RECORD OF SOCIETY OF ACTUARIES
1984 VOL. 10 NO. 4B

VALUATION ACTUARY—CHANGING ROLE

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MR. WALTER RUGLAND: It is appropriate to give members of the Society an opportunity to again hear the background of the Valuation Actuary concept and to discuss the issues at hand.

With this in mind, we have assembled a panel of three individuals. The first speaker is Gary Corbett who has been chairman of the Joint Committee on the Role of the Valuation Actuary in the United States. The next speakers are Burton Jay and Stephen Radcliffe who have agreed to enter the discussion as debaters. The issue they will debate is:

RESOLVED: That the NAIC and the States should adopt the interim recommendations of the Joint Committee on the Role of the Valuation Actuary in the United States and it should be adopted now.

Burt will state the affirmative and Steve will speak to the negative. First, Burt gives us his thoughts; Steve then presents his thoughts and responds to Burt; then Burt responds to Steve. After this members of the audience may address the question.

As I look on the concept of the Valuation Actuary, and recall things that have happened to bring us to where we are today, two events stand out. The first is the time when the industry brought to the NAIC actuaries the proposed 1980 amendments to the Standard Valuation Law. The NAIC appointed a technical advisory committee to review the proposal. This committee was, and still is, chaired by Charles Greeley. It was made up of actuaries, some who had been on the industry committee working on the project; some were added.

The Greeley Committee reported to the NAIC actuaries that on a basis of relative conservatism to the standards being considered in 1976 and 1972 with regard to Amendments at those times, the proposed amendment was as conservative. However, Greeley's committee said there were additional benefits in the 1980 proposal. One is that the interest rates will be handled on a dynamic basis, not only allowing for adjustments up, but allowing for adjustments down which we said was more important in terms of maintaining the conservative level. An additional benefit was that the products would be separated and each product type would be addressed within the 1980 amendments. One of the specific ideas with that was to say there is no difference between group and individual annuities; another was that they segregated products to allow some to react more quickly to environmental concerns.

However, the Greeley committee also said that it may be as conservative as it was in 1976, but we understand more about the risks today, and in fact, we can't rely on the valuation law to eliminate all risks. It noted that

in some aspects the valuation law is not designed with any conservatism in it at all. We suggested that research begin to develop a new valuation concept to replace the current law at sometime in the future.

Until that time, the Greeley Committee said that the NAIC needed to rely more and more on the actuary's opinion as new research became available. The NAIC response was to ask Greeley's committee to "go about it and get the job done." Greeley's committee revamped itself in terms of subcommittee structure and assigned one of those subcommittees, the Surplus and Solvency Subcommittee, the job of establishing a basis within the profession for a future valuation concept.

The basis of this research was emerging in the late '70's from the Society of Actuaries Committee on Valuation and Related Matters, chairman of which was Charles Trowbridge. The Trowbridge Committee presented a preliminary report at the New Orleans meeting in the late '70's and indentified that there are three contingent risks we need to deal with, the C-1 risk, the C-2 risk and the C-3 risk. The Greeley Committee asked the Society of Actuaries to sponsor more research into the C-3 interest fluctuation risk. That was done by the C-3 Risk Taskforce of the Society which continually kept producing research results for us to assimilate.

About the same time, the American Academy of Actuaries began to have discussions with the AICPA to see if there were areas where accountants and actuaries could divide responsibilities. From these preliminary discussions about the role of the actuary with regard to the statutory statement emerged the valuation actuary concept for the United States.

It is also important to note that in 1982-1983 there was also great concern emerging among the regulators about life insurance company financial reporting. The NAIC began to express more and more interest in how they could rely on actuaries' opinions with regard to economic health of insurance enterprises. In response to all this, the Society's Planning Committee recognized that there did not appear to be any coordinated effort within the profession to bring about a change in the traditional approach to reserves and to the role of the actuary. It suggested there be a joint committee of both Society and Academy designees to deal with the concept of the role of the Valuation Actuary in the United States. I was a member of that committee, Gary Corbett was our chairman, and I think I've set the stage for Gary to tell us about the work of the joint committee.

MR. GARY CORBETT: Walt has provided you with the background leading up to the problem formation of the Joint Committee on the role of the valuation actuary in the U. S. He did leave you with the question of why the Joint Committee was formed when there were already a number of other organizations working on the problems of U. S. life company valuations.

I would suggest the following reasons:

First, although a number of different groups were working on elements of the problem, nobody seemed to be integrating the work of the different groups. Second, and largely as a result of the lack of integration, there

was a growing concern, and even frustration among the people working on the problems about how little impact these considerable efforts were having on practicing valuation actuaries. Third, the Academy and Society needed direction on just what each should be doing to develop and implement specific proposals for change.

For these reasons, the Society's 1983 Planning Committee identified the role of the valuation actuary as a priority issue. We were concerned about the profession's lack of support for the valuation actuary today and also about the Society's not having determined its proper role in the development of the actuarial principles that would underlie a new valuation system.

At the instigation of the 1984 Planning Committee, the Academy and Society appointed the Joint Committee in December of last year. The charge to the Joint Committee was essentially three-fold:

1. To recommend the role of the valuation actuary;
2. To recommend the basic principles that should underlie the valuation of life insurance companies;
3. To recommend how the Academy and Society should effect and support the valuation actuary in his new role within a revised valuation system.

The Joint Committee was formed with John Fibiger, Walt Rugland and Virgil Wagner representing the Academy and Don Cody, Burt Jay and myself, as Chairman, representing the Society. (I had attempted to disqualify myself as Chairman by moving to Canada before the Joint Committee was established, but this ploy was quite unsuccessful.) We met monthly throughout the first six months of 1984 and early in July submitted our Final Report to the Academy and Society Governing Boards. The Final Report was primarily a result of our own study and deliberations, but we did solicit input from the Society membership through an article in the Actuary and we have received additional comments following the distribution of our Report to interested Society members this summer. Some of these comments did cause us to request the Boards to adopt our report with a few specific changes. This has been done. Only one of these changes is significant. I'll describe it to you when I summarize the recommendations themselves.

