

**RECORD OF SOCIETY OF ACTUARIES
1988 VOL. 14 NO. 3**

**TOWARD THE DEVELOPMENT OF A
NEW STANDARD VALUATION LAW**

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- o Current status and direction
- o Key issues
 - Actuarial opinion on reserve adequacy
 - Use of cash-flow and other testing
 - Relationship to tax reserves
 - Centralized valuation review facility

MR. JOHN H. TWEEDIE: I work for Metropolitan Life. With me are Mike Mateja from the Aetna, Tony Spano from the ACLI, and Allan Brender who is an associate professor of Actuarial Science at the University of Waterloo but also, through his association with William M. Mercer, is a consultant to the Canadian Department of Insurance and has been involved in this issue in the Canadian context. He will offer us a somewhat different perspective from what we have been exposed to in the United States.

"Toward the Development of a New Standard Valuation Law" is a misrepresentation. The genesis of this session was that there is a new advisory committee on the Standard Valuation Law for the NAIC which I happen to chair. The objective of the advisory committee is to develop a model law and/or regulation that would extend the Valuation Actuary concept to law or regulation through the U.S. causing the valuation actuary to offer an opinion supported in some fashion as to the adequacy of reserves in the annual statement. This committee grew out of a prior committee with much the same objective chaired by Carl Ohman and Bob Maxon. That was a very large committee which attempted to look at more aspects of the job than we are attempting to look at. As a result by trying to bite off what might be a decade's worth of work, in totally rewriting the valuation law and setting forth the associated standards of practice for the valuation actuary, the committee took on perhaps more than it could do and was unable to reach a consensus.

Our group, which I would like to report to you a little bit about before we ask the panelists to talk about some of the more significant issues, took on a rather limited charge of answering the question: "Should there be some sort of testing for reserves?" If so, what should it look like and what sort of law or regulation would be needed, and what would the mechanism look like that would provide for the submission of those opinions or tests in the event that we ultimately submitted them. The one thing that we are not attempting to do is to rewrite the Standard Valuation Law. So that's what I meant about the misrepresentation.

PANEL DISCUSSION

The thrust that we've been taking is to not change the law, not for a moment suggesting that it doesn't require change. I'm sure you all have a list of the things you'd like to see changed, errors and problems, things where the law has been unresponsive to current products or situations. Our thrust was to take a smaller step forward and to look at the current dynamic minimum valuation requirements and see if we could go a little bit beyond the table lookup of the valuation law and construct a mechanism which would require the valuation actuary to exercise some judgment and offer an informed opinion as to the adequacy of the assets necessary to discharge that particular liability, standing behind the reserves. The idea was to take a step forward which would embody in the law the need to do some kind of test, to form some kind of an opinion, and to prepare some kind of memorandum or record supporting that opinion, but not to correct all the real or perceived problems with the current law. I suspect that job might fall to yet another committee. I think our committee probably agrees that needs to be done, but in the short time frame that we have, by May 1989, it's extremely unlikely that we will be able to deal with it. The direction that we've taken so far is to propose a change to the Standard Valuation Law calling for testing and to provide a model regulation which would tell the valuation actuary what the form of his opinion ought to be and give him some guidance as to the type and intensity of the testing that he might want to undertake. In that respect, we hope to look to the AAA, Actuarial Standards Board (ASB) or the Interim ASB if it doesn't become the ASB, and ask that Board to draft the standards which would help the Valuation Actuary to decide what sort of testing should be done.

We've envisioned a grid which would be "n"-dimensional. One of those dimensions would be inherent product risk. I'm not sure what would be the best example to use, perhaps a product which simply is a deposit of money with very short-term rates for a short duration at one end of that spectrum involving no mortality, morbidity, expense risk and really no investment risk. At the other end of the spectrum might be something like a structured settlement which would be very long in duration perhaps having increasing payments, might be a substantial mortality risk and clearly would be a substantial investment risk. So there would be a spectrum of risks by product.

Another dimension might be the spectrum of risk by investment strategy and a third dimension, and I don't think there are only three, although as a matter of practice it might come down to that, is important in terms of the practicalities involved and that's the dimension "Who cares anyway." It probably matters more to test the reserves or the assets of a situation in which a particular product is 90% of a company's business and it's a sizable company than it does to test the assets for a product which is .5% of the company's assets and it's a fairly small company. We're sensitive to the cost and the practicality of doing something like Regulation 126 which requires, for example, that you test everything, that you test it all with the same degree of intensity and that you use cash flow testing. Our thought process is that cash flow testing is not necessarily a standard and certainly not the only kind of test you can do. It might be as simple as the test that says, "Gec, it looks okay to me." There may be situations in which something very simple will suffice and there will be situations in which full-blown cash flow testing with all sorts of scenarios is appropriate. Our group hopes to sort that out, set some guidelines, and have them embodied in a standard which will help the valuation actuary decide what kind of test he should do and what intensity is needed to satisfy a reasonable standard of actuarial practice, satisfy the regulator and to do a satisfactory and prudent job to satisfy his own responsibilities to management. I guess that's a long-winded way of saying that

TOWARD THE DEVELOPMENT OF A NEW STANDARD VALUATION LAW

the committee is certainly sensitive to the various constituencies, particularly the smaller companies who do not have the resources to engage in full-blown cash flow testing of all their products, when it wouldn't be appropriate.

We want to move ahead the concept that some sort of asset adequacy testing ought to be done in support of an actuary's opinion. We try to couch the opinion in terms that make it clear that what the actuary is attesting to is that at a given moment those particular assets look like they would be adequate to mature the liability given a particular investment strategy and the particular scenario and all the like but stopping short of a guarantee of solvency. Actuaries can't, don't, and won't guarantee solvency. I think we are all pretty sensitive to the issue of liability and responsibility and not extending our opinions or signing off on things which are beyond our capability, capacity or willingness to do. We are very sensitive to the good and sufficient issue.

The third aspect has to do with the question -- Suppose we all do these opinions and we produce a whole lot of paper and a lot of reports and we send them to somebody, what's going to happen next? Who would review them all? I know from talking to Bob Callahan and Pete Smith that the New York Department has found the burden of reviewing Regulation 126 opinions to be significant. Some of them are easy and pretty straightforward. I am not sure they have completed the review of all the opinions that have been submitted. In fact, I am quite sure they have not. On a nationwide basis the question arises, "Who is going to review all those and where's the expertise?" I don't know if you are aware of this, but there are about fifty actuaries practicing in State Insurance departments in the U.S. I think 28 of those are with New York State. That leaves 22 in 49 states and I am not sure how many California has, but you get the point. It is going to be very difficult.

Our committee has talked about the possibility of having a central valuation office of the NAIC whose function would be to review these on behalf of the regulators and who would pass the results along to the regulators. The regulators could opt out of that system and review them themselves. However, I think right now we're leaning to the point of view that says that the chief examiners have a network of information -- Insurance Regulatory Information System (IRIS) tests, results of examinations and so on. Just by sharing information from all the sources that group has at its disposal they will know when the valuation actuary's report would be valuable for the regulator and when that should be obtained. The regulator can review it; he can obtain professional help in reviewing it. The number that is likely to be actually needed to be reviewed in depth is far less, of course, than the total number that will be prepared or submitted. The thought process is that there would be an opinion submitted. The report would not be submitted. It would be held in the company's home office for reasons of confidentiality and because it wouldn't serve any useful purpose to simply have a collection of them somewhere. It would be like anything else that the regulator could, upon examination, and the NAIC could probably be relied upon to develop its own early warning type of system to trigger when that should happen and when it shouldn't.

