

**1997 VALUATION ACTUARY  
SYMPOSIUM PROCEEDINGS**

**SESSION 36**

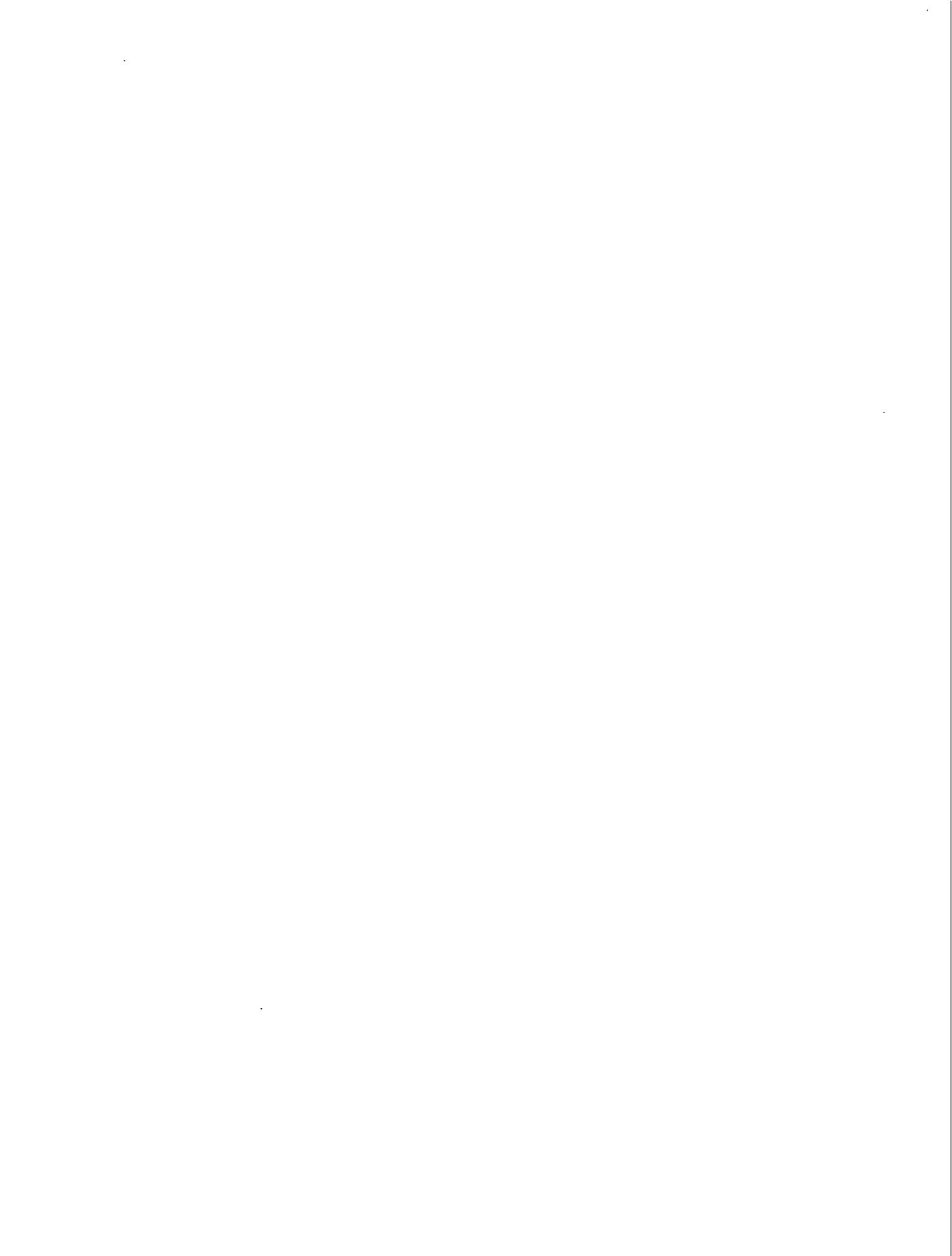
**Ask the Experts**

**W. Michael Pressley, Moderator**

**Douglas C. Doll**

**Michael E. Mateja**

**Edward L. Robbins**



## ASK THE EXPERTS

**MR. W. MICHAEL PRESSLEY:** I am a principal in the Dallas office of Tillinghast-Towers Perrin. The experts on the panel are Doug Doll, who is a principal in the Atlanta office of Tillinghast-Towers Perrin; Mike Mateja, who is the managing director of the SS&C/CHALKE Consulting group; and Ed Robbins, who is a principal in the Chicago office of KPMG Peat Marwick.

Our plan is to begin by addressing questions that were submitted in advance. At the end of each question, if anyone in the audience has a related question or a follow-up question, we would invite that person to ask that question at that time. After we get through all of the presubmitted questions, we will open up the session to questions from the floor.

The first question deals with the use of overhead expenses in cash-flow testing. Specifically, is it the prevailing practice to include overhead expenses in cash-flow testing that's done for regulatory purposes, and if so, why are such expenses included?

**MR. MICHAEL E. MATEJA:** First, cash-flow testing is a going-out-of-business type of analysis, and since overhead is a central part of business, start off with the premise that you have to reflect it somewhere. On the other hand, if after ten years you have half the business in force, and you have made no provision for reducing the overhead, then you are probably going to be overstating your expenses in the projection. Our traditional approach to this is to deal with expenses on a fixed and variable basis, if you can figure out what the fixed expenses to maintain the operation really are. Even if you have half as much business in force, you're going to be stuck with these as fixed expenses. These would include the overhead associated with the organization, and the rest of the expenses will then vary as the business runs off the books. There's probably a dozen variations on that general model. The idea is to produce something that you think is realistic so that your results will be representative of the actual expenses that you would expect to incur.

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**MR. DOUGLAS C. DOLL:** I don't think there is a single right answer to this. One problem with cash-flow testing is you're only projecting in-force business. You are not projecting new business. So the allocation of the overhead between acquisition and maintenance is a key factor. One thing the valuation actuary should consider, is how much of this overhead expense is being allocated in pricing to new business. You should have some consistency there.

