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# 2003 VALUATION ACTUARY SYMPOSIUM

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### International Accounting Standards

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*Summary: The International Accounting Standards Board is working feverishly to finalize standards for insurance investment products. Companies domiciled in European Union countries will be required to report financial statements under International Accounting Standards in the near future. Understanding these standards is critical to actuaries working in these companies, but is also important to other actuaries.*

**MR. WILLIAM HINES:** Our first speaker is Tony Cope. Tony is a full-time member of the International Accounting Standards Board (IASB), whose project we're going to be talking about today. Prior to joining the IASB, Tony was a member of the U.S. Financial Accounting Standards Board (FASB), so he has a good perspective on where we're coming from in the United States. Prior to joining the FASB, Tony was a securities analyst for a number of years, culminating with some senior positions and a partnership at Wellington Management Co. Tony is going to give us a brief overview of IASB activity with some specifics about the insurance project.

Our second speaker today is John Graff. John is partner with Ernst & Young and has broad insurance background in both the managed care and property and casualty insurance industries. He brings a pretty broad background to the discussion. He also has a broad background in GAAP accounting, GAAP conversions and the like. He has served on many training courses, including a life insurance GAAP accounting course, and holds CPA, COU and FLMI distinctions. John's going to be giving us an overview of the phase one exposure graph for insurance contracts. Following John, I will be speaking. I'm a consulting actuary with Milliman USA. I've been following the insurance project for quite a few years, and I'm active with the International

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†Mr. Anthony T. Cope, not a member of the sponsoring organizations, is a member of the International Accounting Standards Board.

‡Mr. John Graff, not a member of the sponsoring organizations, is a partner with Ernst & Young..

Actuarial Association (IAA) to develop standards of practice for actuaries who work under the international accounting standards developed by the IASB.

**MR. ANTHONY T. COPE:** First, let me give the usual disclaimer in that everything I say does not necessarily reflect the opinions of the board. They're my opinions. I guess my role is to set up the straw man that these two guys will then try and shoot arrows at. What I want to do is talk about our insurance project, where we are and where we're going. But to begin, what I'd like to do is to put it in some kind of perspective.

The IASB is charged with the simple mission of trying to develop a single global set of accounting standards. In that context one is aware that there is no single set of accounting standards for insurance contracts. Practice varies, and my conclusion is that no existing regime is satisfactory. As someone who has spent 30 years working as an analyst of financial institutions and financial service companies, including insurance companies, I can tell you that U.S. GAAP has even more flaws than was suggested in some of the sessions today. These dealt with all the inconsistencies in defining acquisition costs, differences in accounting for purchases and various other things. We're not going to use any kind of individual existing model as we go forward, but we will try and start over with a clean slate. The objective here is to provide something that will resolve the major uncertainties that investors face when they try and evaluate insurance companies. I think you would agree with me that insurance companies have a higher cost of capital than they otherwise might if their accounts were transparent and understandable.

You are probably aware that the European Union (EU) has ruled that consolidated accounts for all listed companies in the EU have to be prepared according to our standards beginning in 2005. The necessary endorsement mechanism has already been put in place for 34 of the existing international standards. Because of the necessity for transition, we have promised our constituents that we will not issue any new standards that would become effective between March 31, 2004, and December 31, 2005. That doesn't mean that we're going to turn in our laptops and go to the beach; we're going to keep working, including on the insurance project. But we're not going to issue new standards that become effective during that one and three-quarter year quiet period. What that means is that certain important projects that we have underway right now have to be completed by March 2004. These are the six standards that we plan to issue before 2004.

The standard on first-time adoption is already out; it was issued in July. In addition to that, we have a standard on some general improvements. We're proposing to amend IS 32 and 39, which deal with financial instruments. Those are the two that the EU endorsement mechanism has not yet endorsed, because we're still working on them. We plan to issue a standard on stock options, and one on business combinations, which basically conforms our standards for statements 141 and 142 in the United States. Finally, we plan to issue what we're describing as phase one of the insurance project.

We're coming from a standing start with a clean slate. A set of accounting standards for insurance contracts is proving more difficult than we might have imagined going in, and we can't get it done before March 31, 2004. In addition to continuing with the insurance project, we have a follow-up project on business combinations. We have a project on reporting financial performance, one on reform of the income statement, one on disclosures by financial institutions, definitions of revenues, liabilities and equity, consolidations, special purpose entities and a short-term convergence project with the FASB designed to eliminate as many niggling differences between U.S. GAAP and international standards as we can. So to say the least, we're busy.

Turning specifically to insurance, there is a perception out there that there's kind of a rush to judgment on this insurance project. Let me assure you that the timeline will demonstrate that that's not the case. The old International Accounting Standards Committee that predated the International Standards Board (ISB) established an insurance steering committee in 1997, and in 1998 that committee published an issues paper, which drew 138 comment letters. They considered those comment letters and issued what they call a draft statement of principles in 1999. That also evoked a lot of comments.

