

# 2004 Valuation Actuary Symposium \*

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## Session 33OF Ask the Experts

Moderator: Meredith A. Ratajczak

Panelists: Mark J. Freedman  
Daniel J. McCarthy  
David Y. Rogers

*Summary: This open forum is an opportunity for participants' questions to be addressed by the experts in the field. Questions may be raised by the participants from the floor and by the moderator and panelists as well.*

**MS. MEREDITH A. RATAJCZAK:** Mark is an actuarial partner for Ernst & Young in the Philadelphia office. He provides actuarial audit and advisory services in the insurance industry. His specialty has been financial reporting, especially GAAP, and in the past few years international accounting.

Dan McCarthy is a consulting actuary with Milliman in the New York office. For most of the 1990s Dan served as the firm's chairman. He serves as a consulting actuary on major assignments, principally for life insurers on corporate products and financial matters. He has actively been involved with the Academy, served two terms on the SOA Board of Governors, served 12 years on the Board of Directors of the Academy and also served on the Actuarial Standards Board (ASB) for six years.

David Rogers is currently a partner at PricewaterhouseCoopers in charge of life actuarial practice. He was previously with MetLife in Boston. He's a co-author of the GAAP textbook, is coordinator of the advanced GAAP SOA seminar, previously was a member of the Financial Reporting Section Council and is a graduate of the University of Michigan.

I'm with Milliman in the Hartford Office, and Dan hired me many years ago.

We'll move on to our questions. The question is which states require a regulatory asset adequacy issue summary to be filed basically for year-end 2003 reporting? Dan?

**MR. DANIEL J. MCCARTHY:** We have a list someplace.

**MS. RATAJCZAK:** I have one.

**MR. MCCARTHY:** The answer is a few.

**MS. RATAJCZAK:** Ten, including Florida, Indiana, New Mexico, Virginia, Alabama, Colorado, Iowa, North Carolina, North Dakota and Rhode Island, and there is talk that Alaska and California are also targeting for a year-end '04. I think there were a couple of other states that are thinking about it.

**MR. MCCARTHY:** The answer is you'd better be prepared to do it because you're going to need it some place.

**MS. RATAJCZAK:** The second question makes reference to a section in the Actuarial Standards of Practice (ASOP) No. 22 that says for a reserve or other liability to be reported as not analyzed, the actuary should determine that the reserve or other liability amount is immaterial. The question is: Is there a maximum dollar amount or percentage of total reserves that state regulators will allow the appointed actuary to report as not analyzed in the asset adequacy opinion? Dave?

**MR. DAVID Y. ROGERS:** I think the answer to this question is that there isn't and that you have to apply your judgment in evaluating the materiality of any reserves that you're not analyzing. It could have to do with the percentage of the total. It could have to do with the maximum dollar amount. It could have to do with other factors like the amount of risk related to the underlying product that you're establishing the reserves for. I think the accepted practice would be to test as much of your reserves as you can possibly do and then make a consideration as to what the amount is that you have not analyzed and make a judgment based on that.

**MR. MCCARTHY:** I would say some organizations have a lot of short-term risk, a lot of short-term claim reserves, for example, where I think the tolerance for non-testing would be higher because the whole thing is going to run out in a short period of time. As Dave said, it depends heavily on the kind of thing you're testing, as well as on the amount.

**MS. RATAJCZAK:** Question three is: Please provide a brief overview of reserving for variable annuities (VAs). Specifically discuss the Commissioner's Annuity Reserve Valuation Method (CARVM) expense allowance, as well as how the reserves and related items are reported in both the Blue Book and the separate account statement. Mark?

**MR. MARK J. FREEDMAN:** I guess there are a bunch of pieces to this one. If you have a vanilla contract, you first apply CARVM, so you take the largest present value, and generally you could use the highest maximum valuation interest rate. When you project forward, you project forward at that valuation rate and subtract out the mortality and expense (M&E) fee when you do your discounting.

The guaranteed minimum death benefit (GMDB) is in Guideline 34, and that works where you assume the market. It depends on the type of funds you have, but you generally assume that there's a big shock in the first year down, and then it recovers after that. There are some rules depending on what type of funds you have. You take the present value of that, and that's usually a big number when equities go down.

For living benefits, that's Actuarial Guideline 39, and that would be the accumulation of charges, but then it couldn't be lower than whatever you would get in a stand-alone asset adequacy tested reserve. You'd use judgment as to what that number is and what kind of competence interval or conditional tail expectation (CTE) level you use. Generally, that's it.

In terms of presentation, the separate account book would hold the account value, and then the CARVM offset would be in the general account, and there's a line. We found it last night. Exhibit six on page three has an expense allowance. The negative expense allowance shows up in some item on the liability page.

**UNIDENTIFIED PANELIST:** Thirteen.

**MR. FREEDMAN:** Okay. The rest of the living benefit and death benefit reserves also would not be in the separate account book, but they would be in the Blue Book.

**MS. RATAJCZAK:** As we've been hearing throughout the course of this meeting, reserving for VA is probably going to change and be much different from a standard CARVM approach.

On this question we did our own interpretation of what the questioner was asking. If whoever asked it is in the room, and we don't answer the question, feel free to come up and let us know exactly what you are asking for. The question reads, "Suppose the appointed actuary determines the statutory reserves on a block of long-term care (LTC) business are not adequate. According to statements of standard accounting practice (SSAP), the total reserves that should be held are to be determined via gross premium reserve calculation. How should the reserves be reported on exhibit six?" Dan?