**MR. PRESSLEY:** The second question deals with companies that might file different annual statements in different states to satisfy the differing valuation requirements. The question is, how prevalent is this practice, and does it create a mockery of the process?

**MR. DOLL:** With regards to how prevalent it is, we are all aware of instances in which companies have done it. We're not sure of the exact frequency of it. It's clearly more prevalent now with the new actuarial opinion than it was, say, ten years ago. What we thought we might do to get an indication of how prevalent it is, is to ask for a show of hands.

Companies do not always send a separate statement out to the state. I am aware of at least one case where, instead of going through the effort of submitting a separate statement, a company was going to send a qualified opinion to another state. In other words, their actuarial opinion would have quantified how much less the reserves in the statement were than the aggregate reserves required by the state. In this case, the actuary thought that it would be less effort than trying to restate the statement for the extra reserves.

I'm going to ask for a show of hands. First, I'm going to ask how many people file one statement with an unqualified opinion in all states in which they file? The second category would be one statement, but a qualified opinion in certain states. And the third category would be more than one statement.

How many people have their companies file one statement with a nonqualified opinion in all states? It looks like we have a strong majority. Does anybody file one statement but in certain states file

a qualified opinion? Four hands on that. How many file more than one statement? Now, keep your hands up if you file more than one statement. I'm going to ask you to gradually put the hands down because we're going to get an idea of how many different statements you file. So, put your hands down if you just file two statements. Put your hands down if you file three. Four. Anybody file more than four different statements? That's a good indication.

I don't think it makes a mockery of the process, but the whole issue of state variations is a burdensome one, and one that the industry and the regulators are trying to address. It would be nice if that can be resolved.

**MR. MATEJA:** It's great in theory, but in practice, for those of us who have had to deal with it, it truly is an intractable process. If you were looking to produce ten variations on random selections of different reserve elements and then produce them all and produce blue books, I'm not sure just what the expense load of that is.

**MR. PRESSLEY:** The next question reads: How can we develop Actuarial Guidelines like GGG and MMM for variable annuities when the Commissioners' Annuity Reserve Valuation Method (CARVM) has not been officially promulgated and/or defined for these products?

**MR. DOLL:** I think the specific question is, how can we define or come up with actuarial guidelines for variable annuities when CARVM is not defined for variable annuities? There might be a more general, underlying question of what authority is there to come up with guidelines that seem to be making regulation or law. With regards to the specific question of "is CARVM defined for variable annuities," I noted that the draft practice note for variable annuities, which was one of the handouts in this symposium, does address the question. The practice note indicates that most actuaries say that CARVM does apply to that. With regards to guidelines in general, from time to time the adoption of a guideline has been controversial because the argument has been made that guidelines are only supposed to interpret laws and regulations, not make laws and regulations.

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As a practical matter, industry and the regulators have worked together to produce guidelines that accomplish desired goals. There seems to be certain boundaries that guidelines are not allowed to cross. Guideline XXX actually turned out to be a regulation. Some people forget that, but it really is technically a regulation and, therefore, has to be promulgated by a state before it can be adopted. My understanding of the reason why that switched from being a guideline to a regulation was that it contained a new mortality table, and the Standard Valuation Law has specific language about the process to adopt a new mortality table.

I asked why Guideline MMM is a guideline because it has a new mortality table in it, too. I was told, "It's stretching things a little bit. The new table is *based* on an existing mortality table, so that's okay."

There are certain advantages to having actuarial guidelines as opposed to doing everything via regulation. One is, once it gets adopted, it's uniform among all the states. There has been a lot said at this symposium about the advantages of uniformity among the states. Another advantage is that, since the NAIC defines reserve methodology for tax reserve purposes, then once the NAIC adopts a guideline, it also defines tax reserves. To the extent that we're increasing reserves, that's a good thing, too. Some states, I don't know how many, officially adopt rules that incorporate actuarial guidelines. For example, Florida is one of those states. Every year, they promulgate a regulation or a rule that incorporates the requirements of the Examiner's Handbook (which is where the guidelines reside), and there may be other states that do similar things.

**MR. EDWARD L. ROBBINS:** Just one comment on that. CARVM, according to Guideline 13, does apply to variable annuities. To my knowledge, that was the first official indication that variable annuities do fall under CARVM. Guideline 13 had to do with contingent surrender charges, and way back on the second page of that Guideline, they talked about how you apply that to variable annuities.

**MR. PRESSLEY:** The next question contemplates a situation where the reserves that are calculated using the revisions to Actuarial Guideline 33 will be somewhat different than reserves calculated without those revisions. It asks if this situation would be viewed as a change in method for tax purposes under which the difference in the reserves would need to be amortized or could it be viewed as a clarification of the CARVM method and, therefore, not require the amortization of the reserve difference?

**MR. ROBBINS:** Mike, you're talking basically about immediate recognition versus the ten-year spread. I'm going to go back to the original Guideline 33 for a moment. The original Guideline 33 basically had implications in three areas for companies, and I'm overgeneralizing just a little bit. There was, first, the partial withdrawal incidence, second, the testing of annuitization values, and the third item was what we refer to as the 93% rule where, if you had certain language permitting current settlement option application, your statutory reserve had to be at least 93% of the fund value. Those were the three major reasons for required "bump-ups" for statutory purposes among our clientele.

The question really is, which of these are clarifications, and which are really new? Now, the preamble in Guideline 33 refers to the guideline as a clarification and not a change of method. I think somebody thought that was helpful language. It's not particularly helpful language because what it really means is that the change in tax methodology results in a ten-year spread on bump-ups on business issued prior to the year in which Guideline 33 went into effect. So what you can do is basically look at the reason you had your bump-up. The 93% rule was new. What I'm talking about is basically filing positions that people take as opposed to what's "right and wrong." Somebody once said, "There's no such thing as truth." It's "filing positions" and support for them. Now you have the new, revised Guideline 33 which refers to elective benefits, nonelective benefits, and benefits that are in kind of the gray area. Death is obviously not elective. Partial withdrawals and surrenders are elective benefits.