One other thing I would like to say, a very important thing, is that this is a very small group that we have relative to the prior group. One of the reasons that we decided to try to work with a small group was that trying to gain a consensus with fifty people or more was difficult, if not impossible, in a reasonable time frame. When you have a small group of people working on something like this which is of rather fundamental interest to all of the valuation actuaries

PANEL DISCUSSION

in all of the companies, the question arises of whether the group is representative and is going to be sensitive to its constituencies. I'd like to point out that we have some liaison members. We have John Montgomery who actually charged us to do this work. We've got Dick Mink from the ACLI who obviously represents a large spectrum of companies' interests. We've got Steve Kellison from the Academy, Roy Woodall from the National Association of Life Companies (NALC) who would represent the interest of the smaller companies. So we've been making an attempt through the membership to try to respond to all of the concerns. We also want to keep our deliberations and considerations in front of as broad a group of people as we can. We've been making the minutes of our meetings available to a broad spectrum of people, including all of the people who are involved in the prior committee and to the executives of the Academy and the Society and other interested parties. We're here at this discussion and someone from our group will be at each of the meetings for the next little while to try to keep you up to date on what we're doing and to be visual assurance that in fact something is not happening behind closed doors that's simply going to extend Regulation 126 across the nation. That is not going to happen, in my view, and I see very little support for that in the committee or elsewhere in the industry. We're looking for something considerably more enlightened than that. I'm going to ask Mike Mateja if he would speak next. What I've outlined very briefly is a practical political solution to adding some actuarial judgments to the reserve process, but not creating an enormous burden in that process. It's far from an ideal solution or an ideal theoretical solution in any event. There's an awful lot that could be done if we had unlimited time and resources and the mechanisms to actually make that happen. I know that what we're worried about is making sure that the minimum reserves currently in the Dynamic Valuation Law are in fact adequate to support the risk. A reasonable question, however, is "What do we do about those situations in which the reserves are more than adequate to support the risk?" I think that's a theme that Mike would like to address.

MR. MICHAEL E. MATEJA: My role in this panel discussion is to take a longer-term perspective on the development of a new NAIC valuation law. In fact, my perspective extends well beyond the current development effort. As John Tweedie has already described, current efforts are highly focused and will address the issue of what tests should be performed by a qualified actuary in support of an acceptable opinion on the valuation reserves held by an insurer. Certainly, such guidance would be useful no matter what reserves are called for in valuation laws. But there is more work to be done.

As a practical matter, the current development effort will operate in only one direction -- to increase reserves beyond levels specified in minimum standards. Valuation actuaries will be obligated to identify the high-risk situations in which prescribed reserve standards are not adequate and then take appropriate action. I see a lot of work throughout the industry to identify relatively few situations in which current minimum standards, which are quite conservative to begin with, prove inadequate. Now, I have no particular concern with this -- it will simply codify what a responsible valuation actuary should do in any event. I am concerned, however, about the opposite situation in which the valuation actuary, after a lot of work, identifies a low-risk situation and is not free to set appropriately lower reserves.

This is the simple idea that I want to examine -- how should valuation reserves vary with the level of the underlying risk? Risk in this context can be thought of as some combination of factors that adversely influences the ability of the

TOWARD THE DEVELOPMENT OF A NEW STANDARD VALUATION LAW

insurer to mature obligations. Greater variation in the amount of claims, lower quality assets, and excessive mismatch exposure are some of the factors that contribute to greater risk. And, of course, when there are appropriate control mechanisms in place, there is reduced risk.

Risk is fundamental to the insurance business, and valuation reserves are widely recognized as one of the major resources available to manage risk. But we do not have well-developed theory linking risk and reserves. In current valuation law, reserves only indirectly reflect risk by varying valuation interest rates based on guarantee duration and withdrawal provisions, which can be thought of as a crude proxy for risk. The real issue is whether the relationship should be more direct.

At a conceptual level, risk, reserves, price and returns are all interrelated as depicted in Exhibit 1. In recent years, we have become more conscious of the risks present in the insurance business. (Probably because we are accepting more.) Reserves and surplus, on the other hand, have been subject to heavy downward pressures. Price and returns have moved in response to increasing risk, but not as much as they would if reserves also varied reflecting the underlying risk. Reserves are the weak link in this chain, as indicated by the broken line connecting risk and reserves, and I think this link must be strengthened to provide a basis for the insurance business to grow and prosper on a sound basis. Surplus, of course, is also important in this process, but it is unrealistic to think of surplus levels moving in response to routine changes in risk.

EXHIBIT 1



Let's look more closely at what we know about the relationships indicated in Exhibit 1. It is fairly easy to illustrate the practical effect of higher reserves on price and return.

Exhibit 2 illustrates how valuation reserves affect price for a life insurance product in which mortality is the primary risk. Increasing valuation reserves from 100% to 125% of expected, which might be appropriate to reflect an increase in the expected variability of mortality results, increases price about 8% in order to maintain the same return expectations. Anyone who has worked on pricing using return on investment (ROI) techniques understands that higher reserves translate into higher price.

EXHIBIT 2

	<u>Base Case</u>	<u>Higher Reserve Case</u>
Experience Claims	75% CSO	75% CSO
Reserve Basis	100% CSO	125% CSO
Price	\$16.45	\$17.77
		+ 8%

PANEL DISCUSSION

During the last ten years, there has been much theoretical work within the profession focusing on valuation and solvency, all of which has basically served to illustrate or prove the point that there should be a direct correlation between risk and reserves. Most of this work has been on the C-3 or mismatch risk, and it is now widely recognized that there is a clear correlation between the level of mismatch present and the amount of valuation reserves and/or surplus that will be required to assure that obligations can be matured.

In the work of the Combination of Risks Task Force, for which I served as Chairman, we demonstrated similar relationships for asset default and mortality risk. This is an intuitively obvious result, i.e., as the risk of loss increases, more resource is required to manage the risk. This resource can be present in valuation reserves or surplus. At a practical level, I believe that valuation reserves must be responsive to variations in the level of risk within the control of the insurer. Surplus is primarily intended for catastrophic levels of risk, which, for the most part, are beyond the control of the insurer.

I became concerned about the relationship between risk and valuation reserves when we started to apply the work we did on C-3 risk and combination of risks. Our work had established that there was potential for great variation in the level of risk assumed, particularly with respect to mismatch. For our own interest-sensitive business, our analysis confirmed that we were definitely at the low end of the risk spectrum. We concluded then, and I still believe, that we could safely manage our business with lower reserves, but the valuation law made no provision to reduce reserves below minimum levels (except through aggregate tests which I believe is not a viable long-term solution). Given the economics of our business, we simply can't afford to set up more reserves than we really need. By the same token, there should be no relief from higher reserves if this is what we really need.

Historically, minimum valuation reserves have been set very high to accommodate all insurers and a broad range of risk. This approach worked well when the range of risk in the industry was fairly narrow. My concern is that this approach will not necessarily serve us well into the future as the range of risk expands. The historical approach to setting minimum valuation reserves is also flawed in that it provides no incentive or reward for managing or controlling risk. All companies, regardless of their risk management philosophies, are treated alike.

I believe our valuation laws should reward companies which adopt conservative risk management programs and penalize companies which do not. The primary reward/penalty mechanism would be minimum reserve levels, which would ultimately drive prices as I illustrated earlier. The impact of reserves on price holds the potential to introduce a real market limitation on the risk assumed by the individual insurer. Companies operating at higher risk would have to charge higher prices.

From a conceptual point of view, I believe it is hard to argue with this position. The only problem, and I freely admit that it is a deal-breaker currently, is the practical difficulty of quantifying risk and translating this into an appropriate valuation reserve on some disciplined basis. With continued effort focused on this problem, we should be able to solve it. If the solution is comprehensive, all involved -- insurance company management, the actuarial profession, and regulators -- should support it. Insurance customers should be the ultimate beneficiaries.

TOWARD THE DEVELOPMENT OF A NEW STANDARD VALUATION LAW

It is interesting to look at the historical relationship between risk and valuation reserves as I believe it helps to put our current circumstances in perspective. In the early history of our business, life insurance was our sole product. Life insurance underwriting throughout the industry was very strict, with the practical result that there was little variation in the mortality risk assumed from company to company.

The mortality risk looked something like this pencil-shaped frequency distribution in Graph 1. The long tail represented the catastrophic loss potential. Any realistic valuation reserve level, represented here by the Y axis, would leave relatively limited downside risk uncovered. It would be appropriate to think of the point G_V as the gain associated with valuation assumptions.

During most of the twentieth century, I believe that there has been a steady deterioration of the uniform risk profile that once existed within the industry. The deterioration began with the relaxation of underwriting standards and hit full stride in the postwar era, when there was very rapid growth in all market segments. New products and new twists on old products produced a bewildering array of options for the insurance buyer. From current perspective, this growth was accompanied by corresponding growth in the nature and degree of risks assumed.

