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Summary: Several organizations (e.g., the National Association of Insurance Commissioners, the Financial Accounting Standards Board, and the International Accounting Standards Committee) are currently crafting the next century's insurance valuation framework. The panel discusses how these efforts are reshaping the way we will do business in the future.

Ms. Shirley Hwei-Chung Shao: It was interesting to read *The Wall Street Journal* when the chair of the Financial Accounting Standards Board (FASB) said that the International Accounting Standards Committee (IASC) proposed standards "don't meet the requirements needed in the global market environment, because they provided too many alternatives. They lack clarity, and their scope is not comprehensive enough." I'm sure Sam Gutterman will have some points to debate on that front.

We have a very distinguished panel. Two are previous Presidents of the SOA (Sam Gutterman and Walt Rugland) and one is a current Board member (Ed Robbins).

Walt will first talk about the National Association of Insurance Commissioners' efforts to develop the Unified Valuation System (UVS). Walt is the vice chair of the American Academy of Actuaries' UVS Task Force. He will discuss this topic in this capacity.

Mr. Walter S. Rugland: A clean piece of paper is the way to describe the task that was given to the Academy task force by the NAIC Life and Health Actuarial Task Force. The wording in the charge goes on a little bit, but essentially that's the assignment. There has been an Academy task force working on this job for the last three years, chaired by Bob Wilcox, it is currently led by Dave Sandberg.

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The format for dealing with this issue within the Academy has been to have open meetings and participation has been welcomed by anyone that wants to come to these meetings. On average, there have been about 20–30 people at each session. Sessions in the last year and a half have been monthly and lasted for a day. There have been a lot of discussions repeated over and over again, but I think we're getting to some conclusions and decisions are going to need to be made in the next year as to whether the thrust of this work actually goes online at some time in the future.

This defines the UVS, as it has evolved, and there are several points listed. One of our goals was to cover the needs for all users. Another is to put the policyholder first. Another is to address future as well as historic or current situations. The system needs to promote regulatory effectiveness, and obviously, efficiency. In other words, it's not just another thing that piles on top of what we already do. UVS needs to replace a lot of what we do. It needs to send the right messages to management. It needs to integrate itself well with what's going on in the rest of the world. Obviously, if we're dealing with the future, it needs to be able to respond to new product forms, even though we do not know what some of them will be.

We identified some objectives early on. The evaluation of the ability of a company to execute various business alternatives was a primary objective. In other words, regulators should be able to use UVS and be able to determine whether an insurer has the capacity to undertake the business approach that it's taking. The insurer's board should be able to get the information that is appropriate from its management, as to whether it can undertake a business plan that's being proposed.

The second objective is to determine that there are adequate resources relative to the existing obligations of the insurer's enterprise. The third is that it measures the changes in resources relative to obligations. In other words, it's usable within an income statement structure.

You transfer those into a concept. First, we want to build on the viability of the institution. That means that we have this continual evaluation of the adequacy of the insurer's financial resources. The key words are "business plans" and "future." We wanted to make sure that we had a system that would look forward instead of look backwards. Second, it would create regulatory triggers. The real thrust of that is to ask if there are adequate resources today to allow the insurer to deliver on its promises.

The third equally important concept is that the system must create an accounting structure that can address the notions of financial condition and performance.

There are some important considerations to keep in mind, as you look at the unified valuation system. Without this framework, you're going to evaluate it based on what we've had or what we've historically learned. We structured the framework to identify characteristics that are appropriate and necessary going forward.

The first is to provide information to all the various parties that have an interest in the financial condition of the insurer, and who need to make informed judgments. The second point is to support the financial analysis, both as a snapshot, as well as looking at trends, i.e., looking ahead at the capacity of the insurer to do things in the future.

The third point is to address overall solvency, and this is not just looking at contract reserves, but all of the obligations of the enterprise. The fourth point is to produce auditable and verifiable results. The fifth is that we want to cover all obligations in the context of the entire enterprise.

The sixth point is to balance practicality and cost and resource effectiveness in relation to the value that the audience wants from the information, not the value that the provider of the information would put on it. Seventh, we need to have some consistency so that regulatory jurisdictions can treat the business and the insurers with fairness and equity.

The eighth point is that the system needs to be flexible. We need to open the doors so that the life insurance business can survive and thrive in the future, and accommodate business designs that are unknown to us today.

The ninth point is that we want to utilize actuarial judgment in the development and interpretation of results. This is in preference to prescribed methods and assumptions, and that again, takes us all the way back into lengthy discussions about the effectiveness and efficiency of the FASB and our discipline process. It asks whether actuaries are really a profession or not.

The last framework point is that we need to accommodate materiality issues. We propose a single system, which serves a variety of different needs. All require financial information on a consistent basis reflecting obligations of the insurer and the resources required to deliver those obligations.

We spent significant time looking at the advantages and disadvantages of the current system and trying to find the pieces in that current system that are appropriate to be carried forward. There are two issues here. One is, what pieces might be permanently carried forward, and the second is, what pieces are appropriate to carry forward in a transition period? One of the advantages is that we have good standardization with our existing system. It is for actuaries, anyway, and it's relatively simple. We certainly have a lot of historical understanding of the system itself.

There are disadvantages. Some of these disadvantages were our target when we did the amendments to the valuation law in 1990. But many still are there in terms of actual practice, and they affect the health and the long-term success of the life insurance business. Our current system is very much formula dependent. There's a baseline that drives the reserve formulas and the valuation formulas. It's quite arbitrary. On the other hand, we do have the actuarial opinion, which says that if your valuation result is deficient, you need to add some more funds to it. There is subjectivity today, but fundamentally, the system is formula dependent.

Emerging experience is not reflected in the formulas. It can be reflected in the amount that you add on top of the formulas. There are some risks that are not appropriately addressed in the formulas. They should be appropriately addressed in the actuarial analysis that goes into the actuarial opinion, but those analyses are really only an approach to contract obligations as opposed to insurer obligations. There are implicit margins throughout the formulas. They can be more explicit as you do your actuarial opinion.

