

**1993 VALUATION ACTUARY  
SYMPOSIUM PROCEEDINGS**

**SESSION 13**

**Ask the "Experts"**

**Robert W. Stein**

**Frank S. Irish**

**Paul F. Kolkman**



## **ASK THE "EXPERTS"**

**MR. ROBERT W. STEIN:** We have received many questions and have done our best to read through them. I'm with Ernst & Young and an actuary and CPA. My background is in the valuation and financial reporting area, with heavy experience on the GAAP side. Paul Kolkman is here from IDS, and Frank Irish from John Hancock. Both will contribute to both the GAAP and statutory reporting questions.

The first question that was raised is a good one to start with. It's more of a poll. There are a number of people who are looking for basic information on the process or mechanics of the work of the valuation actuary. There's an interest in how many individuals have been asked to support their opinions with a memorandum, and how many companies have had state insurance departments pursue information in the memorandum with follow-up questions. With a show of hands, we'll estimate how many of the 250 people here have encountered some of these issues.

The first question relates to the process of filing information with the department. How many have actually sent the complete memorandums as opposed to the opinion to insurance departments other than California? Looks like the overwhelming majority have sent the memorandums in. How many of you who have done so have had serious follow-up questions with the insurance departments? Relatively few. Looks like less than 10.

**MR. FRANK S. IRISH:** One of the questions was whether they sent the memorandums to the state of domicile. That would be useful to know.

**MR. STEIN:** For those of you who sent memorandums, how many sent them to states other than the state of domicile? I would say, virtually everyone of you have sent them to the state of domicile and half to states other than the state of domicile.

**MR. IRISH:** Well, you wouldn't have sent it to the state of domicile if it hasn't passed the Standard Valuation Law.

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**MR. STEIN:** That's right. And relatively few have had follow-up questions. That fact suggests that in the early stages, departments perhaps are not carefully scrutinizing the information and trying to follow up on it.

There is a question on the basic process used in the calculations of the test values in determining whether one passes or fails the analyses being completed. This question concerns the use of statutory surplus as the indicator or the market value of that surplus. I know this has been an ongoing question. How many companies that have filed these valuation actuary reports have used book value of statutory surplus? I would guess that's about a third. Somewhat under half. And how many have used market value surplus? Looks like about the same amount. It's a relatively even mix. We won't ask you to defend what you did.

The related question is, at what points in time have the values been examined? The choices the individual is seeking to compare are individual points in time at the end of 10 years, at the end of 20 years, or the more continuous review of results, with the expectation that one would pass at essentially all points in time. How many have tended to use discreet points in time, such as 10 years, 20 years, 30 years for the analysis? And how many have looked at it on a continuous basis, expecting to pass essentially all the time? I would judge that somewhat more have used the continuous evaluation as opposed to the discreet points in time.

The next question will be addressed by Frank Irish. It is a question concerning whether insurance companies have used the information to increase reserves. Frank? Any comments?

**MR. IRISH:** Now might be a good time to take a poll on that one. How many companies showed additional amounts in their actuarial opinion?

**MR. STEIN:** Anybody increase reserves as a result of that? About six people.

**MR. IRISH:** Very few. That was what I had already heard. We did and I think in our case, as in most other cases, it was not a large amount relative to the total reserves of the company.

And, how was it determined? It was determined on, in our case, projected book value surplus and an interim point. And, one of the situations was that some of the formula changes being considered in individual annuity area are directed at. Where you have uneven surrender charges, that can create some deficits at certain points. And we did set up additional reserves to cover those.

**MR. STEIN:** Paul, any thoughts?

**MR. PAUL F. KOLKMAN:** The only thing I would add is, I'm not aware of any situation where a state has come back and asked a company to raise reserves. That's a little more embarrassing situation for someone to disclose, but let's put it this way, is anybody aware of that situation arising? [No one responded] That was my perception.

**MR. STEIN:** The next question deals with a particular regulation requirement of the state of Colorado. Paul, you've indicated some experience with that.

**MR. KOLKMAN:** The question is Colorado has a notice dated December 1987, which states that only one interest rate per policy can be used in reserve computations for annuities. Is this a law or regulation that is to be complied with in order to sign the new paragraph three, or is it a generally distributed interpretation, as indicated in the valuation manual, and therefore, it only needs to be mentioned in the supporting memorandum if it's not complied with?

Actuarial Standard of Practice No. 22 intended "laws and regulations" to mean any action by a state or an insurance department that went through a due process. There is a process for passing a law; normally both houses of the legislature adopt it and the governor signs it. And there's a process for adopting regulations in each state which involves an exposure period: sometimes there is a public hearing and then formal adoption of the regulation. "Generally distributed interpretations" were intended to be sort of less authoritative guidance in the sense that they have not been adopted through a due process procedure. Now I'm not certain what a "notice" is in Colorado, but I strongly suspect that a notice in Colorado has not gone through

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some form of due process. And then I would feel that would fall in the category of a generally distributed interpretation, so that to the extent that you've been reasonably diligent in reading the valuation manual and looking through the laws, or looking through the regulations and letters you get from the various states, and you know of this, you should comply with it. If you don't comply with it, it would be something you would need to disclose under the terms of Section 6 of the standard. But the distinction between law and regulation and nonlaw and nonregulation should be pretty clear, and that's the due process piece.

**MR. STEIN:** The next question relates to stockholder dividend assumptions. And Paul, you again indicated some experience.

**MR. KOLKMAN:** The question is, what is an appropriate stockholder dividend assumption in later years of a projection where reserves are way down and most of the business is lapsed? The retained surplus might be quite high. Is it proper or acceptable to assume that stockholder dividends are paid out so the retained surplus gets no higher than some percentage of reserves?

Practice is going to vary, but I think it's essential that you have some kind of a shareholder dividend assumption in your projections. I can tell you what we do. We have an internal target surplus formula. We start with assets equal to reserves, and go forward in time. We accumulate surplus up to our target levels for that block of business, and then any time we have earnings that we generate more surplus than that, we presume it's dividended out. If we, in some future period, dip below that, we stop the modeled distribution of dividends.

It would be the way that we would model the company if it were an open block with new sales coming in. We would try to distribute surplus in excess of target levels. For a closed block, there is more of a question as to what you're really doing, but I think to accumulate huge piles of surplus really isn't realistic. In fact, we would be paying those out along the way, it's just a matter of how. Practice will vary, however. People will adopt a rule that they think is reasonable for their company. Are there any others who have an approach that may be of interest?

**FROM THE FLOOR:** How would your answer vary if there were different lines of business, one of which generated substantial amounts of surplus and another of which or others of which did not?