Our recommendations are basically two in number: the first dealing with the role or position of the valuation actuary and the second with the principles that should underlie the valuation of life insurance companies for solvency and solidity purposes. As an aside, my role this morning is to simply present these recommendations without editorializing on them. A discussion of their merits is in the province of the following two speakers.

As regards the role, or position,of the valuation actuary, we are recommending that the Board of Directors of each life insurance company be required to appoint a valuation actuary. The initial appointment, as well as any subsequent changes, would be reported to the state regulatory authorities. Qualification standards to practice as a valuation actuary would be established by the Academy and accountability would be ensured through standards of professional conduct and disciplinary measures. Such

standards must address the problem of assuring that the valuation actuary remains knowledgeable concerning current valuation principles and standards of practice. On the basis of these standards established by the Academy, the individual states would determine whether an individual does qualify as a valuation actuary for that state.

Our proposal is a middle road between the status quo, where the actuary responsible for valuation is part of the management structure, and a requirement for complete independence of the valuation actuary from the company and its owners. Our recommendation, which you'll recognize as closely paralleling the Canadian set up will, we believe, provide the regulators with sufficient assurance as to the valuation actuary's objectivity while not exposing the companies to substantial additional costs nor to the vagaries of an unreasonable valuation actuary.

The second, and much more difficult, recommendation deals with the principles we believe should underlie the valuation of life insurance companies for solvency/solidity purposes. We believe that ultimately the valuation actuary should be responsible for the selection of assumptions and the establishment of reserves appropriate to the circumstances. The valuation actuary would be directed in his activities by general principles in the statutes, further explanations in actuarial literature and by standards of practice promulgated by the actuarial profession. We believe that the availability of such principles and standards, along with the qualification standards for the valuation actuary and his relationship to management and regulators, which described earlier, should provide regulators with the confidence needed to accept the valuation actuary's determination of the appropriate reserves.

In our Final Report we had stated that "in time, when confidence in the protection afforded by the actuarial opinion becomes firmly established, the legal solvency standards should be eliminated." Following the publication of the Final Report, it was pointed out to us by both company actuaries and by regulators that the assertion that "legal solvency standards should be eliminated" was a rather sweeping statement. We have agreed that we overstated our intent in this area and thus, at our request, the Society and Academy Boards have adopted our report with the following change: "In time, when confidence in the protection afforded by the actuarial opinion becomes firmly established, the solvency standards promulgated by statute or regulation should cover only principles, possibly including a minimum standard methodology. It is expected that the actuarial profession would work closely with the regulators to develop the statutory valuation principles. The selection of assumptions appropriate to the company and environment and consistent with the statutory principles would be left to the professional judgment of the valuation actuary." This is basically what we intended all along, but certainly not what we said in the report.

In our report, we accept that until such time as comprehensive valuation principles and standards have been developed, that specific legal solvency requirements, much as we know them today, should continue to be defined.

We recommend that a statement of actuarial opinion be required from the qualified designated valuation actuary dealing with both reserves and surplus. First: that the reserves established are such that the related

anticipated policy and investment cash flows will make a good and sufficient provision for all future obligations on a basis sufficient to cover reasonable deviations from expected assumption and,

Second: that such reserves and additional internally designated surplus are such that the related anticipated policy and investment cash flows will make a good and sufficient provision for all future obligations on a basis sufficient to cover future plausible deviations from expected assumptions.

We have not further defined what we mean by "reasonable" and "plausible", recognizing that this is a very important decision to be made by the Society's Committee on the Valuation of Life Insurance Companies, working closely with the regulators.

The first section of the opinion, dealing with reserves, would initially be superimposed over the statutory solvency requirement and could require that additional reserves be established on the balance sheet. To satisfy the second part of the opinion with respect to surplus, the necessary amount of surplus would simply have to be recognized by management and the amount, along with the basis of its determination, would be available for review by regulators, but would not be required to be published in financial statements. Documentation of the basis for the opinion would be provided in the valuation actuary's Report to management and to the Board.

The reasons underlying our recommendation with respect to valuation principles are covered in our report. In the interest of time and not asserting my personal views, I'll not describe them this morning.

The third charge to our Committee was to make recommendations to the Academy and Society concerning what is necessary to effect and support the role of the valuation actuary in the context of the recommended new valuation system. Our recommendations were to cover laws and regulations, research, education and training, and principles or standards of practice.

So far as changes in laws and regulations are concerned, we certainly appreciate that our recommendations would call for extensive revisions in the laws and regulations of all the states. We recognize that such revisions can occur only with the support of the NAIC and of the life insurance industry. We would look to the Academy, probably through its Committee of Life Insurance Financial Reporting Principles, to draft the necessary changes to establish the position of the valuation actuary and the requirement for a statement of actuarial opinion. The Academy is already addressing this task, working closely with the NAIC Technical Groups.

Research necessary to support the valuation actuary will be primarily the responsibility of the Society. We are recommending that such research be coordinated by the new Committee on Life Insurance Company Valuation Principles, which was established by the Society Board upon our recommendation.

Education and training is clearly a responsibility of the Society and must address the needs of both students and practicing actuaries. The E & E Committees must provide appropriate education in the principles and

standards governing the valuation of life insurance companies to all prospective FSA's who will be called upon to provide actuarial opinions on such valuations.

A greater need, however, at least for some years, will be to educate valuation actuaries, who were not exposed to the new valuation system in their formal education, in the principles and standards of the new system. The basic responsibility for such education should lie with the Society's Services to Members Policy Committee, working with the Committee on Life Insurance Valuation Principles, the Financial Reporting Section and with the appropriate Academy Committees.