In terms of a frequency distribution of experience results, I think the curve now looks like Graph 2 -- flatter, with more loss potential not covered by valuation reserve. Conceptually, I believe we need to move toward a valuation system where the loss tail not covered by valuation reserves is consistent with the surplus position of the insurer.

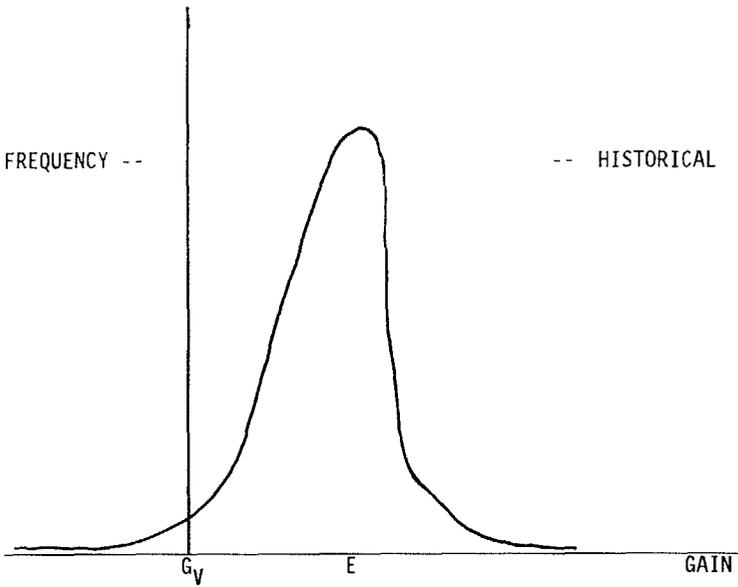
As a result of the research during the last ten years or so, we have confirmed a broadening of the risk profile as illustrated here. This is most clear with respect to mismatch risk for our various interest-sensitive products. There is newfound respect for call risk on the asset side and withdrawal risk on the liability side. The growth of the junk bond market, equity kickers in real estate and mortgage lending, and many new forms of investment have introduced the potential for greater variations in the level of asset default risk. When the next depression finally arrives, we undoubtedly will develop a new respect for the range of asset default risk. To further complicate the situation, there are some innovative guarantees offered that are difficult to evaluate from a risk perspective. By almost any standard, there has been increasing divergence in the underlying risk profile within the insurance industry, much of it driven by the unsettled economic environment.

Compared to the early history of our business, the current situation presents a far more complicated risk management challenge. Certainly, the uniformity that existed during our early history is gone -- diversity, perhaps great diversity, is the norm. An objective assessment of this situation should at least raise doubts as to whether a single valuation reserve level will do the job. My assessment is that a single valuation standard can no longer do the job -- there is simply too much variation in the level of risk for a single standard to be effective. A single standard can be too high or too low. The current development effort will hopefully solve the "too low" part of the problem. Some time in the near future we need to focus on the "too high" part of the problem. The real benefit of a valuation law in which reserves vary with the underlying risk is that companies will be forced to better understand the risks associated

PANEL DISCUSSION

GRAPH 1

FREQUENCY DISTRIBUTION
OF
EXPERIENCE RESULTS

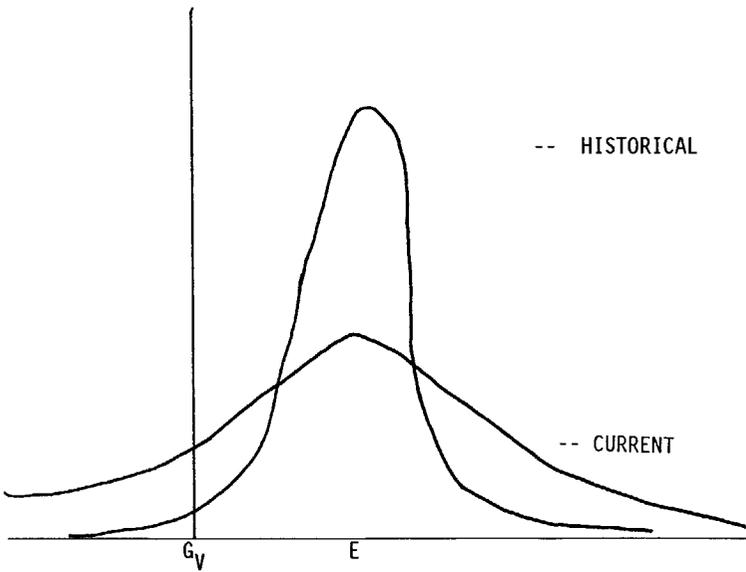


- E = EXPECTED
- G_v = VALUATION RESERVE

TOWARD THE DEVELOPMENT OF A NEW STANDARD VALUATION LAW

GRAPH 2

FREQUENCY DISTRIBUTION
OF
EXPERIENCE RESULTS



E = EXPECTED

G_v = VALUATION 1

PANEL DISCUSSION

with their products and appropriately provide for them. This could prove to be a sobering process.

In recent years, I believe we have lost our focus on the risk management process which is fundamental to the operation of an insurance company. It's time to return to the basics of identifying, controlling and responsibly financing the risks we assume. Valuation reserves are an essential part of the financing process, and I clearly see the need to focus more effort in this area to reflect the changing character of our business.

MR. TWEEDIE: Just a point, I personally happen to agree entirely with Mike, 100% or more. I think the direction he suggests and that we might ultimately go is one I would very much endorse. I think also, though, that the effort of the current Standard Valuation Law Advisory Committee is consistent with that. If we take a small step now which institutionalizes the concept that judgment is a part of the reserve setting process, actuaries have opinions, they do tests and they set a reserve based on risk even though it may be only one direction as opposed to simply looking up in a table, then we'll be much better positioned to take the more difficult step at a later time.

I'll ask Tony Spano if he would share with us the viewpoint of the ACLI and maybe a little bit of a review of the deliberations of the ACLI and the Task Force.

MR. ANTHONY T. SPANO: I'm going to cover the valuation actuary subject and the work toward developing a new valuation law from the perspective of the life insurance industry. I'll describe the current policy of the ACLI with regard to the valuation actuary concept, and then touch on some of the industry concerns. I'll conclude with a few largely personal comments about the management of this issue. The current ACLI policy on the valuation actuary concept was adopted in September 1986 when the ACLI Board of Directors approved the report of a special task force that had been created by the Board to study the concept in some detail. The following is a description of that policy, as recommended by the task force and approved by the Board. As we go through this list, note the different gradations in the policy positions, ranging from support at one end of the spectrum to opposition at the other.

1. The ACLI generally supports the strengthening of the role of the valuation actuary, by the profession and through regulatory requirements, to the extent that such strengthening does not infringe on proper management prerogatives or generate costs that are out of line with potential benefits.
2. The ACLI supports regulatory requirements that would require life insurance company boards of directors to either appoint, or to designate someone to appoint, a qualified actuary who is an employee of the company or someone hired by the company to perform the duties of valuation actuary.
3. The ACLI supports regulatory requirements that the valuation actuary make a public statement of actuarial opinion as to the adequacy of the reserves of a life insurance company.
4. The ACLI does not oppose any reasonable regulatory requirements for the valuation actuary to test a minimum number of specified possible future scenarios in developing a statement of actuarial opinion on the adequacy of life insurance company reserves.

TOWARD THE DEVELOPMENT OF A NEW STANDARD VALUATION LAW

5. The ACLI opposes any regulatory requirements that the valuation actuary report on the adequacy of surplus.

Having indicated what the ACLI is on record as supporting and not supporting, let me now mention the understandings and qualifications with which the ACLI Board went on record adopting the current policy. First, the Board said that the ACLI position is based on an understanding that the valuation actuary concept would include the following conditions:

- o The regulatory authorities would be no more involved in the oversight of company surplus levels than they are at present.
- o There should be appropriate exceptions from testing requirements for products in which the valuation actuary demonstrates that the volume of business or the nature of the risk indicates such testing is not warranted.
- o The development and imposition of standards of practice for determining the methodology and techniques used in developing an actuarial opinion should be determined by the profession.