**MR. KOLKMAN:** I would try, to the extent possible, to apply the test in aggregate. So that, if you have one line generating surpluses and one line using them up, nothing would be going out of the company. Sometimes the way you do the models makes that a little difficult, but I think theoretically the test I just described, should be done in aggregate.

**MR. STEIN:** The next question concerns various assumptions with respect to some annuity contracts, and Frank has some thoughts on that.

**MR. IRISH:** Let me try to state the question. Does it seem appropriate to assume that lapse rates will double under the following circumstances? These are annuity policies, like single premium deferred annuities (SPDAs), and it is conservatively assumed that under the level scenario, the ultimate lapse rates after the surrender charges have worn off, will be in the range of 10% - 15%. But in the up scenarios, we see rising lapse rates and lower prepayments from mortgage-based securities. Hence, cash flow becomes negative in the up scenarios. The crediting strategy is portfolio rate minus a spread. So the company will be unable to raise crediting rates in the up scenarios, because of the negative cash flow.

In answering this question, one must presume that the actuary has used one of the standard lapse formulas. In the New York formula, for example, lapse sensitivity is two times the square of the difference between market rates and credited rates. In this case, the difference could get as large as 5%, so the New York formula could produce a rise of 50 points in the lapse rate, which is an extraordinary amount.

In my own work, I often use a formula of four times the difference between new-money rate and credited rate. That is a linear formula rather than a square, but a larger factor. This would

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produce a rise of 20 points in these circumstances, which is still nearly a tripling of the lapse rates. I think this kind of lapse assumption on interest-sensitive products is warranted.

Customers are not going to sit still for credited rates that are so dramatically uncompetitive, and they're going to take their money elsewhere. It's a situation similar to the savings banks of the 1970s when they tried to manage interest-sensitive accounts by investing in mortgages. It's just the same thing. Explosive increases in lapse rates are the evident result. Thus, I feel this company is exposed to loss, and this should be taken into account in reserving. Also, I feel a couple of other comments can be made.

First of all, it may not be reasonable to assume that a company would ignore the new-money rate under these circumstances. I think it's bad modeling to assume this. As a suggestion, why not assume that this company will not let credited rates fall below 70% of the new-money rate? That is an easy modeling assumption change to make. It means that the company will lose some of its spread in the up scenarios, but will not suffer explosive lapse rates.

Such an assumption is often used. It is easy to program and is probably more realistic in terms of how companies actually behave. Also, this company obviously has to talk to its investment people. It seems on the face of it, that the investment policy of this company is not appropriate. Shorter-duration investments would lose a little in current yield, but would greatly reduce the risk that this company is exposing itself to. The use of cash-flow-testing techniques, to help formulate investment policy, is something we all should do more of.

**MR. KOLKMAN:** I have just a couple of further comments on the surrender assumption. I think today the surrender assumption for annuities is a very difficult assumption for most people to come up with, that is an assumption that they're really comfortable with. My company carried, what was at the time in 1979, 1980, and 1981, a significant block of annuity business through the interest rate spike when short-term rates hit 20% and long-term investment grade bonds were about 16.5%. And we saw annualized surrender rates in some months approaching 40 and 45% on a block of business with a very strong relationship to the company. If it had

been marketed, in other ways, I think the rates would have been much higher. Since that time, there hasn't really been a good period of time in which to study what annuity surrender experience is going to be when interest rates rise. Some people use linear formulas, and some people use exponential formulas. Some people just, I guess, can't imagine rates going up as high as other people imagine they can go.

I would encourage people to test, where they have an assumption that they lack confidence in, or have a lot of questions about. The best thing to do is to test several different versions of the assumption. Don't always do that at year-end. You might do that earlier in the year, and then do your final testing with one. It is a key assumption, and you'll be much better off if you know what each version of the assumption does for your company's results.

**MR. STEIN:** So much for the questions we've had some time to think about. Now, we would like to move into the questions that we've received at this session. I'll do my best to capsule the question and seek input from everyone.

The first question concerns the implications of the risk-based capital requirements on the testing that's being performed with respect to reserves. Recognizing that the valuation actuary is dealing with reserve liabilities, as opposed to the total ability of the company to remain viable, the question would be, are you considering future risk-based capital relationships in the forecast with respect to the assumed termination activity and policyholder behavior under the scenarios being projected? This means, for example, if you project a serious and adverse condition prospectively, that could lead to deterioration of the overall relationship between surplus and the risk-based capital requirement. Are you taking into account possible accelerated adverse policyholder behavior as a result of either regulatory action with respect to risk-based capital limits or publicity related to rating agency activity related to a weakened corporate RBC relationship?

I would be very interested in any thoughts that you may have and certainly would like to get comments from Frank and from Paul. My own view is that those kinds of conditions should be

anticipated, should be factored into the calculations that we're doing these days for commenting on the adequacy of reserves. I think the risk-based capital standards will become increasingly focused on in the years ahead. And ignoring what happens in these adverse scenarios to the entire organization fails to consider what might be, in fact, one of the most serious factors impacting the level of policyholder termination activity. Paul and then Frank, any thoughts on that?

**MR. KOLKMAN:** The question really gets down to making your surrender formula also a function of risk-based capital level or ratings. And I agree with Bob. It should be factored in in some way. The trouble is, it's very difficult to do, because you have a closed block of business here, and your risk-based capital levels or your ratings will be a function not only of this closed block of business, but also of what's going on in the rest of the company a number of years down the road.

Perhaps one way to take care of that is to just make certain that, as interest rates go up, as lapses really start to hit in force, and as margins on business really begin to narrow, the surrender function does, in fact, have a strong upward bias.

In future generations, once new business gets factored in in some way, I think, this will be a much easier assumption to incorporate. It's just very, very difficult to do today.

**MR. IRISH:** It's so difficult that I don't think anyone really is going to do it, except in the indirect way you just mentioned. Be sure that you assume lapse rates do get very bad under adverse economic scenarios. In my company, we've done this kind of testing or made this kind of assumption in some liquidity testing we've done, which is a different matter, and is aimed at a more extreme scenario than cash-flow testing is aimed at.

**MR. STEIN:** Let's move on then to a general, nontechnical question. The question is, what do you suggest doing if you don't have much faith in the liquidation values given to you by the investment officer, upon whom you're relying? Perhaps more generally, it's a question of the

credibility of the information being utilized by the valuation actuary, whether it's in the investment area or not.