When we began discussions in 2001, we decided that the best way to get things going was to reissue the draft statement of principles (DSOP), which we did. It soon became obvious that we weren't going to finish this by March 2004, and we decided to split the project into two phases. In July of this year we issued an exposure draft (ED) on accounting for insurance contracts, with a comment deadline of October 31, 2003. The objective is to issue a standard in March, which will become effective January 1, 2005.

These are the key issues that we are facing and that are a part of the phase one issue. There are others, but from my point of view, these are the ones that are the key issues. Before we get to those, what was our objective in issuing the phase one draft? First of all, there was a practical need for some kind of guidance. If you're a financial institution in Europe and you issue insurance contracts, you've got to do something in 2005. In the absence of any literature, what our standards say is that you follow the framework. In the case of insurance, that's not terribly helpful. We wanted to make some limited improvements in practice that we thought we could accomplish. We didn't want to impose any changes that when we got into phase two with a comprehensive set of accounting standards would require two sets of system changes for people. We wanted to require some disclosures that would help users to assess the risks associated with insurance contracts.

In very brief summary, what the ED proposes applies only to insurance contracts and not insurance companies. There are some existing international standards that exempt insurance companies, and there are some that exempt insurance contracts.

The proposal here is to deal only with insurance contracts. Insurance companies are required to follow all other international standards beginning in 2005.

It allows entities to use existing practices in valuing the assets and liabilities associated with insurance contracts until 2007. It has a sunset clause in the ED, which states that this permission expires on December 31, 2006. It prohibits certain accounting practices that would never pass muster in any future standard. It provides for additional disclosures, particularly the disclosure of the fair value of assets and liabilities associated with insurance contracts.

Turning to these key issues, the first one is the definition of an insurance contract. This differs from the existing definition of an insurance contract under international standards, which is in IS 32. IS 32 talks about whether principally financial risk is transferred by the contract. We turn that around. Instead of saying whether it's principally financial risk that's transferred, it's whether the insurer accepts significant insurance risk. There has been some debate about what is meant by "significant." The intention here is that you should not be able to escape from normal accounting practices if you have some trivial amount of insurance embedded in a financial contract. That hasn't pleased some of the regulators, particularly in Europe, who feel that a contract that has any insurance feature ought to come under their jurisdiction and ought to be considered an insurance contract. One regulator told us that 1 euro was enough in the contract to make it qualify for insurance. But we're proposing a significance test and leaving that to people's judgment with the principle that it is significance that counts.

What that means is that many contracts that are issued by insurance companies don't qualify under that definition as insurance. Many investment contracts won't qualify as insurance contracts and won't qualify for the exemption from existing accounting policies. That's what is causing a great deal of angst at the moment, as people have come to the realization that they're going to have to account for these contracts under IS 39, which deals with financial instruments. It covers some of the issues you've been hearing about today related to derivatives and embedded derivatives, hedge accounting and the like.

The temporary exemption, which contains the sunset clause, allows insurers to continue their existing practice. I spoke earlier about removing some existing accounting policies that we thought would never survive, and one of those is that, as in the case of U.S. GAAP, we're proposing to prohibit catastrophe and equalization reserves. We are also requiring some kind of loss recognition test, if you don't have one in your existing regime, and we're going to prohibit the offsetting of reinsurance contracts against the original contract.

Another issue that's causing a lot of concern among constituents is what we call unbundling. We've said that if a contract contains both an insurance component and a financial component, and if the cash flows of those two components are

independent and don't affect each other, then you must account for them separately.

The treatment of discretionary participation features will not be changed in any significant way from current practice, except that you have to make a distinction as to whether the feature is entirely a liability, entirely equity or some of both. If it's some of both, you should separate it. What we're not going to permit is some kind of mezzanine presentation that's neither fish nor fowl. You have to decide whether you have an obligation to make these participation payments. And if you do not, they are equity, if you do they are a liability.

Finally, we're requiring disclosure of accounting policies, key assumptions and effective material changes in the assumptions. We want information about insurance risk, including sensitivities and claims development data for property and casualty general insurance. We're illustrating that with the familiar triangle tables. We want information about credit and interest rate risk, which is already required by other international accounting standards. We're asking for disclosure of the fair value of insurance assets and insurance liabilities beginning on December 31, 2006. One of the complaints we've had is to dispose of the fair values, but you haven't told us how to do it. That is a fair criticism, and we plan to provide guidance about developing fair values before that time.