On the subject of principles and standards, we believe that principles, or tenets, of actuarial science can be distinguished from standards of actuarial practice. The learned bodies,such as the Society and the CAS, are responsible for the former and the Academy for the latter. To enable the Society to assess its proper role in determining actuarial principles generally, the Board has established a Task Force on Actuarial Principles, chaired by Bob Lindsay.

When it comes to valuation, the principles will be the responsibility of the new Society Committee on Life Insurance Company Valuation Principles. The Joint Committee's recommendations, as modified by the governing Boards, will form the basis for the work of this new committee. The resulting principles should be applicable to both Canada and the United States, but the standards necessary to implement the principles will undoubtedly vary by country.

The Academy is the organization responsible for standards of actuarial practice in the United States. It undertakes to codify, publish and manage generally observed and acceptable practice through the promulgation of recommendations and interpretations. The Academy's Committee on Life Insurance Reporting Principles is the body currently responsible for codification in the area of life insurance company valuation, but this role could eventually be assumed by the proposed Actuarial Standards Board.

Beyond the Academy and Society structures just mentioned, we have recommended the appointment of a Joint Academy Society Steering Committee to:

1. Communicate and coordinate with non-actuarial audiences, such as insurance regulators, the insurance industry, and the accounting profession; and
2. Coordinate the work of the Committees within the actuarial profession.

The Joint Committee has agreed to serve as such a Steering Committee until such time as our sponsoring bodies might appoint a new Steering Committee. For this new phase of our operations, John Fibiger has taken over as Chairman of the Joint Committee.

So, as you can see, there is much work to be done. Hopefully, the Joint Committee has established a reasonable framework within which the necessary work can proceed.

MR. BURTON JAY, Resolved: That the NAIC and the states should adopt the interim recommendations of the Joint Committee on the Role of the valuation actuary in the United States - now. I have the affirmative position.

Before debating the merits of this proposition we need to define some of the terms. Exactly what do we mean by the "interim recommendation" and when is now? Gary has provided a summary of the contents of the report of our Joint Committee. I will now elaborate on that portion of the report that we refer to as the "interim recommendation". It is interesting to recall the many hours that the members of our Joint Committee have spent together over the past several months, some of which were frustrating, most of which were enjoyable, and all of which were stimulating. We have come to know each other very well, including our individual personality traits and ideosyncrasies. When Gary summarizes and I elaborate we end up with the same level of detail. Don refuses to summarize at all!

The Report has two major recommendations. The first is that a "valuation actuary" be appointed by each company and that notice of the appointment be filed with the insurance department of the state of domicile. This recommendation may be considered as both interim and ultimate. It should be implemented "now", which I will define later.

The second major recommendation deals with the principles underlying the valuation of life insurance companies for solvency/solidity purposes. The interim part of this includes a continuing detailed Statutory solvency requirement, with formulas and limits on assumptions. In addition to these detailed Statutory requirements, the valuation actuary would be required to express a two-part opinion: (1) that the reserves established are such that the related anticipated cash flows will make a good and sufficient provision to cover future obligations assuming future reasonable deviations from expected assumptions, and (2) that such reserves plus a designated amount of additional surplus are such that the related anticipated cash flows will make such a good and sufficient provision assuming future plausible deviations from expected assumptions. In other words that the reserves are adequate with a reasonable safety margin, taking asset and liability cash flows into account, and the reserves plus a given level of available surplus are adequate with a higher margin of safety. Obviously, more work needs to be done to further define the two required levels of confidence.

Now I will try to define "now". When should the two parts of the interim recommendation become effective? The shortest possible timetable envisioned by the regulatory actuaries who are closest to the project would entail a partial implementation to apply to 1986 statements. The partial implementation would be an amendment to the existing Statement of Actuarial Opinion strengthening the "good and sufficient" assertion by requiring the actuary to take anticipated projected asset and liability cash flows into account and incorporating the two-part "reasonable and plausible" test. Late this year, the Academy Committee on Life Insurance Financial Reporting Principles will provide the Technical Actuarial Task Force of the NAIC with suggested wording for the expanded Opinion requirement, together with a revised Recommendation 7, which specifies the standards of practice for signing the Opinion. The Academy's Qualification Standards Committee will also provide the corresponding

proposed qualifications standards giving guidance as to who is qualified to render the Opinion. These Academy documents will be exposed to the membership as soon as Board authorization is received. The revised Opinion Statement will have to go through the NAIC Blanks Committee to eventually be adopted by the NAIC. This process will take time and is not expected to be completed soon enough to be implemented before 1986 annual statements. The remainder of the Joint Committee's interim recommendations will likely take at least another year. This would include adoption by the states of the designated valuation actuary requirement. This is, therefore, how I would define "now".

The ultimate recommendations of the Joint Committee would eliminate the specific formulas and assumptions for Statutory reserves. We realize this is a long range goal.

Why are we doing this to ourselves? Does this not subject actuaries to unnecessary additional liability which could result in lawsuits and penalties? Perhaps the exposure to such risks will be increased, but the Joint Committee and many others do not consider this unnecessary. Our industry has been subjected to extensive and detailed regulation for most of this century. While this has worked reasonably well until recently, during the last few years increasing and volatile interest rates, uncertain economies, major new product developments and innovative investment strategies have rendered the rigid standards unwieldy and inadequate. While conservative in some areas the existing standards no longer provide the assurance of solvency.

Regulators are demanding something more. The actuarial profession can either take an active role in the development of sound principles and standards or sit back and hope that we can live with whatever is imposed by others. The Joint Committee's position on this is obvious.