There are likely to be different views on that, but my own would be that to ignore perceived weaknesses in the quality of the information that you're relying on is a potentially serious problem. I would strongly suggest, even though we're expressing reliance on information received, that we should perform some reasonable level of review, so as to be able to spot major inconsistencies, glaring anomalies in the data. I think to take it literally on face value and use it without even a cursory review, is likely to be a mistake.

I also believe there are some proposals being considered that would require the valuation actuary to notify the insurance department if errors in the data that he's using are later identified and are not reflected in revised calculations and a resubmitted opinion, if necessary. So I think there are regulatory areas of interest in this whole issue, and I think it would behoove everyone who is doing this kind of work to perform some reasonableness review of the information on which we rely, even though we express reliance on the information. Paul?

**MR. KOLKMAN:** At the end of the day, the actuary should feel comfortable that he or she has done a good job in performing the studies and providing the opinion. The opinion is what counts, and if along the way you get data that you suspect in any way, you need to focus on the quality of the final result and not just on complying with the rules -- to me the rules come second. A good job comes first. You try to do a good job, and then once you figure out what you'd really like to do for a good job, go look at the rules and see which ones you followed and which ones you might have to tack onto the end for compliance purposes. But if you get information from someone (even if you have the ability to walk away from it, stating reliance) and you suspect it in any way, I think that in the interest of good, solid work, you should question it. You should go back to the person you obtained the data from, probe a little more, and see exactly how good it is. If you still suspect the data, you might test two sets of numbers. But when you're done with your work, you should be proud of what you've done. And that's

different from simply having complied with each of the rules and signed off on each of the disclaimers along the way.

**MR. STEIN:** The next question is with respect to dealing with the uncertainty surrounding the degree and timing of a recovery in the commercial real estate market. This is rather difficult specifically to address, but I think this gets back to this whole issue of running scenario tests. There is not necessarily a good deal of historical information on the kinds of events that we're forecasting or trying to model. In this area of commercial real estate, as far as the degree and timing of recovery, there's a tremendous amount of uncertainty. Perhaps all one can suggest is that public information be used to the extent possible. And that the actuary be comfortable that he has at least evaluated what he considers to be a reasonably broad range of possible outcomes.

Trying to nail down assumptions with any degree of certainty will be nearly impossible. And when we're doing this kind of work, what I try to do is to test sufficient alternatives so that I become comfortable that I understand the dynamics involved and the impact on the organization or on the block of business being examined. To do so, I test a reasonably wide range of possibilities. Using these tests, I can, in an intuitive way, determine that I covered a significant portion of the possible outcomes. Paul, any thoughts?

**MR. KOLKMAN:** Just one technical thought, Bob. We don't have a lot of guidance anyway, in how to do real estate and other kinds of equities. It's a very difficult problem for all of us. It seems to me that where your modeling is producing positive cash flows, so you don't have to sell the equities, until the endpoint or ten years out, it's reasonable to assume a very good level of return on the equity. You should be able to get that over a number of years. The difficult point comes if your modeling is producing negative cash flows, so you have to assume that you're going to sell some of the properties or some of the common stock or whatever it might be in the short term. Then I think very conservative assumptions would be required.

**MR. STEIN:** A question was raised regarding HMO opinions. Do the instructions for completing the opinion require the evaluation of the risks in provider agreements? Or is it sufficient to limit the opinion to incurred claim liabilities? My understanding is that for HMO opinions, you do need to evaluate provider agreements and relationships with providers as part of the opinion process.

There is a question concerning the use of alternative tests for cash-flow testing. It's an actuarial judgment question. The situation is a large company, heavily concentrated in one line of business, which is not interest sensitive. Cash-flow testing was performed in a relatively thorough and exhaustive manner in 1992 and circumstances haven't changed in 1993. The expectation would be that the results, if cash-flow testing were performed, would not be any different than in 1992. The question basically is, is the professional judgment that the situation is not any different sufficient to qualify it as an alternative test under the Academy guidelines and, therefore, be sufficient reason to avoid performing any detailed or more exhaustive cash-flow projections? If that is the case, how would the opinion be worded and how would the memorandum be worded?

My own point of view is that that would be a sufficient basis for reaching an opinion, as long as it was supported by some reasonably thorough evaluation of the conditions in 1993 compared to 1992. This presupposes adequate documentation on the nature of the assets, the nature of the liabilities, the general economic conditions, and any other factors that might generally be impacting this noninterest-sensitive line of business. It's in that review of conditions, the review of the environment, if you will, that the actuary demonstrates the situation is not materially different and thereby concludes that the test results wouldn't be different. I would be comfortable in reaching a clean opinion without having performed complete redo of the complete cash-flow analysis.

With respect to the opinion, what would you say in the opinion, and what would you say in the memorandum? I guess there might be a couple of routes to take, depending upon one's level of comfort. If you were absolutely without concern that there would be a problem, it would

seem to me that the opinion would not have to be modified from the standard wording. On the other hand, it might be worthwhile in this kind of situation, to provide a very brief sentence or two, describing the fundamental basis for reaching the conclusion and stating the basis on which detailed testing was not considered necessary. I'd probably opt for the identification of the basis for the decision to not do a complete testing, so that a reader could easily challenge that, if that was necessary. The memorandum would contain the documentation of the evaluation and comparison of the prior conditions and the current situations and would incorporate the prior detailed analysis and outline the current review and consideration of the situation compared to one year ago. Paul, and then Frank, any thoughts?

**MR. KOLKMAN:** This is an example of a large company with a single line or type of business that really isn't too interest sensitive and doesn't really benefit from annual cash-flow testing. A more general example would be a more diversified company with lines of business that fall into that category. I think in both cases, you still have to do some work. I don't think it necessarily has to be cash-flow testing, to the extent you've done that and done a good job of that in some prior year. But I think it's very important in your memorandum to reconfirm that each of the assumptions are within some range of the assumptions originally tested. The company hasn't gotten into other lines of business in a significant way; lapse experience, premium payments, investment strategy, everything is tracking the way the original studies were performed. To update, not so much the cash-flow testing, but the assumptions, would be very important in the memorandum. And then once you've done that, I think, providing the opinion is very easy.

**MR. IRISH:** I agree with all of this. One should remember that the opinion has a table in it, where you display whether you've used cash-flow testing on each block of business. This table would be an ideal place to say, "other than cash-flow testing," and that ought to do it for the opinion. But for the memorandum, you should do much more.

**MR. KOLKMAN:** It does raise an issue that, if you've done cash-flow testing a year or two ago, can you still list the business as cash-flow tested? Presuming you've done the assumption

and experience review, I would tend to think you could, perhaps with a footnote that says you're relying on a prior study. The basic opinion does come from a cash-flow test. It just happens to be a year or two or three old.

