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## Session 30PD

### Fair Value And The International Accounting Standards Committee (IASC)

**Track:** International/Financial Reporting

**Moderator:** DOUGLAS C. DOLL

**Panelists:** MORRIS W. CHAMBERS  
STEPHEN J. STROMMEN

*Summary: The "fair value" concept has been in use for several years on the asset side of the balance sheet. However, external parties have typically had problems valuing insurance operations, particularly those with international operations, since standards may differ from country to country.*

*Several organizations, with representation from a number of countries, are currently drafting new standards to create uniformity across nations. These new standards may affect not only companies that currently have international operations, but also those considering such a step, and possibly even companies with no intention of engaging in international operations,*

**MR. DOUGLAS C. DOLL:** Our session today is intended first to give a history and current status report of the various regulatory and actuarial organizations and their positions relative to fair value accounting for insurance. Mo Chambers, with London Life Insurance Company, will address this first topic. Second, we want to give you a description of the issues involved in calculating the fair value of insurance liabilities. Steve Strommen, with Northwestern Mutual Life Insurance Company, will address this second topic.

**MR. MO CHAMBERS:** How do we approach international insurance accounting and regulatory developments? I'll give you some background information, we'll talk a little bit about where we are now, and I'll give you some of my speculation about

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**Note:** The chart(s) referred to in the text can be found at the end of the manuscript.

what the impact of some of these changes might be. We'll also look at the tentative timetable.

As background information, the whole thing is wrapped up in what's become the catchword of the day: globalization. Globalization is affecting the regulators. It's certainly affecting the accountants, and they, in some sense, have been driving this, or at least they began the drive. Basically what's happening is that companies are becoming international. Corporations are becoming international with the international conglomerates being created, and that's particularly true in the financial services industry. We're, of course, all aware of the extent to which the European multinational insurers have been acquiring businesses throughout the world, but the problem is that the regulators are national, and that's creating some pressure. There's no common view of what constitutes solvency of an insurance company. The accountants and the capital markets also have a problem in that the capital markets in particular are getting different stories about the same companies, and those stories are different because of different accounting rules.

To give you an example, there was a very popular product through the early '90s in Canada called Term 100—most of you will have heard of it—but under the Canadian accounting system, those products are currently generating significant losses, and that began around 1994 or 1995. But to the extent that those products are reported on in the U.S. under the U.S. system, both GAAP and regulatory, those products are generating profits. Now, to be frank, they're not profitable. So, there's a bit of a problem with the current U.S. system.

Which regulators are we talking about? Well, first of all, we have the securities regulators, and I've already alluded to the problems that they're finding—different stories in different capital markets, and it's downright confusing. Of course, the Ontario Securities Commission is the primary Canadian regulator in the field of securities regulation; in the U.S., it's the SEC.

The bankers are involved, too. The Bank for International Settlements (BIS) in Basle, Switzerland, is interested because of the predominance of bancassurance in Europe. Interestingly, in Europe, given the current accounting rules, it's more profitable for a banking conglomerate to sell its insurance products through the bank rather than through the insurance operation simply because of the differing accounting rules.

And then we have the issue of international accounting. The IAIS, which is the International Association of Insurance Supervisors, is now looking at the need for universal standards for insurance company solvency.

Finally, there's the European Union, which itself is a regulator. Why are these organizations concerned? Well, I've already talked about the multiple listings of international firms and the differing standards of accounting in different countries and under different accounting regimes. In particular, the issue is exacerbated in

the EU because with the Maastricht Treaty in 1992 when the EU was set up as part of the European Economic Community [Common Market] (EEC), a significant political compromise was made. To get the EU in place, each jurisdiction was allowed to keep its own rules, so that a German company could continue to use German standards, an Italian company could continue to use Italian standards, and so on. So, you've got a broad spectrum of accounting regimes in the EU. In fact, I understand that in the Netherlands there are three major insurance companies, and each one uses a different accounting standard. That was politically expedient in 1992, but it's become absolute chaos in 2001.

In 1995, the International Organization of Securities Commissions (IOSCO) realized it had a problem with these multiple accounting standards, so it gave a mandate to the International Accounting Standards Committee (IASC). The IASC was formed around 1973, and up until 1995, its primary activity had been to develop accounting standards for those jurisdictions where the accounting standard-setting bodies were weak or nonexistent. So, basically it applied in Southeast Asia and Oceania, that sort of thing. It didn't apply in Japan or in North America or the U.K. Its standards did apply in some parts of Europe.

In any case, the IASC had really been sort of subsidiary to the strong national accounting standard-setting bodies, but with this charge it received from IOSCO in 1995, the IASC had the opportunity to sort of float above the humdrum, and it actually jumped at the opportunity.

The first charge was for the IASC to establish a set of 12 core standards by the end of 1998. Of those 12 standards, two of them affected insurance. One had to do with contingent liabilities and contingent assets, and the last one, established in December 1998, dealt with financial instruments. In the establishment of both of those standards, insurance was specifically exempted.

Then in 1997 and 1998, the IASC realized that some things that had been exempted really had to be dealt with, particularly in Europe, and so it turned its attention to insurance, to the issues of present values (discounting) and financial instruments. It established the financial instruments standard at the end of 1998, but it recognized that it hadn't completed the job, and the standard was likely to be an interim one, also reporting for banks and for extractive industries such as oil and mining.

