch up just by paying whatever is required? To rephrase it, how bad can things get before the secondary guarantee comes in? And if policyholders have fallen off the wago n, as it were, can they crawl back on just by catching up when these bad interest rates happen?

MR. ROGERS:. Less specifically, how did you consider these risks in the pricing? How are those risks reflected in the way we report our results? We are talking about the coordination of actuarial assumptions, so I'm concerned that we have different levels of optimism between pricing and financial reporting.

MR. JUNUS: I think the bottom line is we are pricing somewhat on a long-term target assumption basis. We've designed the product in such a way that somewhat limits people's anti-selection ability. But we do have room in other margins, especially in the rate setting process, to be able to recover some of the cost, and the hedging is supposed to reduce the tail events in the stochastic analysis. Whether we need to do more robust stochastic analysis to determine whether people are going to be able to drastically anti-select is a legitimate question. Maybe that has to be done in order to make sure the risk profile is acceptable.

MS. MILNES: For our GAAP assumptions, we need to use best estimate assumptions for our future gross profits. But in many cases, we have no way of understanding what those best estimates are. So we have done a lot of sensitivity testing to try to get an understanding what the worse cases are. The statutory reserves on this seem to be extremely conservative. We haven't found a reinsurer to relieve us of that. So I think that the total assets set aside for this product will be sufficient to address those concerns.

MR. ROGERS: If we hit our sales targets that Novian has used in developing his expense assumptions, are we going to have a capital issue this year, Esther?

MS. MILNES: We're going to have to watch that. This is a capital-intensive product, because of the high statutory reserve requirements. So we're going to have to watch the capital usage in the sales mix of this product with our other products.

MR. JUNUS: To get to this stage with senior management for the go or no go, we've gone through pricing experience assumptions committees to determine what the assumptions are. We've done extensive risk return analysis as well as stochastic analysis. To the extent that those are not enough, then it would be appropriate to do more but that's where we are right now.

MR. ROGERS: Novian, are you using assumptions that Esther gave you, or is she using assumptions that you gave her?

MR. JUNUS: I'm pushing the envelope from my point, but I think you're going to get the level of competitiveness that's necessary. The assumptions have been approved by the assumptions committee, so to speak.

MR. ROGERS: So there's an assumptions committee Can you tell me about this, Esther?

MS. MILNES: The experience assumptions committee meets regularly and we developed some standard assumptions that everybody uses. That's the way we handle our basic mortality assumptions, for example. Then there are other assumptions that we develop for specific purposes. For best estimate GAAP assumptions, I typically use what the pricing actuaries believe are the long-term best estimates of what's going to happen. Of course, we have to take into account the current situation when we're setting some of those DAC and reserve targets at the outset. If someone who was working on a project that required assumptions, they would bring their grid to the committee, show what assumptions they were going to use for the pricing, for the GAAP reserves, for the illustration testing, and for any other aspects of the project that would require specific assumptions. Oftentimes, the grid shows us that it's the same assumption across the board, but sometimes a different assumption is more appropriate. There may be some regulatory restrictions on what you can do for illustration testing that you might not feel are appropriate as long-term assumptions for other purposes.

MR. ROGERS: This has to be an actively managed product. We've heard that we're unsure of policyholder behavior; we're unsure of hedging costs; if we sell too much we're going to have a capital problem. I want to better understand the process you have put in place to actively manage this. This is not the kind of development job that is done, and you put it on the shelf and go on to your next product. I want to understand how much flexibility you have to actively manage or reprice the product going forward without getting into a market conduct problem.

MR. JUNUS: I think most pricing committees typically review traditionally priced products. Processes will have to be set up to make sure that the product is accurately modeled. The analysis has to be done to determine the risk return profile of this product, where the risk is coming from and how people can antiselect. With that being the case, presumably a current pricing committee may have to change their focus and effort to encapsulate all these other exotic risks that can be introduced with this product .

We do have a rate setting process to set new business rates, in-force rates, and readjust to meet current earning targets.