Finally, the Board resolution adopting the task force report acknowledged that the recommendations in the report were appropriate for the present, but put the ACLI on record as encouraging the actuarial profession to develop accepted methodology and techniques for taking quality-of-asset information into account in determining the adequacy of reserves. The resolution also included an understanding that the ACLI would make every effort to obtain relief for companies from existing regulatory functions that would be made unneeded by the activities of the valuation actuary. Such relief would be particularly important for smaller companies, for whom the costs of a valuation actuary would prove substantial, the resolution indicated.

As you can see, yes, the ACLI does support a strengthened role for the valuation actuary. But it should also be clear, given all of the hedging, qualifications, and so forth, associated with the current ACLI policy, that any proposal put forth to advance the valuation actuary concept will be evaluated with a critical eye by the life insurance industry. The discussions within our organization make it clear that this evaluation will be done in the context of some significant unease within the industry generally. Let me now discuss briefly some of the industry concerns. I'll mention four major areas of industry concern that must be recognized.

1. **Infringement on Management.** Interference by the valuation actuary with management prerogatives has generally not been a significant factor so long as the valuation actuary's job has consisted primarily of applying prescribed factors to in-force amounts. A prime objective of the valuation actuary movement is to give the actuary considerably more latitude and, with that, responsibility in determining the amount of reserves the company should hold. Obviously, a change in this direction enhances the potential for differences of opinion and conflict between the actuary and management. Management concern is considerably heightened when the discussion turns to the valuation actuary reporting on the adequacy of surplus. Thus, the ACLI policy statement stipulates that the ACLI will oppose any regulatory requirements that the valuation actuary report on the adequacy of surplus. This point of opposition is stimulated by concern of possible interference coming not only from the valuation actuary but also from the regulators.

PANEL DISCUSSION

Another sign of management sensitivity to an invasion of its prerogatives is the ACLI opposition to a requirement that the valuation actuary be appointed directly by the company's board of directors. The ACLI does not object to the official appointment of a valuation actuary, but believes that the board of directors should have the option, as it does with appointing other company officials, of designating someone to appoint the valuation actuary as opposed to having to appoint the actuary directly in all cases.

2. **Costs.** This is a broad category. Industry unease in this area relates both to relative as well as absolute costs. First, the cost of implementing and maintaining a valuation actuary structure must be seen by management as a good investment in enhancing the prospects of the company's solvency. It must be perceived as having real value to the company as opposed to simply requiring an interesting, or perhaps not even a very interesting, actuarial exercise. Put another way, any proposed requirements must seem reasonable in relation to the solvency risks involved.

A number of companies are also concerned about the absolute cost of a valuation actuary structure. The smaller companies come immediately to mind, but let me emphasize that we're talking here not only about companies with just several million dollars in assets, or even \$50 or \$100 million. Rather, we include here many companies that, though not of giant size, still qualify as substantial enterprises. At the ACLI, we have a special committee to represent the interests of the smaller companies, and for this purpose "smaller company" is defined as a company with less than \$500 million in assets. The number one concern of this committee for the past couple of years has been the valuation actuary issue, because of the cost factor. The same unease has been expressed by the NALC, a trade association composed primarily of smaller companies, and it has been reassuring to observe that the NALC has been given a prominent role in the committees and discussions on this issue. To generate broad industry support, it is clear that any proposal must recognize that very few companies can afford, for example, to do the elaborate research and analyses that have been done by some of the major companies and consulting firms.

3. **Competitive Balance.** A valuation actuary proposal must not be perceived as giving a competitive edge to one segment of the industry at the expense of another. For this purpose, "segment" involves such factors as company size, type of organization (stock or mutual), market orientation, and product orientation. Any proposal that does not meet this criterion will simply not receive widespread industry support.
4. **Company Taxes.** This is an item that contains both cost and competitive balance considerations. Any valuation actuary proposal will clearly be analyzed closely for its potential effect on company federal income taxes. Companies would be concerned here about having to hold reserves for which a corresponding tax credit would not be available, and with the effect that the proposal might have on the way the tax bill is split among different segments of the industry.

I would like to conclude with largely personal comments directed primarily to those who in the political jargon are referred to as the "proponents." The proponents in this instance are those who would develop and then try to sell a particular valuation actuary structure.

TOWARD THE DEVELOPMENT OF A NEW STANDARD VALUATION LAW

Many years ago -- and in this case I can accurately say "many years ago" since I am this year celebrating my twenty-fifth anniversary as an FSA -- a college history professor was describing to us some of the qualities of the great political leaders. I remember one thing he said very well. In his opinion, Franklin Roosevelt's greatest strength was that he never got too far ahead of his constituency. We may or may not agree with this observation as applied to Franklin Roosevelt, but I am sure that all of us in one way or another have heard of this trait as a prerequisite for effective action.

I'm sure you're asking, "How is this relevant to the valuation actuary issue?" The reason I bring this up here is that I recognize that some of those who believe fervently in the valuation actuary concept have been disappointed with the lack of quick enthusiasm within the industry. Make no mistake about it, a tremendous amount of high-quality work has come out of this effort, and all of us owe a sincere debt of gratitude to those who have been involved. But at the same time, I must say that it would not have been realistic to have expected an immediate and broad consensus on changes of the type and magnitude that have been proposed in some cases. Whenever I'm asked why I believe the valuation actuary movement has not developed more quickly in this country, my response has been that there is no way in which there can be any movement if, as has been the case, there has been no consensus on the subject within either the actuarial profession, the industry, or the regulatory community.

We all know that John Tweedie's committee was formed in the aftermath of the breakup of the previous committee that had been formed to restructure the standard valuation law, the committee co-chaired by Bob Maxon and Carl Ohman. Certainly, the Maxon-Ohman committee did not fail to complete its assignment because of any lack of ability. There was tremendous talent on that committee. The committee was unable to complete its assignment because its assignment was many times too ambitious, given the practical realities. No leader, regardless of how talented, could have forged the necessary consensuses on the job given to that committee, considering the many different constituencies that needed to be accommodated.

With that in mind, we've been pleased that John Tweedie's committee seems to be clearly aware of the importance of not being too ambitious too quickly. John's committee has a much narrower charge than the previous committee, and that should help considerably. I know that John's committee realizes the industry concerns and sensitivities. I'm confident that if the committee continues to keep these concerns and sensitivities in mind as it proceeds to develop a regulatory proposal, that proposal will merit the serious consideration that it will receive.

MR. TWEEDIE: I'm beginning to wonder why I took this job. You're right, we are very aware of these concerns and the limitations that the process places on us. We're also chafing a little bit under the constraint in that we can see a vision of what could be done, but that is being tempered with what can and should be done and I thank you for your guidance and sobering remarks. The committee may call it a blueprint for how we might take some tentative but very positive constructive steps.

Now I'd like to ask Allan Brender to tell us about a different pathway and different set of steps towards an effective system and effective regulation which I think will serve all of the constituencies in Canada.

PANEL DISCUSSION

DR. ALLAN BRENDER: First, let me say I recognize that this is a discussion about the U.S. and I'm not here to claim equal time for Canada within the Society. We've had a fair amount of experience, over ten years of experience now, with some form of the valuation actuary concept and it's been developing and it's continuing to develop and at the moment there's a tremendous amount of discussion going on about the role of the valuation actuary and about the nature and the quality of the job that's been done. The Canadian Institute of Actuaries Annual Meeting was held recently and I can assure you that I spent all of that time in sessions dealing with valuation actuary matters and so on and we're going to be dealing with these matters.

One of my roles is to describe a little bit of what the situation is and some of what our experience has been and what some of the current developments are. I spot some Canadians in the audience and I apologize to them if I skate lightly over what I think are some very complicated and complex issues and I'm sure I'll miss quite a few fine points and details, but I'd like to give you some of the flavor of things. I hope that you recognize what I'm saying does have some point of view in it and I'm not pretending to speak for the Canadian Institute of Actuaries (CIA). The CIA I'm talking about, and I realize there's more than one, is the one that doesn't use intelligence in doing its work. It was put to me also something like this a couple of weeks ago at another meeting -- somebody said that the distinction is that the CIA I'm interested in is interested in solvency; the other one is interested in liquidation.