Then you have certain gray areas that are really tough -- things like some of the hardship clauses under a 401(k), the purchase of a home, or college tuition -- this kind of thing. What is that? Is that elective or is it nonelective? There are some new requirements coming under the new, revised Guideline 33. Take a look at your own portfolio and make your own conclusion as to whether it's a new requirement or a clarification of the existing requirement. There is no terribly clear answer. What gets more complex is the issue of the permitted three-year phase-in under which, according to the revised guideline, you're allowed to do so with the permission of your commissioner. If you're ten-year spreading, it's our opinion at our accounting firm that you use ten-year spreading right from the beginning of the guideline as opposed to three successive ten-year spreads, as the one-third, one-third, one-third statutory effect rolls through. That could very easily be subject to a statutory cap if you're subject to the three-year statutory bump-up.

**MR. PRESSLEY:** The next question reads: Under what circumstances, if any, would unisex mortality be an appropriate reserve basis for unisex products?

**MR. MATEJA:** I think the general rule is if you've priced on a unisex basis, the valuation on that book of business is appropriate. I'm not sure whether it's even practical under those circumstances to check to see that the distribution you have in your actual business is somewhat consistent with the assumed distribution in your valuation basis, but that would be the only contingency that would come to mind to cause you to consider a change in the assumptions underlying the valuation table. I don't have any specific experience in this regard. Does anyone else on the panel have that experience?

**MR. DOLL:** I'm not quite sure what the question being asked here was. Maybe it's the question of, can you use a unisex mortality table in a state that hasn't adopted a unisex version of a mortality table. That has been kind of vague.

Regulators may let some things go, if it's appropriate anyway. Kerry Krantz mentioned in the last session that, in the state of Florida, there were companies using smoker/nonsmoker versions of the



1980 CSO for reserves prior to the adoption of those tables by Florida. He said he could have given those companies a hard time asking them to demonstrate that their reserves in aggregate were okay using the unismoke version of the 1980 CSO. As a regulator, you sometimes do things that are appropriate and to follow the spirit of the law.

**MR. PRESSLEY:** In the next question we have the product actuaries developing a universal life product with a built-in, long-term, no-lapse guarantee of something like 40 years and saying no additional reserves are required for that provision. The question is, assuming that XXX does not apply, what reserve is needed? Also does this feature require a nonforfeiture benefit?

**MR. DOLL:** Maybe we can get some audience participation on this one. Basically, my opinion is it's a loophole in the Standard Valuation Law for those products. He seems to be asking what reserves are required, but, technically, under the Universal Life (UL) Model Regulation, there aren't extra reserves required for that. You might want to hold some reserves at a prudent level. Unfortunately, those reserves won't be tax deductible because the valuation laws and regulations don't require them.

**MR. ROBBINS:** Doug, XXX, for tax purposes, is effective as of the issue date March 13, 1995, and subsequently. Therefore, for this type of no lapse guarantee, you certainly have a good filing position for substantial deductibility for 1999 and later issues. You're unfortunately subject to a statutory cap, of course.

**MR. DOLL:** That's an interesting point that you raise. For tax reserve purposes, XXX already applies because it has been adopted by the NAIC.

I guess my loophole statement might be a little strong, but the regulators have, in effect, admitted it's a loophole by virtue of the fact they've tried to correct it in Guideline XXX.

**MR. ROBBINS:** I think one other way to say it is, if you reserve under only the UL Model Regulation and no more, there could be a major problem a little ways down the road. You could be holding woefully inadequate reserves. You could incur statutory losses a few years later under circumstances such as a 40-year guarantee.

**MR. DOLL:** We have situations now where it's a new product for the company. When they do their cash-flow testing, they're aggregating it with their other in-force business.

Assuming that there are adequate reserves elsewhere, cash-flow testing is not going to make them put up extra reserves for a while. Does anybody have any comments on that?

**MR. LARRY N. STERN:** With regard to the comment inquiring about nonforfeiture compliance, there are three states that are trying to get at this issue. Massachusetts, Texas, and California are imposing requirements to demonstrate compliance based upon the length of the guarantee period. It's my understanding that Massachusetts will not approve anything beyond a five-year guarantee. Texas generally is approving a guarantee of ten years up to about age 70, and five years above age 70. California is a mixed bag. We've talked to a number of companies that have achieved a 20-year guarantee in California, but other companies have achieved no more than a ten-year guarantee. Those states are trying to get at this reserve issue by requiring cash value demonstration based upon the guarantee period; as such, the cash values would be higher with the demonstrations that are going forward than just imposing the maximum expense allowance as a surrender charge. In a roundabout way, there are somewhat higher reserves being required because there is a higher cash value being required.

**MR. DOLL:** At the time Guideline XXX was first drafted, there was a proposed guideline to require nonforfeiture values on long level term plans. That guideline fell by the wayside.

**MR. PRESSLEY:** The next question asks about the new annuity valuation mortality tables. It asks if specific action is required by the states to adopt these valuation tables, and, if so, what states have taken that action?

**MR. DOLL:** Donna Claire informs me that New York has incorporated the adoption of these new annuity valuation tables in its Regulation 151 so that when that regulation gets adopted, which is expected, then New York will have it. It is true that, when the NAIC adopts mortality tables, it doesn't make them effective in the states. To be effective in the states, they have to be adopted by regulation. For tax deductibility, we'll have to get 26 states to adopt those mortality tables before you can use them for tax reserve purposes. Kerry Krantz from the Florida Insurance Department mentioned that. In its regulation for 1997, Florida plans to incorporate the new annuity mortality tables. I would guess that quite a few states will adopt them during 1998.

**MR. PRESSLEY:** We will move on to the next question. To settle an alleged misrepresentation of the vanishing premium concept under a universal life contract, a company has agreed to keep the policy in force until death with no further premiums, provided that no value is withdrawn from the policy. What are the proper statutory, GAAP, and tax reserves for these policies? We'll address each of the statutory, GAAP, and tax reserves separately.