There are inconsistencies across product lines in terms of how the formulas are applied and how they are developed. I think the number one weakness in the current system is obvious. We are getting a proliferation of additional requirements. It essentially points out that the system itself doesn't take care of all the things that are developed when we keep getting all these new guidelines and new amendments into the current system. And most of these add-ons ignore the benefits of asset adequacy testing.

Dave Sandberg likes to describe the UVS system by basically saying, in the current historic approach, which is really almost a hundred years old, you go back to the Armstrong investigation. It is based on the notion of fixing a specific problem. Some specific restrictions on practice are thought to deal with that problem, and then everybody goes to work trying to find ways to avoid the restrictions and do what they want to get done. I believe this sets up a punitive system. The bars are set and you figure out how to get past the bars; the regulator's task is to catch you at it if you stray.

This UVS approach tries to say let's make sure that everybody understands the principles. Let's not worry about defining what the rules are, but let's have principle general requirements, and let's have compliance to those general requirements. I think that's the fundamental difference that we're dealing with. We have a principle-based alternative in the UVS system. The actuary's role here is to determine resources, which are needed to accept planned risks and to meet obligations. It goes on to talk about the probability distributions that you want to use in terms of dealing with risk. We're really analyzing risk, both at a point in time, as well as in dealing with the long-term future trend of the insurer. Does the insurer have the viability to execute its business plan? In reality, this is an extension of the Big Tent concept that you've heard so much about at this meeting.

What risks should the UVS be addressing? The risks are: underwriting, the sales force behavior, overall investment risks, the ability to change prices, customer behavior, and the value of options granted. All of those things need to be taken into account and they really need to be insurer specific, as you do the work to analyze those risks. Finally, UVS should allow recognition in the valuation process, as experience diverges from original expectations. In other words, you're always getting your feedback loop, and you're making appropriate adjustments in terms of the adequacy of your resources with respect to current obligations as well as the ability of the company to carry on a business plan, given the new information that you continue to have.

I thought I would give you documentation of what our thoughts are with respect to what the actuary's responsibility might be within this system. The actuary has to professionally clarify to the insurer and to the regulators, the range of future expectations that the producer of the company or the customer or management may have regarding a future behavior. This is a big statement, but it's an additional dimension of actuarial responsibility. It goes with this system, and is within the context of what we're trying to do as a profession.

This manifests itself in really three separate phases.

With respect to in-force business, we would still carry forward the standard valuation law basis for the reserves of that system, until that business is gone.

With respect to flexible premium business in force, and most new business that's written after a certain date, the UVS system would be set up to deal with the reserves on a statutory reporting format.

Risk-based capital (RBC), or whatever you might want to call it in the future, would be an aggregate for the insurer and would be driven by the S curve, which is the fundamental thesis of the UVS system. Along that S curve, you can decide what portion of your assets are necessary to satisfy the obligations of the insurer. You define whatever purpose you're going to use for establishing that measure, whether it's GAAP accounting or statutory accounting, or accounting for mandatory capital in addition to statutory reserves or whatever. The S curve would be the basis of determining RBC in the future.

The actuary's opinion would be divided into three pieces. The opinion deals with obligations of the insurer that are affected by business that has been in force prior to the date of change to the new system. It also deals with the other business, the flexible premium business and the new business that is tied to the UVS system. Third is the RBC-type opinion, which encompasses the whole insurer enterprise. These opinion drafts are works in process. The task force is open to ideas and comments.

The question is, will UVS happen? Larry Gorski can answer that better than I can. I think something like this will happen. My bias on it says that eventually the life insurance business is going to demand that it has more freedom to deal with the needs of the customers and the demand of the marketplace. We, as a business, will not be able to do that with a restrained and restricted approach that is based on product designs that no longer work in the marketplace. We need to have a more professional approach to dealing with the obligations of the insurer, and this is the best answer we've had so far.

How long will it take for UVS to happen? That's a good question. I think a lot of what we're going to hear about the international thrust is going to influence it. I believe something like this will happen. I believe the Life and Health Actuarial Task Force of the NAIC embraces that notion also.

There are professional issues. How do we deal with the feedback loop? How do we link research into the practice?

I have a list of all the people that need to feel comfortable with a new system before it will come into place. The list includes: creditors, reinsurers, guaranty associations, tax authority, investors, policyholders, regulators, and management. You can see that the taxing authority is important. How do we deal with guaranty associations in this new environment? How are reinsurers going to deal with it?

In the end, the policyholders are supreme, and whatever the policyholders really benefit from will drive us in the long run.

Ms. Shao: Our next speaker is Ed Robbins who is the senior vice president and chief actuary of Zurich-Kemper. He's also the chair of the Academy's Committee on Life Insurance Financial Reporting (COLIFR) which has recently responded to a FASB exposure on fair valuation. He also went to FASB last July to present the response. This July meeting is becoming an annual meeting between the Academy and FASB to exchange the issues. Since Ed was at the meeting, he can give you some firsthand perspectives.

Mr. Edward L. Robbins: Some people think it's a bit of a stretch to link the FASB fair-value paper with IASC. There is a connection. Very definitely, according to conventional wisdom, FASB is going to have an influence on what is fair value, should IASC go that way.

I'm going to divide my remarks into three parts. First, I'll discuss the recent history of fair value in the U.S. (I'm going to be speaking from a U.S. perspective.) As you all know, concepts of valuation of assets and liabilities have taken some significant turns in the last ten years. I just want to give you a very brief example of how much things have changed. All of us who studied Jordan used to deal with commutation functions, which are no longer tools in the actuarial foreground. I recently gave an assignment to an actuarial student. The assignment included an Excel spreadsheet with commutation functions, and she kept referring to the Excel spreadsheet as the "Way-Back" machine.