This is rather a defensive reason, however, for the near term adoption of the Joint Committee's interim recommendations. We believe that the future health of the life insurance industry could be at stake! Insolvencies have already occurred and more are possible. What will happen the next time that there is a 50% increase in prevailing interest rates in a short period of time? We do not believe that "cookbook" remedies exist! By far the best solution to the problem facing our industry involves sound professional judgment as well as new technology. We believe that the actuarial profession is uniquely situated to provide the judgment and to develop the technology. There are no other close candidates! We all know that much research and education has yet to be done, but much is already ongoing. I believe that we can prepare valuation actuaries to fulfill this role by the time any new requirements can be implemented. Both the requirements, which will be defined by standards of practice, and the tools which will be contained in principles developed through research, will be expanded gradually after the initial implementation of the new Opinion Statement requiring us to take assets into account. Standards will be developed to provide both guidance and protection to those actuaries who are qualified and follow the standards.

To put it succinctly, "it may be nasty work but somebody has to do it!" The only thing worse than having actuaries do it would be for it to be done by anyone else.

MR. R. STEPHEN RADCLIFFE: Let me begin by saying that I realize that this is an extremely difficult problem for our industry and for our profession. My comments are not meant to be critical of the people who have worked on this problem so far. I have a lot of respect for all of these people. They have much more experience in this area than I do. They have done a lot of diligent work and have given us a start on the problem. I just think that we have gone down the wrong road with this recommendation. It puts the "cart before the horse". We need to have more theory and more quantification of the risk before we put the valuation actuary's neck in the noose.

As Gary Corbett has described, the Joint Committee on the role of the valuation actuary has recommended that valuation actuaries attach new opinions to financial statements. I will paraphrase but basically the opinion would include a statement that statutory reserves together with future cash flows will make good and sufficient provision for future obligations and be sufficient to cover reasonable deviations in future experience. In addition, when surplus is added, the entire amount can cover all plausible deviations from future experience. The report goes on to say, "the actuarial profession has neither identified nor promulgated ... principles" to make such an opinion. Nonetheless, they continue "until we require actuaries to go beyond the statutory formulas in valuing life insurance companies, it is unlikely that the necessary energies will be devoted to the task of developing valuation principles."

As a valuation actuary, I highly resent being put on the griddle and having someone else turn up the flame just to get some action. This recommendation will put an enormous industry problem on the shoulders of the lone valuation actuary. This is not appropriate action. The real problem is that we have unsound products in our industry that are priced with ridiculously low margins. What has the valuation actuary done to deserve having all of this problem dumped in his lap?

Like everyone else, I love the thought of being a hero. Just picture the final scene in "Star Wars" and who would not want to be with Luke Skywalker and his friends as they all receive medals for acts of heroism? In this same vein, I would like to be a part of a profession that could save our industry from ruin. I have seen the actuarial profession lose control of the GAAP issue, the Society Security issue and the enrolled actuaries' issue. I do not want to see us lose control of this issue. By saying that valuation actuaries should not sign opinions, I do not mean to imply that the problem should be left entirely to the regulators. I want actuaries to retain control of the valuation process. I just think that this recommendation takes us down the wrong path.

Some people have interpreted my previous public comments to mean that regulators should make opinions on financial soundness instead of the actuaries. My point is that no one should make opinions about future solvency of life insurance companies. Opinions are not appropriate or supportable in these times when our economy is so unpredictable and erratic. Opinions will be misunderstood by the public and the regulators. They will take on a lot more meaning than we intend. I think that the opinions will be understood as a warranty on not just the current solvency of the insurance company but the future solvency as well.

During my research on this project, I discovered that I do not even like signing the current opinion. It says too much. I honestly do not really know if reserves make good and sufficient provision for future obligations even if I do a professional job in valuing my company. There are just too many things that can happen in the future in these times to make that opinion invalid. In retrospect, I think we started with the current opinion and expanded it to a point that it is less supportable than the opinion that we currently make.

The most basic objection I have to this recommendation is that these opinions are not supportable in a court of law. We have no actuarial standards or principles to rely on. Instead, we leave the valuation actuaries' subjective feelings about the matter exposed like an open nerve. Remember, these opinions will not be judged in the light of the day that they are signed but in the light of some future day with all the beneift of hindsight. If people do rely on the opinion as an assurance of future soundness, this opinion will surely backfire if the future does not work out the way the valuation actuary thought it would. This is the main reason why I am objecting to this process. Some actuaries could really get hurt by this process if the future does not work out the way we think it will. This is an unnecessary risk to force on the valuation actuary and after all, some of my best friends are valuation actuaries.

The recommendation on the role of the valuation actuary stated that some judgment is necessary in valuing life insurance companies because it is not possible to quantify all of the risks. I just plain cannot buy that argument. If you cannot quantify the risk, how in the heck are you supposed to make an opinion about it? Is the opinion going to be based on just how the actuary feels on a particular day about the future of his company?

Well, if we are not going to sign opinions, what should we do? I think that we should develop an entirely new reserving system that quantifies not only the requirement to pay future benefits but also that covers some of the risks inherent in paying those benefits. Up to now, the recommendation has only considered the C-3 risk. We should really cover all risks, C-1 through C-4, in the new reserving system. I know all of this will take some time but we must concentrate our energies on research so that we can quantify these risks. The valuation actuary will have something to back him up and have a sound basis for all of his statements about the financial soundness of a life insurance company.

Many will argue that we just cannot wait for a new reserving system. Our needs are immediate with nothing less than the existence of our industry hanging in the balance. If we must do something in the meantime, I suggest that the best that we can do is to sign a statement, not an opinion. The statement would say that we had made calculations with respect to future cash flows, that we used reasonable assumptions and that the formulas and calculations are correct and accurate. Then, we could attach a schedule showing the results of the calculations but make no opinion about those results.

I would like to conclude by asking - what is the real objective of our profession with regard to this matter? I think that we are trying to provide a valuation basis that will make our industry more financially

sound. However, this opinion could actually create a situation that would make our industry less sound. Consider, for example, a case where the valuation actuary decides that he cannot sign any opinion for his particular company. There may be other actuaries who would be quite willing to sign the same statement but for some reason the actuary in question decides that there is no way that he would be justified in signing the statement. In a matter of days, the "Wall Street Journal" would pick up on the story of the actuary's refusal to sign. The story is then picked up by the rest of the media creating panic in the public's mind and funds begin to be withdrawn from the company in question. This "run on the bank" in turn causes the insolvency of the company. This is an example of how the actuary's opinion preempts the capitalistic process. By forecasting insolvency, he actually created an insolvency. On the other hand, the more liberal actuary could have signed the opinion and the company could have easily weathered the storm in the event that some future event was favorable to the company.