**MR. MCCARTHY:** As we talk about this, it seems to us that there's a difference between what you have to do in terms of the amount and the flexibility you have in terms of how you elect to report it. As the question said, in that situation you need to do a gross premium reserve analysis to figure out what you want to hold. You have a lot of freedom in your mind as to how you approach holding it, and there are

a lot of considerations. For example, depending on the basis that you have been using, you might be able to strengthen that basis and that may be in part of or in whole a good tax reserve, so that might be something that you would want to take into account.

On the other hand, if you go through a reserve-strengthening process instead of just putting up an additional asset adequacy of gross premium reserve, as exhibit six allows you to, if you put that up in the form of specific reserve-strengthening, and later on your experience improves and you want to take it down, you're going to have to go back to the regulator and get approval for destrengthening. The points we would make are: you have to put it up; you have a lot of flexibility; and you should think about the permanence of what you are doing about tax considerations and about any other planning, but you do have a lot of freedom in how you elect to report it.

**MR. ROGERS:** I think the only other comment we had is we weren't sure within the context of a gross premium analysis applied to an LTC book of business, so we were thinking that it would have been the claim liabilities that were deemed to be deficient relative to the expected cost of the future claim. We got there by saying that it was the gross premium analysis but with no future gross premiums that would lead to this conclusion.

**MR. MCCARTHY:** We've included that with shorthand for an asset adequacy analysis.

**MS. RATAJCZAK:** On exhibit six of the Blue Book, can you please describe "reserve for future contingent benefits" and "reserves for rate credits?" Dan?

**MR. MCCARTHY:** Reserves for future contingent benefits as reported for health contracts are typically in relation to benefits that become committed to by some event other than the date of service, and a common example is maternity benefits that are promised on an onset-of-pregnancy basis. Similarly, a number of health contracts have benefits that lock in for a benefit period based on total disability. Commonly, when you do your claim reserves for health insurance, most entities simply report the incurral date as date of service. As a result you're not capturing that additional liability, the reserve for future contingent benefits, and you have a choice whether you analyze it on an active life basis or a claim reserve basis. Look at exhibit six. Essentially, it is designed to pick up the additional obligation you have that you would not be picking up simply by common claim triangles.

The reserve for rate credit, which is the other question, is commonly a group item where you have some commitment either contractually or by administrative practice under which based on experience there's money that is the policyholder's money either to carry forward and use against future premiums or in some other way. Companies that are in the group business that have those kinds of contracts report that liability in that way.

**MS. RATAJCZAK:** On exhibit six what is tabular fund interest on line 18? Is it used or referenced anywhere else in the Blue Book? Mark?

**MR. FREEDMAN:** On the life insurance side there's a whole exhibit that shows the roll forward of the reserves, and you see the reserves go up by required interest; you see the tabular mortality and reserves released by death and all of that. The required interest in that line is the same as the tabular interest would be for health insurance, but for health insurance there's no roll forward exhibit. Theoretically you go through the same exercise, and this required interest would be the same. The point is that both for life and for health, it doesn't appear anywhere else in the annual statement. I don't know what you get out of that other than you could compare the tabular interest to the investment income that you're earning in the line to see, but there are probably other ways to do that. I don't know why it was put there. It's been there for years, and I didn't put it there.

**MS. RATAJCZAK:** Please provide a brief description of secondary guarantees on UL and the current issues regarding our valuation. Dave?

**MR. ROGERS:** We thought that this question was so important that it deserved its own session, In fact, just preceding this one there was a session on this particular question, so that is where it was answered. I don't think it's possible to provide a brief description of secondary guarantees. I think they generally take a variety of forms. The one that seems to be most controversial is the shadow fund design, where as long as the actual fund is in excess of the shadow fund, the contract is guaranteed to stay in force. Depending on how the shadow fund is designed, you can create a situation where the reserves are low according to AXXX or Actuarial Guideline 28, I think.

The issue is that many people feel that the follow-your-nose AXXX reserves are too low and that they might not be at a properly conservative level relative to their purpose and the risk in the contract. Others feel that this is a good opportunity for actuarial judgment to be applied and are advocating for a stochastic or an economic approach to evaluating the product. The issue hits at the heart of our profession, and it should be important to everybody in this room because it's a situation where you're faced with a rules-based application of statutory accounting, which is typically what it's been, as compared to one that requires a fair amount of judgment and assumptions that are made by an actuary. In fact, it could create a great amount of reliance on the actuary's opinion.

As a profession, are we ready for something like that or not? I think that's the question and therefore a summary of the issue. I'm not in a position to say. Should we vote up here? I don't think so.

**MR. FREEDMAN:** On this AXXX issue and the shadow funds, there are two sides. On the one hand, you have a preamble that says you should feel guilty about not establishing a reserve as high as you get if you have another similar design that got

you that kind of a reserve, and then you have I don't know how many steps in AXXX that tell you how to get the reserves. It might have been a better way to approach the whole thing if AXXX itself only had the paragraph in the preamble and said something like: "Compute the reserve using XXX with something that had a similar type of exam and hold a similar type of structure and hold that type of reserve," instead of coming up with all of those steps.

I think that's why some companies are taking advantage of using the steps, and then some people are saying the preamble says you can't just blindly apply the steps. Maybe long-term there should be just the principal-based type of standard, and that in conjunction with ASOPs by the Actuarial Standards Board could probably solve this whole thing. I guess short-term the NAIC is going to deal with it. Does anybody in the audience want to comment?