The second thing I want to deal with is the FASB exposure draft itself. The third thing I want to deal with is a recent transmittal from Wayne Upton, who is the senior project manager at the FASB. The transmittal was on a special issue which I'll call the credit standing issue. That issue is going to become clear in a moment.

As far as the history is concerned, fair value has been liberally sprinkled throughout the FASB literature for quite a few years. I'm going to start with the advent of *FAS 115*, which was pretty much of a watershed event in the life insurance industry. In 1993, the FASB came out with *FAS 115* in response to a major crisis in the savings and loan (S&L) industry. Back in the 1980s, the S&L industry was a classic example of legislated asset/liability (A/L) mismatch, and in the 1980s, when interest rates took those tremendous spikes, and S&Ls began to be in trouble, they began to engage in a practice called "gains trading." Gains trading is selling assets where market was above book and holding on to assets where market was below

book. It is something some people cynically referred to as "income recognized when needed."

The FASB felt they had to take a pretty strong stand against that. *FAS 115* came out in 1993 and what it said, in simple terms, is most debt and equity instruments fall under *FAS 115* in a typical life insurance company.

With respect to debt instruments, virtually none of them in a typical company can be sold without generating some horrendous consequences. Most assets are now categorized as "available for sale." According to the *SFAS 115* requirement, except for some very restricted exceptions, you pretty much have to hold your debt instruments to maturity.

The FASB completely ignored the liability side of the balance sheet in enacting *FAS* 115. You now have what the FASB calls "mixed attribute accounting." The FASB consists of smart people. They understood this inconsistency between assets at market and liabilities at book, but they refused to grapple with this situation. In the "Basis for Conclusions," in *FAS* 115, what they said was, number one, we can't come up with any good idea of exactly how to fair market value liabilities that is not unnecessarily complex or permissive. It sounds like the theory, "If it's difficult to measure, it's not important."

But it was a difficult problem for them, which they left to some subsequent SFAS, which hasn't come out yet, of course. The other thing that disturbed them was that the industry was divided. One of the problems that divided the industry, for example, was whether supporting assets should influence the fair value of liabilities. There were major constituencies in both camps.

This led to the next watershed event in October 1995. COLIFR, my committee (which was Jim Hohmann's committee at that time) published a White Paper, called "Fair Value of Liabilities," and it suggested a whole litany of different alternative methods of how to fair value liabilities. The paper tended to be academic rather than advocating, so no methodology in particular was recommended. The White Paper simply discussed each methodology, including its advantages, disadvantages, strengths, and weaknesses. One of the methodologies they came up with was a GAAP equivalent of the statutory interest maintenance reserve (IMR), which has some appeal. The concept of the IMR, as you who have dealt with it know, is that it tends to adjust liabilities to market when gains and losses are realized. Another approach they looked at was analogous to a purchase accounting concept on the benefit reserve. Adjust your benefit reserve to current assumptions.

There was another interesting alternative. How many of you have heard of the "shadow adjustments" to *FAS 115*? Quite a few. Some people felt that, in general, the shadow deferred acquisition cost (DAC) and the shadow value of business acquired (VBA) would tend to mitigate the tremendous amount of volatility that you get when you have assets at market and liabilities at book, as interest rates flop up and down.

Those were some of the suggestions made, but there were two very important approaches that were discussed at length and really constituted the emphasis of the White Paper. One was the appraisal value method. What is appraisal value methodology? It basically says that you know what your market values of assets are. They've been defined. You know what the appraisal value of your book of business is if you have a set of liabilities and supporting assets. Incidentally, one can say that assets and liabilities are really the same kind of thing. They're positive and negative cash flows, and when you have liabilities and supporting assets, you get a stream of distributable cash flows.

You discount those distributable cash flows at the appropriate interest rate and you have an appraisal value. The market value of the assets, minus the appraisal value, gives you your market value of liabilities, or your fair value of liabilities. That, in a nutshell, is the appraisal value methodology for fair valuing liabilities.

The other method was very different. It was a method suggested by Bob Reitano, and it was called the option-adjusted-value (OAV) method. Its precept was to take the value of this liability to the contract holder as an asset. That becomes the liability value of the insurer. It takes into account all the optionality inherent in the instrument—in a single premium deferred annuity, for example.

The COLIFR White Paper enjoyed a huge amount of readership, including Wayne Upton of the FASB. He borrowed heavily from this option-adjusted-value approach, when he issued a 1997 draft concept statement of present value concepts. The paper that he wrote back in 1997 used the terms *fair value* and *present value interchangeably*, and I'm not sure those are synonymous terms. Nevertheless, he appeared to consider them synonymous.

I attended the Joint Academy FASB meeting in 1997, mostly to discuss that exposure draft, to comment around the edges of it. Two years later, in March 1999, the FASB released a much more refined exposure draft.

First, I'd like to take a moment to introduce the concept of a "concepts statement." It is basically a theoretical paper and is not a requirement. Requirements eventually attempt to build around the concepts statements that the FASB has put in place.

When the ACLI first saw this draft concept statement from FASB in March 1999, the preliminary reaction was: "What are you going to use this concept statement for? Please tell us how you're going to use it? What kind of requirements are going to emanate from it?" They were extremely interested in that. Once I've described the contents of this exposure draft, you'll understand why it made the ACLI a bit nervous.

It's a big paper, 75 pages, and it demonstrates a pretty good knowledge of a lot of the sophisticated concepts in financial theory. It basically advocates fair value as an appropriate approach to valuing liabilities. The gist of it was, "Whenever a deep market exists, use the deep market value. Otherwise, use the concepts and theories espoused in the paper."

As I indicated, FASB is very much advocating option-adjusted-value approaches to valuing liabilities. As I indicated, OAV is the value as an asset to the counterparty, considering all the embedded options, both those favoring the liability holder as well as the asset holder. It also advocates including a default probability. That is a very disturbing concept to many people in the industry. What it basically says is that a life-insuring entity with a lower credit rating can hold the liability at a lower value. It conjures up a scenario where you call up your rating agency, and you ask them to lower your rating, so you can increase your surplus. That doesn't make a lot of sense.