MR. JAY: Steve has stated that he does not want to be a sacrificial pancake to cleanse the sins of an indulgent industry. Frankly, neither do I! The prospects of being a part of a group where only the survivors receive medals is beyond the risk threshold of all but the most daring and reckless of us. The problem is that valuation actuaries who sign the required Statement of Actuarial Opinion have already been in that position for a decade or so.

When this Opinion Statement was first thrust upon valuation actuaries by the NAIC there was much turmoil. At that time it was considered onerous by many actuaries that an assertion was required that the reserves established make a "good and sufficient provision for all unmatured obligations of the company guaranteed under the terms of its policies." However, the NAIC was not willing to negotiate on requiring this assertion then and I feel would be even less likely to eliminate this requirement today. On its face, the assertion would seem to say that, in the professional opinion of the opining actuary, if the company gave away all of its surplus and stopped writing new business it would remain solvent until the last policy matured. This is not a guarantee, however, whatever that would mean--it is a professional opinion.

Recommendation 7 of the Academy defined what that professional opinion meant, based on the state of the art as it existed at the time it was written. The Recommendation and its Interpretations define gross premium valuations and a few other tests but remained silent as to future cash flows related to the lack of coordination between the timing of maturities of assets and liabilities. In that period of relative stability of interest rates and the economy in general, mismatch did not seem to be a concern and, it was thought, could properly be ignored.

It is no longer prudent to assume a stable economy and the state of actuarial art has expanded, and is continuing to expand, to deal with unstable economies. It has been argued that, because of the changed environment and new actuarial tools available, the valuation actuary is already obligated to take projected cash flows into account in forming his opinion.

I submit that it is better to define this obligation in the wording of the Statement of Opinion and the content of the related standards of practice in order to remove as much doubt as possible for the actuary, the regulator, the courts and the general public as to exactly what the Opinion means today. This definition of the methods and procedures that the actuary is expected to follow should put all concerned on notice as to the nature and magnitude of risks that can be tolerated by a company's block of business that has been blessed by a clean Opinion of a qualified valuation actuary. If our profession does not clearly establish the definition, we place our destination in the hands of some fickle court that has the benefit of hindsight in a particular situation.

This is a rather long answer to Steve's point that no one should make opinions about future solvency of life insurance companies and that he doesn't even like signing the current opinion. First, we already have the current opinion. We have had for ten years. The prospects for having it withdrawn are remote. Second, the current opinion does not say that the valuation actuary can ignore cash flows or anything else. Third, since we do indeed know something about how to manage cash flows and measure their effects under varying future conditions it would be reasonable for a regulator or court to assume that a valuation actuary signing the current opinion has taken this into account. Fourth, by specifically codifying as many tests and considerations that anyone could reasonably assume the valuation actuary should take into account, we can provide as much protection as possible to the actuary for company failures resulting from events beyond his profession's ability to analyze.

Steve's remedy is that we reduce the current Opinion to a statement that we have correctly followed specific procedures and that our assumptions are reasonable and begin to develop an entirely new reserving system that quantifies all of the risks. In the real world, the weakening of the current opinion requirement just isn't in the cards. Further, we may never be able to scientifically quantify all of the risks.

One thing might be done, however, that may help Steve and would make me feel better too. This thought was suggested to me since I have been here and has not yet been considered by the Joint Committee. What if we changed the Opinion's wording slightly from "make a good and sufficient provision" to "make an appropriate provision"? I believe that this would better describe what the assertion really means anyway and might therefore be considered a clarification, rather than a change. I understand that a similar clarification either has been made or is in the process with respect to the Canadian Statement of Opinion.

Steve's "run on the bank" illustration is a concern to all of us. But, is it better to save a shaky company that may get lucky in the future or to sound a loud warning when solvency is a question so that early steps to protect policyholders can be taken by management or regulators. In practice, a company does not suddenly become shaky. It is the responsibility of the valuation actuary to inform management in confidence early on if practices or events have occurred that may lead to future trouble. We must train our members to do this.

Actually, Steve's remedy of a weakened statement does not solve the "run on the bank problem" anyway. If the valuation actuary simply states that

he has followed the recommended procedure and made his calculations correctly and publishes the results, and the published results show that the company is shaky, we still will have a "run on the bank". Further, the actuary is probably as unpopular with his management as if he had followed this statement with an opinion that the company is shaky. There could be borderline cases where some actuaries or regulators would consider a given set of results as indicating a shaky company and other actuaries or regulators would consider the same results to be acceptable. This is a problem with any requirement that calls for a clean opinion, a qualified opinion or no opinion. The actuary may have to choose between his job for another year or jail! This has potentially already been a problem for 10 years. We hope that its occurrence has been and will be rare. Given where we already are, I do not think it can be eliminated entirely.

In summary, I do not believe that the solution is to go back or even to stall. I do not believe that this is an option. The solution is to design the opinion statement and draft the standard of practice as carefully as possible, given the current state of our technology, to package the research and development work as well as possible and to educate all actuaries with valuation responsibilities as quickly as possible. We probably have at least two years before new requirements can be in place. We have already accomplished a lot in the last two years and we have the research, training and principles and standards development going in high gear and still gathering speed. You will have the opportunity to watch all of the work in progress and provide your input. I urge you to do this; we need all of the help that we can get.

Over a reasonably short period of time we will see the valuation actuary's job evolve into a much higher level profession, with all of the problems and benefits that that entails. I believe that this is, on balance, a very positive development for our profession and the insurance industry.