A second objective I have is, as John may have indicated, I've had a fair amount of contact with regulators -- I should point out actuarial regulators -- who in the U.S. may be a minority among all regulators, not only in Canada, but also in the U.S. and in Europe, and I think that there are a number of common goals that they have and common worries and concerns, and they don't always articulate them completely. So along the way I'd like to try and make a couple of points on their behalf.

Legislation in Canada was amended in 1977 so that effective in 1978 Canadian statements contained a certificate of a valuation actuary. The roots of the movement -- and I think this is important -- were not the same as they are in the U.S. today. GAAP was rearing its head and there was pressure for GAAP-like statements. People looked south of the border and somewhat in horror at the notion that you could have two separate pictures both purporting to represent the truth about a company, having two separate statements. Which one were you to believe? Particularly, the Federal Superintendent of Insurance at the time was definitely of this view and was also of the view that perhaps a so-called more realistic method of reporting income might in fact in its own right be a good early warning test for regulators as to the true health of a company.

So the move was to amend our statutory reporting to incorporate GAAP-like elements into it and hopefully then to forestall the growth of a separate GAAP statement. The motivation did not really have to do with interest rates, new money, interest in new money products and so on. And in some sense, the concept of the valuation actuary could be thought to have been introduced in more stable times.

One of the interesting questions is how the industry came to accept the valuation actuary, particularly in view of some of the sentiments that Tony Spano has just expressed. I think there are some cultural differences in terms of actuarial involvement.

TOWARD THE DEVELOPMENT OF A NEW STANDARD VALUATION LAW

First of all, I should say that in the history of the federal regulations, all our regulators, all the Superintendents of Insurance, with the exception of one, have been actuaries. Canadian companies traditionally have many more actuaries involved in them than U.S. companies of similar size, and certainly back at that time I think a great deal of top management of industry was actuarial, and I'm sure that had a lot to do with paving the way towards some of these moves.

The valuation actuary in Canada is an individual who is required to be appointed by the board of a company. Every time a new valuation actuary is appointed, the regulators, what is now the Office of the Superintendent of Financial Institutions (OSFI), must be notified. There's no requirement at the moment that OSFI or that the regulators have to be notified when the valuation actuary leaves his or her post, but as a matter of fact, that is about to be introduced. It's clear that in new legislation that will be a requirement, that when someone leaves, the regulators will have to be notified as to what the purpose of the leave is, even if it's just a retirement, but certainly if it's because of some dispute, then the regulators will know. One of the interesting developments is that if you try and change the statement and start having sort of reserves which are in some sense more GAAP-like, then the usual argument is that the great conservatism in the statutory level of reserves disappears. One might wonder what business our regulators had in allowing that sort of thing.

The regulators thought they managed to overcome that by saying that GAAP is about income reporting and solvency is about balance sheets. So the reserves really are more connected with income statements, and the idea would be that the balance sheet would somehow be adjusted to bring it back to the solvency level.

The way we did that was to introduce an official notion on the government's statement of something called appropriated surplus. One is required to make certain specific appropriations of surplus. For example, the investment reserve which is something like the Mandatory Securities Valuation Reserve (MSVR) is considered an appropriation of surplus but not a liability. There are certain appropriations of surplus which are required, in some sense, to bring reserves up to statutory levels. For example, reserves as such don't have to have any necessary relationship to cash values, but you're required to appropriate surplus to cover the surplus difference on a policy-by-policy basis if your reserve is less than the cash value.

Similarly, our reserving system incorporates all kinds of expenses, lapses, cash values, etc. and particularly in the early years reserves can be negative. If you do have negative reserves, which might be appropriate for some kind of income reporting, then at least on the balance sheet, you have to appropriate the absolute value of that negative amount as an additional appropriation to bring it back at least to zero.

There are a number of other appropriations. For example, there are a number of things which are traditionally so-called nonadmitted assets which have not been allowed in statutory accounting but which are allowed now but there is an offsetting appropriation of surplus so that the free surplus supposedly that is left will approach what you would have on a classical statutory basis. This is all fine and good and sounds really great, but I have to tell you that there are problems with it, and I'll come around to that in a little while.

Now, what the valuation actuary is currently responsible for is calculation of reserves and certification as to their adequacy. The certificate basically says

PANEL DISCUSSION

that the assumptions that have been used to calculate the reserves are appropriate. That's an important word. Appropriate to the circumstances of the company and to the nature of the business being valued. There is some good and sufficient language in there as well. But the operative notion is appropriateness of the assumptions. And I think this is really what Mike Mateja is asking for because there are no minimum standards. There are no specified mortality tables, no minimum interest rates, certainly not in any regulation.

There is a reliance on the actuarial profession to lay down standards, and here we come to that same important cultural difference. Our regulators themselves are actuaries and a lot of this discussion that led to this move was done with the CIA and the assumption is that the valuation actuary is a professional who will do a professional job, following standards laid down by the profession.

So the CIA has a committee, which is now the Committee on Life Insurance Financial Reporting, which came up with a very comprehensive set of recommendations on life insurance financial reporting. Though they bear the title "recommendations," don't be misled. They're binding. They're not recommendations at all. They're binding on the valuation actuary. There are explanatory notes which go on to say what the recommendations do, which are not binding, but the actual recommendations are word of law.

The recommendations sound really great and make a lot of good sense. They say, for example, that in choosing an assumption, you start with your best guess, then you add in a reasonable provision for adverse deviation and get your rate. You're supposed to do things according to the recommendations such as picking interest rates by looking at your current asset position, looking at how you're going to reinvest and do cash flow projections and so on. All this was written down in 1978. Cash flow projections were not a hot topic at that time. Unfortunately, they haven't necessarily been a hot topic since that time in all cases.

The problem is that these recommendations fail to be very technical. They left it to the actuary to decide what appropriate meant, they didn't give any real guidance on how to choose provisions for adverse deviations or on how to arrive at your best guess for that matter, something which people, in fact, were used to not doing. They were used to not having a best guess.

Because we were in a situation in which we had a statement that was supposed to be substituting for GAAP on one hand and being a statutory statement on the other, there was considerable confusion within the valuation actuary community as to what level of conservatism they should really be putting into the reserves, as to what the provisions for adverse deviations were. Certainly experience has been that two actuaries valuing the same company could come up with very different answers. We've come to see that as a really great difficulty. As an outside critic looking in, I could say that we hadn't nailed things down enough.

The next thing I want to mention is what the valuation actuary has to do in terms of reporting. There is a statement with respect to appropriateness, and that's contained in the public statement. More than this, the valuation actuary files a report with the regulators each year which goes into considerable detail in some cases as to what the assumptions are, why those assumptions are being chosen, why certain changes are being made, what the company's policies are with respect to asset-liability matching and so on.

TOWARD THE DEVELOPMENT OF A NEW STANDARD VALUATION LAW

I say in some cases, because one of the problems is that until very recently there were very few standards as to what the valuation actuary's report should require and it's only in light of some of the past experience that the regulators have decided to issue guidelines and say here's a minimum of what we want to see.

My message is that we jumped into this process, but we've been learning as we go on that we have to specify things that were left unspecified at the beginning. It's definitely an evolving process.

The valuation actuary's report, incidentally, is considered to be a confidential document. We have legislation similar to the Freedom of Information Act that you have here. To the best of my knowledge, they can keep these reports outside of the scope of the legislation, and the competition or the public doesn't have access to those reports. On the other hand, I think there's a lingering suspicion that this has never really been tested in law and no one is quite sure. This will become more critical as time goes on.

What was the experience? I've indicated already that there's been a wide variety of assumptions that can be made. A couple of things developed.

First of all, the regulators right now are part of what's called the OSFI. The name is fairly new but what's important is that it brings together the regulation of all financial institutions in the country, on a federal level. I would suggest that this also has an effect on the process, not always appreciated by the insurance industry in Canada, but I can tell you, having sat in the regulator's office, it's significant because they regulate all institutions at the same time and they're probably more concerned about the concept of level playing field than the industry. They're much more aware of it. The regulators know the ins and outs, the rules of the various types of institutions and they know which ones are comparable in one set of institutions to which rules for the other set. In so far as they do have some effect on legislation the goal really is to level things out. They recognize that different types of institutions are engaged in essentially the same types of activities, operating sometimes under different rules, and they can see that that doesn't always make sense.