Then there were two crises in financial services. In 1997, there was the Asian crisis, followed by another Asian crisis in 1998, which spread to Russia and to South America and really threatened world financial markets.

In May 1998, there was a G7 conference at which the British Chancellor of the Exchequer, Gordon Brown, and Canada's Minister of Finance Paul Martin proposed to the G7 that there was a need to improve the accounting standards and the oversight of financial institutions, as a result of the crisis that had occurred in 1997.

However, at that meeting, the proposals that they made were rejected. Then, of course, with the second crisis in October 1998, when the finance ministers in the G7 met again five months after the May 1998 meeting, they had flipped their coin, and everybody was in favor of doing something about the financial sector and establishing new rules.

At the same time, the IAIS was becoming aware of the activities of the IASC. The IAIS began to see the need for a new universal standard for insurance solvency that could be run off of the new accounting standards that were being worked on for insurance and banking by the IASC, so it got things going. At the same time, the International Actuarial Association (IAA) was obviously interested in all these things and got things going on the actuarial side.

Where are we now? Well, this isn't quite now, but the IASC put out an issues paper at the end of 1999 about the valuation of insurance contracts—in particular, the valuation of insurance contracts as liabilities rather than insurance—because a lot of insurance contracts are sold by firms other than insurance companies. For instance, as I mentioned previously, banks in Europe could apparently sell insurance more profitably than could insurance companies; at least in the early years, the profits emerged sooner. So the IASC realized that to avoid this accounting arbitrage of choosing between institutions, it needed to establish the rules for insurance contracts so that they applied regardless of the institution that was selling the product.

The IASC recommended the calculation of insurance liabilities based on best estimate assumptions of all insurance contingencies, together with a market value margin—essentially an additional margin for risk in each of the assumptions made. It also recommended that the value should be the price that would be charged by an assumer of the liability in a transaction to transfer the liabilities from one institution to another, and that those institutions be on the same footing and willing purchasers and sellers so that any value that might be established by a transaction that was tied up with the bankruptcy of an organization would be excluded.

The IASC looked at three alternative methods of valuing insurance contracts:

1. Deferral and matching, basically historical cost-based accounting, which is widely used throughout the world
2. Non-fair value asset/liability accounting, which is used in Canada and, to some degree, in Australia
3. Fair value asset/liability accounting, which isn't used anywhere.

Then in 2000, the IASC had some significant breakthroughs. The 12 core standards that it had put in place by the end of 1998 were officially recognized and accepted by IASCO, although IASCO identified a number of improvements. In addition, the EU, having identified its particular problems, mandated the use of the International Accounting Standards in Europe by 2005.

In 2000, the IASC realized that it had a big order on its plate and would need some help. It appointed Paul Volcker, former U.S. Federal Reserve Board chairman, to develop a new structure for the IASC. He established a board of high-profile, heavy-hitter trustees who put together a package for a new structure for the IASC and its administration, raised a lot of money, and expanded the IASC's full-time staff.

As I mentioned previously, at the end of 1998, the IASC put in place a standard for reporting financial instruments, but it realized it hadn't done the whole job there, and so the members of the group that had put that last standard together were asked to continue their work in what was called the Joint Working Group to determine the ideal accounting approach to financial instruments.

In December 2000, their views were published in a financial instruments paper. It recommended essentially fair value for all financial instruments, but it excluded insurance from that consideration because the IASC at that time had established an insurance group to develop insurance standards.

The paper also recommended that all financial embedded options in contracts be broken out and reported separately unless the whole liability was calculated on a fair-value basis. Well, that raised some issues. An insurance contract is essentially a bundle of embedded options, so, having exempted insurance, hadn't the IASC essentially brought significant elements of insurance contracts back into the whole mix of the financial instruments paper? At the same time, the governor of the Bank of England, a fairly heavy hitter, endorsed the concept of fair values as a regulatory tool for banks.

By the way, back in about 1997 or 1998, the Bank for International Settlements established its Basle Accord for banks, which essentially involved risk-based capital formulas for banks. It was a formula-driven approach to risk-based capital.

But then in January 2001, the Bank for International Settlements published the Basle 2 Accord, which establishes four different levels of determination of the risk profile of a bank. At the highest level, it's essentially left up to the bank to determine the appropriate level of capital. Now, how does a bank get to be assessed on that highest level? Simply by proving that it has good models (stochastic models, stress-testing models, etc.), monitoring them, and making sure that they are representative. Of course, the regulator goes in and confirms that the models the bank is using internally are representative and realistic.

The next big thing was that earlier this year, the EU's commission recommended that the Basle 2 Accord be legislated for all EU banks as early as 2004, and the EU has agreed, of course.

Then in April, the International Association of Insurance Supervisors (IAIS) got active. It issued a number of papers—one on the principles of capital adequacy and solvency for insurance companies, another on public disclosure, and another on

anti-money laundering guidance, which is interesting given the terrible events of September and the fallout from that about money laundering. So, in some ways the IAIS was very perspicacious in that regard. It had earlier in the year issued a paper on reinsurance. I might add that the IAA sent responses to the IAIS with respect to the reinsurance paper and the first two of these three.