I would like to thank Steve for his thoughtful comments. I know that his concerns are shared by others. These concerns must be addressed and dealt with. I hope that I have contributed something to this end. It is important that we achieve as much of a professional conscience as possible as we move ahead so that we can concentrate our resources on doing the job right, rather than continuing to debate whether or not to do it at all. If we cannot even convince our own members that we should be the ones to do this job, what hope do we have with others. We don't have all the answers yet. We need your help with that. But we firmly believe that we are capable of doing more than multiplying one number by another several times and adding up the columns.

MR. GREG CARNEY: I would like to congratulate Burt and Steve on making some excellent points.

I agree with Steve that the focus really should be on pricing right now and on product development. I think that we are asking the valuation actuary to solve the C5 risk problem and I define C5 to be insanity in pricing. Steve made another point about being judged with the benefit of hindsight. In 1976 I did a doomsday scenario and what I did was project

out for about 5 years and said we would get an inverted yield curve; short-term rates would be at about 14% and the long rates would be at about 12%. We believed we were able to withstand that doomsday scenario; we made a presentation to our Board of Directors and to some stock- broker firms in the due diligence. Everybody said that those assumptions were outside the range of plausibility and if we could survive them, no problem. Then we hit 1981 with a prime at 21%. We would have been judged in 1981 in that environment.

I think we can have a good-faith effort by the actuary in terms of doing the type of work that has been discussed here and still have an insolvency because we just cannot project everything that is going to go on in the future. In summary, I support the recommendations but I do think that we have to define the standards and the principles that are going to be used to judge us.

MR. CLAUDE PACQUIN: After listening to this debate I am not sure which way I ought to lean, and I suspect that my mind is in suspense as it often is in some of these matters.

It appears that the main concern with having the Valuation Actuary is a concern over insolvency and it appears to me that there haven't been all that many life insurance company insolvencies, either in the U.S. or Canada. When there have been some, the insolvency has been due much more to gross mismanagement than to a shortage of premiums, or inadequacies in pricing, or truly actuarial matters. I think if we analyze most of the insolvencies we see that there is nothing truly actuarial at the foundation of them. So I am not sure that we ought to be concerned that much with the actuarial aspects of insolvencies because I do not see them as a cause.

I see some impracticalities in trying to insulate an actuary from the rest of management, and yet to call him as a part of management. I realize that more and more corporations are setting up some internal audit departments which are generally insulated from the remainder of management and report to some independent committee of the Board of Directors. I think the Securities and Exchange Commission favors that sort of arrangement, but I am not sure that the actuarial profession is ready to be insulated or to have some members of it insulated in a separate department.

I think there is also a need for standards because it seems that the ultimate view of the Valuation Actuary is a person who, relying upon standards, comes to an opinion as to whether a company is headed for solvency or insolvency. It seems to me that the ultimate standard is a bit too fluid. For tax purposes, for instance, we have some definite reserves and some standards so that no manipulations are possible. I also see a merger of the GAAP reserves and the statutory reserves. Frankly, I am not quite sure where the Valuation Actuary concept takes us except that it seems to lead to a merger of GAAP reserves and so-called statutory reserves. But when we seek to eventually abolish the statute which created statutory reserves, I am not sure what kind of reserves we are going to be left with.

Some comments have been made here about the law and being sued. Generally speaking, everyone has the right to be wrong. There is a standard of

malpractice which applies to professionals, and it applies to actuaries in the same way as it applies to anybody else. The standard of malpractice normally is to display and use that level of skill which the common practitioner in the community would normally use. As a practical matter, it's not worthwhile suing an actuary because actuaries don't have much money, especially those that work for life insurance companies. Insofar as going to jail is concerned, that's preposterous because unless an actuary displays a criminal intent which is overwhelming and violates some specific criminal provision which I cannot envision at this point, there is no chance in the world that you would possibly go to jail.

I also question the value of the Valuation Actuary when we think that we are evolving toward universal life and products where the valuation essentially is retrospective. With so much of the risk being transferred on to the policyholder there might be less need for a Valuation Actuary who tends to look at things prospectively.

MR. CORBETT: First of all the fact that most insolvencies are caused by poor management rather than actuarial problems is a historical fact, certainly in the United States. I think, fortunately, Canada has a lot less history to go on in that area but they are catching up a little more in recent years. We are careful in our report to point out that no actuarial opinion, no actuarial judgement, is going to prevent companies from becoming insolvent because of current unsound business practices. We have to be very careful that we don't over promise what we can do with this opinion.

Second, what about the Valuation Actuary being separate from management. I don't consider him separate from management. This situation exists in Canada. Valuation Actuaries are every bit a part of management as everybody else. They simply have another recourse which is directly to the Board and they report directly to the Board with respect to their valuation opinions, but they are still a part of management.

With regard to income tax: there is no question that if specific statutory requirements are done away with in the law, something will probably have to take their place as far as income tax. Again, it's the situation in Canada. There will be negotiations. Income tax laws are always a matter of negotiations and I am sure the matter of those reserves would become a matter of specific negotiation. I don't see this necessarily moving toward a merger of GAAP and statutory. I would caution that we were strictly looking at the statutory scene and deliberately did not address the GAAP situation.

As far as UL, yes to the extent that products become truly retrospective, truly fund accounts with no significant minimum accumulation rates, or mortality assumptions, some of the problems of valuation go away. But I would say that UL today has most of the problems of traditional life insurance as far as valuation. It need not. If it is purely separate account funded, some of those problems would go away.

MR. AL CHRISTIANSEN: It seems from reading the report that one of its premises is the appendix which seems to take for granted the fact that you are going to apply probability models to not only the securities markets but to all the other processes imbedded in the life insurance company.

Gary spoke of objectivity in the Actuary's Report, but its objectivity is based on objective application of mathematics starting with some subjective assumptions. If you do enough mathematics you can obscure the fact that it is really a subjective report in the end. This puts us in a position where we have an entirely different standard applied to the insurance companies than from the other financial institutions with which we are competing. They don't have any probability requirements.