By the early 1980s, the regulators discovered that they were experiencing failures or insolvencies, not of life insurance companies -- no federally supervised life insurance company, at least in recent history that I'm aware of, has ever become insolvent, but of property and casualty companies and trust companies, which are our version to some extent of the savings and loans here. They were aware that a lot of the problems that gave rise to those insolvencies had their counterparts potentially in the life insurance business. One of the things that became clear was that we'd better have some sort of deposit insurance counterpart for insurance companies, similar to what you have for deposit-taking institutions. So the regulators put the industry on notice that some sort of guaranty fund is required and also one that said the industry could do it themselves, but if they didn't, then the government would do it. This is coming into effect, both the P&C and the life industry have been busily designing their own plans and I think that we can expect to see one introduced this year. The life one is almost ready to go but there are some jurisdictional problems.

This is important because these guaranty plans have their own interests at heart and are interested in making sure that companies are solvent, and that the

PANEL DISCUSSION

industry doesn't have to pay any claims. So there is a move there to introduce some sort of ongoing minimum capital and surplus requirement to make sure that companies which are covered will not go insolvent and the industry will be fairly happy.

That was in 1982. In 1983, the regulators were becoming increasingly concerned by the failures and by the wide range of valuation results they were seeing, and a couple of things happened.

One, they began to get interested in a statutory minimum capital and surplus requirement and began to investigate that problem. That eventually led to a report which has led to the development of a formula for minimum capital and surplus which is being developed jointly by the industry guaranty fund, which is sponsored by the Canadian Life and Health Insurance Association, which is like the ACLI, and by the regulators themselves.

Secondly, with respect to certain products, the regulators were extremely concerned about the level of valuation assumptions being used. The products themselves don't exist in the United States. We have a variety of things called lapse-supported products. Imagine, if you will, whole life insurance with no cash value. If somebody lapses, once there's a significant asset share, the company profits considerably. We have that, called Term to 100 or Term to whatever age you want to use. Some actuaries were using lapse rates which were rather high, and therefore in their valuation were taking credit for some of these gains. It was believed that this was inappropriate. For if the marketplace became aware of the advantages of keeping business in force, there was considerable antiselection risk which wasn't being recognized.

The department was really concerned. To the embarrassment of the actuarial profession, they actually issued a memorandum Christmas Eve 1984. Just as people were doing their year-end work, out came this memorandum which essentially laid down what lapse rates will be. This was the first time since the valuation actuary concept had been introduced that the regulators had actually said this is what the rates will be. There had been a little bit of consultation with the CIA, and the CIA immediately set to work at the request of the regulators in trying to formulate guidance to member valuation actuaries about how to choose assumptions. This has been a major focus of work for the last two and a half years.

We produced a series of what are called Valuation Technique Papers. Two of them have gone through the whole route of exposure production, exposure drafting and final approval and adoption and a number of them are in the works. Each of these deals with some specific subject, for example, choosing lapse rate for lapse supported products, for choosing mortality rates in particular for reentry type term products in which you have a great difficulty in dealing with antiselection risks.

Each of these technique papers is supposed to be fairly detailed, not only lay out principles but also in some cases specify acceptable ranges of assumptions, not lay out an assumption in most cases, although some people might argue that. In particular, these papers feature worked-out examples of exactly what is meant by the text of the paper. These are considered as supplements to the recommendations for financial reporting and are binding on valuation actuaries.

TOWARD THE DEVELOPMENT OF A NEW STANDARD VALUATION LAW

Two of them are officially approved; one is now in the exposure draft stage, and has been for awhile. Last Sunday, the Council of the CIA approved another three for exposure drafting. There are several more coming along, dealing with such things as how to choose reinvestment rates and so on.

There was a lot of concern about the fact that these valuation assumptions varied a lot. The concern was increased because of some anonymous surveys. For example, there are several surveys which looked into the question of the choice of the interest rate assumption. According to the recommendations, one is supposed to do cash flow testing. In fact, 50% of the valuation actuaries in an anonymous survey indicated that they didn't pay much attention to the assets when choosing the valuation interest rate. To have admitted this in a non-anonymous survey is to subject yourself to professional discipline. The survey served its purpose because it alarmed the Institute in terms of the need for setting assumptions for setting standards, and also alarmed the Institute in terms of the need for having some sort of effective disciplinary procedure to ensure the members were complying with professional standards and recommendations. This has led to another incredible amount of work.

Now let me tell you about current events that are going on which are causing us to again modify our view about the valuation actuary.

Around 1985, a committee was struck known as the Crawford Committee to look at the role of the valuation actuary. On one hand, they were concerned that the job wasn't being done nearly well enough, on the other hand they were concerned that there was a need to do more because up until now, the actuary has only been responsible for reserves. Because of the emergence of the guaranty funds, because the insurance law has now been modified to allow for some sort of capital or surplus test, by formula, but nonetheless a test, and because of developments taking place certainly in the U.S. within the Society, the committees on valuation and the C-1, C-2, C-3 task forces and Mike's Combination of Risks task force and so on, it would seem that there is need for an expanded role. First of all that report recommends that the valuation actuary's role be continuing, not dealing just with the snapshot at the end of the year, but saying that they have a continuing role, a continuing obligation to the policyholders, to management and to the board.

There was a notion that the valuation actuary perhaps is somewhat tied to regulators and if that person perceives that the company is adopting some policy which seems to be injurious from an actuarial point of view to the company, if all else fails, then there is an obligation to go to the regulators. It's nothing that anyone particularly looks forward to doing and it's hard to imagine when in fact one would do this and it's not clear whether one should pack one's briefcase before doing this, but the report recommends this obligation.

There's a recommendation that the valuation actuary be involved with the study of the solvency of the company and has to concern himself with surplus.

These things are proceeding. I think that one of the differences is that we're working on these developments, perhaps not to the liking of everybody, but by and large these things are progressing.

With respect to the solvency aspect of things, the CIA has said that there is going to be a minimum formula test, but it's a formula and doesn't apply equally. No formula is deemed to be equally applicable to all companies or appropriate for

PANEL DISCUSSION

all companies. Therefore, we're saying as a profession, the actuary should be involved with some other type of testing.

A committee was struck, titled the Committee on Solvency Standards for Financial Institutions, and that tells you something about our hopes for the future, that we don't intend to necessarily confine our activities to life insurance companies and some of that has to do with the unified regulation incidentally.

What's envisioned is that every valuation actuary will be required to do some cash flow testing over a wide variety of scenarios and test whether the company can continue to meet the government formula surplus requirement under reasonably foreseeable future scenarios. Scenarios don't only include things like changes in interest rates, that's discussed in New York Regulation 126, but involve all kinds of elements that might affect the company's experience, elements the company can't control such as mortality experience, inflation, and interest rates, and elements the company can control such as its investment policy, its policy by which it sets dividends, its marketing strategy, whether it introduces new products or cuts back on distribution or doubles its business or whatever. The scenario also includes the choice of valuation assumptions because that is left to the actuary. The requirement certainly in this testing is that when you test the solvency at the end of the projection period, you must value using assumptions which are consistent with the situation that the scenario assumes will be in effect at the end of that scenario. If you're testing that mortality goes really bad, then you have to be valuing using assumptions which you might expect to be made by an actuary at that time in light of the five years' worth of experience.

There are a number of other moves that are being made. We have been discussing with the accountants the introduction of GAAP and it's likely we'll change our valuation system to something which is essentially a gross premium valuation but with the valuation assumptions still based on best guess plus provision for adverse deviation. A major question is "What are the standards for choosing provisions for adverse deviation." We certainly don't intend to let that slide and there are task forces working and lots of discussion as to how those provisions will be specified.

One of the questions that comes up in the U.S. as well, and this is one thing the regulators never articulate very well, is that in moving to GAAP we've seen that perhaps there will be an additional release of surplus from the reserves. It's expected by many observers that our new reserves will be even lower than our current reserves, which are definitely much lower than the U.S. level of reserves under the Standard Valuation Law. The question is, "When this surplus gets released, is it going to be released into free surplus or not?" The temptation is to say it's going to become another appropriation of surplus which is consistent with the way we did things in 1978. It turns out now the regulators are balking. The reason that they're balking is (and I've found this statement has been made in the U.S.) that in setting up certain reserves or appropriations, they would rather see it above the line than below the line as some sort of designated surplus. I've learned it's not always clear to people why that's so.