**FROM THE FLOOR:** I have a quick comment. I'm co-chairing an Academy work group to try to address the long-term stochastic approach. One point I would make is it's a fundamental change in the reserving approach, but one thing we're going to recommend in our proposal if we ever get there, because there are a lot of challenges before us, is the concept of peer review and certification. It won't be just one actuary at one company opining on that. There's going to be a requirement that there be some independent peer review. What form that will take and how that will be implemented still need to be worked out, but I think that's an important point.

**MR. MARTIN CLAIRE:** What role do the auditors have on the reserves of this sort of thing in terms of whether they're adequate or not?

**MR. ROGERS:** You would think I'd be able to answer that question. I think as auditors we are looking at the rules that are defined in the various literature that support statutory accounting and expressing an opinion on the appropriateness of the financial statements that are prepared in accordance with those rules. When those rules are ambiguous, as they were last year with respect to dollar-for-dollar partial withdrawal benefits on VAs, we took refuge in making sure that companies disclosed if they had an issue that the rules were ambiguous and disclosed the information about the range of outcomes that might be possible under various alternatives.

We can serve as an effective voice in asking the NAIC to clarify where rules are ambiguous, but I don't see us being an arbiter of what the correct reserve level is for a universal life (UL) policy with secondary guarantees when the rules are ambiguous. We won't do that because that's a setup for being wrong.

**MR. FREEDMAN:** We're not sure where we're going to end up on this one, either. With the VAs last year, we ended up recommending companies go to their states and get permission for doing what they're doing. While that might be short of the permitted practice thing, it was in the spirit of permitted practice, and we went with that. I'm not sure whether we would do that with this item this year. Last year

when it came around, with the few companies that had it, it was pretty immaterial. This year the numbers are starting to get a little bigger, so we're a little concerned with this.

**MS. RATAJCZAK:** Regarding the proposed C3 Phase Two project, can you please comment on the differences in results one might expect if using a lognormal return model versus a regime-switching model?

There's also another part to this question, and we might throw it out to the audience. Would you expect the regime-switching model to calibrate better than the simple lognormal model? Our issue with that part of the question is we're not sure what "calibrate better" means, but I'll throw this one to Mark.

**MR. FREEDMAN:** In what I've seen, the regime-switching models tend to give you bigger reserves because there's a mild regime, and then there's a regime that behaves almost like a black hole. Once you get in there, the volatility is bad, things don't behave, you get the bad tails that are coming, and they tend to kick the numbers up high.

Is anybody in this group from the C3 task force?

**MS. RATAJCZAK:** Tom.

**MR. MCCARTHY:** I see Donna Claire is in the room. You commented yesterday, Donna, at one of the sessions on that. We'll see what Tom says first.

**MR. TOM CAMPBELL:** I chair the reserve group. The difference between lognormal and regime-switching lognormal, which are two different lognormal distributions—one bad, one good, or one whatever, one worse than the other—is that the regime-switching has what we like to call fat tails. The distributions on the tails are out there a little bit more. From the point of view of calibration, the requirements say you can use any distribution you want, but you have to meet the calibration criteria. The calibration criteria were developed, and all the calibration criteria are saying is that when you look at the distribution of the scenarios that you use, you have to hit certain points as far as accumulation points at different percentiles of your distribution. Those points were developed using a regime-switching lognormal with two regimes based on where the parameters were fitted to historical distribution. If you're using a regime-switching lognormal model and have parameters similar to what was used to develop the calibration points, guess what? You're going to hit the calibration points with a minimal amount of inefficiency from the point of view of having even fatter tails than what it would require.

If you're using a lognormal distribution to get a fit to those fat tails, you essentially are going to have to crank up the volatility, which means you're going to have a much fatter tail. As the distribution goes up to the mean, it's going to be fatter than the lognormal, and so you're not going to get an efficient result. Bear in mind that

the regime-switching lognormal was just used for the calibration points. It was also used to develop the 10,000 prepackaged scenarios. You don't have to use a lot of regime-switching lognormal. You can use anything you want. You just have to meet the calibration.

**MS. RATAJCZAK:** Thank you.

**MS. DONNA CLAIRE:** I'd like to expand on what Tom said. Again, no one particular model is required; however, as Tom alluded to, to use straight lognormal, tests have shown that it not only increases volatility, but it probably decreases the mean and the calibration points of one, five and 10 years. If you think about it, to get the calibration points in regime-switching models, that one-year time period is the one that is probably going to be most problematic compared to a typical lognormal.

**MS. RATAJCZAK:** Thank you. Please discuss the rationale for including or not including the interest maintenance reserve (IMR) and asset value reserve (AVR) in asset adequacy testing. Dan?

**MR. MCCARTHY:** I think the question as submitted said cash-flow testing.

**MS. RATAJCZAK:** It did.

**MR. MCCARTHY:** We changed it because if you just look at the phrase "cash flow," somebody will say that IMR and AVR aren't cash items, but we're talking about asset adequacy testing, so you're talking about asset adequacy against the solvency of the entity. To the extent that the IMR is in fact released into income in future years, our view is it's appropriate to take that into account as a legitimate flow of solvency margin even though it isn't cash flow.