**MR. STEIN:** The next question also is one regarding the memorandum. This one tries to get at the relationship between the actuarial memorandum and the external auditor's statutory audit opinion of the company in question. The question is basically, is the statutory audit opinion to encompass the appointed actuary's memorandum? I would expand that to paraphrase it as a question as to whether the external auditor's procedures and scope of engagement with respect to auditing statutory financial statements would necessarily include review and analysis of the actuary's memorandum, more specifically, the cash-flow work. I suspect a related question is, if reserves are increased (as a handful of you had increased reserves as a result of cash-flow testing), would that need to be considered in the statutory audit opinion?

I think the answer to the final question is, yes it would. The results of these tests do impact the statutory audit opinion that auditors provide. In our work, we require a review and challenge to the work that's being completed in the cash-flow-testing area to help confirm that this statutory requirement, that is, the valuation actuary requirement, is in fact, accomplished. Frank or Paul, any thoughts on that?

**MR. IRISH:** Being on the other -- receiving -- end of this, if you want me to put it that way, we have a number of different auditors we have to deal with. Our own chosen auditors, we know and trust, and we release the actuarial memorandum to them. We just fail to trust them just quite to the ultimate point: we block out a few proprietary pieces of information that will not destroy what they see. We also give them full access to a number of people around the company, who have done cash-flow testing, and the auditors do talk to these people. This year, our state has hired another auditing firm as part of, I believe, the triennial examination, to plow the same ground essentially. These are more strangers to us. We have given them the actuarial memorandum, however, but we have asked them not to copy it or take it with them. They can sit in our offices and read it, which is a compromise we reached. And they have also spent even

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more time with the people who have done the cash-flow testing, talking to them about techniques and methods. So I agree, Bob, we do have to release this, in large degree, to various kinds of auditors.

**MR. STEIN:** Any comments from the floor? Many of the remaining questions are more technical in nature. The first one that we'll delve into is the appropriate amount of remaining reserves at the end of the projection period. When should the projection be considered terminated? Frank and Paul, any thoughts there?

**MR. IRISH:** A conservative answer would be 5% of the remaining liabilities. And I think many people are not even going that far. Paul, do you agree?

**MR. KOLKMAN:** I would agree. You should go out to where the remaining business is immaterial. The real issue is less what's required because nothing's really required in a numerical sense. The real issue is how far do you have to go to feel comfortable with your opinion? The standard says you should go far enough so that remaining business is immaterial, or if you cut off early, explain why you feel cutting off early will give you the same result or pretty much the same result as carrying it on out.

Again, at the end of the day you have to be personally comfortable with your work. If a regulator says you must do five or must do seven or must do 10, I would consider that secondary, or if the standard says you have to do 10 or 12 or 13, I would consider that as a secondary requirement. Go first and foremost to how far do you think you need to go to really form the opinion, and then look at the underlying numerical requirements that someone else may be imposing.

**MR. STEIN:** There's another question here. We'll ask for a little bit of explanation of the use of market value or book value surplus at various points of time to evaluate the results of the test. I might ask Frank and Paul to comment on why each of you used a different method. Please

comment on which method you used and what the principal reasons are for following either the book or the market value approach.

**MR. IRISH:** We used book values at interim points and market value and book value at the endpoints. I believe, this is the full way to comply with the standards of practice. I would not be as concerned if market value produced a deficit at an interim point. I don't think this is a problem. But at the endpoint, I think you really have to use market values to get a reading of how your assets and liabilities are going to run out beyond the endpoint. So, that has been our solution to the problem. Also, this is our solution to the problem of varying state requirements with different projection periods. We give them results at several interim points, and they can look at them and use their own interpretation on them. If one state wants 10 years and we're projected 20 years, we give them the 10-year point as well. As a matter of fact, we give them every quinquennial point on the book values.

**MR. KOLKMAN:** I don't actually do the work for our company and our valuation actuary, and I have had some discussions on this from time to time. I'm a strong believer in market values. I strongly believe that, if you have a block of business and if over the life of that business you can mature your obligations, and at the end of the horizon have a penny or two left, then you were successful. If on a book value basis you proved to be insolvent along the way, it may raise some issues, but at some level it's not too relevant. In fact, we do look at both. We do project out market values, and project out book values. And as I say, I would happily downplay or dismiss the book values, but, I think the focus on book or market is going to vary a lot with the individual actuary, and I think, over coming years, as a result of meetings like these, practice may move one way or the other. But I know there is divergence of practice out there today, because we see it within our own company.

**MR. STEIN:** Any other comments?

**MR. PETER P. WU:** I agree with Frank. That's the way our company has been doing it. We look at the book value at interim periods and also look at both the market value and the book

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value at the endpoint. I just want to point out that New York likes the market value approach better. We gave New York both, but did not emphasize market value, so the state asked us to point that out. The market value certainly is one way to go.

**MR. STEIN:** Thank you.

**MR. ALBERT JOSEPH ZLOGAR:** I just had a question on the market values that you're talking about. I suspect that it's probably market value of assets less some liability measure. I don't think we've come to a straight agreement on what the market value of liabilities is, both for this issue and FAS 107. So I just have a question of what you're using for the market value of the liability side.

**MR. KOLKMAN:** Right, the market value of assets is pretty clean. A market value for liabilities is less clean. You can do those. We don't. We actually just use cash-surrender values. So actually our test isn't a market value test, it is just marking assets to market and not liabilities. I would like to see liabilities mark to market in the test. I think it's doable, but difficult.

**MR. ZLOGAR:** You use cash values?

**MR. IRISH:** The trouble is that a lot of these long liabilities are annuities in payment, that don't have a cash value and there you have to do something. I think there was a question deep in the pile that is on this point. But since it's asked from the floor, let me try to answer it. The question went to two points. When you do market valuation of liabilities (and we do; we feel we have to at the endpoint), what quality rating do you assume for your discount rate? And what duration do you assume for your discount rate? And we assume a higher quality rating for the discount rate, for discounting liabilities than for discounting assets, because we feel that's basically the way we operate. In other words, we have a higher rating from the rating agencies than our assets do, so to speak. And, we use a duration that is appropriate to the remaining duration of the liabilities.

**MR. STEIN:** I would certainly agree. For this purpose, I would try to use something other than the cash value as a better indication of the liability value. There is no doubt that there's a tremendous variety of liability valuation methods used for the FAS 107 disclosures. In our work in 1992 we probably saw a dozen or more different variations on the theme as to what the market value of liabilities was. And it's unlikely in the near term that that wide variety of practice will narrow substantially.