The ultimate fear is that if a company gets in trouble and the regulators exercise some of their powers in terms of interfering with the company's activities which might be appropriate for a troubled company and if management then resists and goes to court, the argument becomes one of whether the company is

TOWARD THE DEVELOPMENT OF A NEW STANDARD VALUATION LAW

solvent or not. If the definition of solvency is that your free surplus has to be greater than zero, and if you're required to have certain appropriations and the regulator's argument rests on the fact that your total surplus doesn't even meet those appropriations, then they've got a problem. No matter what insurance law says, the court is used to classical accounting. In classical accounting the whole test is assets greater than liabilities. If you don't have enough surplus to meet some kind of requirement, nonetheless you may have assets greater than liabilities. There's a fear based upon a certain amount of experience that the requirements will be ignored by the courts because the judges basically understand classical accounting. Therefore, the regulators, if they're going to say you must have certain funds available, set minimum values for assets. They want to see those requirements specified in the liabilities because there's a much greater probability that the requirements will be enforced by the court system.

What do I think we have learned from the valuation actuary experience?

1. In spite of all the problems, I don't know of anybody in Canada who would go back on it. It's regarded as a positive step, and general management accepts it. We think that it's a better system than just having mandated rules and verifying that you've done the right arithmetic, added up all the policies, multiplied by the right factors and come up with a final grand total. However, there are a lot of pressures on the valuation actuary.
2. The valuation actuary has to be a true professional, has to be able to live up to professional standards, has to have considerable integrity and be prepared to accept a considerable amount of pressure from management. There's every indication that that's going to continue and that there will be more pressure as time goes on as people try and get leaner and leaner.
3. The actuarial profession, on the other hand, has to live up to its professional obligations, provide detailed professional standards, not tell you exactly what numbers to choose, but give you detailed guidance as to how to do the job and specific guidance so that you can tell whether you're doing a reasonable job.
4. Everything is predicated upon a really good system of regulation. That's something that we've been extremely fortunate to have. Many of our regulators are actuaries. There's close cooperation between the regulators, the actuarial profession and the industry. For example, all the major committees within the CIA which deal with financial reporting, solvency and so on, have members of the Superintendent staff as members. The system is predicated upon the trust in the actuary's professional judgment and upon the quality of the job that will be done by the valuation actuary. I think that's extremely important.
5. As we pay attention to choices of assumptions and choices of provisions for adverse deviation and as we get into testing whether there is adequate solvency, the valuation actuary's job is going to become increasingly technical. We're going to have to pay some real attention to things like statistics and probability and not just what was on Part 2. It's going to become actuarially technical. I find in financial reporting committees now we're discussing how mortality tables are built, what margins are in there and so on. You have to begin to remember this stuff again.

PANEL DISCUSSION

6. The valuation actuary will have to have considerable resources. This brings us to Tony's point about expenses. It's going to be an expensive job, it's going to be an incredibly difficult job. We're piling the work on these people. We're going to demand incredible resources. Everyone's worried about how much the valuation actuary's going to have to do. My perception is that everyone is worried about how much they're going to have to do in the next two years, that the system is evolving and it's changing rapidly and we're increasing the job. The question is, "How are these people going to cope, how are they going to adjust." However, I do not detect an overriding or very strong resistance to the idea that the job should be done. With respect to the solvency testing, the cash flow testing I've mentioned, my perception and the one certainly that the committee that's putting this forth, is that this whole cash flow testing process is much more useful to the company from a strategic planning point of view than it is just to help the actuary satisfy some technical requirement. The benefits are greater to the company than the cost of doing it, even though the original impetus for doing the job is to fulfill some requirement. It's going to be hard, it's going to be expensive. Small companies are going to have to pay as much as large companies are. It might be that the political position of the small companies is different in Canada than the U.S. and that might account for some of the differences. The small company argument about expenses and resources is not nearly as strong in Canada as it is in the U.S. and this movement generally is proceeding.

One last point that was raised once or twice. We're requiring people to write a lot of reports. Incidentally, the solvency report will be a report to management. It will not be public. The minimum surplus test will not be public, it will be done but won't be part of the published financial statement. The valuation actuary's report and the solvency report are available to the regulators. First of all, there is a problem of confidentiality but also there's a problem of who's going to read these things. In fact, our regulators are just as understaffed as everybody else. Actually in the last two months lots of people have left, unfortunately, and they are severely understaffed. The regulators never had time to read all the reports. They never told anybody that until about two years ago. In fact, they do what you might expect. They look to make sure that the reports exist for all companies and they read the ones that come from the companies they're worried about. That's a fact of life. What has to be done is give the regulators resources and generally this final comment tells you the state of things in Canada. I think the industry would support giving the regulators increased resources to do that job. It's a hard job, but I think there's lots of experience here, good or bad.

MR. TWEEDIE: Personally, I'm glad you took a little longer and explained that in some depth. That is a different world than we have in the U.S. or that anyone is postulating, but it could come, and if it does come, it'll be because of a failure of our regulatory system, failure of the actuarial profession or failure of the industry generally to fulfill its promises. We may have easier ways to get the job done. If you don't think that you'd like to go through the tremendous amount of work that Allan is describing, I guess we had better find those other ways. We have a few minutes for some questions, and I wondered if perhaps Mike and Tony might want to have a few words of comment, analysis or rebuttal to what Allan has just said, since some of his remarks are so provocative in the sense that it's such a different picture that he painted than we've been talking about here in the U.S.

TOWARD THE DEVELOPMENT OF A NEW STANDARD VALUATION LAW

MR. SPANO: I've found Allan's presentation to be extremely interesting. I know I certainly picked up an awful lot from what he said and I think that the most significant comment he made was about the cultural differences between the Canadian and the U.S. situation, and that's going to have to be kept in mind. The Canadian regulatory situation, as far as I know it, is that there is a combination of federal and provincial regulation with the solvency responsibility resting with the federal regulators, so you have one set of regulators that companies are concerned with. The situation, of course, is quite different in the U.S. It's the state regulators who are involved here, and we're talking about many different governmental entities, 51 jurisdictions in the U.S. John referred before to the considerable difference in resources among the different states. Those figures are tremendously revealing that over half of the FSAs in regulatory work are with the New York Insurance Department.

Naturally, this means that most states do not have any actuaries or perhaps have a part-time actuary. So it's a very different regulatory situation.

MR. MATEJA: I'd just like to make one observation. I think the Canadian situation is indicative of a response to what I would say is a clear change in our business. The insurance business is no longer the state of business that it was at the turn of the century and maybe that's another way of looking at it. We have the same valuation concepts today that existed back at the turn of the century, and I would suggest that in itself represents some kind of an indictment of the entire valuation process. The 1980 amendments introduced some kind of process that reflects underlying risk, but our business has changed dramatically during my tenure, which is now approaching 30 years, and I think the valuation concepts are the one thing that probably are pretty much the same. We're really in need of some kind of a major breakthrough that will get that end of the business in step with a lot of other change that has taken place.

MR. OWEN A. REED: I manage the valuation process in Sun Life of Canada and we have to do worldwide valuations in Canada and worldwide valuations in Britain. We do the valuation for our U.S. branch, and we do the New York Regulation 126 testing. I think it might be of interest to you to hear from our perspective. The valuation actuary in Canada is actually regarded as something of a no-man inevitably, simply because he's the other end of the balance. The more the margins are cut, the more that becomes noticeable. So a lot of the companies support the principle, have supported it and probably will continue to do so, but it's this problem that's arising as margins get thinner. I think the valuation actuary is regarded to be a bit more of a no-man than he was a couple of years ago.

My company actually has volunteered an actuary to the Department of Insurance to help it review its reviewing process to figure out what it's going to do about the valuation report. Tony referred to the possible problems of small companies. Because we operate multinationally, I perceive that the management process is much more difficult for a big company than it is for a small company. Needless to say, what I'd like to see is countries on roughly the same basis and we could just copy the system one to the other. What I don't want to get locked into and what we seem to be in danger of happening in Canada is that we're going to be pulled down to the lowest common denominator, that they're going to set these standards on what they call a simple and practical basis and bring us down to their level of mediocrity in setting the valuation standards.