The AVR, of course, is a different thing. The key there is that there needs to be some reasonable correlation between the AVR, on the one hand, which you are absolutely entitled to use, and your default assumption. Some regulators take the view in particular that by using the AVR, you should not make a profit, but it is certainly appropriate to use it to cover default. We're not sure, I'm not sure, how universal that position is, but some regulators have said it's fine to use the AVR to cover the default cost. If it goes beyond that, they're not going to let you count that part. Given that it's for default, anyway, and it's a provision that you built up for on a statutory basis, it's appropriate to use it for that purpose.

**MS. RATAJCZAK:** As we begin to develop '01 CSO X factors, we are also considering changing the basis of our anticipated mortality for the SOA '90-'95 mortality table. Should this new anticipated mortality be used to show compliance with the X factor requirements for our existing '80 CSO X factors also? Dan?

**MR. MCCARTHY:** In many respects, there are probably two ways to look at that question. One is: Should it? The second is: Can it? My own view is yes, if you've



adopted a new way of measurement that is more modern and more reflective of mortality slopes, I think it's appropriate to move to that as a way of testing your inforce business. Don't ever go back, by the way, for these things. Once you take that step, you've made a decision that you've adopted a basis that you think is more appropriate. It's probably going to be easier mechanically for you to do all your testing on one basis rather than two different bases. The fact that you've used it for your new business suggests that you think, in this case, that it's reasonable and more reflective of current slopes. I don't know anything that says you have to switch there. This is in a judgment area. I think the longer you go with different blocks of business being tested in different ways, the more difficulty you may have explaining why you are doing what you're doing.

I would summarize by saying that, in my view, there's no specific requirement to do it. It's a judgmental matter. It might make sense. Once you do it, you don't go back.

**MS. RATAJCZAK:** The revised Actuarial Opinion and Memorandum Regulation (AOMR) eliminates the required interest scenarios. Would you discuss current practice concerning number of scenarios to test; construction of scenarios; and criteria for determining the need for additional reserves, for example, number of scenario failures or confidence levels? I'm going to take this one, and Dave can chime in, as well.

First of all, the thing to keep in mind is not all states have adopted the revisions to the AOMR, so most people and most companies will still be doing testing based on the required scenarios. I think we saw from the lunch discussion yesterday, as part of the revisions to the asset adequacy practice notes, the survey was done to get a sense for what current practice is. I think we see companies using required scenarios plus a few extra. I would suspect that it's going to take a while or maybe never even get to the point where the appointed actuary can totally choose the scenarios. People have been using the required scenarios for so long it's hard to get away from those.

We also saw on the survey results in terms of criteria for determining the need for additional reserves some companies say that if they allow one scenario to be failed, that's it. They might have set specific internal guidelines that say, "Here are our particular requirements for setting up additional reserves." We also saw a large contingent of people use their professional judgment because this is one of those questions where it depends if you fail two scenarios by a buck, do you need to set up more reserves? I don't know. If you fail two scenarios by many millions of dollars, you're going to look differently at the results. It depends on the magnitude of the results that you're seeing. It's going to depend on your professional judgment. You might have some internal guidelines that are going to dictate whether you need to put up additional reserves or not.

**MR. MCCARTHY:** It might be worth tracing the guidance that's out there. The AOMR says except for the extent overridden by specific requirements in the

regulation. A place to start is the Actuarial Standards of Practice. If you go to ASOP No. 22, which deals with the opinion, it says for cash-flow testing, go read the revised ASOP No. 7. If you go back and read ASOP No. 7, you will see, as Meredith was saying, that it's flexible. It says you can use deterministic scenarios. You can use stochastic scenarios. You better be prepared to justify what you're going to do. Failing one doesn't necessarily mean you need to do anything. There's useful guidance there, and it's general.

I think what's going to be helpful with the revision of the practice notes, if I put my other hat on for a moment, is that practice notes never contain the word "should." ASOPs contain the word "should." Practice notes are collections of information about practice. They are literature, but they're not authoritative guidance. Nonetheless, they will collect things that are useful and will give somebody who is using his or her judgment a better sense of where the world is and where you want to be within that world. That will be useful. The ASOPs themselves give you general guidance but a broad range for judgment.

**MR. FREEDMAN:** One thing I've seen (and I don't know whether there are any actuaries here from Canadian companies) is it seems that the Canadian professional requirements are a little stricter. Specifically if you have a fixed-annuity block, you'll tend to establish additional reserves easily if you're in Canada versus the United States. I'm not sure what exactly does that. Maybe there's a requirement in Canada that says you can't fail specific scenarios, but it seems to me that companies are more conservative there in doing their cash-flow testing.

**MR. ROGERS:** The only thing I would point out is that from an auditor's perspective, we would say it's good practice to prepare for the rainy day and to establish guidelines and policies around things like setting up additional reserves that tend to be judgmental. If that time ever comes, you're in a position to say, "Here's the policy. Here's what I did, and here's why," rather than simply say, "I thought about it and evaluated it, and this is where I ended up," which is a dangerous place to be when you're in a room full of auditors.

**MS. RATAJCZAK:** The California Insurance Department has recommended that a normalized yield curve be used in cash-flow testing. Has this become common practice? Do companies test and opine both with and without normalization? Mark?

**MR. FREEDMAN:** I'm not totally familiar with the California requirements, but we know in New York, they do not like normalized scenarios. What I've seen when companies do this normalization is test both with and without the normalization.