**MR. MATEJA:** We can start off with the tax. I guess there's more than one company out there that's faced with this problem. I think the theoretical application is determined by the basis upon which the agreement was made. I believe, in most instances, there was a formal policy rider issued which changes the nature of the company's obligations contractually and converts what was a premium-paying policy to a paid-up policy. I think the resultant reserve is the appropriate paid-up reserve as of the attained age. Given that this is a significant policy change, I think you might be in a position to change the valuation basis from the original issue date to the change date. I'm not aware that anybody is not holding the additional reserve for that. This is a substantial obligation, and usually this is the basis upon which they've been quantified in terms of the value of the settlement.

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**MR. ROBBINS:** For GAAP purposes it would appear that you hold accumulation value and your DAC as you normally would have with a change in your gross profits and with some substantial loss recognition testing on the line of business. That appears to be an appropriate approach. Nothing would really change except for the fact that your gross profit stream would obviously change downward prospectively, and your DAC would end up being depressed.

**MR. PRESSLEY:** Next we have a Guideline XXX question. We have a company whose state of domicile has adopted XXX to be effective January 1, 1999, and they have no plans to start holding any XXX reserves until that time. If another state passes a regulation with an effective date prior to January 1, 1999, is the company required to hold XXX reserves on policies issued in that state? As states adopt XXX, is it necessary to refile the products?

**MR. DOLL:** First, if a state has adopted XXX, and you're going to file a statement in *that* state, XXX will apply to business issued in all states, not just that particular state. With regard to refiling, I'm not quite sure what the question is. If it's a question of refiling simply because you're changing your reserve basis, we've all concluded that there's no need to refile for that. If you're going to change your product design to somehow get around some of the onerous requirements of Guideline XXX, then, of course, you would be refiling.

**MR. PRESSLEY:** Next we have a stock company that has a closed block of participating policies, and they have recently realized some capital gains on a stock portfolio for these policies. They want to pass the realized capital gains along to these participating policyholders. Instead of just a one-time increase in the dividend for one year, they want to spread it out and increase the dividends over some period of time. Is it necessary to set up a liability for the increase in future dividends? They're asking this question from both a statutory and GAAP standpoint. They are also asking for suggestions as to how to spread the capital gains over the future in order to incorporate them into the dividend scale.

**MR. MATEJA:** I'm not aware of any regulation or guidelines or any other pronouncements that would provide guidance on this. I go back to what I would call a general principle. There's no reason why a company can't, for statutory purposes at least, establish a liability if it cares for such a planned action on the dividend. It would be particularly appropriate if this has, in fact, been a realized gain. The treatment for tax purposes is clear. Because there's no statutory basis for it, it would not be a deductible item.

**MR. ARMAND M. DE PALO:** I have a real-life experience with this issue. You can't set up a liability. We've asked New York State several times whether you can put up a liability for capital gains that were realized that you plan to pay in future dividends. The answer from them is no. It constrains the board of directors, in violation of the board's authority to approve dividends on a year-by-year basis. On the GAAP basis, we've gone to our accountants, and because it cannot be guaranteed that it is paid in all future years, it cannot be put up as a GAAP reserve. We've been trying to get this through both the state, to allow us to put up reserves for realized capital gains, as well as through the GAAP statement, but it is just not allowed.

**MR. ROLLINS:** Are you saying it cannot be put up for a GAAP reserve? You're talking about your auditors, not New York.

**MR. DE PALO:** We're being told by Price Waterhouse, and we checked with others, that we cannot put it up in a GAAP reserve because it is not guaranteed to be paid. It's contingent on the year-by-year approval. We've gone to the regulators on this. Northwestern Mutual has gone to the regulators. We cannot put it up as a GAAP reserve or as a statutory reserve. The only time you could put it up as a statutory reserve is if it became guaranteed to have to be paid.

Since you can't constrain the future actions of a board, you can't guarantee it to be paid even though it is the full intent of the company to pay it.

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**MR. ROBBINS:** I have two responses to that from a GAAP perspective, Armand. What do they say about the participating policies liability that you have to set up for those jurisdictions in which there is a restricted dividend to shareholders? Of course, you're a mutual, so you don't deal with that. In a stock company that issues participating business, it would appear that you could put those profits over to that par liability and handle it that way for GAAP purposes.

**MR. DE PALO:** In our own internal statement we do full GAAP, it's an audited GAAP, and we actually have a second set of GAAP numbers that we give to the board, along with our GAAP numbers which you can't give to the public, that takes the capital gains related to the future distribution of dividends and has what's, in effect, a payout or a liability equal to the capital gains realized and not yet distributed to policyholders. We show that to the board, but we're forbidden by the accountants. We've gone to them several times, as has Northwestern Mutual, to hold a GAAP reserve.

**MR. ROBBINS:** You're effectively already holding the GAAP reserve for it in respect of a depressed deferred acquisition cost (DAC), I think, at least in part.

**MR. DE PALO:** It's a partial. It doesn't do the whole thing.

We tried again and again on this. The problem is that the dividend scale is paying out capital gains. The capital gains that it's paying out may be being paid out in a year that you've had a capital loss. Your GAAP statement in the year you show a capital loss could look very, very bad even though you're paying out a very fine dividend, whereas, if you basically had a fund here that was realized capital gains and capital losses, it would be an insulating vehicle, and it would be in sync with your dividend scale. The ripples of not being able to do this in GAAP-reported earnings are enormous. It's fallen on deaf ears, and we've tried for about two years to address this issue. That's all I can add to this.

**MR. CHARLES D. FRIEDSTAT:** It's a very analogous issue that is applied not just to mutual companies but in general. This was discussed at the AICPA insurance companies' committee meeting. There was a very good discussion of the pros and cons of it. I think the general consensus is exactly as Armand stated it. You almost need an enforceable legal obligation to set up a liability on a GAAP basis. One company had an analogous issue, but it was not the same issue. It actually obtained the opinion of counsel and the attorney stated that the company had an enforceable legal obligation. Something short of that, I think the accountant's position would be, as Ed stated, that it should go through your estimated gross profits and that you would, in essence, get a partial DAC offset.

**MR. MATEJA:** In our discussions of this we conjectured as to whether it would be more prudent to get some kind of a guarantee or a rider on the contracts to provide a contractual basis for it. If the company is committed to doing that, and they have the cash, and they think that this is equitable, it becomes some kind of a contractual basis for which I think you could then probably get the tax deduction as well.