Also in April 2001, under the recommendations that had been made by the Volcker trustees, the IASC became the IASB, the International Accounting Standards Board. The steering committees that they had out there—one on present values, one on presentation of values, one on insurance, and I think one other—were told to wind up their material and provide Statements of Principles for October 2001. They determined that this improvements project, that is, the response to the IASCO request, was a top-priority item and identified that insurance, presentation of financial reports to the public, and banking disclosure were likely to be top-priority items but that full fair value and present-value projects were likely to be deferred, and then that was to be confirmed by a meeting in July. By the way, the IASB is essentially 15 people with representatives from the major accounting standard setters and a few generalists, I guess you would say.

The IASB appointed a Standards Advisory Committee to provide guidance, a certain amount of expertise, and, in particular, geographical diversity. To achieve diversity in expertise and geographical representation, the committee has 45 members. It first met in July to establish priorities. At that time, it also confirmed insurance as one of the five high-priority items, along with this improvements project, banking, business combinations, and performance reporting. The likelihood at that time was that there would be disclosure of the draft Statement of Principles for insurance accounting in October and a draft Standard of Practice in spring 2002.

At the same time, the national accounting setters have agreed that there is a need for accounting convergence to avoid the confusion that arises when one company says that it's making money in one jurisdiction, but when it reports in another jurisdiction on exactly the same activity, it says that it loses money. So, the National Accounting Standard setters, while they haven't said that they will go along with anything, have said that they have agreed not to establish new standards that move them away from the direction of uniformity. In addition, they've considered whether they should abandon their own standard setting and move toward the International Accounting Standards. In fact, the EU Commission, as I think I indicated before, has confirmed that they will use the International Accounting Standards by 2005 on the presumption that they exist in 2005, and for that reason it may be 2006.

Well, what's the impact of the change likely to be? As I said earlier, while this is certainly speculative on my part, there will be a new International Accounting System for insurers. From what we've seen to this point, it'll be closer to the current Canadian system than any other system in the world. But the difference between what's being proposed and the current Canadian system is that assets are

likely to be reported on a fair value basis. The expectation is that there will be a new risk-based capital system that reflects principles similar to the current yet-to-be-developed accounting basis, but it will reflect covariances and underlying real risk.

Basically what that says is that there's an attempt to build on top of the international accounting basis a risk-based capital system that is likely to follow the direction of the Bank for International Settlements in the Basle 2 Accord based on stochastic methods, stress testing, and that sort of thing. The better you are at it, the more likely you will be able to determine your own realistic and proper level of capital for solvency-determining purposes. And the timeframe for that is likely to be 2005 to 2008. Again, this is in the context of international accounting, but it affects a lot of companies in the U.S. that are subsidiaries of international insurance conglomerates or that are bases for international operations.

What sort of issues may arise? Well, first of all, there isn't going to be a role for the actuary under the accounting standards. The accountants will have set out what accountants have to do. They are reluctant to say they don't know anything about establishing the liabilities for an insurance company. They will provide the guidelines, but they are not going to say only actuaries know about this.

In this regard, the future of the actuarial profession lies in its ability to establish actuarial standards and demonstrate that those standards are viable and worthwhile and thereby enlist the support of the regulators. It will be the regulators, in my view, who will determine or hopefully dictate that the role of valuing liabilities for insurance contracts should be undertaken by qualified actuaries, and similarly for the stress testing and for the capital. It goes much beyond simply establishing the liabilities. It gets into solvency testing and that sort of thing.

The timetable is tentative, but it'll be mandatory for EU companies by 2005 as far as the accounting is expected, maybe 2006, if they haven't got the accounting rules fully established by that time. It's likely that a country such as Canada, since it is so close to what's being proposed, will make the international rules optional fairly quickly, perhaps within three or four years, and mandatory some time after that. In the U.S., a lot depends, obviously, on the SEC and whether the SEC adopts the IASCO standards. I think personally that it'll depend on the extent to which the Fed gets involved in insurance regulation. Of course, it's obviously involved in bank regulation, and with the BIS identifying rules for banking conglomerates and the assumption that the Fed goes along with that, it's going to bring the Fed much more into insurance regulation.

The NAIC, as you're probably aware, is another kettle of fish, but as long as the Fed gets into the game, obviously the influence of the NAIC is going to decline. The extent to which it declines, since you're talking about a finite element of influence, remains to be seen. They have a real problem in Japan, because if these rules were

introduced today, essentially the financial industry in Japan would be bankrupt, and so it is going to need a substantial transition period to get its house in order.

What about international regulatory developments? As I said, a new risk-based capital system, sensitivity testing, internal modeling, this is the connection with the Basle 2 Accord. It'll likely be introduced around 2005 to 2008 and will be similar to what is being introduced for banks.

How's the U.S. life insurance industry positioned? Currently there are multiple accounting systems: different accounting systems for regulatory, a different one for GAAP, and a different one for income tax accounting. The liabilities in GAAP and in regulatory, as I understand it, use a variety of methods. Some of them are prospective. Some are historical cost-based, which are locked in at issue. The ones that involve stochastic methods obviously tend to be prospective. There's internal self-monitoring and assessment of risk exposures to operational and economic risks. There are risk-based capital requirements that attempt to recognize the risk covariance through the square root of the sum of the squares, as I understand it.