**MR. MCCARTHY:** Typically it's not uncommon. New York in particular has requested that inverted yield curve scenarios be tested. If you don't happen to be in a current inverted situation, they specifically like to see the effective inversion, particularly going back to what we were talking before on annuity business.

**MS. RATAJCZAK:** What impact will Sarbanes-Oxley have on statutory reporting and tax reporting? Dave?

**MR. ROGERS:** Our firm took a look at this issue. There are two levels on which you can answer this question. One is at the macrophilosophical level. I think the reference to Sarbanes-Oxley has to do with establishing and identifying the key controls, making sure that those controls are operating effectively and testing them. At one level a lot of the processes and the data that support GAAP financial reporting also support statutory reporting, and so there is going to be some carryover effect in that those same controls will be documented, tested and determined to be effective to the extent that there's overlap between the two bases of reporting.

Specifically the statutory information does come into the GAAP financial statements, I think, through a footnote reconciliation. At least our firm has concluded that footnote information isn't within the scope of Sarbanes-Oxley currently. Statutory information would not be directly relevant to the GAAP financial statements and, at some level, would be I can't say completely excluded, but it certainly has a lower threshold of testing and evaluation relative to primary GAAP financial information. I think the same would go for tax-related information.

In the GAAP financial statements the tax provision is the key component, but how much of that is dependent on the controls around the approach used to develop tax reserves is where the question is. That would be a secondary consideration rather than a primary and would not carry the same scrutiny as primary GAAP information.

**MR. MCCARTHY:** I would note that we have a couple of clients who are not Sarbanes-Oxley and don't report on GAAP, but still the kinds of questions on controls that they are getting from their auditors are several levels higher than they used to be and, up to a point, that's a good thing because it ferrets out sloppiness. It requires you to document thoroughly, but I think it has ramped things up.

**MS. RATAJCZAK:** I was involved in a session yesterday entitled "Optimizing the Valuation Process." As preparation for that session, we gave the attendees a short survey, and one of the questions we asked them was how Sarbanes-Oxley has impacted their valuation process. It was interesting that most of the people who responded to the survey just complained about the reporting requirements. On the other side, they said they feel it has made their valuation process more optimal from a control standpoint. I think documentation is a pain, but it has helped put discipline and rigor in place in terms of that process.

**MR. ROGERS:** The only other thing that I would add is that as everybody in the room probably knows, I guess it would be the NAIC, but the regulators are considering some sort of Sarbanes-Oxley-type rules as applied to statutory information. There is going to be a carryover effect, and the extent of those rules isn't yet determined. I think the first draft was onerous because it was going to take

it down to the legal entity levels. If you have an insurance company with several other insurance companies underneath it, it would have been individually applied to each of those other companies. That would have been expensive, I think.

**MS. RATAJCZAK:** Which states, if any, require an actuarial opinion on reserves for a life insurance company's quarterly statement? Dan?

**MR. MCCARTHY:** To the best of our knowledge, none. We're willing to hear from anybody who thinks otherwise. Even in New York, which tends to have specific reporting requirements, all it requires at the quarter is a signature that says, "I calculated these reserves, and I'm not expressing any opinion about them other than the fact that they meet the formulas." The panel, at least, is not aware of any state that has a specific requirement except possibly in what I would call watch list situations, which would be company-specific, not state-specific. Whoever asked the question may know something that we don't.

**MR. FREEDMAN:** I had a couple of situations where I did, at one point, sign quarterly statements, and we decided to stop doing them and see what happens. As Dan said, the only one that ever came back was from New York, and it's a mild letter. I don't know what you'd call it. It's a form of a comfort letter that it requires, but it doesn't say all that much.

**MS. RATAJCZAK:** It used to be the appointed actuary had to physically sign the annual statement, but with the quarterly statements that's not the case.

**MR. MCCARTHY:** No, in New York you still sign that letter, but it's two sentences long and, as you say, doesn't say much.

**MS. RATAJCZAK:** Can a reinsurance treaty be classified as having sufficient risk under stat but not GAAP? Dave?

**MR. ROGERS:** I think this is related to risk transfer, and the short answer is yes. In fact, most reinsurance treaties that are entered into—I was going to say as surplus, but it's a caustic term—for surplus-related reasons are deemed to have transferred risk under stat, but not GAAP. I was looking through this red Practices and Procedures Manual up here. The rules for risk transfer for statutory accounting are in SSAP Number 61, if you don't know, so you might want to write that down.

I think there are other people in this room who could probably talk about those better than I could. Under GAAP it's FAS-113. Because of some recent work, I have to say in 113 there's a lot to be desired in terms of describing how to evaluate risk transfer for a long-duration, life insurance-related reinsurance agreement. The general rule is that there has to be a reasonable possibility of significant loss to the reinsurer as a result of the reinsurance treaty under GAAP.

**MR. MCCARTHY:** The statutory test is different. The statutory test is whether the reinsurer is responsible for reimbursement of the various risks without regard to the point of whether it will win or lose on that. You can have something where the reinsurer is unlikely to lose money, but it definitely complies with SSAP-61. It won't comply under GAAP.

When we were talking yesterday about this, we couldn't think of any examples in the reverse. We couldn't think of one that transfers risk under GAAP but not stat. I suppose, in theory, you could have something that transferred risk under GAAP but somehow failed one of the more mechanical statutory tests. I just haven't seen one because people wouldn't design them that way.