PANEL DISCUSSION

Allan made a comment that he thought that the Canadian reserves were lower than the U.S. I don't think that's true of annuity reserves. For some blocks of annuities I find that the Canadian statement reserves are a little bit higher, sometimes a little bit lower. I think in balance they're about the same.

Allan also talked about valuation law. I'm interested to know whether the regulatory authorities in the U.S. are thinking of changing the asset values. For example, I spearheaded the Canadian industry's move to get what we call amortization of income on real estate. I think you've got an archaic way of carrying real estate on your statutory balance sheets in the U.S., namely, cost less depreciation, probably way below what the market values are.

As far as provision for adverse deviation, I'm not too interested in this business of coming up with the best estimate in the provision. What I'd like to do is simplify and go straight after the interest assumption, including the provision for adverse deviation, mortality assumption included. I don't see why we have to go through any intermediate step if we don't need it.

I'd like to ask you a question, and I'll tell you a real-life story just to indicate why I'm asking it. In Britain, the test there is market to market. Assets are at market. You have to set up reserves with interest assumptions relating to market values and right in the reserve, you have to provide against the cash value floor, and in addition, you have to provide against interest rates moving up 3%, staying low, at the same time equity values in real estate go down 25%. Our cash value insurance liabilities for Canadian statutory purposes are about \$3 billion. Under the British system, we have to pump about \$500 million into those reserves to meet those tests, essentially because of the existence of cash values. So one primary question for me is, "Do you think they're going to retain the cash value floor in Exhibit 8 of the U.S. statement?"

MR. MATEJA: It's probably premature to speak to a lot of that. I don't know that the current committee would be addressing as broad a range of issues as I think you've described. One of the things that the group has been trying to do is define the charge that they think they can get through in a reasonable period of time, which is take a look at the range of risks and say in this situation certain tests are appropriate and in another situation another form of testing is required. I doubt very much that we'll get any kind of statement that reserves less than cash surrender values are appropriate anywhere in the near future, certainly not from this group.

MR. TWEEDIE: If anything, I'm struck by the inadequacy of our efforts. When I hear about what's happening in Canada, we're taking very small steps here.

DR. BRENDER: I think as far as the best guess plus provision for adverse deviation, particularly if we're talking about a GAAP-type statement, then we're talking about a range of provisions for adverse deviation, a minimum because you have to keep solvency related issues there. There are solvency-related issues and regulators certainly want a minimum and a maximum because we have made a deal with the accountants that this will be GAAP and the accountants certainly want to keep some control on what the margins are. There should be some maximums. I think that is part of that deal. With respect to assets, we do have a somewhat different view. For example, we do take unrealized capital gains on shares into income gradually and adjust the book value of the shares. Fifteen percent of unrealized capital gains are taken in as sort of an amortization and I believe we're going to be required to do something like that with real

TOWARD THE DEVELOPMENT OF A NEW STANDARD VALUATION LAW

estate. We're going to be required to value, to have your real estate appraised, at least once every three years. Every three years you'll have to have a piece of real estate reappraised and then there will be some sort of taking into account on a gradual basis into the asset value of the unrealized capital gain or loss.

MR. JACK L. GIBSON: Due to AIDS, there are certain blocks of business in which the 1980 CSO table may not be conservative. Is there anything being considered to modify minimum reserves due to AIDS?

MR. TWEEDIE: Again, the answer would not be by this committee. At the moment we don't intend to touch the standard valuation laws as presently constituted, which is not to suggest that it shouldn't happen.

MR. MATEJA: On the other hand, that is not to say a valuation actuary possessing the knowledge that you've just described should ignore that. What might come out of this group is that if you knew you were 110 or 120% over your valuation mortality that there would be an obligation to strengthen reserves for that group or to rely on margins elsewhere in your valuation of reserves and make some statement about the overall adequacy of reserves.

MR. SPANO: Those of you who were at an earlier general session may recall that I referred to the report of the SOA AIDS Task Force. I mentioned that the board assigned to the Committee on Valuation and Related Areas the task of determining the implications of the AIDS epidemic as far as solvency considerations are concerned. So that aspect of the problem will be pursued within the Society by a group working under the Committee on Valuation and Related Areas.

One thing I wanted to add that may be a bigger concern regards Universal Life, for at least your nonmedical business. You might be in a position where you wouldn't want to guarantee 80 CSO mortality charges if there would be some sort of formal guidelines set by an actuarial group. Maybe it would be easier to get state approval of guaranteeing higher than 80 CSO charges under certain circumstances for Universal Life contracts.

I just want to add that if you're concerned about the AIDS problem, besides the Society task force, two reports are available by a working party on AIDS of the Institute of Actuaries in the United Kingdom, which is in their journal of the Institute and I think is quite highly regarded, and I really recommend looking at some of their stuff if you're interested in extra provisions.

Allan, Harry Panjer of your university has written a paper on that aspect of the AIDS epidemic. I'm not sure of the exact subject area, but I know that it has just recently come out in preprint form.

DR. BRENDER: Harry Panjer is a colleague of mine at the University of Waterloo and I think that paper's in preprint stage. He's interested in mathematic modeling of the AIDS process and what you can then predict about it. Usually the only data which you have are the number of people who are infected HIV positive. So we need mathematical models to trace the development of AIDS. There have been other models. Mike Cowell has one that has received wide distribution within the Society and there are a number of others. There's lots and lots of work going on, a lot of it in our department, not only by the actuaries, but also by the statisticians in our group.

PANEL DISCUSSION

MR. ARMAND M. DE PALO: Tony, I know your position is that surplus should not be controlled by the regulators. Surplus is actually a very major item that's probably more the role of the actuary than many things that they have to do today with reserves. I'm very comfortable with my reserves. Most of my time is spent giving guidance to my management as to what surplus they will have today and if they continue to go along the growth plans they have, what surplus they will have in the future. It's very important that we make a statement that the regulators should not interfere with the setting of surplus and that should be left with management's discretion. That it's left clear that it's the actuary's role to input to management that the surplus they have should be consistent with their plans. To abandon that or to give cognizance that it's not part of the actuary's role to monitor, study and explore the needs for surplus is very risky. The second part of my question is really what I wanted you to expand on. Utah has come out with minimum surplus laws that over the next few years are going to be quite onerous for many companies. The New Jersey Insurance Department is now starting on a minimum surplus law of its own. I'd like you to comment on the ACLI's position at this time on those two states.

MR. SPANO: Let me back up a little bit and talk about a third state, that is Wisconsin. I will talk about Wisconsin first because Wisconsin was the first state to attempt to impose minimum surplus requirements for life insurance companies. When I talk about minimum surplus requirements here, bear in mind that I'm not talking about initial requirements for a new company. All states do have a certain amount of required surplus of companies that are seeking to be admitted to do business in the state. I am talking about continuing requirements, that is, every year a company must demonstrate that its surplus is equal to a certain prescribed amount. Wisconsin developed a regulation about 1982. The insurance commissioner was required to develop a regulation in accordance with legislation that had been passed. The legislation said that the commission shall promulgate minimum reserve standards. The industry was very much involved in developing those requirements that are in the regulation. We had a good amount of input in the regulation. To our knowledge, that requirement is working well even though we did object to the basic principle, and that's important here.

You asked what is the ACLI position. The ACLI position is one of opposition to the minimum surplus requirement simply because we recognize that the minimum amount of surplus that a company should have is dependent on many different factors and that it is very difficult to set one standard that would be appropriate in all cases. The ACLI has indicated that there's a lot of work that needs to be done before a requirement of this nature can be developed that really makes sense. So we oppose the Wisconsin requirement on general principle, but then we recognize that the commissioner had no choice here. So we worked with her in developing this regulation. To our knowledge it has not presented any problems.

In Utah, a minimum surplus requirement was implemented through legislation. This means through the law. Input was supplied by domestic companies. The domestic companies in that case were in favor of such a requirement because of guaranty fund considerations. Again, however, that regulation to our knowledge has not presented any problems.

In New Jersey we are working with the regulatory people there to make sure that whatever goes through there again will not present any significant problems.