**MR. ROBBINS:** It sounds like, from what I'm hearing about New York, you'd be able to hold the statutory liability. I think that's true with a couple of small caveats; let me mention those caveats.

You don't want to guarantee dividends on pre-1984 business. There's a dividend acceleration penalty in the tax code that could be rather severe. You lose some fresh start that you received many years ago. That statute never closes until that business is gone. The second issue is that the IRS could conceivably take a position that you cannot single premium it, that is, you could not find the liability all at once, while future premiums are continuing to be paid; you might have to fund it out of higher future net premiums. It's a possible position they could take.

**MR. PRESSLEY:** We'll move on. We have a company that is performing cash-flow testing for a block of variable or equity-indexed annuities, and they're using economic scenarios that involve expected equity returns. At the same time they're performing cash-flow testing on a block of fixed

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products, fixed annuities perhaps, utilizing interest rate scenarios. Can they aggregate the cash-flow testing results for these two blocks of policies? In the question, they mention two potential arguments that could be made to support aggregation. One is establishing a correlation between the equity returns and the interest rate movements. They're asking if that would satisfy the Aggregation Test 2(a) in the Actuarial Opinion and Memorandum Regulation.

Alternatively, they're asking if they could make the argument that the two blocks are subject to mutually independent risk and that would, therefore, satisfy the Aggregation Test 2(b) criteria. Or is aggregation just not an option for these blocks of business?

**MR. DOLL:** The ideal situation would be if the interest scenarios and the equity scenarios were developed to be consistent with each other (how ever that might be defined). I think there are more and more papers coming out on how to include equity scenarios in addition to interest scenarios in scenario generators. In fact, since one of their blocks was equity-indexed products, I would expect that they must have interest scenarios in addition to the equity scenarios in the same block of business.

Let's put that aside and assume that they were just testing a set of variable annuities using equity scenarios and then a set of fixed annuities using interest scenarios, and those scenarios weren't developed consistently. Then, I think you would have a problem with trying to aggregate those reserves. If both sets were adequate by themselves, then there's no problem. If one set has a deficiency that is small or relative to the other block, then you may be able to do some hand waving and make it go away. But if one block has a very large deficiency, and the other one has a very large sufficiency, then I think the actual valuation actuary is just going to have to do the extra work to see what kind of correlation there is among those scenarios to see whether those really offset.

**MS. DONNA R. CLAIRE:** The real answer to this question is there will be an actuarial guideline on this issue written by Larry Gorski of the Illinois Insurance Department that will be released very soon. One reason you would not want to combine it is if you want to meet the so-called hedges



required criteria. In order to come up with the reserving methodology (other than what we call CARVM with updated market values, or UMV; which is the Larry Gorski method of reserving), you have to prove that the equity-indexed products meet certain criteria by themselves. Therefore, you would not be able to combine them. Also, the last session I was at was a session Dave Becker was doing on interest rate models, and he was saying that interest rates and Standard and Poor's (S&P) returns are not really correlated.

**MR. MATEJA:** When we talked about this, we recognized the possibility that at an individual policyholder level you might have part of the policy in a general account, and part in a variable account; I think conceptually it's okay to offset at a policyholder level if it's possible to do that in your analysis. But if you did one block and a separate block and then were looking to combine them, it seems problematic to me.

**MR. PRESSLEY:** The last presubmitted question concerns calculating CRVM reserves for a variable universal life (VUL) product. We have a product that has a guaranteed minimum 5% accumulation rate in the fixed account. The company currently calculates the reserves for each of the policies two different times -- once assuming that everything's in the fixed account, and the second time assuming that everything's in the variable account. The reserve for a given policy is the weighted average of those two reserves where the weight is the relative amount of fund value in either account. They have two questions. First, are other companies doing something similar to this for valuation purposes? Second, what is the appropriate accumulation rate to assume in applying the separate account side of the product?

**MR. DOLL:** There's a variety of methods being used by companies right now on VUL. To some extent, I think they all have differing degrees of reasonableness. They all make some sense. If I were a company developing a brand new method now, I'd be inclined to look at Actuarial Guideline MMM for variable annuities. There may be some guideline coming down the road that will address VUL, and it'll more likely be similar to Guideline MMM than be different from it.

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We discussed the fixed account with the 5% guaranteed interest rate and 4.5% valuation rate. We think it's pretty clear that if you have sufficiencies within a policy, it's okay (that is, if you have a small portion of the fund in the fixed account so that you have credits on the separate account that offset the deficiencies in the general account). If you have two different policies, one completely in a separate account, one completely in the fixed account, then we think that the offset wouldn't work. Statutory accounting wouldn't let you do that offset. So that, I think, would be some problem. We would suggest that it'd be a good idea to reduce the guaranteed interest rate on that fixed account.

**MR. PRESSLEY:** That's the end of the presubmitted questions. We'll take questions from the floor.

**MR. PETER P. WU:** I have a question on mergers and acquisitions. When you acquire a block of business, most of the time you look at the major plans, like the basic policies or paid-up additions (PUAs) and so forth. Oftentimes you don't have enough time to look at the other small pieces. How do you address that? In other words, after you get the business, you sometimes find that there are surprises. You have to be able to take care of those other things. After you obtained this block of business, you certainly did a lot of due diligence work, and you ran a lot of scenarios. I think the biggest concern is that in the future, the block of business might lapse, and the lapse could be much higher than you expected. How do you address that?

**MR. MATEJA:** There's an old adage, let the buyer beware. I think this applies in merger and acquisition type work. Once you buy it, you own it. To the extent that you want to comply with the law, you deal with the surprises. I assume that there might be valuation implications that were not completely understood at the time of sale, and you wind up establishing a larger reserve than you thought so that there's a somewhat greater investment. I think that's reality. There is inconsistency within the industry as to how certain things are valued. When they come into another company setting where they have a somewhat different methodology or valuation approach and they take the other block and put it in their own valuation process, they get a different answer. I think the way you

do this is through the due diligence route. You just need to look for the surprises. If you can identify them before the fact, that becomes one of the criteria for varying the price of the deal. If it's after the fact, then I think you just do what you have to do.