What it does recognize, however, is that we're living in a probabilistic world. GAAP traditionally has dealt with "best estimate" values. It hasn't graduated to cash-flow testing and stochastic scenarios yet. FASB has tried to make this leap to what is really a probabilistic environment in today's world.

As most of you know, Scenario 1 out of the New York Seven is typically an optimistic scenario. Some would consider Scenario 1 to be a best estimate. Our best estimate can very often be an unconversative value.

Because the draft espouses OAV, it intentionally ignores the supporting assets, which the actuarial community believes is a mistake. Second, it doesn't absolutely specify the use of a risk-free rate, but it seems to strongly espouse the use of a risk-free rate, coupled with binomial lattice-type future interest rare paths to get expected values and then present values.

Deep markets implicitly put in a risk-awareness factor. As the default probability of the instrument grows, that risk-awareness factor also tends to grow. The draft does discuss the risk-awareness factor. However, we don't believe it develops it sufficiently to give us a fundamental theory of how you select the interest rate for discounting.

The ACLI sent in a comment letter and made the following points. First, it stipulates no clear underlying fundamental theory as to how to select the interest rate. Second, best estimates are often the better approach than expected value. (I don't know whether they meant pragmatically better or theoretically better.) They felt the risk-free rate is generally too conservative a value. They're in disagreement with the tying of the liability value to the credit rating of the entity. The FASB draft basically speaks to value to the counterparty as a good fair value of the asset. And that's what the FASB appears to be espousing. However, value to the counterparty is only one concept of valuing liabilities. There's another concept called value in settlement. For example, you sell your portfolio of business with its supporting assets to another insurer. That would be a value in settlement, which is extremely consistent with the appraisal value approach to fair-valuing liabilities.

The ACLI also has deep disagreement with the complexity of such calculations for all material financial instruments. In the case of insurance contracts, there is rarely, if ever, a deep market, and they see a real problem with that.

COLIFR sent a much larger comment letter to FASB, and I testified with respect to that comment letter on July 16. I'm not going to repeat the comments we made that the ACLI has already made. I'll just add a bit to it.

First, if you take fair value the way FASB is defining it, there's an insidious effect if you actually use an expected value approach and present value of those approaches, and you do it without margins. You end up with a gross premium valuation of sorts—front ending profits. That's a major departure on the part of the FASB. That was not explicitly mentioned in the FASB paper, but that's probably what it would amount to, unless they start adding in provisions for adverse deviation, to let earnings flow thereafter on some sort of a release-from-risk basis.

Second, one of the major issues that we found is that there is a long established set of practices in the industry. Some are far more sophisticated and on-point than what is being suggested in the draft. Making this methodology a requirement would confuse the users of the financial statements, and why cause another set of methodologies?

We had major problems with considering the default risk with respect to a life insurance entity and its liabilities. We pointed to the potential public policy problems, including additional pressure on guarantee associations.

This objection was voiced in a COLIFR comment letter: "...the complexity of both adapting to a world in which asset and liability values are probabilistic, versus the perceived need to eventually set forth one unique set of prescriptive rules to capture these probabilistic concepts." The true probability distributions themselves can only be approximated, are changeable over time, and at best, would be extremely difficult to work with, if the value of every material financial asset or liability were to be measured on that basis."

We have some major issues with this draft concepts statement. Nonetheless, it appears to constitute reasonable progress on the part of the FASB, in terms of an intelligent approach. We just have to continue working with them.

On September 9, Wayne Upton understood our concern about tying liability values with the credit rating of the life insurer. He proposed four approaches. The comment period closed on October 1, but I suspect he may open it for comments again. The first pertained to present GAAP rules. The second was the exposure draft approach. The third was a suggestion we gave him, which was to tie the liability value to the counterparties asset value, but set up a "deficiency liability" to bring the total value to the "good credit rating" level. The fourth alternative, which our property and casualty colleagues espoused, was to put the liability up at full value, and then set up an asset. Such an option asset gets you back down to profit neutrality at the issue date of the contract. We would add: COLIFR did not put this into its comment letter, but we would probably go along with that approach, subject to recoverability testing. That fourth approach is very much like how most companies are handling single-premium immediate annuities, where they build a deferred profit liability directly into the reserve under the *FASB* 97 rules for limited

payment contracts. You thus make it profit-neutral at issue. You subject that to recoverability.

Ms. Shao: Our next speaker is Sam Gutterman, who is the consulting actuary with PricewaterhouseCoopers. He's also the chair of the IASC and a member of IASC's discounting steering committee. In other words, he's very active in various insurance issues regarding fair value, present value, and international insurance accounting.

Mr. Sam Gutterman: My presentation can only provide an overview to this topic, because the issues are extremely complex, but it will be similar to what Walt said regarding the Academy's efforts. The accounting community also seems to be starting out with a blank sheet of paper, discussing underlying concepts of accounting in terms of a basic review of accounting for insurance, particularly on an international basis. I'll make a few comparisons to the progress in the U.S. as well. I will be covering five separate topics. What is the problem? Why is now a good time? Who is involved internationally? What are the issues? What will happen?

A fundamental problem that people are concerned with is that financial statements are difficult to use. These statements form the basis for many economic decisions for both insurance enterprises and their investors or policyholders. That's where the fair-value issue arises. The bottom line is, are they meaningful? In addition, there's a problem of lack of comparability among financial institutions, and among companies in general. It's very difficult, if not impossible, to really compare similar products offered by insurance enterprises and, for example, a bank. There is a need to develop a totally different accounting philosophy.

In addition, there has not been any international accounting standards applicable to insurance, either for statutory or for GAAP purposes.