What about Canada? Canada has a single accounting system for regulatory, for reporting to the public, and for income tax, at least for policies issued since 1996, and the same basis for tax calculations. The liabilities use best estimates, using consistency between asset and liability cash flows. There's internal self-monitoring and assessment of exposures through dynamic capital adequacy testing (DCAT), and there are risk-based capital requirements. However, those have been around for 15 years and have not changed to a significant degree, and they're admittedly somewhat crude.

One of the first work programs for the IASB, with respect to these insurance standards, was field visits. Those field visits took place in Canada Thursday and Friday the week before last, and from the reports I've heard, they were highly successful and worthwhile for the people in the IASB who were there. A draft Statement of Principles is expected to be published next month. I think it'll be approved for availability to the public by the IASB when it meets in November. In the meantime, it has been made available to some people in the actuarial community to review. The big question is whether the IASB will invite comment from the public with respect to the draft Statement of Principles. The likelihood is that it will not, but it will accept comments it receives.

Field tests are to proceed next year at at least two companies so that the IASB can see what the results are of applying these new rules in real operations.

And in the meantime the International Actuarial Association is going to be scrambling like mad to put together the resources that we're going to need to develop actuarial standards to apply in concert with these International Accounting Standards.



**MR. STEPHEN J. STROMMEN:** I'd like to thank Mo Chambers for that excellent background on all the political activity that is leading to so much interest in fair value for accounting purposes. My understanding is that there's still a lot of confusion and perhaps some uncertainty about what fair value means when it's applied to insurance liabilities or liabilities of insurance contracts. So I'd like to share some views this afternoon on what fair value means and how it might be calculated. To frame these remarks, I use the outline of a white paper being developed by the Fair Value Task Force of The Academy. The task force was formed in 1999 to respond to the preliminary views on financial instruments documents issued by the FASB and also a draft standard and basis for conclusions which was issued by the Joint Working Group of Standard Setters, an international body.

The Academy task force is chaired by Burt Jay, who happens to be in the audience. The task force includes members from a wide variety of specialties, not just life and health insurance. It includes pension actuaries, property casualty actuaries, and some financial economists that Burt invited to join. Getting such a diverse group together to agree on fair value issues has been, shall we say, fascinating. We've had long conference call debates.

Consensus has emerged on principles to be applied in valuation, and some significant issues have been identified. The white paper under development is an effort to share a valuation framework based on stated principles, provide some examples, and discuss related issues. The outline of the paper and today's presentation begins with a short introduction and then proceeds on to valuation principles, some example valuation techniques, and other issues.

Now, The Academy hasn't taken any kind of a position on whether fair value accounting is a good or bad idea. That's an issue for the accounting profession. But the white paper does say this in its introduction:

"The number and character of valuation assumptions that change on each reporting date should be kept in mind when developing accounting standards under any new paradigm and determining whether measurement issues have been adequately resolved."

This reinforces something you all already know. Fair value of insurance liabilities is hard to estimate. Sometimes a wide range of estimates can be considered reasonable. Whether such estimates are appropriate for financial reporting is for the accounting profession to decide, but not without our input.

With that caveat behind us, let's take a look at a framework for valuation and the principles on which it's based. Since one of the purposes of this paper is to communicate our views to accountants, let's begin with the hierarchy of valuation methods put forward by the Joint Working Group to determine fair value of any financial instrument. It suggests:

1. Use market value if it's available.
2. Use market value of similar instruments with an appropriate adjustment.
3. Use present value techniques with some kind of adjustment for risk, if no similar instruments exist.

This is a simple, elegant hierarchy, but note what is not included. You might recall that a few years back, The Academy produced a document indicating that the actuarial profession was ready and able to calculate fair value and provided a long list of methodologies that could be used. Here, there is no long list of methodologies. In particular, the actuarial appraisal method, which backs into liability value by valuing assets and subtracting off distributable earnings, is nowhere to be seen. However, this hierarchy is far from being incomplete or partial. Actually, all of the actuarial approaches to fair valuation, including the actuarial appraisal method, can be expressed as a risk-adjusted present value if you take the effort to do so. Sometimes this requires a lot of algebra, but it can be done.

So let's go with the accountant's hierarchy and define some principles to apply when calculating risk-adjusted present values. First, I'll list some principles, and then we'll talk about how to apply them.

The first principle gives us a baseline value. When there is no risk in the cash flows, use the risk-free rate.

The second principle begins to deal with risk. When there is risk in the cash flows, include a risk adjustment. But what is it we're adjusting? We adjust the baseline value determined by discounting the cash flows at the risk-free rate. We have a well-defined baseline, and we want to adjust up or down from there depending on risk. Now there are three different ways to make a risk adjustment: you can adjust the discount rate; you can use a multiscenario approach, like many of the option pricing techniques, and adjust the probability of each scenario away from the real probability so that adverse scenarios are more heavily rated; or you can adjust the cash flows to include some sort of cash compensation for taking the risk.

The third principle is to include all cash flows. This deals with completeness. No likely scenario should be ignored, and all expenses and other costs involved with meeting the obligation should be included in the cash flows being valued. Application of these principles helps resolve some of the issues regarding fair value.

In applying the first principle, we recognize that cash flows that are truly risk-free may not exist. Even the U.S. Treasuries involve risk because the cash flows are denominated in dollars, and dollars have uncertain future value. So when we say a risk-free rate, we really mean a default-free rate. I'll have a little more to say about the risk-free rate later on.