**MR. DOLL:** I think the persistency risk is one that you just have to judge before you buy the block of business. It could be business that has been sold by a distribution system that's likely to turn on you after you buy the business and replace it all. That's something you have to be wary of.

I have just another comment on the due diligence. It's good to have some sort of checklist of things to look for on due diligence so you don't overlook something. Your advisors hopefully have that kind of list and are adding to it over time.

**MR. MATEJA:** We've done a fair amount of this work, and I can tell you that the requirements that we have is to get copies of all of the contracts on which we're rendering an opinion. We also want to see sales materials to look for noncontractual guarantees that would impact the liability. It's a very time-consuming process to go through, but it's one of the ways that you eliminate the surprises.

**MR. ROBBINS:** I would say that is very true, especially with respect to possible Section 7702 issues pertaining to life contracts and what we call Section 72(s) issues with respect to annuity contract language. You definitely want to get that checked by people who know what they're doing in that area. Did you want to talk about purchase accounting after the fact? I'll just talk a little bit about that. As those who are involved in purchase accounting are aware, there was an Emerging Issues Task Force (EITF) number 92-9, that came out in 1992. The EITF basically says that once you have acquired the business and set up your value of business acquired, you treat it like a DAC. That's really the bottom line. So on *FAS 97* type business, you adjust your gross profit stream when you know these things, such as when you know the worst lapse rate.

With respect to *FAS 60* business, it's a little trickier because your reserves are effectively locked in. The one thing that happens, though, if you find this out fairly shortly after purchase, is you can continue to adjust your assumptions until you're audited. There's a little slack there. You had a question on the nonmodel business, and I guess the only thing I could say there is do the best you can.

**MR. BRYN T. DOUDS:** I was wondering about *FAS 120* products and *FAS 60* products. Would companies tend to set up completely separate accounts for these? With *FAS 60* products, where your assumptions are locked in, you never have to keep track of your maintenance expenses. For the *FAS 120* products, you do need to keep track of your maintenance expenses. Is this just an allocation issue or do you really keep the expenses completely separate?

**MR. ROBBINS:** In terms of separate accounts in the chart of accounts, I haven't seen people actually separate that way. There's usual notional separation by taking a total grid by line and function, balancing down to an Exhibit 5 type of thing for the company (Exhibit 5 and perhaps some of Exhibit 6), without actually setting up a different chart-of-accounts item.

However, they are (according to *FAS 97* and, to some extent, *FAS 60*) different lines of business, in which case you really have to do loss recognition and recoverability separately. The loss recognition section of *FAS 60* talks about a line of business being defined as method of acquisition, method of servicing, and measurement of profits. Clearly, the measurement of profits is different between *FAS 60* and *FAS 97*. When you look at *FAS 97* it talks about an accumulating annuity, in the accumulation period, being under one type of FASB pronouncement. Then, when it annuitizes into a life annuity, it's considered a new contract, or a new line of business. So, you put all that together, and you really have to keep these things apart for certain purposes.

**FROM THE FLOOR:** I have a question about universal life Commissioners' Reserve Valuation Method (CRVM) reserves. On the valuation date when the fund value exceeds the guaranteed maturity fund (GMF), and you have to re-project your GMF, should you take into account the

guideline premium limitation (assuming it's a guideline premium product) when you look at the guaranteed maturity premium (GMP) that you use to re-project the GMF? I'll give a quick example to make my question a little clearer. If on July 1, for instance, you paid a guideline single premium, your fund value is going to exceed your GMF on December 31. Do you immediately start piling on GMPs when you reproject your GMF?

**MR. DOLL:** I would say, yes, you would. The statutory valuation doesn't care about the tax ramifications of the mechanics of calculating the reserves. Realism would say, no, those other premiums won't come in, but the methodology defined in the regulation would say, yes, you do.

**FROM THE FLOOR:** I agree. That's why I was asking. Also, my second question is, does it make any sense to have a reserve that exceeds fund value?

**MR. ROBBINS:** For example, a 5% interest rate guarantee and a 4% statutory valuation rate, just to pick a hypothetical example?

**FROM THE FLOOR:** Well, then that would be an alternative minimum reserve, right? So, that would or could exceed fund value?

**MR. ROBBINS:** Well, in that case, the base reserve that exceeds the fund value.

**FROM THE FLOOR:** I'm talking about a basic reserve.

**MR. ROBBINS:** That can happen. Let me give you an example. For 1987 issues, the valuation interest rate was 5.5%. Some contracts had guarantees at 5%. They had 1958 CSO guarantees at that time and a 1980 CSO tax valuation. When you have a very heavily funded flexible universal life policy with those characteristics, you get a universal life model regulation reserve above the fund value.

**FROM THE FLOOR:** I saw the same thing on last survivor universal life. I saw that, if you heavily funded a last survivor UL contract, the scale of the cost-of-insurance rates would allow the fund value to get to a point where it would bump up the corridors much quicker than you could actually do in the contract due to the guideline premium limitation. What would end up happening is a reserve that exceeded fund value for scenarios where you paid a very high premium, like a seven pay, for instance. It rattled my confidence in pricing because you do a bunch of different scenarios, and the ones that you expected (which would be the big premiums on last survivor) caused the reserve to go over the fund value. In those scenarios, the pricing was much worse than other scenarios. That's why I asked the question.

**MR. DOLL:** Was this product assessing mortality charges based on net amount at risk?

**FROM THE FLOOR:** Yes.

**MR. DOLL:** Then that doesn't sound right to me. If you are accumulating forward and discounting back at the same valuation rate, and your actual mortality charges are the same as your valuation mortality charges. That shouldn't be happening. If it is happening, it must have something to do with your monthly equivalent mortality charge not being exactly equivalent to the valuation rate or something like that.

**FROM THE FLOOR:** I wouldn't be asking the question if the mechanics really didn't pump out the number. I really, really checked it. I was just curious.

**MR. PRESSLEY:** Are there any other questions? If not, I asked the panelists to develop some questions of their own based upon what they run into in their consulting practices, and we can try those one at a time.