Why is now a good time? Capital is now international, and companies are multinational. I had a session with about 100 people in which I asked for a raise of hands of how many people were associated with multinational insurance enterprises. It turned out that 97 out of those 100 people were involved in such companies. Not only are current standards inconsistent across countries, but the number and types of standards are also proliferating. Although some are using U.S. GAAP due to the strength of the U.S. capital markets, there is significant resistance to U.S. GAAP throughout the rest of the world. In the last few years, there have been a number of countries that have examined their insurance accounting standards; none of which have selected U.S. GAAP accounting as an example to follow.

There has been a recent push for more transparent reporting standards, espoused by such diverse groups as financial analysts and by the G-7, which, if you've been following international politics, has stated that there is a significant need for transparent international accounting. As indicated in the *Wall Street Journal* article, Mr. Greenspan also agrees. Some of this discussion has been generated by the Asian crisis, in which insufficient financial information was available regarding the

financial condition of many companies. Various parts of the world do not have realistic accounting statements.

In addition, there has been a change in the accounting paradigm. I would characterize it as a movement toward fair values, but as I'll mention in a moment, it's not obvious that that will be the result.

Who's involved? The IASC is the international counterpart to the FASB. It's 25 years old; but for its first 20 years, it was generally used as a source of accounting standards for developing countries only, countries that didn't have the infrastructure to develop their own accounting standards. In the middle 1990s, however, the International Stock exchange Organization called IOSCO, which is based in Canada, started its push for a core set of standards for international accounting, a push accelerated by the Asian crisis.

In that request for a core set of rigorously established standards, IOSCO set forth a given set of areas that had to be covered. The IASC completed that core set of standards at the end of 1998. Before then, they were accused by many, in particular by the SEC and FASB, of providing too many alternatives from which companies can select. This range has been reduced significantly with their revised set of core standards, and I know that the IASC is intending to reduce them even further.

They are also beginning to work on standards applicable to specific industries, including insurance. Their effort at developing insurance accounting standards has been ongoing for two-and-one-half years, with an issues paper expected to be distributed later this year. This is an extremely difficult topic.

I believe that the jury is still out as to who will control accounting internationally in the future. I think that FASB and the SEC would prefer that the U.S. control it, partly because the SEC doesn't want to have anybody else telling it what accounting standards that it should be enforcing. The SEC is clearly a very strong player. It is supposed to come out with an opinion on this sometime in the next year. So far, based on the conversations that I've had, it may turn out to be the U.S. versus the rest of the world, just like it is in a number of other areas.

On the actuarial front, the organization that has taken the international lead is the International Actuarial Association (IAA). I think it's currently working well with the IASC, as did its predecessor organization, the International Federation of Actuarial Associations, which had significant impact on the discussion on international accounting for pension liabilities three years ago. The IAA has been working very hard in this area. Paul McCrossan, a key member of the IAA, is an observer to the IASC Insurance Steering Committee, but a key player in the IASC's discussions so far. I would have to say that, based on a comparison of the draft version of the IASC's issues paper of a year ago, and what it now looks like, you can see a significant influence of actuaries.

There are two related committees of the IAA relevant to the issues we are discussing today, one is the one that I chair (the IAA's Insurance Accounting

Standards Committee), and the other one is tackling insurance regulatory issues. The International Association of Insurance Supervisors (IAIS) is an organization that probably most people here have not heard of. It is ten years old and located in the same building in Switzerland as the Basel Committee of the Bank of International Settlements, the organization of international banking regulators. This is an organization that we may hear from increasingly over the next couple of years. They have recently asked for IAA assistance in the development of an international RBC standard system. They want to start discussing the potential role of the appointed actuary on an international level.

The IAIS has been involved with the IASC discussions regarding its insurance project as an observer. They have expressed considerable problems with the development of the IASC's ideas.

I would like to turn my attention to a discussion of some of the significant issues involved, of which there are many. I think I'll start off by saying that the game is just beginning. Even though there has been two-and-a-half years of considerable discussion within the international actuarial community, specifically within the IAA, the discussion has just now begun within the international scene.

For example, one of the larger multinational companies, AXA, has been espousing a far different position than those represented by the preliminary views of the IASC. I believe that the ACLI has come out in discussions with FASB opposed to fair values of insurance contracts. Some of this discussion relates to the fundamental question of "What is insurance?" Is it a risk-taking contract? Is it a financial instrument? The IASC has taken the position that it is a financial instrument. Conversely, both AXA and the ACLI have indicated that they believe that it is a servicing contract. As a result, they have some significant problems with the use of fair value of that type of contract.

There have been two primary approaches discussed: (1) a deferral and matching method, which is basically historically cost based, and (2) an asset and liability method. The former method focuses on the income statement, with significant historical cost aspects, including deferral of acquisition costs (or for purchase accounting, present value of future profit). As I mentioned earlier, the new accounting paradigm increasingly stresses the balance sheet. The A/L method is usually fair-value based, resulting from the use of fair values of assets and liabilities which are explicitly independent of each other. According to the underlying conviction that each is marketable, they can be disposed of independently, with separate market values. Fundamentally the concept assumes that an asset held by one company should be valued at the same amount as if it was a liability in another company.

In other words, if it's the same financial instrument, they should be valued at the same amount, independently of which side you're on. In addition, as a result of the A/L approach, a company can develop a profit or loss at issue, as opposed to a break-even situation, which is typically the result of the application of a deferral and matching approach.

I should note that there are some people who feel that accounting will always be made up of a mixed attribute method, with some parts being prospectively based, while others remain rooted on an historical basis.

The fundamental issue currently discussed is whether to fair value or not. Ed described some of the discussion points. I'll make a few additional comments. The parties that are pushing for fair value include accounting standards setters from many parts of the world, including the U.S. and U.K. Financial analysts have also been very strong in pushing fair values, partly because of their interest and participation in the capital markets. If the end result of the discussions is not a system based on fair values, then the reported insurance values may be inconsistent with similar products offered by other financial institutions, and in fact, most other enterprises.