In applying the second principle, we recognize that risk adjustments can be either up or down. The direction depends on who bears the risk. In most cases, risk to the

insurer leads to an upward adjustment from the value. Remember, we're starting from a value that is the discounted cash flows at the risk-free rate. In our risk to the policy owner, of course, we do a downward adjustment in the value. What makes insurance complex is that insurance contracts often involve risks to both parties. Clearly, there's a risk to the insurer in almost any type of contract, whether it be life insurance or homeowner's or any other type, but risks to the policy owner occur any time there are rating adjustments or participating dividends or other nonguaranteed elements with uncertain amounts.

In applying the third principle, we resolve some of the more contentious issues with regard to fair value accounting. If we recognize that all probable future cash flows need to be recognized, then there can be no deposit value floor. If there are patterns of future cash flow with present value less than the deposit value, and those patterns have a likelihood of actually occurring, then the liability fair value can be less than the deposit value. In fact, the liability fair value can be negative. This can occur when the costs of distribution are paid upfront, and they are recovered through premiums to be collected in the future. Since there is no deferral of acquisition cost in a fair value model, negative liability values might even be common in some lines of business.

There have been proposals to ignore taxes when calculating liability fair values, and there have been proposals to include only contractually required cash flows, thereby ignoring nonguaranteed payments and participating dividends. If we adopt as a principle that all cash flows must be considered, then such proposals are not agreeable, to put it in a politically favorable light. If you came here, then, to learn about how to calculate liability fair value, that's all there is to it. Start with the Joint Working Group hierarchy and methods, and if you wind up needing to calculate a risk-adjusted present value, apply the principles we just discussed. Easy, isn't it?

Well, of course it's not easy. Making reasonable adjustments for risk is hard, and there are no exactly right answers. The white paper will include a number of examples illustrating various risk-adjustment techniques applied to a variety of products. Each example will emphasize two things. First, it'll talk about how the risk-adjustment technique falls within the framework we just discussed; in other words, which of the three risk-adjustment methods is being applied? Second, it'll illustrate a method for calibrating the risk adjustment to some measure of a market price for risk.

The example valuation techniques fall into four categories. The first three categories correspond to the three fundamental ways to adjust for risk: adjusting the discount rate, adjusting the weighting of the scenarios, and adjusting the cash flows themselves. The fourth category illustrates some kind of combination approach. I'm not going to go into these examples today, as that would probably take several hours. What I will do is talk about a number of other issues that have come up related to fair value, in particular, inefficient markets, the risk-free rate, the emergence of earnings, and entity-specific value versus fair value.

Now The Academy task force has benefited from the participation of several members with backgrounds in financial economics, and we've run into some disagreements between practicing actuaries and financial economists when the size or even the existence of some risk adjustments has been discussed. A prime example is the treatment of pure insurance risk; that is, the unknown level of future claims. Practicing actuaries say this is a risk for which a risk adjustment should be made. Financial economists argue that no risk adjustment should be made for insurance risk. Their reasoning is that insurance risks are not correlated with the general financial risks. Therefore, they are, by definition, diversifiable. And in capital asset pricing model (CAPM) theory, where the risk in a security is defined by its beta, that is, its correlation with the market, any financial instrument with a zero beta theoretically has a zero risk premium in its yield. So there is no reward for taking diversifiable risk in a theoretically perfect market.

All this disagreement with practicing actuaries has been resolved by agreeing that real-world markets violate the assumption of perfect markets. There are no financial instruments that allow easy and inexpensive diversification of all insurance risks. Therefore, those risks are not optimally diversified, and the market provides some reward for them. So, the task force agrees it's realistic to make a risk adjustment for insurance risk, but where does that leave us? Financial economics doesn't provide an approach for quantifying risk adjustment because its very existence violates the principles underlying financial economics. So, any risk adjustment for insurance risks has to be empirical and approximate.

Another area of debate has been the treatment of investment risks retained by insurers. The issue here is whether an insurer of good credit standing is out of its collective mind if it guarantees policy owners a yield higher than the risk-free rate. Some actuaries will note that this happens all the time in the guaranteed investment contract market. So, here's what I'm going to do this afternoon. I'll present an actuarial argument for why this is a reasonable thing to do, and then I'll ask for a vote. There will be three options:

- 1 Do you agree with the argument?
- 2 Do you think there's a flaw in the argument?
- 3 You're totally confused.

Let's start from the actuarial appraisal method. Luke Girard has demonstrated that a risk-adjusted present value calculation arrives at the same liability value as the actuarial appraisal method if two key risk adjustments are made. First, the discount rate is adjusted to be equal to the expected yield on the investments underlying the liability. Second, a required profit is added to the cash flows as compensation for risk taken by the insurer. This is a Method 3 risk adjustment. For the moment, let's assume we're not dealing with interest-sensitive cash flows, so we don't have to think about Method 2 adjustments. Now, you're just going to have to trust me on this. Girard really did show that those two adjustments do result in a present value

equal to the actuarial appraisal method. The trick is how he defines the required profit.