There are a number of questions regarding somewhat similar issues. One relates to the treatment of ancillary benefits in the cash-flow-testing process. I might ask for an initial show of hands. How many include in the testing, however broad, the effects of substandard extras, waiver of premium, accidental death benefits, or other ancillary coverages? Relatively few. Looks like less than 10 hands, I would say. Presumably, everyone else concludes that the impact of the miscellaneous benefit provisions, on the one hand, are not material or, on the other hand, would be a favorable impact. I would add that it's likely that would be the case and that the normal approach would probably pick up any costs associated with those benefits in the projections of the base policies. So one might argue that there's a hint of conservatism.

This next question is a process question and relates to the ability to use information from earlier periods, whether that data should be adjusted, or updated. I think it relates to rolling forward earlier information that might have been obtained from investment professionals or others at June or as of September and rolling it forward to the end of the year and using it. I personally don't have a great deal of problem with that. I think that in these kinds of analyses, whether all of the work is done at an interim date or whether the analyses are done at year-end, with some roll forward of other information is satisfactory from my point of view. As long as, if you're using an interim date, changes in conditions following that date to the end of the year are considered to make sure that there haven't been substantial changes in the environment. On the other hand, if information is rolled forward in an approximate way, some reasonableness review should be performed to make sure that the adjustments are not materially distorting the results that you would have obtained if accurate information were used. Paul, Frank, any comments?

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**MR. IRISH:** Yes, I do have a comment. Actuarial standard of practice No. 22 gives September 30 as an example of an acceptable date for early data. Like Bob, I have no great reservations about using June 30 data. But I think many of the regulators do. I've heard from at least two regulators that they would prefer to see nothing earlier than September 30. So I think that's going to become a de facto earliest date. And, of course, I second Bob's caution about interim changes in experience, or new sales for that matter, that could affect the block of business between September 30 and the end of the year. At the same time, I wholeheartedly support the idea of using early data, because you can't use December 31 data, and have enough time to do your work.

**MR. STEIN:** I certainly agree with that.

**MR. KOLKMAN:** I would agree with the comments. The regulators who are concerned about using data prior to September 30 are the ones who are concerned about companies changing in a three- to six-month period; getting into a new line of business, restructuring an investment portfolio, or acquiring something in the last half of the year that was sort of different from what they've done before that, and having the actuary rely on the implied permission to use prior information, unfortunately, in some cases, without much thought. I think to the extent that the profession does a good job in the use of prior information, in other words, making certain that the distribution of assets is good at the end of the year, compared to when you developed it, making certain the distribution of liabilities is similar, and making sure that nothing material has happened, then I think there will be far more comfort with using prior period data. But the burden is on the profession to do that well.

**MR. HSIEN-MING K. KEH:** I am from the California Insurance Department. I think, from a regulator's point of view you file Schedule D only at year-end. Those are data that are easily verifiable that you can match with the assets being used. So it's a practical issue that anything off year-end may be a problem.

**MR. KOLKMAN:** If I understood the question, it's that year-end data are in Schedule D and are verifiable and data prior to that, since the Schedule D was not prepared, are not necessarily verifiable?

**MR. KEH:** Not easily.

**MR. KOLKMAN:** Some actuaries will use the data in Schedule D, but most will do sorts and summaries on their asset portfolio that develop information separate from Schedule D. There is a lot of overlap, but it's still separate from Schedule D, and that's the information used to do the projections. To the extent you can do a summary of your portfolio in June, and a summary of your portfolio in December, I think the Schedule D can be tied back to that summary you do, and to the extent that techniques were similar in June and December, there should be a lot of comfort that it will in fact be usable. But there is an issue about not having all the detail necessarily supporting it.

**MR. KEH:** My point is not to say you shouldn't use it. My point is, we should develop some kind of a rule so that it smooths out the concerns both sides have. Then it becomes workable. Right now, there are problems.

**MR. KOLKMAN:** Right, and I strongly agree. I think that gets back to the comment of the burden being on the profession to do a good job of doing that and supporting it, and providing the information needed to make other people comfortable with it.

**MR. STEIN:** I think a quick poll is in order on this next question, which concerns the use of interest maintenance reserve (IMR) and asset valuation reserve (AVR) in the calculations. How many in the analyses are using both the IMR and AVR? This would be presumably including the liabilities and the associated assets and treating them effectively as reserves from an allocation of assets standpoint. These are the people who are using both IMR and AVR? Relatively few. About a dozen perhaps. How many are using just the AVR? Nobody. How many are using just the IMR? A little more than maybe 20, I would guess. So there is a

somewhat greater use of the IMR only than both the IMR and the AVR. How many are using neither? I would guess that's about the same as the IMR only. It may be a little more.

**MR. KOLKMAN:** The interesting thing there is you're required to use the IMR, but the question is, what does "required" mean? And I think that when people say they don't use the IMR, I think the proper way to do that is to start with a liability that's equal to your Exhibit 8 reserve plus your IMR, and then if you want to use an asset pile smaller than that, in order to demonstrate that you're fine, so be it. But in principle, you really should use it.

**JAN L. POLLNOW:** I'm not sure why you really need to use the IMR. I mean if the results come out fine, why bother? I have the impression that maybe the regulators had put that instruction in there because they thought there might be negative IMRs, and if you have negative IMRs, you definitely should include those. But otherwise, it just seems like you really don't need it if it's redundant. If you want to do it, fine. If not, fine.

**MR. KOLKMAN:** It is a requirement, but as you say, if you test your underlying reserves and everything is adequate, adding an additional liability with no cash outflows can't really hurt. But sort of for completeness and form, I would tend to put it in.

**MR. IRISH:** But what if your cash-flow-testing models assume assets are sold? And if assets are sold, creating an IMR in the modeling, then I think you're missing something if it's ignored. Of course, our models happen not to assume assets are sold, so we are in the situation that Jan described, where the IMR is simply a giveaway to us, an additional thing to depend on.

**FROM THE FLOOR:** We had a hearing on this issue a couple of weeks ago. The question was brought up that the "must" applies to the negative IMR initially, and also to the IMR subsequently developed within the model. That must be captured within the model. You cannot let it escape. So the test applied initially is not a positive. You don't have to include the positive IMR. You must recognize if ever the negative IMR becomes an admitted asset. And subsequently, IMR developed within the model has to be kept inside.

**MR. IRISH:** Let me read the next question. In generating interest scenarios, how does one differentiate rates within a scenario for different assets? That is, if one is generating rates for 10-year bonds, what one-year rate goes with the 10-year bond rate in a given scenario? And I assume that this question is essentially getting at the matter of projecting yield curves and also, possibly quality spreads.