Currently, the banking industry opposes fair values.. If you want to understand the banking position, a very good illustration is provided on the IASC Web site at iasc.org.uk. It also includes a discussion of certain proposals presented by the Joint Working Group, a group of national and international accounting standard-setting organizations.

The Joint Working Group recently disseminated an issues paper about the application of fair values to banks, which the banking industry responded to about two weeks ago. It disagreed with fair values for liabilities, indicating that the group was in favor of a modified historical basis. It took this position because it didn't see a need to move to fair values and indeed thought that fair values were conceptually unsound. In addition, it expressed the belief that it was subjective, particularly on the liability side, if the liabilities weren't liquid, or if there wasn't an active market in them. They also claimed that fair values focused too much on short-term timeframes. These are issues that the IASC will have to deal with in the upcoming discussions on financial instruments and insurance.

A number of continental Europeans have opposed the use of fair values. In general, the industry there has valued a smooth pattern of predictable earnings, along with a conservative balance sheet partly sheltered from income taxes. In addition, some are concerned with the practicality of fair values.

The case for historical costs. Many people are still in favor of historical cost accounting. Among its advantages is the fact that it is easier to estimate, calculate, and validate. For example, you can easily count the account value of a portfolio of products. You should be able to easily identify deferred acquisition costs. Although there may be significant issues regarding how to amortize them, at least you know what it is. In addition, the original DAC doesn't change.

It should also be recognized that there is no complete fair-value-based system in use now in insurance enterprises. This project is starting from scratch, while most people are very uncomfortable about starting from scratch. They like to operate on an evolutionary rather than a revolutionary type of change.

Some people feel that the objective of this project will be impossible to accomplish. The current AXA position, in essence, says, "We may like fair values, but nobody has figured out how to determine these values for long-term products such as insurance." In fact, the IASC committee has struggled with it for two-and-one-half years and no proposal has yet been developed.

Although it has been claimed that the use of historical costs results in smoother results, some would disagree with a mixed system with assets based on a prospective view and liabilities based on a retrospective view, which could produce more volatile results. It is also claimed that a historical cost system avoids one potential source of manipulation and that historical costs are more appropriate for a long-term business.

Case for fair value. Currently, the fundamental issue is, What is fair value of an insurance liability? The IASC, FASB, and the IAA are currently struggling to come up with the right solution. If insurance liabilities were traded in a liquid market, it would be a great deal simpler. However, most people don't think that there exists a liquid market for insurance liabilities. As a result, the search for a rigorous methodology to determine appropriate fair value continues. This is where Ed's comments about present values are relevant.

Some people feel that the use of fair values is inevitable, due to the rapid expansion of financial instruments traded in capital markets and the increase in markets in general. I should note that the IAA is on record for having a consistent standard for both assets and liabilities.

Those in favor of fair values claim that the use of historical cost-based values are unrealistic. It cannot be used effectively for economic decision making, mostly because it is not based on current information. It was designed for a past where we didn't have sufficient technology to do things in a more meaningful manner. As a result, in many cases, accounting arbitrage has resulted, where decisions are made solely due to accounting rules with little economic purpose.

Profit at issue? Again, where people stand on this issue depends partly on what is meant by fair value. Is it an entry price or exit price? Entry price is the price that you paid for it. Exit price is the price at which you might be able to get rid of it or trade it. If it's too conservative, in other words, as in typical statutory values, you may report a loss at issue. If it's too low, you front-end your profits. Most people don't want to end up in either of those two extreme situations. Another approach, which is reporting no profits at issue, is inherent in the margin for services method that was recently introduced in Australia this year. It is not a fair-value method, but since they automatically solve for zero profit at issue, it could be viewed as similar to an entry price fair valuation system.

Another key issue is whether or how to reflect risk. There are several approaches to reflecting risk, including the use of best-estimate cash flows combined with a discount at a risk-adjusted interest rate or risk-adjusted cash flows discounted at a risk-free rate.

First, I'll start with the arguments against reflection of risk. These have been pushed by financial economists who believe that the market does not reward risk-taking. I think that this is an arguable assumption. They also believe that they should be using the expected value of future cash flows discounted at a risk-free rate. Right now, that approach does not constitute the current or preliminary view of the IASC Steering Committee.

This issue is also a significant one in the very interesting discussions regarding discounting. The IASC Discounting Steering Committee has been discussing this issue for about a year. They are two meetings away from distributing their issues paper, that will most likely come out in 2000. Its scope is similar to the corresponding FASB document on this subject and will probably end up being a couple hundred pages.

I won't delve into the question of owning credit risk as it could affect the liabilities of an insurer. I don't think it is as simple as what Ed described it as being. In fact, I have written an eight-page paper on this topic that gives the various arguments regarding this issue.

Many actuaries believe that the market reflects risk-and-loss preferences. It follows that it would be appropriate to adjust for risk, and by doing so, you can avoid front-ending profits as well. This leads to the issue of how to reflect risk. If we do reflect risk, which I think is a necessity, the question is, how do you do it? There is a whole panoply of methods that have been used. Actuaries typically call the adjustment the provision for adverse deviations. Those active in the IAA have a term for this: *market value margins*, which is related to fair values. Currently, the IASC is referring to it as being adjustments for risk.

Here enters a possible problem of lack of comparability. How does one compare the results of subjective provisions in the methodology for developing risk adjustments? There's the Canadian approach that, through the Canadian Institute of Actuaries, dictated ranges of assumption values that are used to develop provisions for adverse deviation, depending on actuarial judgment. This approach, with narrowly judged ranges, may be difficult to prescribe internationally. But the IAA is willing to address this issue, possibly through adoption of standards of practice if given the opportunity.

You can also develop confidence intervals, based on statistical analysis. You can also take the U.S. approach, at least for *SFAS 60* products, by using judgment. Or, for *SFAS 97* products, you do away with risk adjustment completely.