MR. ROGERS: Who's responsible for the re-rating process? Is there a committee on that too, Esther?

MS. MILNES: Our experience committee reviews what's going on in the new rate setting process. But there is a rate setting committee that consists of people from marketing, the investment area and the tax area, as well as the product actuaries and the financial actuaries that are responsible for those in-force products.

MR. ROGERS: Is there a difference between the rate setting committee and the assumptions committee?

MS. MILNES: The rate setting committee actually has more focus on investments. The experience assumptions committee is more focused on other types of experience in addition to investment experience. The experience assumptions committee monitors things like hedging programs, if there was a hedging program for a particular product like we have with this one. That would be a new experience function for us to monitor. That committee not only establishes and approves the assumptions, but also monitors the experience to decide when to change those assumptions for in-force product.

MR. ROGERS: I assume the rate setting committee meets as frequently as rates are reset, but what about the assumption committee?

MS. MILNES: We have a skewed calendar year schedule. In the first half of the year the experience assumptions committee waits until year-end is over. Toward the end of February, it begins meeting weekly approximately through June to review experience and to update the assumptions. Most of those assumptions would be established by the middle of June, then we meet maybe once a month after that.

MR. ROGERS: We have a question from our chief risk officer.

FROM THE FLOOR: If we don't get the degree of mortality improvement or the lapses that we price for, would we be able to go out and say, "Gee, the mortality is fine, except it didn't improve," or "The lapses are good, which is bad news. So we're going to raise the cost of insurance rates." Would we dare do such a thing?

MR. ROGERS: Absolutely. Novian, I understand that our product has the flexibility for us to be able to do that within bounds. We're concerned about sales practices and misleading our customers.

MR. JUNUS: To a certain extent, you've got to build in the right process to monitor and control the risk. To that extent, I suppose it's in progress.

MR. ROGERS: So we're going to roll the clock forward about three years. We decided after another hour of debate to release the product; we've been selling it for a while; it's now a significant component of our business. At this point, the plan is being presented to senior management. We're in a fourth-quarter environment and the preliminary plan or projection for the upcoming years is on the table. As senior management, we have some concerns.

Esther, if I remember correctly, you felt that this product that we're selling was supportive of our profitability targets. I'm looking at these results and I don't see us achieving them. Maybe you could help me understand why that's the case.

MS. MILNES: Our actual ROE depends not just on what our current products are doing, but also on what all the in-force has been doing. Some of our in-force was priced for lower ROE. That's one of the reasons we don't see an aggregate ROE up to what we're thinking of as pricing standards right now. In addition, the product mix in our financial statements really matters. That secondary guarantee UL that we developed was a big capital hog, and got a little bit lower ROE than we might normally target. Some of our other products have higher ROEs. So the product mix of what we've been selling and the popularity of the secondary guarantee product is having an impact on overall financials.

New business expenses over the last few years have been higher than what we assumed. Since those vary with the level of sales, we deferred some and now have a larger than expected DAC balance. We're amortizing more DAC every year than we had put into pricing, so that's also having an impact on our ROE.

MR. ROGERS: I'm hoping that you'll add something to this, Novian, because it seems that our pricing assumptions are not playing out.

MR. JUNUS: We have evaluated an increase in the current rates, and increasing the rate on new sales. Basically, we've measured the expected cost using the amount of loss spread versus pricing. We've measured the expected benefit in increased sales or increased persistency relative to pricing. But the overall impact is steady in terms of impact against pricing internal rate of return (IRR). Is the ROE about where we priced it to be in aggregate since it's been three years?

MS. MILNES: The ROE varies by duration. It isn't like the IRR that we discussed when we were pricing. In the earlier years, the ROE in this plan is lower than in later years, so we still might be on track for an average overall. But the current financials have lower ROEs than those the original discussions were about.

In the assumptions for pricing, it is appropriate to take a long-term view. You're pricing something that you expect to be in effect for a long period of time. We still probably will be reluctant to increase particularly expense charges in the in-force. But our three-year financial plan needs to be based on what we think is actually going to happen in the next two or three years. If we are too optimistic or too conservative, we're going to get in trouble explaining things to investment analysts. We've got to take a very hard look at what we think is going to happen, and not go with a longer term view, where over a 20-year or 30-year time horizon this product is going to turn out.