I think it's common practice to project parallel moves in the yield curve. So that if you project a rise of 3% in the 10-year rate, you project a rise of 3% in the one-year rate. That, I say, is common practice. It probably isn't sufficient practice. And we all should think harder about testing different moves in the yield curve. Today's yield curve is unlikely to last forever. It's an extraordinarily steep yield curve. And therefore, one should test, at least as a sensitivity test, some other change in the yield curve, such as a flattening or even an inversion.

Another question is, what do you do with the down scenarios where your limit on the down scenario is half the Treasury rate? I think there is a diversity of practice on this one. But our own solution is to assume that the entire Treasury yield curve falls to half its current level. I believe the regulations specify five years, but we assume that at all durations. It falls to one-half its current level. It falls parallel prior to that, and then when it hits that floor, it stops. We also assume that current quality spreads above Treasuries will be maintained in the future, which is another assumption we might want to take a harder look at.

**FROM THE FLOOR:** Are these spreads additive or multiplicative?

**MR. IRISH:** Additive spreads.

**MR. STEIN:** Any other comments on the yield curve? There's a general question here about provisions for expenses. How are expenses incorporated into cash-flow testing? And it is followed with a more specific question, relating to the inclusion of any first-year sales expenses that are allocated to renewal business in the process. I might ask Frank and Paul to generally and somewhat briefly, describe their company's approach to incorporating expenses, acquisition,

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and maintenance expenses, possibly identifying how corporate overhead, if any, is identified and whether it is included or not.

**MR. IRISH:** Well, that is not an easy subject because we all hate to deal with expenses. First of all, I would add to the question that the most important thing about expenses is to be sure to include an inflation assumption in your projection, and there's a good question as to whether your inflation assumption should be related to your interest rate scenario. I think it should be, but that's getting into more detail than we want. We assume that corporate overhead is in proportion to all expenses, and therefore, a proportion of it is allocated to maintenance expenses and to renew field expenses, and so on.

Obviously, we leave out issue expenses, since all of the business we're testing is beyond the point of issue. We do try to pick up as best we can renewal field expenses, but often that isn't easy to do.

**MR. STEIN:** Any thoughts from the audience on expense provisions? I think while we're not going to say a lot about it here, this is a tricky and perhaps underappreciated area. I often wonder how fully many companies are providing for expenses and how they're handling the likelihood that expense relationships will improve. I think there are a lot of soft spots in the provisions for expenses.

**MR. MARK A. DAVIS:** How do you determine how much overhead to allocate to the in-force business versus how much is essentially allocated to the new business function?

**MR. IRISH:** We use our current corporate overhead allocation ratio. In other words, our corporate overhead is allocated in proportion to total expenses. We assume that proportion will continue on the partial expenses, which are in our projection.

**MR. KOLKMAN:** And inflate with time, so the overhead expenses will inflate also.

**MR. IRISH:** Another thought occurs to me. There was a question directed also at investment expenses? There's another whole area where there's a lot of practice diversity.

**MR. STEIN:** The question does not specifically ask that, but I'm sure the audience would love to hear your thoughts on that matter.

**MR. IRISH:** Well, perhaps I shouldn't have raised the question. I think there is a lot of room to look at investment expenses that tend to be heavily front-loaded. That is, the investment expenses tend to occur at the time of acquisition of assets. And you might well be justified in using less than your average investment expense load in your cash-flow testing. Because you are not acquiring as many assets in the cash-flow test, as in your business as a whole, because it is a closed block of assets.

**MR. STEIN:** I would add that I have been somewhat concerned about the utilization of averages. Not necessarily for that reason, but because of the change in the mix of the projected asset portfolio going forward and having either a heavier or a lesser dependence on mortgage loans, real estate, or other expense-intensive assets. But as the portfolio mix may change prospectively, I think we need to be careful to reflect changes in the investment expense assumptions in consideration of the level of intensity needed to manage the asset class. Similarly, one could easily argue that, if one were projecting a deteriorating or currently troubled mortgage loan or commercial real estate portfolio, reasonably significant increases in asset management expenses would be needed as those assets go through foreclosure and become managed by the organization itself. So I think there are some subtleties here. But, depending upon your investment mix, they may be quite significant to the outcome of the analyses. Paul, do you have a question there on annuity reserves?

**MR. KOLKMAN:** What are minimum death benefit reserves for variable annuities under the Commissioner's Annuity Reserve Valuation Method (CARVM)? In particular, for a return of premium death benefit or account value if larger, during the surrender charge period, and then what about a step-up contract?

First of all, I don't think the requirements for these are under CARVM. I think they're under the variable annuity regulations, and they vary a little bit by state. I know that we have discussed these with different states from time to time. The standard approach as I understand it is to try to hold a reserve for something on the order of a one-third drop in market values. A lot of companies have difficulty with the data, especially where you have multiple premiums coming in over time, sometimes the relationships are difficult to get at.

There are two issues. First, is the actual number you put in your annual statement, and second is, what do you do for testing purposes? As far as the annual statement is concerned, I would try to take the usual approach, look at a one-third drop and make certain that it's acceptable to the states that you're concerned about. From a testing point of view, I think you need to bring it into account if it's significant. To the extent that your block of business is truly significant, it's more an issue for the company than for testing and for valuation purposes. If you're selling a lot of business with these kinds of guarantees, you really ought to figure out what they're worth. And then hold an appropriate provision especially for the stepped-up guarantees. The one-time guarantees do go away with time, usually. The stepped-up guarantees never go away, and so you'll always be holding some kind of a provision there. But you should, first and foremost, try to find out using some back testing, with market performance and the like, what you really ought to have as a company, to protect yourself against that risk. And then, look at what the regulations in the various states are and build something into testing. But it is a risk that you do need to take into account.

**MR. STEIN:** There are a couple of questions on annuity product interest rate enhancements. The question basically deals with what kind of variations in lapse and investment experience are assumed for some of the popular "enhancements" in annuity products? I assume we're talking here about bonus interest rates and that sort of thing. What might happen at the end of the bonus period and so on. My initial reaction to that is that, while I have certainly seen a lot of products of that variety, I haven't really seen a lot of variation from what I might call more traditional annuity product assumptions. There is not much discontinuity at the end of the enhancement periods. Paul or Frank, any comments?