Now, the adjustment of the discount rate up from the risk-free rate to the expected total return is a downward adjustment to fair value. It covers all investment risk, both the investment risk retained by the company and that retained by the policy owner. The adjustment for required profit is an upward adjustment to fair value. It covers all risk retained by the company, both the retained investment risk and the retained insurance risk. The investment risk retained by the company is part of both an upward adjustment and a downward adjustment. In theory, they cancel out. So we'd be left with an upward adjustment for the insurance risk retained by the company and a downward adjustment for the investment risk transferred to the policy owner.

Well, so far I hope this makes sense, but now recall that there are both upward and downward adjustments for investment risk retained by the company. What if those two adjustments don't offset? What if the adjustment upward for a required profit due to investment risk is less than the downward adjustment for the expected investment return? How could that happen? Diversification could make it happen. A well-diversified insurer may have risk covariance such that the contribution of investment risk to the total enterprise risk is less than the investment risk viewed in isolation. The company owners may view the marginal contribution of investment risk to be less than the investment risk viewed in the open market. Therefore, the owners of the diversified insurer may be willing to accept a lower return for investment risk, that is, a lower required profit, because the risk appears smaller to them. This is illustrated by the vertical dotted line in chart 1. Or an insurer may be willing to accept greater risk for the same return, as illustrated by the horizontal line.

So, therefore, company owners may be willing to give up some portion of the reward for investment risk and pass it on to policy owners to help attract more policy owners, and that might appear to be a rational thing to do.

Ok, that's the argument. There are two options. You either agree with the argument or you think there's a flaw with the argument. How many people agree with this sort of argument? Is there anybody in the audience that agrees with this? We've got a couple of hands here. I saw three or four tentative hands go up.

How many people think there's a flaw in this argument? There's one, two, three, four. If you think there's a flaw in the argument, you tend to agree with the financial economists in our task force. The flaw they see is in attributing this reduction in fair value to investment risk.

What actually happens is that the market's reward for insurance risk is being reduced, not the reward for investment risk. This is exactly the financial economists' argument for why the market reward for insurance risk should be small

or zero. Financial economists argue that companies that guarantee or give up part of the reward for investment risk to policy owners are really creating a loss leader that's being supported by profits onto the insurance risks.

The point of this whole discussion and the vote has been to illustrate that there are significant differences of opinion on what risk adjustments are appropriate and how they should be determined. That makes fair value of insurance liabilities a very fuzzy number.

Now let's turn to some other issues. First, what is the risk-free rate? As we talked about earlier, the risk-free rate is really just the default-free rate, but are U.S. Treasuries a good indicator of the risk-free rate? The answer may be no. The value of a Treasury could be considered to be the sum of the values of a default-free security and an option to liquidate any time before maturity. If the option to liquidate has any kind of value, then the value of a pure default-free security is less than the value of a Treasury. So its yield rate must be higher. That's a nice theoretical argument, but as a practical matter, it does make it difficult to pin down what the risk-free rate is.

Another issue is the emergence of earnings under the fair value framework. There are two parts to this. First, fair value puts all fluctuations into the earnings of the current year. That differs from GAAP, which tends to spread things out. For example, in a loss-recognition situation, GAAP requires writing a liability up to the point where the business produces zero future earnings. Fair value would require writing the liability up to a higher value, taking a larger current loss to be followed by positive future earnings, because if you had to sell that liability in the market, you'd have to pay somebody a price that would allow that party to make a profit in the future. They wouldn't accept it if they weren't going to get a profit.

The second issue relating to emergence of earnings is the degree to which earnings become controllable by the company. As I've said over and over, there's a wide range of reasonable risk adjustments for use in liability valuation. Smaller risk adjustments lead to lower liabilities and faster emergence of earnings. Higher risk adjustments lead to higher liabilities and slower emergence of earnings.

The last issue I want to talk about is the debate over the valuation objective. Two different valuation objectives are in play. One is fair value, and one is entity-specific value. Fair value is the amount a third party would require in payment to take on a liability. Advocates of fair value say under this definition fair value should reflect the credit standing of the party selling the liability. And fair value also ignores any special circumstances of the liability holder, such as administrative efficiencies that might lead to lower expenses than the market average. Fair value attempts to use market-based assumptions rather than assumptions specific to the entity holding the liability.

Entity-specific value, on the other hand, ignores credit standing, and it does take into account any special circumstances of the insurer. Entity-specific value is

consistent with existing international accounting guidance in IAS 39, and that makes it the current default unless some change is made, but, of course, a lot of changes are in the works. Credit standing is a huge issue. The Academy task force has not arrived at any consensus on whether or not credit standing should be reflected in liability valuation under a fair value paradigm.

To briefly summarize, the accountant's hierarchy of value methods combined with some actuarial principles for risk adjustment provide a simple framework for valuation. Within that framework, there's room for a wide variety of techniques. Second, market pricing of insurance risks violates the assumptions of financial economics and perfect markets, and this makes liability valuation all the more subjective. Third, subjective estimates affect the emergence of earnings in a fair value paradigm. And, fourth, fair value and entity-specific value are competing objectives for the definition of liability value.

**MR. DAVID RUIZ:** Mr. Chambers, I have a question for you. With regard to the IASB's recommendations being applicable in the EU in 2005, will the various regulatory bodies that currently exist there continue to be regulators and get into a situation like we have in the U.S., with the states regulating and a national standard for GAAP as well?