MR. ROGERS: So our short-term view is somewhat lower than our long-term expectation. Is that what is causing the difference that we're seeing in the plan versus the pricing results?

MS. MILNES: That's right. Our interest rates today are a lot lower than we would expect over the long term. We're used to operating where investment results have been better than our long-term view, and the actuaries have been accused of being too pessimistic. Then we don't get any credit in the opposite direction. The current very short-term view is not consistent with what we think the long term will be, just like it wasn't consistent when we had the fantastic returns 10 years ago.

MR. ROGERS: Has this affected the thinking of the experience assumptions review committee? How is this issue being dealt with in current pricing in terms of what we're using for assumptions coming out of this committee? Esther, could you talk about the committee deliberations and, Novian, could you tell us how we're dealing with this in today's products?

MR. JUNUS: To a great extent, we have a lot more leeway in pricing new products in terms of changing assumptions. In terms of repricing current products, we do have a few levers, but within bounds. We are, in most cases, pricing using long-term assumptions or along target assumptions. We usually only need to change them for new business. If we're not going to meet those targets, then we have to reprice the in-force business and the new products appropriately. But that's assuming that you're not going to be able to meet those targets. If you are able to meet those targets, which is what we're planning, then I think it's appropriate not to reprice the product.

MS. MILNES: Our experience committee has been doing more sensitivity testing in the low interest rate environment to see what the consequences are. The adequacy testing that we already do in the financial area looks at adverse economic scenarios to see how things play out. But we've got to keep senior management posted on what to expect in this environment so there aren't surprises about how things that were priced earlier are faring in this environment, and so management can take action or hold fast and go ahead. It's really important for the financial plan to take the very current expected view, because that's what is going show up in our public statements. In spite of what the long-term financial outlook for a particular product might be, we've got to look at the current implications of what's happening in our current financial projections.

MR. ROGERS: Let me ask you a process question. As senior management, I want to know what I need to be concerned about. I keep current with what's going on in the financial marketplace and in the news, but I have difficulty identifying those things that I need to be concerned about with respect to our business. Can you tell me what process you would use to identify the top five things that I need to be concerned about? ? How are we organized so that I know what's important to the success of our business?

MS. MILNES: We have a great financial projection model for our business. We have a good idea ahead of time from general reasoning what the big drivers are. But what we can do is run alternate assumptions through our models and show you the impact. One thing that we do regularly is test. For example, if the Standard and Poor's (S&P) 500 is at this level, and that's the only difference from the current situation, then what should I expect my earnings to do? It's fairly comprehensive, because the equity markets can affect every aspect of your financial results. So we can do analysis like that on alternate sets of assumptions. When we do that, it's also useful to use the actual pricing assumptions as one of the sets: Where we are versus pricing assumptions, and what financial results would we expect if we were achieving all of those in the current year, versus what's actually happening in the current year. It would be highly unlikely that we ever have a match in a given calendar year between all the pricing assumptions that were used on the in-force and the current financial situation. But that's what we would do: use our planning model to run alternate assumptions sets.

MR. ROGERS: Another question from our chief risk officer.

FROM THE FLOOR: In 2003, when we came out with this product, interest rates were at historical lows. But it's 2018 and we're now experiencing rates not seen since the early 1980s. We've got this portfolio locked up in 30-year bonds earning us miserable rates. We've been trying to prevent catastrophic lapses by crediting a higher rate than we really can justify, because if we tracked our portfolio then the new money rates would entice our policyholders away from us. We're probably in danger of violating the illustration rate, because when we do in-force illustrations we have to have a discipline in current scale. So what are we going to do about all this?