**MR. KOLKMAN:** I think to the extent that you have some kind of a contract feature that's going to be a future event, surrender charges are suddenly going away, or there is something that's going to cause some kind of commotion with your client or your distributor, you need to take that into account. Most of these features are new enough that there hasn't been a lot of experience developed with these kinds of features as they all of a sudden come into play. And it's going to be interesting to see how the experience emerges. I think to ignore these features is a mistake. But by the same token, almost anything you put in is a mistake, it's going to be at best an educated guess. Then you ought to watch the results closely so that you can improve the assumptions and the modeling going forward. But I think you do need to put something in for those kinds of features.

**MR. STEIN:** How many in the audience, who have a bonus interest rate product, do have some specific assumptions that relate to the nature and term of the bonus rate? Three or four individuals.

We have, I think, the only GAAP-related question that I seem to have come across. This relates to a structured settlement block of business being reported for GAAP purposes. The question relates to the appropriateness of unlocking reserves, as opposed to deferred acquisition cost balances, although it's not completely clear, for capital gains and losses. So the fundamental question is, should reserves or deferred acquisition costs be unlocked for capital gains and losses, and how many companies are recognizing capital gains and losses in gross margins? What techniques are used? This brings up a variety of questions in the structured settlement area, related to the recognition of realized gains or losses. I might say first, the "rules," while somewhat on a lesser level of authority than other FASB pronouncements, do require that capital gains and losses for Financial Accounting Standard (FAS) 97 products, be included in gross profits for determining whether amortization schedules should be unlocked. I would point out that in that context, the first cut has to be a determination that the structured settlement business is really an FAS 97 product, an investment contract under FAS 97. If it has, as many of these contracts would, significant mortality risks and one concludes that the business is really an FAS 60 single-premium-type product, the whole unlocking issue is set aside. So one needs to first

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make some determination as to what the fundamental accounting basis is. What's the model? If it is an investment contract, I would say in the last three to four years that the preponderance of companies have begun to incorporate relatively routinely, realized gains and losses in gross margin calculations for amortization purposes. So I would say that at this stage, that's fairly widespread. I might have a show of hands, how many companies here would include capital gains and losses in unlocking gross profit margins for deferred cost amortization purposes? Perhaps 20. How many of you are reporting on a GAAP basis regularly? I would say that virtually everyone was including capital gains and losses. So I think that has become relatively standard.

In recent months, the issue of some kind of adjustments to FAS-60-type reserves to recognize the change in portfolios, have been asked by a number of companies. That's a rather delicate area. I think that under FAS 60, it would be difficult to redo the assumptions to recognize that the redeployed assets after the gain would be a lower rate. Lower rates would have compressed profit margins going forward, and therefore, one might want to unlock the reserves and offset some of the capital gain. I think that's difficult to do under FAS 60. Some companies are exploring that.

The specific area where that would be permitted if one got into a loss recognition situation, and prospectively, the old reserve would be inadequate, would not be sufficient to fund the benefits at the new lower interest rates. One might conservatively expect continued capital gains and losses, therefore further depressing the existing portfolio and ultimately driving you into that position. So some companies might explore a conservative evaluation of what the future strength of the reserves would be and build a case to unlock an FAS 60 reserve. Although, that would be outside the traditional norm, it would require a fair amount of discussion with your auditors.

**MR. STEVEN A. SMITH:** You said that one of the primary issues is whether or not the contract is FAS 60 or FAS 91. This gets to the question of, how much mortality is really in there? I'm interested in what the audience would think about this. Suppose you have a typical structured settlement annuity, age 30, male, 20-year certain and life thereafter. At age 30, the

life expectancy is something on the order of 45 years. Now these are approximately correct numbers. The gross premium for say a level benefit for the first 20 years is only, is \$150,000. For the 20 years certain in life thereafter, it's \$195,000. So it sounds, at first blush, that some 76% of the premium is for the certain benefits and therefore 24% of the premium is for life contingent benefits. And you say, well, that's a significant element. But let's go one step further and calculate a 45-year certain only premium for the life expectancy, which is about \$200,000. Comparing that calculation with making the last 25 years of benefits life contingent, you only reduce the premiums from \$200,000 to \$195,000, ergo, only 2.5% of the premium is for life contingent benefits. And then go further, and say what really makes this kind of a contract an investment contract is that the benefit stream has a very high degree of predictability. It has a very small standard deviation of payments. When you compare a life insurance contract and an annuity contract, if the chance of death is one per 1,000, let's say, and that moves to two per 1,000, well you're talking about doubling the chance that a benefit will happen. A life insurance string of death benefits may be very predictable in the aggregate, but it will have a very large standard deviation. By the same token, even if you were looking at a straight life contingent annuity, where the chance of death is one per 1,000, if it increases to two per 1,000, you've only reduced the chance of payment from 99.9% to 99.8%. It's still very, very determinable. And, it is very predictable. So I think, personally, there's a good argument that these contracts -- not the certain only contracts, because those clearly are FAS 91 contracts and therefore, would have to go under FAS 97 -- should be considered FAS 91 contracts because of the very predictable nature of the thing. For the vast majority of structured settlements, I would argue that these things really are FAS 91 contracts, using that sort of logic. Does that sound like a reasonable set of arguments?

**MR. STEIN:** I made a lot of notes here. I actually have a lot of sympathy for the conclusions you've drawn. Even though 25% of the reserve is life contingent, when you look at a different means of quantifying the relative risk, you end up with the conclusion that it's principally an investment contract. Based on that, I would not have a great deal of difficulty concluding that it was an investment contract and therefore, susceptible to adjustment for realized gains.

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**MR. SMITH:** Not just susceptible. You would be required.

**MR. STEIN:** Yes, the direct application of the rules would apply if it were an FAS 97 contract.

**MR. SMITH:** I think also that given the real nature of these contracts, it is strongly preferable to consider them as FAS 91 contracts, and more conservative as well. There is something that grates on me as wrong, when for everything else, like SPDAs and universal life, you're required to do that sort of thing. This is one situation where statutory makes a lot more sense than GAAP accounting. In statutory, you're required to strengthen the reserves through the 100% C-3 IMR. In such cases, maybe the deferred acquisition cost or the implicit deferred acquisition cost, if you hold the net reserve, is really only say, 30% or 40% or 20% of the present value of future gross profits. So, you know you're not getting an IMR effect. Whereas, the other FAS 97 and 91 products are required to do so. So I think it's preferable to do FAS 91 and be more conservative.

**MR. STEIN:** As I said, I have a lot of sympathy with that. I think you can build a pretty good case for it. Unlocking can be performed under the provisions of the FAS 91 statement that you mentioned, which relates to unamortized acquisition costs of mortgage loans. So there is a mechanism in the support for FAS 97 to go into FAS 91 and to use these changes and anticipated experience to adjust the reserve balances.