**MR. CHAMBERS:** My understanding is that under the EU directive, each country and each jurisdiction will adopt the IAS rules. That's for GAAP reporting. The issue, of course, is whether the regulators will go along with the IAS rules with respect to regulatory reporting, but my understanding is that they're leaning in that direction now. They certainly weren't originally. France might be the most difficult. I should say that the draft Statement of Principles that's been developed and will be made public next month recommends not fair value for insurance contract liabilities but entity-specific value.

**MR. DOLL:** My understanding is that full fair value for other financial instruments, the replacement to the IAS 39, has run into significant opposition, and it looks like that's not going to come out by 2005. What's your prognosis?

**MR. CHAMBERS:** Well, the rumor is that it's run into a fair amount of opposition. The closing date for responses to that Joint Working Group paper was the end of September. So, the group is in the process of compiling those responses. When the IASB and the Standards Advisory Committee of the IASB met in July, the degree of resistance, if you will, suggested that it was not going to be a priority item with respect to establishing standards—they'd have to live with IAS 39. By the way, IASs will disappear and become IFRSs, International Financial Reporting Standards. As I said, there are five priority elements of the work that they're turning to, and the financial instruments issue is not one of them. Interestingly, present value is not one of them either, but insurance is, and you wonder how that's going to turn out.

**MR. BURT JAY:** I'd like to first say that it's been a real pleasure and a lot of fun to work with both Steve and Mo on the task force over the last many, many months, and I'm not at all surprised that I really enjoyed your presentation today, as I always do. I'd like to ask one more question of Mo, maybe kind of a follow-up that will probably involve an amount of speculation, but we've talked about the edict or the expectation that the European community will adopt some form of a fair value or entity-specific value accounting for insurance companies by 2005 and that the individual standard-setting bodies of the countries will be under a lot of pressure and are expected to adopt the same international standard.

My question is, what does that mean for FASB and the Canadian authorities? How long do we anticipate it will be before they would follow up on this? If the European countries become consistent, it would seem that there'll be a lot of pressure for North American countries to. If it goes in 2005 in Europe, when would you anticipate it coming to the U.S. and Canada?

**MR. CHAMBERS:** That's not speculation. That's wild guesswork. Well, one thing I can say with some certainty, in fact, is that it'll happen in Canada before it happens in the U.S. because Canada's pretty close to it now, and I believe that the Office of the Superintendent of Financial Institutions (OSFI) in Canada is already contemplating what the consequences of moving to the international standards might be. The idea of international standards for solvency arose within the IAIS during the period in which the president or the chairman of the IAIS was John Thompson, who was at the time the leader of the insurance regulatory element of OSFI, and he actively promoted the idea of establishing universal standards. So you can see that there's some support among the regulatory community in Canada for that. So, I think it's going to be an easy road in Canada. I ask you: what's your guess?

**MR. JAY:** All I can say is, is the U.S. big and powerful enough to stand alone in the world and for how long?

**MR. CHAMBERS:** Yes, and I think that some domestic companies in the U.S. will say, who cares what's happening out there? On the other hand, increasingly, U.S. companies are owned by Europeans, and, increasingly, U.S. companies are operating in other parts of the world where these rules will apply. If managements of those companies find that these rules really work, and they're learning more about their operations, and they're able to manage their companies better using this approach, surely they're going to bring pressure to bear on the national regulatory and accounting bodies to get with it.

**MR. DOLL:** In fact, FASB is showing a disposition toward fair value accounting. It's not like FASB is saying it doesn't like fair value accounting. So, the question is whether it likes the fair value accounting that comes out in the international standards.



**MR. CHAMBERS:** If anything, FASB is going to have difficulty swallowing the idea of the assumptions being left up to the actuary.

**MR. DOLL:** And it may also have trouble with certain things such as entity-specific because it's gone on record as saying it believes in taking the company's credit standing into account.

**MR. CHAMBERS:** Has FASB said that for liabilities? If that's the case, it's my view FASB has been sucked in by the financial economists.

**MR. DOLL:** Well, maybe it has. You've mentioned that the Canadian system is close to what's being proposed for fair value, but could you elaborate a bit on that? It doesn't seem like it's all that close to the fairly complicated scheme that Steve was describing.

**MR. CHAMBERS:** Where it isn't close is, of course, we don't value the assets on fair value currently. We value the assets on sort of a mixed market on stocks and real estate and on a historical cost basis with respect to bonds and mortgages. So, the assets will change. Currently in Canada, the value of the liabilities is determined—or certainly the discounting of the future cash flows is determined—by the earning power of the assets that are there to support the liabilities, whereas the IASB has taken the position that the assets that you hold have nothing to do with the value of the liabilities that you hold. Its argument, and I think this is indicative of the fact that the majority of the members of the steering committee were from the property casualty side of the insurance business, is that you could sell those assets tomorrow and get an entirely different portfolio of assets. Why should that change the value of the liabilities? I think some actuaries would argue that, in fact, that would change the value of the liabilities depending on what risks you're incorporating in the liabilities. If the cash flows of the assets change, then that changes the disintermediation risk associated with the liabilities, and to the extent that you incorporate some of that disintermediation risk in the liabilities, the value of the liabilities change. They don't see it that way. They see the disintermediation risk as being something that's exclusively for the required capital.