**MR. FREEDMAN:** No, and in fact the best example that works the other way would be if you take a coinsurance arrangement and have an experience refund in it, it probably won't be sufficient risk transfer for GAAP, but with statutory that would be fine because I think there's a clause in there that says experience refunds are fine.

**MS. RATAJCZAK:** If statutory reserve requirements can be reduced by using offshore reinsurance, why don't companies use this mechanism more extensively? Mark?

**MR. FREEDMAN:** There are two reasons. First, there's the issue about letter of credit capacity that I've heard out there now. There are not unlimited letters of credit. The second is letters of credit have a cost, and the cost tends to go on for a long period of time because the ceded reserves build up. If you take that cost into account on your pricing, it's not as cost-effective as you might think, so you do have to go through the motions and see what it does to your return on investment (ROI).

**MR. MCCARTHY:** You also have excise tax issues depending on the treaty. Not only for a letter of credit does the cost go on forever, but you don't know what it is. A letter of credit gets repriced, and so it's difficult to know what it's going to cost. That gives you a different dimension.

**MR. ROGERS:** As I sit here, I think that the results of the asset adequacy analysis on an equity-indexed annuity are so dependent on the investment strategy that's used to protect the company in the event of different market changes that you ought to keep an eye on it and use that in developing the scenarios that you're going to test because that, to me, is what you're trying to stress test through the asset adequacy analysis that you're doing. Yes, I think that it would be difficult, as Dan said, to generalize that. You have to keep in mind the purpose of the testing while you're doing it.

**MR. FREEDMAN:** Generally in pricing you'll see whether the stress points and rules would be the types of scenarios you would tend to make sure you test in your asset adequacy testing.

**FROM THE FLOOR:** Here's a completely different topic. Under statutory reserving rules as they were codified recently, claim reserve and liabilities and medical insurance are supposed to be done on a best-estimate basis. I know there's been some resistance to that rule, and many companies want to build in some provision for adverse deviation. I wonder if the panel could share its recent experiences on whether companies are putting in provisions for adverse deviation and what level seems to be acceptable under the rules as they're not codified.

**MR. FREEDMAN:** I'll start on this. Technically if you want to go back in history on this issue, for GAAP the standard has always been best estimate. For statutory, generally people felt a little guilty about just the best estimate without a pad. On the other hand, I don't know of any companies with medical reserves that ever had a difference between GAAP and statutory. This has always been an issue, and I think the point is the statutory requirement now is more like the GAAP requirement, but I don't see a lot of medical insurance. I haven't seen reserves just come down by 5 percent or anything.

**MR. MCCARTHY:** I haven't, either, but I'm thinking in particular about some clients we have including the BlueCross types of organizations. It used to be that you would see more put away in the good years for the rainy times than we're seeing lately. I think there is a movement in the direction of true best estimates.

There's also been some conversation about what "best estimate" really means, and whether it's best conservative estimate, or whether you really know the shape of the distribution, which is a complicated question anyway. I think people use the shape of the distribution as refuge to put a little bit extra away, but not as I would have seen a number of years ago.

**MR. FRANCIS BERNARDI:** It was remarked that the appointed actuary should consider or perhaps write down criteria for reserve strengthening and not face the day when he thinks it should happen. Could you draw out some ideas at what you might think would be good criteria for reserve strengthening? One idea I had is we run a number of stochastic scenarios, and would CTE be a good way to do that?

**MR. ROGERS:** Yes. Dan just said if you could hear him that CTE would be a good place to start. I think that would be, too. When companies have failing scenarios, or if they're doing stochastic analysis, it's usually been a CTE sort of analysis that's a good place to try to set some policy. If you're doing a fixed number of scenarios or using the required scenarios, companies tend to look at the number of years until the negatives arise or the variability of results across the different scenarios, and in some cases, given where interest rates are today, their judgment as to the relative likelihood of the particular scenarios that are causing the deficiency to develop.

Those are the metrics that would be referenced. The idea would be to say, "These are the factors that I look at." They can be soft criteria, but I think that as long as you can say, "This is what I look at, and if it's a long way off in the future, I feel less strongly that an additional reserve is required because of the variability in

those outcomes. If it's close in, I would consider it to be a basis for establishing an additional reserve."

**MR. FREEDMAN:** One item that bothers me a little bit is when companies take total refuge in doing a stochastic test, and they pass 99 percent of those scenarios even though they failed three of the seven. Sometimes that's because the parameters that go into the stochastic analysis are items such as mean reversion and a big weight toward mean reversion so that they tend sometimes be self-serving. You have to be careful with the way you do your stochastic analysis.

**MR. MCCARTHY:** You mean if you pass a lot of stochastic but fail the level scenario, you ought to think twice?

Something else you might think about is that different kinds of business tend to react differently under the different scenarios. One thing we've looked at particularly for companies that had both UL and annuity business where they tended to behave differently was to look at the growth rates in those different lines of business because you can sometimes see things on the horizon that are there. You're going to have this problem next year if you don't have it this year.

**MR. CLAIRE:** When the '80 CSO kicked in, we were writing actuarial opinions saying, "My reserves need to be the standards in my state of domicile." The next year when the '01 CSO was kicking in, quite likely not all the states will be passing it, but people will want to issue products under the '01 CSO. How do they handle the statement that now says, "I'm meeting the domicile state and the minimum aggregate for all the states in which this statement is filed?"

**MR. MCCARTHY:** I'm curious. I was interested in your example because I think some companies will instead beat the drum to get every state in there, particularly companies that operate nationwide because it's a pain in the neck dealing with different products in different states.