MR. JAY: I would like to make a couple of responses. It was pointed out that most of the recent insolvencies have resulted from bad management rather than the C-3 risk or any of the more actuarial risks that we are equipped to deal with and Gary acknowledged that we all agree that is true. And I think that the function of developing and finding the standard is to define what risks are addressed by the actuary, and then by implication it will also be clear what risks are not. And certainly bad management isn't one of the risks that anyone that I know of is writing a textbook about for valuation actuaries. The C-3 risk is one we already have started on. The standards will say that these are the things that the actuary will take into account. Maybe we can get some kind of a consensus on how bad the bad scenarios should be that we test that prudent actuaries would tend to agree on. Then if interest rates triple or quadruple or we get into a 400% inflation environment, at least there will be some basis to say that was beyond plausible level and we all agreed to that because it was written down.

Obviously probability functions that we are talking about must be subjective. But we need to develop them if only because they help us to understand better the relationship between some of the variables that aren't intuitively obvious. And to watch the results of probability functions, giving them certain specified inputs, can teach us a lot, help make better judgements. It will still be subjective, but less subjective. There usually seems to always be a simple answer, the only problem is it's often wrong. In many cases the statutory reserves are a simple answer, but they're wrong.

MR. JOHNSTON: I am from the Government Actuary Department in Britain. I'm a Regulator. We are grappling with much of the same problems that were brought out today because we are running a system rather similar to your proposed valuation, actually. We've been doing it for about ten years now. It got set up as a result of a number of insolvencies which created quite a shock wave in the British insurance market.

Some of the comments I found interesting. We expect the Valuation Actuary to be involved in the pricing program and product development because from our regulator's point of view what we want as regulator's is a quiet life like everyone else. Therefore, we don't want the company to get into trouble. It's no satisfaction to us to have to pick up the pieces afterwards. So we want the Valuation Actuary to say when a product is being designed, "if you put in those guarantees, I will have to set up these large reserves which will cost you a lot of money". And if the system works, the product designers and the pricers then say, "Oh well, in that case we'd better modify the guarantees". That is the great hope anyway.

Now for this to work, the Valuation Actuary has first got to be an important person in the company. As a manager he really needs to be

someone who reports directly to the Chief Executive Officer and not anyone lower down. I think there's hardly a single case in Britain where he's not in that tier of management. He also needs to be identified to the company, and to those outside the company, as the person who is responsible for the actuarial state of the company and the actuarial reporting of the company. That's why we require a certificate which corresponds to the more difficult opinion which I gather your committee has recommended.

We have much the same argument at home about this. The result is to make the job an exceedingly difficult one; there's no question about that at all. When some trouble occurs--well we had a case a year or two ago where a company just made a straight forward mistake in the wording of its contracts. When this mistake was discovered it was with several hundred policies and they realized that if the policyholders chose to exercise their rights, their liabilities would for all practical purposes be infinite. At that stage they call in the actuary and say, "What do we do to get out of this." The regulators of the Department of Trade call in the actuary and say, "Are you prepared to sign your opinion? If you're not, we are going to stop the company, and you can't do any more business, but if you are that's all right." So it's quite a difficult job.

Two things are needed, one is support from the profession . That takes various forms. One form is an issuing of practice standards, things which give the actuary a set standard which he knows he has to conform to and he can then say to his management this is the standard which I've got to conform to. Your competitors also have to conform to that standard. That is essential.

Also there is the ability to consult. This is needed because the Valuation Actuary will not necessarily be a senior person, or experienced. If it's a small company, he may be somewhat recently promoted, and the ability to consult a senior member of the profession in total confidence without his company knowing what he is doing is, I think, valuable. Also, he needs support from regulators. Support may not be what you think you normally get from regulators but this takes the form partly again of the setting of standards.

We just had some talk about probabilities. I didn't fully understand the technicalities involved over here because in many ways your practice is different from ours, but one can't do without regulatory standards altogether. One has got to have some sort of minimum standard. If the figure required is an arbitrary one then probably it has to be set by the regulators who then have to take responsibility for it.

But it goes a little bit further from that. The regulators need to have actuaries on staff who are in a strong and senior position. In the contacts with the company they need to take a line which will strengthen rather than undermine the position of the Valuation Actuary. Where they are in the position to put the screw onto management, that screw needs to be put on in the form of what is your actuary's advice? If necessary we actually get a letter signed by the actuary, saying what the advice is, because not all managements are completely trustworthy in this regard. Then the screw goes on to comply with their advice. That's an ideal which one can't always attain, but that sort of approach from the regulators,

that sort of feeling in the situation is I think necessary if one can achieve it in order to enable the Valuation Actuary to carry out his difficult job.

Some difficulties remain. We've had great problems, for instance, in the finding of what sort of valuation standard to expect in a case of mismatching. What does matching mean? What are the symptoms of matching? How do you know if you've got it? How do you know if you're mismatched? What tests do you apply? What might happen if interest rates diverge from their expected path? How large a divergence should one test for? What sort of reserve should be held? If the company is not matched, how does one assess its size? We've been quite unable so far to develop any sort of objective standard about that, which is difficult for the Valuation Actuary. Our professional body at the Institute of Actuaries hasn't got very far either, but they have come out with a statement that it's a matter for careful professional judgment which is a help actually because it does put the actuary on notice that he's got to think about the question. It's not something that can just be taken for granted.

Finally, may I say how glad I am to be able to come to this meeting and to listen and learn from your discussion here.

MR. ALLAN BRENDER: I have a question for Gary. I think you said that on this question of risk surplus that it would be something that wouldn't be disclosed. I can understand some of the reasons for it, but I think ultimately when it comes to solvency the reason for having regulation is to have some sort of external control on solvency.