**FROM THE FLOOR:** I won't pick up on that last point, but something Steve said earlier, I would gently disagree that it's not for actuaries to determine whether a fair value is the right thing to do or not, but that it's an accounting decision. I think that was roughly what your statement was. And I guess I would somewhat disagree. I think that actuaries have a key role to play here, and so maybe you'd comment on that, but I also would ask Mo, as well, if you think that actuaries are adequately represented, shall we say, in the debate and the proceedings of the IASB? So that's a question of what roles do we play, should we play, and are we playing adequately?

**MR. STROMMEN:** Well, first to respond to the question about whose decision it is, I do feel that it's an accounting profession decision, but I hope I included in my

remarks the idea that it would not be done without our input, and you are absolutely correct, we need to provide a lot of input because I'm not sure that the accountants really understand the nature of the kinds of risk adjustments we or they would be called upon to make, if they don't put something into the standard that requires reliance on actuarial expertise. So, we have a job ahead of us to explain some of the issues that we see.

**MR. CHAMBERS:** Well, we could always have more influence, I think, but it's remarkable how much influence we have had on what we've seen—what's come out of the issues paper. What was in the issues paper was largely influenced by the actuarial community in the first place. They've been listening to us. And that's amazingly fortuitous, and where the good fortune lies is in the timing of the restructuring of the IAA. The IFAA, which was the forerunner of the new IAA, was formed at the congress in 1995. We started talking about, well, what if the IFAA has to issue public statements? Maybe we'd better start thinking about how we would get consensus among the actuarial organizations represented to make a public statement on behalf of the worldwide actuarial community. And so the organization started working on that right away and set up a process within a year or so of the formation of the IFAA. Within a month of having formed the IFAA, we became aware of what the IASB—IASC at that time—was doing and that it had issued an exposure draft with respect to the valuation and reporting of employee benefits, and it was flawed from an actuarial standpoint in four respects, although I can't name those now.

But Paul McCrossan and Paul Thornton, who were instrumental in this, essentially chased the IASB around the world for 18 months arguing for change in what was being proposed, and ultimately the steering committee that had put the thing together didn't move an inch. It recommended what had been exposed. The IASC, for its part, essentially rejected what its steering committee had proposed and accepted three of the four recommendations of the IFAA and modified the fourth one to the extent that it was actuarially acceptable, and that became IAS 19. So, consequently, because of the success, if you will, at the time the IASC set up the Insurance Steering Committee in the summer of 1997, we were aware that that was going to happen. And, in fact, the committee that Sam chairs, the IAA's Committee on International Insurance Accounting, was established even before its accounting committee. It was established in April of 1997.

So we've been following right along. By the way, on that steering committee was Paul McCrossan and we've been feeding information to Paul, and Paul's been making the actuarial pitch, if you will, within that steering committee.

We had the issues paper that was issued in December of 1999, and there were 138 responses to it. In what we've seen in the draft Statement of Principles for insurance accounting, essentially it follows exactly the line of what the IAA had proposed. We had the largest submission, something over 200 pages, and I don't think there's a single element of what the IAA recommended that hasn't appeared

in the draft Statement of Principles. So I think we've had a profound effect on the direction the accountants are going. But that doesn't mean that the road is clear ahead. There are still serious matters to be dealt with, and the biggest one is the need for the IAA to be seen as effective in developing and accepting and publishing International Actuarial Standards to go with the International Accounting Standards for insurance.

**MR. DOLL:** And since this is a Society of Actuaries meeting, it was just a year ago that we were announcing that the SOA had changed its constitution. The members voted to change the constitution so that the SOA could vote to endorse statements of the IAA, and Mo, you were largely responsible for that.

**MR. CHAMBERS:** And the SOA did endorse the IAA's submission with respect to the issues paper. And we're now going to be dealing with the Joint Working Group.

**MR. SAM GUTTERMAN:** I have just a couple of very brief comments. First, I believe that the current schedule is to have an exposure draft out in the third quarter of next year. It's uncertain how long it will take after that for adoption, but, given the timeframe of 2005...

**MR. CHAMBERS:** There have been two exposure drafts.

**MR GUTTERMAN:** It all depends on how controversial it becomes. My second comment is that on the valuation of assets right now, it looks as if the IASB is going to give a higher priority to changes in IAS 39 than it is to a full, comprehensive value of fair value of assets, and that will be a tightening up. At least, speculation is that a higher percentage of the assets will be required to be put on a fair value basis, but not all.

**MR. DOLL:** I don't know how many in the audience are familiar with IAS 39. My understanding is IAS 39 is, on the valuation of assets, very much like the U.S. FAS 115. You have assets held to maturity that are held at book, and then there are other assets that are held at market.

**MR. GUTTERMAN:** It's not precisely the wording—interpretations are a little bit different—but it's fairly similar.

**MR. DOLL:** And so you're saying they may make more assets valued at market, but still have some assets valued at book?

**MR. GUTTERMAN:** It's uncertain right now. It's still in the discussion stage, but right now it has a higher priority than the full, comprehensive fair value, which was expressed in terms of the Joint Working Group paper.

**MR. DOLL:** And I think that's because it's been viewed as part of the improvements project.

**MR. GUTTERMAN:** That's right. And the improvements project of the IASB is given high priority because it wants to have full acceptance by IASCO and the EU as an acceptable accounting framework.

Chart 1

### *Treatment of retained investment risk*

Upward adjustment for “required profit” may be less than the downward adjustment for expected return!