**MR. CLAIRE:** In fact, all you need is one state.

**MR. MCCARTHY:** All you need is one, that's right. I think that people will converse with those states if they have to. There's often a delay for legislative reasons or something like that. I think in most cases regulators will cut you some slack there, but you are going to have to check.

**MS. SHIRLEY SHAO:** This is why I've been fighting for the state variations, but that's not why I'm here. I have two questions for Dave. The first question is do you have any insight as far as when the purchase GAAP (PGAAP) accounting guidance is going to come out and how it may look?

The second question is I know you have worked on the first version of the GAAP textbook and know you're working on the second version now. Can you tell us a little bit more about that?

**MR. ROGERS:** Tom Herget, maybe you could update people on the second edition. I don't feel qualified in your presence to talk about it. On the PGAAP guidance, it is moving forward. Every year, the SOA does an advanced GAAP seminar. It's good to attend if you want to get up-to-date on current developments in GAAP reporting that didn't make it into the textbook. We heard that there is an exposure draft, I think, on business combinations that is expected to come out. I thought it was later this year. I think it's around the fourth quarter. Mark, do you have better information than that?

**MR. FREEDMAN:** No, but I also think the International Accounting Standards Board (IASB) is coming out with the same thing, and I think they're supposed to be somewhat similar.

**MR. TOM HERGET:** I would like to talk a little bit about the GAAP textbook. Thanks for the question and proceeding it back to me. The members of the SOA's Financial Reporting Section had commented to the council that enough has changed since the GAAP textbook was issued that we ought to consider updating it. This summer the nine original authors plus Mark met for the first planning and writing session, and we're going to have another session in November. We hope to finish our writing in January, start the editing process and come up with a new book by, I'd say, July of next year. One open issue is the breadth of coverage.

Some of the things we're going to be addressing include enhanced purchase accounting, SOP 031 and FAS 133. Those are the biggest items, and we'll be upgrading almost every page for even better grammar.

**MS. RATAJCZAK:** I have a question. It must be a GAAP question. Recently there have been articles in the *Wall Street Journal* regarding FASB coming up with new requirements related to impairments and how a company reports those. At first, one of the articles made it sound like this is something that was going to happen right away, and then it backed off from it. Could you talk a little bit about that?

**MR. ROGERS:** This is an area where I would have to say I'm not an expert. The issue has to do with a pronouncement out of the Emerging Issues Task Force (EITF), which is one of the accounting bodies that I think is related to FASB. It's EITF 03-1. Those numbers, by the way, mean that it's the first pronouncement of the EITF in '03. This thing has been out there for a while, and it deals with how to determine whether you have an impaired security. If you have an impairment, you need to write it down. EITF 03-1 doesn't exclude interest-related losses on fixed-income securities. If you're holding a Treasury security that you purchased at 5 percent, and rates go up to 6 percent, that Treasury security could be deemed impaired under EITF 03-1. There are numerous other examples that don't involve Treasury securities, but that's the most blatant.

Banks and other financial institutions, when they understood that this was the case, started lobbying the FASB for some sort of relief here and argued that this didn't make any sense. What the FASB has recently done is defer the application of the



EITF 03-1, so it's not an issue for this year-end, but it is something that will come up in the future because it is literature, and it is out there.

I've never seen FASB retract anything. I've seen it modify stuff fairly significantly. It retracted 103, that was the tax one. I think it did pull that one back, but generally you're not going to see that. There's going to be something in there, some additional interpretive literature, that will come out probably either later this year or early next year that deals with how to determine impairments on fixed-income-type securities.

**MR. MCCARTHY:** The biggest problem with that is that once you classify it as impaired, you can't unclassify it later on. If the facts change, it's a lock-in. It's not just a market value; it's a lock-in problem.

**MR. ROD BUBKE:** The SOP addresses the deferral of sales in business but mostly in conjunction with annuities. I'd be curious whether we could apply the spirit of SOP and defer term conversion credits where the policyholder converts from a term policy to a whole life or UL policy.

**MR. FREEDMAN:** I thought technically the SOP applies to products classified under FAS-97, either UL or deferred annuities. I'm not sure you would be able to do that because the term would be under FAS-60, and I don't see what mechanism you'd use to make that work.

**MR. MCCARTHY:** Does the question imply that you're thinking about it as an inducement to buy the FAS-97 product? If so, it's like a sales charge for the new products, not on the old products. I think that's where he's going. I don't know the answer, but I think that's where you're going with the question.

If you give a conversion credit, you are offering an inducement to buy the new product by refunding part of the premium for the term product. I think that's where you're going. It's like the commission, or there's another word that I'm not going to use, by the way, because it's illegal.

**MR. FREEDMAN:** The "R" word?

**MR. MCCARTHY:** Yes, that's right.

**MR. ROGERS:** You'd have to take a look at that. It does sound to me as though it would be qualifiable, and I don't want to say it definitely works, but it does sound like it would be qualifiable. I thought you were talking about capitalizing it over the life of the term policy, which I think is what you were thinking about, Mark.

**MR. FREEDMAN:** Yes.

**MR. ROGERS:** You can't capitalize stuff on a contract that doesn't exist yet. I know that rule. I think the SOP applies to all life insurance enterprises and all of the contracts that they issue. I would modify what Mark said. I think if you had a sales inducement on the FAS-60 contract, presumably you could consider it for SOP treatment. It's not clear how that would exactly work because once capitalized — it doesn't say we amortize it like deferred acquisition cost (DAC). It says you amortize it against estimated gross profits, I think. That would be a tricky thing to do.