Another issue raised by a number of continental Europeans, is whether or not you should have a cash-value floor; it is what they view as the ultimate exit value, the value that an individual can get out of the contract. This approach is consistent with the approach to valuing bank deposits. This may become a significant issue in the future. If a cash-value floor is used, the value may not reflect probabilities, but it certainly would be easier to validate, which is an advantage for any system.

Prospective margins. Should you be allowed or permitted to anticipate prospective margins? This is an interesting and another possibly significant issue going forward. A preliminary conclusion reached by the IASC Steering Committee was that this might vary by type of margin. Although the vote on this issue was 5–4 in the IASC Insurance Steering Committee, there was general agreement that you can anticipate non-interest-rate risk margins. This leaves significant questions about anticipating prospective interest rate margins because banks don't do this for similar products. Why should insurance companies do it?

Disclosure. Clearly there's more need for disclosure. Internal management sometimes creates its own books, even when they also calculate statutory valuations, GAAP valuations, and tax valuations. If they're a multinational company, they can develop or they might be required by corporate to state these things in another national system. In addition, some companies are using approaches such as economic value added, or embedded values, because the current accounting systems aren't good enough to help them make economically appropriate business decisions.

Many British actuaries have espoused embedded values. However, it is sometimes overlooked that the embedded value system adds value only if there are conservative statutory reserves. If the underlying reserve approach is modified in some way, then the value of embedded values might change as well.

However, assuming there will always be some regulatory constraints, an owner or prospective owner should be aware of the impact of those regulatory constraints, as well as the level of risk the organization undertakes.

Another issue is transparency. How many can understand current financial reports? I won't dwell on this, but we should strive to make insurance companies' financial reports intelligible. For many insurers, this problem is a direct result of the long-term nature of the insurance contract. Even if we can't make the balance sheet understandable to non-actuaries, necessary disclosure information should be included. It will be a challenge to obtain a consensus of what this information should consist of and how it should be presented.

Comparability. The application of judgment can easily lead to non-comparable results. The difference in accounting rules also leads to non-comparable results, whether the comparison is made within an industry or between industries.

There is the role of the actuary. A fundamental question is "Who should be responsible for estimates in insurers' financial statements?" Even if fair-value reporting is adopted, material assumptions must be made, of course, assuming that there continues to be limited liquid markets to validate values. Whether it's a UVS system, or another system, the question is who will be responsible?

Some have expressed concern over how anyone can trust the entity that's being measured to do the measurement? The actuarial profession's answer has been to trust us because we are professionals and are objective. We have professional standards and we have a discipline process. I am convinced that those are sound

arguments, but others might not be so convinced. Certain insurance companies may not always trust their competitors to be objective. Our actuary is okay, but we're not sure that the other guy's actuary will be totally objective. This is and will be a challenge for the actuarial profession both nationally and internationally. Trust in the appointed actuary concept will be quite important in the future if we develop a rigorous and meaningful system of insurance accounting.

The IAA has indicated that, if appropriate, it will be willing to develop an international set of actuarial standards to go along with IAS. These would not be in conflict with national standards, but hopefully will be coordinated with them, and applicable if a company has to comply with IAS. This will be a challenge. The IAA has just formed a committee to recommend the process to be used to develop such standards. We may hear more about this development in a couple of years.

What will happen? I can make a couple of predictions. General purpose accounting for insurers will change. I'm not certain when it will change. I currently think it will be within a five-year to eight-year time horizon. Most assets will be valued at their fair value, whether reflecting FASB's efforts or the efforts of the IASC. FASB is scheduled to come out with an initial draft report on fair values in December of 1999. That should make reference to insurance. The FASB seems as if it is moving towards a comprehensive fair-value system. The IASC, through the Joint Working Group, hopefully will obtain international cooperation on the move to fair values; they have already issued an issues paper on banks and fair values, as I previously mentioned. It will start issuing some discussion drafts next year, which I'm sure the actuarial profession will follow with great interest.

The future of fair value in the measurement of liabilities is not as certain. I'd still say that it will probably happen, but there are a lot of players that don't like fair values. On the other hand, as I said, there are a lot of players that do, and in this case, the players that do are the ones that are making the rules.

Another factor that many people don't recognize right now is that U.S. and IAS may start to converge. The FASB has taken some fairly strong positions. Since they affect insurance accounting, they are moving to a fair value basis on a fairly quick track, with the banking industry and now the insurance industry joining in opposition. In many cases, the FASB has been pretty successful in pushing their views.

The U.S. system is going to change as well. It is difficult to predict when U.S. GAAP for insurers will change. I think it will happen in the same general time frame that international standards get adopted—it might be four years or maybe even seven years. The FASB is now about two years behind the IASC in looking at this issue, but since one of the key drafters of IASC insurance standards is also a staff member at the FASB, the gap might shrink over the next few years. We will be looking at the same issues in the U.S. as are being addressed on the international scene now.

Two significant questions remain: what will it look like and when will it be effective? I am fairly confident that change will come, both nationally and

internationally. My current guess is that it will come in the next five to seven years, which seems like a long time until you start working backwards to look at all the steps that will be needed. If we look at it that way, it is just around the corner.

I often encourage people to participate. The international actuarial community is currently very active and the national actuarial community is just getting actively involved. So far, the international profession has been surprisingly successful at convincing people of their opinions. However, now that the game is officially underway and the players are warmed up, we will now have a chance not only to see how the game will be played, but possibly help set the rules as well. How the players stake out their positions, who the ultimate arbitrator will be, and what the results will be may be fascinating as the future unfolds.

Mr. Morris W. Chambers: It's two issues. One is the issue of comparability. I frequently see the statement made by those who argue against fair values, that it introduces judgment brought to the determination of liabilities and it removes the possibility of comparability. In my view, nothing could be further from the truth. In fact, the requirement to follow a stipulated set of assumptions according to a stipulated formula is, in my view, the absolute antithesis of comparability, because it simply cannot carry into the reports that you're producing what's really going on in the company. You're assuming that the company is something that it isn't.