MS. MILNES: One of the things that your question supposes is that we haven't been working closely with our investment managers over the years. Although those kinds of situations happened in the early '80s, we have processes in place now that keep us linked with the investment managers on an ongoing basis. We all have common objectives that we're trying to achieve. We have good communications. We understand the nature of our liabilities, what kind of obligations the company has taken on, and the risks that we have. We also have an understanding of the assets that we have ready to help us meet those obligations and we're working to optimize our financial results given all that information.

FROM THE FLOOR: We didn't buy 30-year bonds.

MS. MILNES: No, we might have bought some, but we've traded them appropriately over the years. I'm talking more about process here. We absolutely have to avoid ever getting into those situations by making sure that we are connecting and coordinating information from the various parts of the company to make sure that we're managing to the same objectives.

MR. ROGERS: Novian, our risk officer is very concerned about the risk that our pricing assumptions are significantly different than what will happen or has happened. As Esther pointed out, assumptions are just one set. The only thing that we know about them is that what actually happens isn't going to be consistent with our assumptions. But we're concerned about the risk that what actually happens is significantly different than our pricing assumption. You've talked a lot about stochastic modeling and other technical things. Can you tell me in plain language what we're doing to make sure that we're protected against experience being significantly different than our pricing assumptions?

MR. JUNUS: The key thing about stochastic analysis is not necessarily the main result being produced. It really is in an elaborate sensitivity testing to make sure that when bad results do occur in your stochastic analysis that you understand why. And when good results occur in your stochastic analysis you understand why.

MR. ROGERS: So this doesn't help us? It just helps us understand what already happened to us?

MR. JUNUS: No, it does help you in that you would have to adjust your design and your pricing, and you have to set up the hedge that's necessary to cut off the tails. You'll understand how to market this product, what kind of risk controls you would need in order for you to feel comfortable that the results you're going to get when you put the product in force is within your control and within certain bounds that you are going to be able to manage to.

MR. ROGERS: So you're putting a cap on the possibility for adverse experience.

MR. JUNUS: Yes. With that cap, you have the leverage to be able to manage to those earnings.

MR. ROGERS: How do we set where that cap is?

MR. JUNUS: That is part of the process that needs to be in place in terms of understanding what the risk return profile of the product is and what senior management's appetite is. If there's a certain point in time when you know that you can't live with that kind of variability in results, then you don't introduce the product. But if you do introduce the product, then you've got to set things in place to be able to control it. One of the controls of leverage is new business. You may not want to accept new business going forward, because it's too risky at a certain point in time to actually sell the product.

MR. ROGERS: Isn't that what happened recently? How are you —protecting me from that scenario?

MR. JUNUS: If you missed designing your product, then you're going to get hurt, period. The bottom line is when you use the tools in terms of risk and profitability that management has put up front, the problem is the design. So especially in those products, which have long-term guarantees, you have got to make sure you know what you're doing, to make sure that the product features you've developed are not going to hurt you.

MS. MILNES: When we develop a product is the time for us to lay out information about the kinds of scenarios that are going to produce lower returns. That way, senior management understands from the get-go that under certain circumstances returns will be lower and we identify our risk return preference. If you have no tolerance for that, then we have to redesign or reprice at the beginning. On the other hand, if you think that it's highly unlikely that 10-year treasuries will drop below 4 percent, and if it does happen you understand why the product is performing the way it is, then we might go ahead with a product that had an adverse result in that scenario. But the communication needs to be up front so there are no surprises, and so people in senior management can make those decisions on the tradeoffs. That's really where those decisions belong, not buried in the experience assumptions committee.

MR. ROGERS: We are, of course, living in a very fictionalized world in this room. But, from the perspective of the audience, are these things ringing true? How many people in the room work for companies that have an experience assumptions committee? From what we've heard as senior management, I think that it would be identified as a best practice to have a committee. It would be gauged to the size of the company; it could be a committee of three, or a committee of five, or a committee of fifteen. But I think that, in terms of being able to understand why assumptions are different between pricing and reporting, and what we're reporting in our plan isn't consistent with what we expected when we priced the product, we should have a committee to air these issues and make sure that differences between assumptions are understood.