**MR. MATEJA:** We do a lot of modeling of lines of business and companies, and one of the more common situations that we encounter are what I would call assets of doubtful value -- maybe some

commercial mortgages or Schedule BA assets. How do you model those? The short answer is with some difficulty because they don't conform to any of the kind of algorithms that are in the software product that we offer or that we use. It goes beyond our expertise to look at individual assets and understand what they're going to yield over a range of experience assumptions. What we often suggest is that they get investment expertise in to assess these assets and give us a downside, an optimum, and an upside expectation from these assets.

Then we layer them in as fixed cash flows in a deterministic test so that instead of producing just a single array of seven scenarios for your cash-flow testing, we would produce, in effect, a series of 21 tests with the three ranges of values for these assets of doubtful value. When you get realistic about what some of these assets might produce, you're confronted with what I would call some real difficult judgments about what you want to say about the results of your cash-flow testing. Inevitably, the downside on some of these assets is significant. What you might have in an optimum scenario, you're not going to have in the downside scenario. Assessing probabilities of this and likelihoods becomes very, very difficult. My approach in all of this has been to disclose and describe what you have done. If others have had experience in this area, we'd love to hear from you just to fill the record with some options.

**MR. W. BLAINE SHEPHERD:** I'm not going to answer your question about experience in this area. In listening to your discussion, I was wondering how you would be handling the reliance issue with respect to the investment expertise that has been acquired to make these determinations.

**MR. MATEJA:** We would just disclose, and since it's not our work product, we would be relying on that. We would ask for a statement from the firm or whoever it was that provided the range of values that were given. This is the only practical approach, I think, that you can use to deal with it. What we're looking for is some realistic assessment of the cash flows associated with these assets. Since it requires, in the case of the mortgage loan, knowledge of a geographic area and expectations over some period of time in terms of likely rents, coverage, and ability to lease it up, it goes far

beyond what I think most valuation actuaries are capable of. I don't know. Doug, have you encountered stuff like that?

**MR. DOLL:** I have, on occasion. First of all, let me note that the Actuarial Standard of Practice for cash-flow testing does require you to ascertain the reasonableness of the qualifications of the persons that you're relying on and the results themselves.

I had a situation where somebody wanted me to use some commercial mortgage cash-flow projections, and the results were so ridiculous that I was able to question the reasonableness of the person doing it and was able to get somebody I felt more qualified to come up with projections. He had given me properties that were, say, 20% leased, and he was assuming that 12 months later they would be 100% leased. That didn't seem right to me.

**MR. SHEPHERD:** From my perspective, the further out on the fringe (if I could use that characterization), that some of the assets get, the more scrutiny is needed. I'm sure that situation is scrutinized much more carefully when the regulators are looking at the opinions and the reliance and whether it all fits together.

**MR. MATEJA:** I think we're basically recognizing the limits of our own expertise in approaching it in this manner. I can tell you that it's problematic when you look at the scheduled cash flows for the three scenarios I described. There is potential for material cash-flow variations. You really have the kind of risk that you're supposed to be investigating here. It's not interest sensitive, and it's not lapse supported. It really gets back to what is expected performance of this class of asset. It's certainly economic scenario dependent. If you have good times returning to an area, then I think you see the expectation for these properties generating more cash than you would otherwise expect. That becomes part of your assumption set in the way we've handled it.



**MR. SELIG EHRLICH:** What authoritative literature would you point me to as to how to do CARVM for variable annuities, specifically regarding the margins that can be incorporated into the process, the categories of margins, and whether or not maintenance expenses are separated in or out?

**MR. ROBBINS:** Are you referring to Guideline MMM, or do you want to know about something that has already been adopted?

**FROM THE FLOOR:** That's what authoritative meant -- something that has been adopted.

**MR. DOLL:** I can refer back to the variable annuity practice note which gives a couple of references. It might not satisfy your definition of authoritative, though.

**MR. ROBBINS:** There was a proposed Guideline VVV years ago that attempted to do that. It got squashed, of course. There's very little out there that's official at the moment. It does come under CARVM, however. That's all we can say.

**MR. DOLL:** Somebody might even argue with you on that.

**MR. ROBBINS:** Well, you have Guideline 13 that apparently puts it under CARVM. I believe it's not an exclusion under the scope of CARVM in the Standard Valuation Law.

Maybe this might shed a little light on it, even though it's not answering your question exactly. There's a problem with combination contracts. If your CARVM result is very different, and you have a reasonably unrestricted right-of-transfer between the separate and general accounts, and if you have major movement between one and the other, you can have major shifts in your reserve levels.

**FROM THE FLOOR:** I have a question for the panel. There's often opportunities to go back and restate your tax return for open years. You may want to try to apply a guideline in prior years if your returns are open. You may have discovered something new or there may have been an inventory

problem. But if you go back and redo tax reserves for open years, do you have a feel for what the cap should be? Would you redo your statutory reserves given the new circumstances or are you bound to stay with the cap as was originally printed in your blue blank?

**MR. ROBBINS:** You're bound to stay with the original statutory cap.

We had a case a while ago. This had to do with the adoption of *FAS 120* by a mutual company. They had a rather large non-par set of lines of business (group pension, group, accident and health) which the company considered to be an investment of the mutual policyholders. If you took a look at the sales illustrations (the rate book, and so on) you would see that it showed glorious returns, if the policyholder stayed with the company for many years, in the form of termination dividends. So much so, that, on a GAAP basis, the policy, based on its own earnings was unrecoverable. The situation is problematic. It makes a lot of sense that the owners of the company, the mutual policyholders, have the rights to those earnings depending on the philosophy of the company. You have the New York Mutual Life company limitation, which is approximately that surplus cannot exceed liabilities. You must give this excess earnings to the owners of the company, who happen to be mutual policyholders. Some of the solutions that have been put forth to this problem of unrecoverability is that, the mutual dividend is really part customer dividend and part owner dividend. The owner dividend should perhaps not be included in GAAP recoverability testing. It's equivalent to the shareholder dividend in a stock company that issues par business, for example. Other thoughts have been, for example, simply taking those non-par lines and increasing your actual returns, in the par recoverability testing considering a true invested asset, in other words, and folding it into your GAAPing that way. Does anybody have any thoughts about that issue?