Second point, in discussing fair value, there's one term that has not been used in this session, and I think it's crucial to fair value of liabilities. What the IASC has been talking about in determining fair value of liabilities is essentially a prospective valuation system. That's the key to a fair value of liabilities in the context of asset/liability measurement.

Once you say that it's a prospective valuation system, then this apparently unmaleable idea of front-ending of profits disappears because there is no such thing. Front ending of profits is a historical cost, backward-looking concept. If we're talking about a prospective valuation system, the question doesn't arise.

Mr. Gutterman: I agree that I was talking about front-ending of profits. I meant to refer to the excess of premiums over the sum of the expected value of future costs and a provision for risk (or adverse deviations), which is a prospective approach. It also eliminates a deferred acquisition cost asset and related items. You would front-end all expected profits if a provision for possible adverse deviations were not included.

Mr. Chambers: I agree. I said the question doesn't arise. That was really a bit of a fib, because all kinds of questions that are inappropriate arise anyway. Canada currently has a prospective valuation system. In fact, the regulator asks the appointed actuary to identify the amount of front-ending of the profit that existed with respect to the business that was issued in the year just completed. Basically, the answer is determined by identifying the initial reserve at the point of issue of the policy. To the extent that the initial reserve is more negative than the acquisition cost associated with the policy, there is some front-ending of profit.

The more competitive market you have, the less of a possibility that that sort of thing can arise. Despite the fact that the question is asked, it's still a nonsensical question in the context of a prospective valuation system.

Mr. Larry M. Gorski: After Walt mentioned my name, I felt I should say something. My comments are directed to Walt and the UVS. First, I think we'd all agree that the change in the current system to something like UVS would be a major paradigm shift. Normally, major paradigm shifts occur after a catastrophe. I hope that doesn't happen in this case, but that is usually the history of things.

People think that it's only regulators who are slowing up the progress towards the development of UVS. I think it's fair to say that the profession has a mixed reaction to the UVS ideas. As for those that are less than enthusiastic about moving into the UVS world, I would hope that they would be maybe a bit more open-minded and more forward-thinking in their approach to the discussions. I believe that, in the end, we will get to a UVS system. For those that are strong supporters or advocates of the UVS system, I would hope that more attention is given to, as I think you identified them, professional issues. There were five or six different bullet points, including one devoted to research. One of my personal concerns is that after a UVS-like system is put in place, the research efforts may fall by the wayside, as a result of devoting resources and other things. When you look at the valuation actuary symposium, or you look at the agenda for the SOA meetings, there's an awful lot of work devoted to regulatory issues, whether it be regulations, laws, or what have you. It's driven by regulatory concerns. My concern is that under UVS, the competitive nature of the industry will win out and there will be less desire or less initiative in doing research to come up with solutions to issues that are of joint interest to everyone.

For Walt, I guess the comment I'd make is that I think you were a bit too negative on some of the most recent regulatory pronouncements. To give you an example, there is Triple X. While there's probably mixed feelings toward Triple X, there is a component, a so-called X factor, that relies very heavily on the valuation actuary and his or her judgments. I think that's a good testing ground for the valuation actuary. Similarly, guideline ZZZ incorporates judgments as to option-pricing assumptions. Finally, the C-3 RBC project also introduces judgment into the process. I think the Academy valuation task force, may want to look at those projects to see how things are progressing and use that as part of your own feedback loop, as to the ability of the profession to deal with judgment issues.

Mr. Rugland: It's interesting. The right time to make a change is when you don't have any problems and you're making the change from strength. The worst time to make it is when you're panicked, you're deep in the hole, or you have a problem and everybody has their mind on a fix just for the sake of fixing something. My view is that this is really a good time for the life insurance business to be dealing with a change like this. Essentially, the business is robust. It's on the high side of the cycle, if you want to call it that. Most companies have strengths; most companies can deal with this type of issue.

Larry suggested that I comment on who's holding up progress, and his comment is right. Except for a few of us who are tackling this with some passion, I believe the strongest group of advocates are the regulating actuaries. Because they realize, much to their credit, that the system we have needs to get fixed for the future viability and strength of the life insurance business. Perhaps the people that are dragging their feet most are the people that are going to have to deal with the problems as to how do you do it.

There are some who appropriately are saying, "Wait a minute." We have a whole lot of things hanging on this valuation system, and those things need to be addressed at the same time. We can't just go in and change the trunk and expect that the branches of the tree are going to still hold all this stuff that's hanging on the tree. There are major issues that are tied to the valuation system that need to be addressed at the same time. With this in mind, some are saying, let's go slow. I believe each one of them can be handled.

Larry mentioned the actuarial responsibility that's embedded in the new XXX and ZZZ. He's right. My concern is, if we were really focusing on the UVS system and how to get to it, we wouldn't be wasting much time dealing with the issues that we're trying to address with those particular segmented-type guidelines. We would be dealing with the whole system, as opposed to the pieces like we did with XXX.

Ms. Shao: I'd like to echo both Larry and Walt's comments on the actuarial profession's involvement in the process. I've been involved with UVS and the FASB meetings. I also talked to many actuaries in the profession. I feel that the actuarial profession is dividing on this development. There are many how and why types of discussions. Some actuaries are scared and don't feel that the profession is ready, while others feel that we have to lead the changes. This will be a big change in paradigm. It may take a lot to make it a reality; however, I don't think the train is going to stop.

I think there's really a movement towards fair valuation. I always thought of FASB as an organization more focused on earnings, but it has said it cares about the value determination (the earnings are just to reflect change in values). I think the only thing that's uncertain, other than the time and the exact framework, is who is going to be involved. If the actuarial profession is not going to be involved, somebody else will.