We should also have another committee, a pricing product review committee, so that when a product is developed the risks that product is creating for our company are identified, communicated and evaluated. The recent downturn in the equity markets surprised the senior management of a number of insurance companies, because they didn't realize how sensitive their results were to equity markets. In 2001, there was an awakening of many people to the fact that life insurance companies, particularly those in the variable product arena, are not fixed income investments anymore. They're an equity investment, and the results are going to be read in that direction. Those are the kinds of issues that need to be brought up in these product committees. The results of those discussions, if they don't directly involve senior management, should be reported in an open forum to your senior management.

How many people here work for companies that have product committees? So it seems this is a prevalent practice. How do you feel your product committee compares to how our product committee works here?

MR. RON KEANE: I'm with Ameritas, from Lincoln, Nebraska. I think it is similar. We have people from the various disciplines in the company who participate on the committee. Our biggest challenge is to have members of the committee that come from different distribution sources actually agree on what priorities will be. If we can get to that point and we're there to present a case to the committee, we point out to them the risks that we need to monitor and what has to be done. This is a process that started maybe five or six years ago, and we've actually been through the review process. It's been interesting to see the conversations that come out of it.

MR. ROGERS: Ed, you had a product committee as well?

MR. ED HEISINGER: I'm from TransAmerica. Ours is mainly pricing actuaries and marketing. We probably could benefit by using a little more input from the financial actuary side. Aside from that, it's roughly similar to what I've heard discussed.

MR. GEORGE SHERRARD: The company that I work for has a product price committee. It's an annuity review, so it's monthly pricing and setting the rates. We do have financial folks along with marketing and product development, and we meet monthly to try to stay ahead of the interest rates or at least closely behind them.

FROM THE FLOOR: I'm from United American. The way our actuarial department is structured on the life side, we have the pricing compliance side, we have the valuation side, and we have a team for special projects, which includes the setup of the assumptions and their review of the experience. Every time there is a new product to work on, the special projects team works with pricing; any time there's anything new on the valuation side, special projects works with valuation. So there's nothing about assumptions that is done without the special project team working on it.

MR. JUNUS: I think when you have a pricing committee, it's really to make sure that the product has been correctly modeled and that all the risks have been identified. To that end, I think it will be good to include investment folks, especially if you're designing variable annuities with options. They can provide different insights that can pinpoint elements or features of the product design or the pricing of the products that may not be in line.

MR. ROGERS: We're going to roll the clock forward again. Things aren't working out for our process, because we're part way through the year, and as senior management, we are concerned because we're not on track to hit our plan earnings. We want to know what options are available to us. We've heard that we're protected against this by virtue of our product design and our risk evaluation. So we want to exercise that to understand what we can do to hit our earnings plan and what kind of actions we can take. We've asked the business unit management, Esther and Novian, to identify and evaluate a number of different options. Now they're reporting back to us. One of the options might be to increase sales. Novian, can you give us your perspective on that option? Do we increase the credited rates on our product or just enhance its competitiveness through some of these options to increase our sales?

MR. JUNUS: We have evaluated an increase in all the credited rates, and also increasing the rate on new sales. We have measured the expected costs using the amount of lost spread that we would incur versus pricing, and measured the expected benefit as essentially lower actual distribution costs relative to pricing. The overall impact is stated in terms of the impact against pricing IRR as opposed to ROE, and it looks to be a fair tradeoff based on IRR.

MR. ROGERS: So is this going to help me, Esther?

MS. MILNES: Since we're increasing these credited rates to induce more sales, we could probably capitalize the cost of doing that. The cost of the increased crediting rate might not hit our financials, so it might look okay. We're interested in the current earnings period impact, because after all you want some earnings now, not later. So we have to find a way to include it as a deferrable expense rather than a current period expense. We've done some earnings projections under both methods with higher sales, the higher crediting rate and the extra deferral versus the lower sales, the lower crediting rate and the current deferrals. I actually think that it comes out better to do this. Inducing the sales, we can keep the accounting treatment that way.

MR. ROGERS: Have you talked about this in the rate setting committee, or have you talked about it in the product committee?