Leonard Kolums wrote a number of questions related to group health insurance. He's the Chairperson for the Health Valuation Practice Note Committee. How many have a significant block of group health business? A couple of dozen I would guess. And how many of those have done what you would consider to be a thorough cash-flow analysis of the adequacy of claim and unearned premium reserves? Well, I think I can count that one. That was one or two. That isn't a surprise to me. What one must struggle with here are some of the questions that Leonard asks with respect to projecting underwriting losses. If we were in a GAAP context, the question might be, do we expect future losses that we need to provide for? Are the

premiums adequate? I think those are some fairly interesting questions. It's quite clear in some cases, that the group business has consistently generated losses and many might argue for strengthening reserves when historical experience demonstrates that the favorable parts of the underwriting cycle are increasingly insufficient to pull one out of the hole on a cumulative basis. I think there are some issues there with respect to the need to provide adequate reserves when the business has not historically demonstrated an ability to be profitable over the long haul.

Leonard asks a related question as to whether consistent profits in group life business, a companion product, would be able to be used to offset the periodic losses from the underwriting cycle on the group health side. And if you were able to demonstrate that other group lines of business sufficiently produce a consistent stream of profits, would it be appropriate or acceptable to use those profits to offset the group losses? My view is that it would be.

The last question deals with an interesting issue, that is, surplus relief. How is it modeled? The individual notes that he's heard two thoughts on how to model surplus relief, to which I would add a third. The two that he identifies are starting with assets less than the liabilities and projecting the transaction forward to see if the retained assets will be enough to cover the aggregate liabilities. The second approach is to simply model the projected surplus relief payback as a scheduled and modeled expense. The third one that I would identify is to exclude it entirely and, since at this stage we're dealing with reserve liabilities only, consider it to be a corporate activity of the capital raising, financing variety. Therefore, even though it relates specifically to a given block of business, I have seen surplus relief at least one time excluded from the analysis of the reserve liabilities. With those options, I might ask Frank or Paul if you have any specific thoughts and then ask the audience what methodology you prefer. Any thoughts?

**MR. KOLKMAN:** The reinsurance standard should be read here, too, and the ultimate requirement in the reinsurance standard is that whatever net liability you hold, you should be comfortable with the fact that that's adequate. You should either test what shows up in the books and let the surplus relief roll off as is expected or modify your methods and exclude it.

But, what you want to do is make certain that the net number you have there is, in fact, adequate. And I would say test it by the means that you consider to be most appropriate to get comfortable with that issue.

**MR. STEIN:** My experience has been that in most cases I've seen that surplus relief most often, but not always, by any means, modeled as a payback, as part of a cost of doing business of the affected product line. So that the payback of the relief was considered as part of the cash flow that was needed to generate funds for covering benefits.

**MR. KEH:** I think as a fundamental question of using net benefits, you do a formula reserve first, before you do any netting. The standard valuation law does not permit net reserve as a formula reserve. You have to start off as a gross reserve. You're looking at a liability, your policy benefits, ignoring where the asset is, how much asset you have. You do a gross reserve calculation level before you net out. So the formula reserve is set at a certain level, not at the net benefit level. Netting out of asset funds withheld, whatever arrangement, may not be appropriate.

**MR. KOLKMAN:** Right, when I'm talking net, I mean net of reinsurance. So you do your gross formula reserve and then you offset it for reinsurance according to what you're entitled to as a credit under appropriate state laws and regulations. And then you have a net reserve, gross minus reinsurance. And the gut level question is, whether that reserve remaining and the assets supporting it are sufficient to mature the obligations. Taking into account the creditworthiness of any reinsurer you might be looking to them to reimburse you for claims.

**MR. KEH:** Maybe I'm addressing a different issue, such as, if you're an assuming company, you're holding a net zero reserve currently. I ask any valuation actuary signing off on a statement showing a zero reserve, why do you not have a liability? The contractual liability in the model is exactly the same as in the coinsurance. You're going to pay the same benefit whether it's modified coinsurance or coinsurance. The question is, how can you sign off on a zero reserve in view of the standard valuation law?

**MR. STEIN:** I'll try to follow up on the question. The question is, if we net down to zero because of surplus relief, what kind of analyses do we need to perform? I had responded earlier that, if you're projecting a payback of the surplus relief, as part of the cost of the zero position, you'll perform an adequate test of the ability to cover the aggregate liability cash outflows.

**MR. WAYNE E. STUENKEL:** I have a question about state reserving variations. Use California as an example. California requires universal life reserves that are higher than the state of domicile. I imagine most companies see that situation. As I see it, there are three possibilities the companies can use with that California situation. They can either forget the California situation and file their statement in California, and everywhere else, using state of domicile reserves, which I think is outside the letter of the California law. They can have higher reserves under California standards everywhere, and they can burn up surplus and set up higher reserves because of that. Or they can file two statements. They can file a California only statement showing higher reserves and lower surplus, and then file a different statement in their state of domicile. I think most companies are probably ignoring the California standards or ignoring special state variations. We file two different statements. I haven't talked to anybody else who has done two statements. One for the higher state and one for the state of domicile, but I'm curious as to any comments about these state reserving variations. And California is not the only example. There are a lot of different states that have requirements, but California universal life is just a very obvious one.

**MR. KOLKMAN:** Well, it can be a problem. Right now, we take some shelter in the aggregate nature of the opinion. I think the ultimate solution is going to be to have two annual statements. The one filed with California would be in compliance with its regulation, reflect California requirements nationwide. And the other one wouldn't. The opinion would be fine then, because there would be two separate opinions, and you say in your opinion that it complies with the requirements of the states in which it's filed. And so you file one in one state and one in all the others, and it falls out logically. It's a lot of work.

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**MR. STUENKEL:** I'd be interested in a show of hands to see if anybody else filed two statements. Did anyone file state-specific statements like we did last year? Are there any other companies that did that? Some did.

**MR. STEIN:** How many filed a single uniform blank and used the greatest reserve standard? It looks about the same response. My response would have been that the "all states" requirement of the valuation opinion now would have caused you to look at the greatest of all of the reserve requirements of all the states and carry that as the reserve. Since the opinion, I believe, had been modified to address all states in which you're doing business, as opposed to the state of domicile. You would be able to file a modified opinion, but I thought that the all states test required you to look around and use the reserve standards in the greatest state.

**MR. KOLKMAN:** Right, it's not so much all the states in which you're doing business, it's all the states in which this opinion is filed and conceivably, you could have 50 opinions. That would be a lot of work.