I'd like to suggest one practice that goes on in Canada. The Valuation Actuary here has to file a report with the annual statement which is not part of the statement which can be labeled as confidential and will be kept that way by the regulators. It would seem to me that the regulators really do have to have some measure of what this risk surplus is and there should be some sort of disclosure at least to them. I don't think it's enough to say that it's in the report to management and leave it at that. I think as an educated policyholder, I wouldn't feel I was served by a profession just because management had been told by its actuary that it should have a certain amount of surplus. I would never know what management's reaction to that was and whether it was there.

MR. CORBETT: That's exactly what's being proposed. The confidentiality is not from the regulators. The confidentiality is from other companies and from the press and so on. This is an extremely significant matter. It's important to something that Steve said. Remember his scenario that because the second level of surplus wasn't there it would trigger the company into insolvency. I want to emphasize a couple of things. The company is not insolvent when they don't have that risk surplus. They're insolvent when they are not covering their reserves.

What is being called into question when a sufficient amount of risk surplus is not there, is the future solvency of the company. It is questionable whether they have enough surplus there to continue in a solvent manner under their current manner of operations.

MR. BRENDER: In these days when everybody is talking about being a financial institution, we often hear remarks about level playing fields and why should insurance companies have additional obligations that others don't. Most other financial institutions have heavy capital requirements. Deposit taking institutions have things called borrowing ratios in one form or another which limits their ability to take funds as a function of capital. Insurance legislation just provides for a minimum capital for incorporation purposes, and few jurisdictions today have some ongoing additonal surplus requirement. I think effectively in the United States statutory assumptions are assumed to provide really significant margins.

MR. DON CLERIHUE: Gary made a distinction between the cash flow from an asset and the underlying value of the asset. I cannot see that distinction. If the cash flow, including the maturity value, is not evident, then what is the value of that asset. To me, you just look at the apparent attributes of the assets such as a mortgage that has a prepayment schedule. What if that mortgage is to the XYZ Company and the only security for the mortgage is the property with no recourse to the company. I understand this is quite a common type of commercial mortgage in the United States.

So really what you have is that real estate which is probably a special purpose type. The company that owns this warehouse or assembly line or whatever could decide that particular operation is no longer economically feasible, and they could walk away from it. Sure, maybe you can take over the building, but if it was mortgaged for 90% of its value and it's no longer of use to them, you're stuck with an assembly line which you can't sell to anybody. How do you make this distinction between the cash flow from the asset and the quality of the asset?

MR. JAY: We have tried to separate the C-1 risk and the C-3 risk. The C-1 is the quality of the assets and we mean the probability of the default of some kind where the borrower doesn't perform according to the provisions of the loan. The C-3 risk assumes that all the obligations of the debtor will take place, but the rights that he has to exercise and so forth or the effects of exercising those rights are what we are trying to study. They are separate risks, but obviously they are related. If a mortgage or bond goes into default it will obviously effect the cash flow. That's not what we're talking about when we talk about the matching of assets and liabilities in this report. The underlying quality of the asset which could result in a default is a different kind of a risk; at this point we are saying that actuaries should not take responsibility for it.

MR. GEORGE ISSAC: I am a member of the Canadian Department of Insurance. For about five years now we have been receiving what is called the report of the Valuation Actuary from companies authorized to do business in Canada. But the practice of obtaining an opinion as to the sufficiency of reserves, goes long back before my time. I imagine it may have been in the Canadian legislation for thirty or forty years, so it seems to me that we have settled ourselves with the notion that the actuary must give an opinion on the sufficiency of the reserves.

I don't believe that as regulators we considered that opinion is a forever kind of statement of what the solvency of the company is. I think we do

expect that when an actuary gives an opinion, using his best judgment, he does have some expectations of the capacity to absorb fluctuations within the foreseeable future, but certainly not forever. The point that I wanted to make is that my predecessors have always felt that the life insurance business has enough unique features that it is best that a properly trained professional make a comment about the capacity of the company to perform under its obligations. As a consequence the opinion is expected from the Valuation Actuary. I don't think we'd like to get that from anyone else.

MR. WILLIAM T. TOZER: I wish to commend the Joint Committee for their work on a very difficult matter. I have, however, serious concerns about the actuarial opinion.

I believe that the actuarial opinion will be misinterpreted. We have already had two well-respected and extensively-read publications--one a financial newspaper and the other an insurance periodical--misstate the role of the Valuation Actuary. I am concerned that the public will interpret the actuarial opinion to state that the insurance company will not become insolvent. As we all know, there will be company insolvencies in the future resulting in various lawsuits. The Valuation Actuary will be one of the primary parties to these suits. Unless there are an extensive number of other companies becoming insolvent at the same time, the courts are going to hold, I believe, that the case before it does not fall outside of the realm of plausible fluctuations and, as a result, the Valuation Actuary is going to be held liable.

I would recommend that we change the actuarial opinion to an opinion similar to those given by accountants. Consequently, the actuarial opinion would state that the figures were prepared on the basis of Generally Accepted Actuarial Standards. I make this recommendation for three reasons. First, it would emphasize that the actuarial opinion is being given based upon the facts as they existed at the time of the opinion and not based upon results being witnessed at the time of the lawsuit. Second, the actuarial opinion would be judged based upon Generally Accepted Actuarial Standards at the time the opinion is given. As the Joint Committee has stated, actuarial standards are in their early stages. Consequently, they will evolve dramatically in the future. With this approach, I believe the courts are more inclined to hold the Valuation Actuary liable for the actuarial standards at the time the opinion was given, not the standards at some later date when a company becomes insolvent or a case is being tried. Third, if it is desirable that the actuary be held accountable for evaluating the company's ability to survive future reasonable deviations and future plausible deviations, this can be made a Generally Accepted Actuarial Standard. As a result, I feel the results we wish to accomplish can be accomplished and also reduce the risk of misinterpretation by non-actuaries.

My comments are more in form than substance. Nevertheless, I believe that this change in form will lead to better acceptance by both actuaries and non-actuaries.