MR. JUNUS: I have reviewed this with Esther; we didn't go through any committee per se. We reviewed the alternatives. Our mandate was to produce a recommendation that created the greatest likelihood of meeting the projected earnings, so I guess if you do want to increase rates you have to make sure the sales are coming in accordingly. We agree on what the financial implications were based on the pricing exercise that we did.

MR. ROGERS: Our company prides itself on keeping our promises to our policyholders. If I enhance rates in a way that attracts new sales, how does the committee feel about that strategy relative to our culture here?

MS. MILNES: Any time we do something like this, we have to include in our illustrations what we really think is going to happen. So if we're planning this as a permanent increase in rates, meaning that as long as experience stayed at current levels we would continue the rates, and if experience changed in the future we plan to change, that would be okay. But if we're planning to reduce these rates even if experience doesn't change, then we need to illustrate that.

MR. ROGERS: Where are those assumptions that we use in the illustration? Where do we get those?

MS. MILNES: The experience assumptions committee reviews and approves those assumptions as well. But for the requirements, you have to look to the life insurance illustrations model regulation. You have to look at Actuarial Standard of Practice 24, which is very specific guidance on assumptions. It isn't exactly a cookbook, but there are some fairly straightforward statements in there. In those assumptions for the illustration regulation, you've got to have recent historical experience. You can't project any improvements beyond the effective date of your illustration, so they can start illustrating for policy forms. You can't project any improvements in experience beyond that. Then your illustration has to pass the test. But if we did have to illustrate the crediting rates we would expect if current experience continues, and if we are planning to have just a temporary increase in rates that would lapse in maybe one or two years, then we've got to illustrate that drop after that if that's what we really intend to do, assuming that experience continues.

MR. ROGERS: One of the options is reducing our expenses. It seems like every year we have a three-year plan to get to our pricing assumptions. Is that a viable option, Novian? Or can we just assume more expense reductions in the future and not worry about actually hitting them? Is that going to help us?

MR. JUNUS: Assuming that there are enough margins elsewhere, maybe that can be a path that we can take. But the pricing assumptions already anticipate a reduction in expenses, so they must be reduced somewhat to hit the profit target over the longer term. We do have an option to increase prices in addition to reducing expenses that may need to be analyzed further. I'm somewhat concerned about maintaining service levels. Presumably there's an impact on sales, but that may be delayed or at least can be immediately affected by reduction expenses. There are some regulatory hurdles to overcome.

MR. ROGERS: Esther, in our earnings we make a lot of assumptions, don't we? Why can't we just reduce our expense assumptions and make things better in the future? Won't that have a current period impact?

MS. MILNES: Anything that we actually did to reduce staff right now, we would get expense rates that start to emerge going forward from that day. But sometimes it's difficult to have an impact right away, because generally if you're going to reduce staff you've got to pay severance costs. We might not be able to achieve those savings in time to meet your planned earnings for this year. On the other hand, if we want to achieve future earnings consistent with those product ROEs, we probably need ongoing plans for continuing expense reduction, so that the actions we take this year produce savings for next year.

Another thing to think about is whether there are any DAC actions that appropriately reflect your changed view of future assumptions, and what would those do to your financial statements? Are there –expense assumptions that you should be updating in your DAC calculations? It is difficult to predict the exact impact of that on these types of products. You need to be consistent from period to period in what you're doing with DAC. You can't decide to suddenly change your assumption. It has to be driven by your accounting policy, and you've got to make sure that you are reflecting experience as it's emerging.

MR. ROGERS: Are these DAC assumptions set in the experience assumptions committee as well?

MS. MILNES: Yes. Typically we try to look at the DAC assumptions and amortization assumptions, thinking of a SFAS 97 product now, right along with product design. We're keeping those best estimate assumptions about future experience consistent between the DAC amortization and the product design work. So if we're going to be getting those out of sync to produce current earnings, that might not be the best way to approach it.