**MR. TOM BICKERSTAFF:** Here's a totally different topic. Suppose you have a company that has a block of variable deferred annuities. It does its valuation and has formula GMDB reserves of X dollars. It does stochastic analysis and based on CTE scenario testing has Y dollars of additional reserves that it feels that it needs to hold on top of the formula reserves. I'm wondering if the members of the panel or anybody in the audience have any strong feelings as to whether those additional reserves should be labeled as part of the GMDB reserve that's held in Section G of exhibit six in the Blue Book, or whether they should be called additional actuarial reserves based on asset liability analysis.

**MR. MCCARTHY:** Is there a question even to precede that as to whether, assuming that on testing that block those reserves were required, you can aggregate? I think we have to assume in your question that somehow when you get to the bottom line, you still need to set it up. I don't think there's any stand-alone requirement testing, so, in theory, the first thing you might think about is whether you can aggregate instead of margins. Tom's going to tell me there's a stand-alone requirement.

**MS. RATAJCZAK:** Yes, there is. Thirty-four.

**MR. CAMPBELL:** I know when 39 was written, it was written in a way that you would have to hold the additional asset adequacy analysis reserve as part of the reserve. The language, I think, was just transferred. I don't have it front of me, but I would think that you could make the argument that you could hold it as part of the base GMDB reserve.

**MR. MCCARTHY:** I was going to ask you why it mattered. Assume you're going to hold it. Why would it matter? I'm not into the question to the point of the labeling.

**MR. CAMPBELL:** I would assume it's a tax issue.

**MR. MCCARTHY:** Yes, probably.

**MR. CAMPBELL:** I think there could possibly be some considerations as to when you would be permitted to take it down.

**MR. MCCARTHY:** Yes, asset adequacy reserves are easier to take down than formula kinds of things.

**MR. FREEDMAN:** I thought the general intent of these stand-alone asset adequacy reserves would be that you could take them down no matter where you put them in the statement.

**MR. MCCARTHY:** Yes, but you might create less confusion if you call it an asset adequacy reserve.

**MR. PAT STUDLEY:** On that same kind of thing, how do you bring margins into the seven scenarios if your formula reserve is an asset adequacy reserve, but you're not running it related to seven specific scenarios that you want to show your total annuity results including this by each of the scenarios? Maybe I'm not asking that clearly.

**MR. MCCARTHY:** I think you're saying if it's stand-alone, from a presentation point of view, how do you also show your overall results?

**MR. STUDLEY:** Right, because I want to test the adequacy of all the reserves, and I'd like to include that block, but essentially I've already proved that its reserves are adequate because I did a cash flow-testing method of generating the reserve stochastically.

**MR. MCCARTHY:** You're assuming that you have margins there that you want to be able to bring back into the overall test? Is that what you are asking?

**MR. STUDLEY:** You could say zero margin.

**MR. MCCARTHY:** If it's zero, why does it matter?

**MR. STUDLEY:** No, then it doesn't.

**MR. ROGERS:** But it's not zero.

**MR. STUDLEY:** It's probably not zero. One time we tried to run the 1,000 scenarios off of each one of the seven interest-rate scenarios, but that seemed too much work. But for each of the seven scenarios there has to be some margin in some of the scenarios.

**MR. ROGERS:** I'm having a little trouble understanding why this would be considered an asset adequacy reserve in the first place because it seems to me that what you're doing is while you're using what seems to me to be common techniques in setting this reserve. This is a mortality reserve because people have to die to get the GMDB, and we're trying to figure out what the most likely level of death benefits is rather than determining whether the assets supporting the contract are sufficient to provide for the liabilities. I'm having a little trouble with that.

I would have said that maybe one way to look at it would be to say that the equity scenarios that relate to the GMDLB liability principally are independent of the interest-rate scenarios that you're stochastically generating generally for asset adequacy testing. It would seem like, as you said, they're independent, you would be able to take that reserve. As long as you included the appropriate death benefits related to the interest-rate scenarios, that would be the extent of what you would have to do. As Shirley indicated, I'm not a statutory guy.

**MR. MCCARTHY:** Let me try this. I agree with you in the first instance. You're getting a stream of death benefits, but then you have general account assets. This means you have their yields and their reinvestment functions, so I would say it is an asset adequacy even given the death benefit strain. I think that brings your question back to life again.

**MS. RATAJCZAK:** It is a stand-alone asset adequacy test.

**MR. MCCARTHY:** You're saying, therefore, you think you can't use the margins anywhere else?

**MS. RATAJCZAK:** I think it has to stand on its own.

**MR. STUDLEY:** I don't think of it as a test. I think of it as a stochastic formula reserve.

**MS. RATAJCZAK:** Yes.

**MR. STUDLEY:** If that's the reserve, now I can test its adequacy under interest-rate scenarios.

**MR. MCCARTHY:** Yes.

**MR. STUDLEY:** Are people doing that?

**MR. ROGERS:** You have to figure out, if you're testing, how much of your liability is going to be needed to pay for death benefits at any given point in time under a particular scenario.

**MR. FREEDMAN:** I thought of it not as a formula reserve, but as an asset adequacy type reserve. If you are setting up a reserve there, I've seen companies take that, roll it off and then test everything else that needed.