**MR. WU:** We're taking the second approach. We're using the non-par lines, gains, and increasing the yield on the par business. We do GAAP that way.

**FROM THE FLOOR:** You stated that, if a state adopted Guideline XXX, it would be extraterritorial, meaning it would apply to all of your business nationwide. At the beginning of the

session we had a show of hands of a reasonable number of people that filed separate statutory statements. There seems to me a little conflict there.

**MR. DOLL:** What I meant was, in the statement that you filed in that one state, you would have to recalculate all states' issues on Guideline XXX, but you would only file it in that one state.

**MR. DAVIS:** How about the actuarial opinion where you state that it meets the minimum conditions for the state it's filed in?

**MR. DOLL:** That would be in that one state that adopted Guideline XXX. You would have to revalue all your business to XXX so that all your business would meet the requirements of the state in which it's filed.

**MR. PETER G. HENDEE:** I'd appreciate it if any of you could shed some light on the changes to the definition of advance premium which appeared in the annual statement instructions about three years ago. It said advance premium is no longer just premiums paid in advance. They have to be paid beyond the end of the policy year before the advance premiums. A premium paid after year-end but before the next policy anniversary is not an advance premium, and the same logic evidently is part of XXX which, if you're using mid-terminal reserves, you're required to hold as a minimum the tabular cost to the end of the modal period (which is the normal practice for mid-terminal reserves) or to the pay-to-date, if later, but not beyond the end of the policy year. I'm just having trouble understanding the logic, and it certainly doesn't fit well with traditional methods that I'm using.

**MR. PRESSLEY:** You just described the calculation of advance premiums, i.e., modal premiums paid in advance of their due date but prior to the end of the current policy year. It's my understanding that such premiums have never been reported as an advance premium but have been deducted from the deferred premiums. That's not a change in practice from what I've done.

**MR. ROBERT J. POLILLI:** I ran into that, too. We were tracking two different groups of regulators and actuaries to figure out what was going on because 10-15 years ago the standard was, if it was an advance premium and before the valuation date, it was not a deferred premium. Then it seemed some of the actuaries and regulators were going a different way, and that seemed to end up requiring that it be put in about three years ago. Many people had a lot of different opinions about the way that it was, but, regardless, some people were surprised to see it at the annual statement. It's my most favorite arcane area.

**MR. ROBBINS:** As I recall it, that's exactly how the codification requirements are being written up. You deduct advance premiums from deferreds, and you take the consequent net deferreds.

**MR. PRESSLEY:** Doug, do you want to ask one of your questions?

**MR. DOLL:** I had a question for the audience concerning cash-flow testing and reinvestment assumptions. I want to know if people generally use (for their spreads to Treasuries) the current environment and assume that it's level. Or do you grade it to some historical average basis? I have a related question. Are people taking today's low default rates and grading them up to some historical average or are they just using an average default cost? Does anybody care to comment? I think it's mixed. I'm going to do a show of hands so you can be anonymous. On the reinvestment assumptions, how many people, when they do the projections, use the current investment environment and project that to stay the same? How many people grade up to historical average? Most people use it the same. On defaults, how many people are using lower defaults in the early years of the projections? Nobody.

There was a session at this symposium (Session 3) that I did not go to, but it was one I was interested in. It was one that Ed was speaking on how you determine when to increase reserves. How many scenarios do you have to pass? I know that's always been a topic of great interest in past symposia, and I was wondering if Ed could briefly summarize what the speakers said.

**MR. ROBBINS:** Steve Sedlak was the moderator, and he had a chart that showed comfort level versus confidence level. He actually showed what that really means, and he was settling around the 80% level in terms of percentage of scenarios passed. He also distinguished between comfort level and confidence level with confidence level having the technical statistical meaning and comfort level meaning percentage of scenarios passed. That's the level he was thinking of.

**MR. DOLL:** Along those lines, Guideline MMM says that, when they set the reserves for the guaranteed minimum death benefit (GMDB), they indicated that they were setting reserves to a certain level. That particular level was 83%.

**MR. ROBBINS:** That's interesting. The other issue that I thought might be interesting that came out of that session was the issue of when you actually have two sets of scenarios, with one set of scenarios showing that you've passed 90% of the scenarios with an awful lot of them that were very close to failure, and another set where you passed 90% of the scenarios with very few that were very close to failure. There should be some judgment involved in those two sets of results. What I've seen is, if people fail one or two of the required seven scenarios, they will tend to do stochastic scenarios, just to see what's really going on.

**MR. DOLL:** I think Steve's right on target with his comfort level term because when you say you do 100 scenarios, you're talking about interest scenarios. You haven't taken into account variability in all the other assumptions.

If you run 100 interest scenarios and pass a certain percentage, you still have to take into account the sensitivity tests you did on the other important assumptions. Just how comfortable you are with the assumptions in that base set of 100 scenarios.

**MR. MATEJA:** I had the pleasure to serve on the NAIC task force that produced the last amendments to the valuation law that incorporated the equivalent of what I think of as Regulation 126 when that was adopted. Everyone at that time understood that the deterministic tests were stress

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tests. These were not viewed as the ultimate valuation of reserve adequacy. If you got something anomalous out of that, it's going to compel the valuation actuary to do more. How much more really isn't clear, but given the kind of advances in both computer technology and the modeling support that you have for that, I think when you encounter those situations, you have to start looking at more comprehensive kinds of analyses. You ultimately find a safe harbor in disclosure. I have found instances where, if you fail one test, you can do some stochastic tests, and you might still get a high level of confidence in maturing your obligation. It's worthwhile to do.

**MR. DOLL:** I had an opportunity a year or two ago to go back and read those reports underlying the valuation methodology in the 1980 amendments. It's amazing how far we've come since then in our ability to model. Sometimes we think that actuaries aren't too good at modeling the asset/liability risk. If you go back and look at what was done 15 years ago, we really have come a long, long way.