MR. ROGERS: We wanted to illustrate a best practice, in terms of the product/financial management in Chart 1. The important thing to emphasize is that it is a cycle. It's a feedback loop. You can start anywhere along the path. Let's start with the assumptions and goals. Those are established through a dialogue with knowledgeable people, so there's a framework against which assumptions are being set. With this dialogue, your product actuary isn't setting his or her assumptions to be different from what the financial actuary will accept when the results are coming through. You need to have that consistency. We think that an experience assumptions review committee would be a good approach to dealing with that.

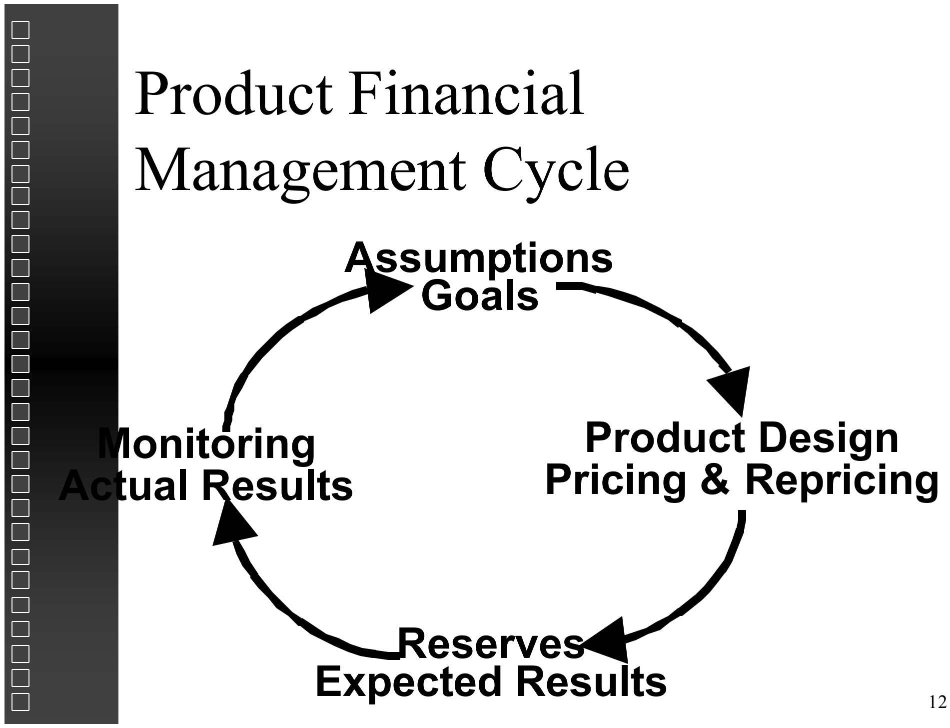
Moving on to product design, another committee that is related to product. The endorsement of that committee is required prior to going to senior management and getting that go/no go decision. Each of the reserving process, the determining of expected results, and monitoring of actual results begin in sessions of these committees. I don't think we would recommend an expected results committee or an actual results committee, as those will be covered in the experience assumptions review committee. Then you go back up to the top, to reevaluate how your assumptions are doing relative to your various objectives, both in terms of what you're seeing in pricing and what is leading to your current financial results.

FROM THE FLOOR: I think it's important to have more than just your product actuary and marketing people working on that. I'd want financial on that committee, so when that committee is giving recommendations to senior management I know that I've got the financial people buying into the same set of assumptions and the same set of projected results.

MR. ROGERS: I think it's important that the financial people understand the financially related assumptions—the reserving methods, the DAC amortization methods, whether or not there are new prices, they need to understand what those are and agree with how those would be evaluated and used in providing a pricing result to senior management. Senior management is going to be interested in both the statutory and the GAAP information. In order for that process to be controlled, you need to have your financial people, your product people and your marketing people all on board with how those numbers are being calculated. It's not just up to one person.

MR. JUNUS: I think you should also include some investment folks, too, especially when you're talking about exotic options and variable annuities, for example. So it really is trying to touch those points, where new risks are being introduced into your products. You've got to make sure that they're well understood and uncovered before anything bad happens.

Chart 1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