We are continuing to work on phase two and the final standard for insurance contracts. We have not had any formal deliberations since our meeting in May. We're not planning to do so in September, but we will in October. It doesn't mean to say that nothing is going on. We've been meeting with a variety of industry groups, actuarial groups, the International Material Association, as Bill mentioned, and we are receiving a lot of unsolicited advice as to how we should go forward. We concluded that one should adopt an asset-liability approach rather than a deferral and matching approach. Deferral and matching is the basic principle in U.S. GAAP, particularly in '60, but also in '97 to a degree. We've concluded that you should reject that approach and look at the fair values without prejudicing the issue of the assets, liabilities and how they fall out, or ought to determine the present of income. Rather than expected value, which the DSOP espoused, we've concluded that the fair values of the insurance assets and liabilities should be the measurement attribute.

We've also concluded that future cash flows representing, for instance, renewal rights that are not guaranteed should be incorporated in a measurement of rights and obligations only in particular circumstances. We're still thrashing around and arguing with some of these questions about renewal rights. But that's the principle. An asset-liability approach carries with it the thought that acquisition costs should be expensed when incurred, and not capitalized and amortized.

There's a great deal of ground to cover in terms of establishing fair values. I'm frequently asked, When will phase two come out? The candid answer to that is: I

don't know. It won't be before 2006, given the quiet period that I spoke about. There are several board members who are dissatisfied with phase one. Four board members dissented from the ED. Two of them dissented because it didn't go far enough, and two of them dissented because it went too far. I wouldn't read into four dissents any kind of unanimous minority block. There is a strong feeling on the part of a lot of board members that phase one isn't a very satisfactory solution, and it ought not to be in place for a very long time. The mismatch between assets carried either at market value through profit and loss or as available for sale through equity with insurance liabilities that are carried at some kind of historical cost or amortized cost convention is a problem. There's no doubt about that.

International accounting standards allow you to value liabilities with the market if you wish. But I doubt at this point, given the uncertainties involved in doing so, that many insurance companies will avail themselves of that option. We're going to continue to work very hard, and we're going to continue to work very hard in conjunction with the industry, with the actuarial profession and with investors to try and come up with a good solution for insurance contracts. In terms of any planning you might want to do, I would think about effective dates in 2007. This would be the most likely.

**MR. JOHN GRAFF:** I'm here to talk about some of the things we have been considering within our firm. Today I want to focus on IS 39, a little bit about the phase one proposal, talk in a little more depth about the product classification, and provide some examples of what we consider to be significant insurance risk.

There are some key dates that you need to focus on. It has to be fully implemented by 2005. January 1, 2004, will be the first balance sheet on phase one, and that's coming up very quickly. Companies are going to need to quickly understand the impact of phase one. Phase two is telling us it will be fully implemented by 2007.

It's typical to talk about insurance contract accounting and investment contract accounting without having a high level of understanding of what IS 39 and 32 refer to. IS 39 talks about the recognition of plans, financial assets and liabilities, as well as how you measure them and what the related disclosures are. IS 32 goes into detail about the disclosures. This has particular implications for investment contracts. If you have contracts, you're going to split them into either insurance contracts, or investment contracts, to the extent that the investment contracts are going to fall under IS 39. We'll get into that in a little bit more detail in a second.

This is kind of a high-level overview of what's contained within IS 39. How do you measure financial assets, liabilities, derivatives and cash-flow hedges? Much of this is going to look like FAS 115 and FAS 133 under U.S. GAAP. Not all of it, but some of the words are going to be familiar, and some of the concepts are going to be familiar as well.

The key requirements as amended will apply primarily to the European insurers, but outside of the United States derivatives generally would not be recognized on balance sheet financial instruments or financial assets. Generally, now they will be carried as fair value with very few exceptions. Investments were classified either as current or long-term; now they are going to be carried at what you're familiar with available for sale, maturity or trading, and the accounting for unrealized gains and losses will be identical the way it is under U.S. GAAP. There was really no guidance for hedge accounting outside of the United States. It was all over the lot. So now you're going to see something that looks very consistent with what you see in the United States.

This is an overview of the objective, which includes limited improvements in the accounting for insurance contracts—again, not insurance companies, insurance contracts and disclosure. Tony talked about disclosures, and we will talk a little bit more about it as well. If you don't have a copy of the ED, the basis for conclusions and the implementation guidance, those are on the ISB Web site, and you can download those. All of the actuarial firms and accounting firms are developing responses that are due by October 31, 2003.

There are a lot of transition issues, and it's important that companies begin to understand what those issues are. When they make decisions beginning in 2004, which will be the first year of comparative financial statements, they can understand how those decisions will look under a new phase one insurance proposal. It applies to all insurance contracts, including reinsurance. It does not apply to product warranties, employee benefit plans, self-insurance and things of that nature.

Companies are going to need to develop a process in which they go through and decide whether contracts are either insurance or investment contracts. The board recognized the difficulty of this and has issued several pages of examples and explanations as to how you classify contracts as insurance contracts or investment contracts. The work effort will depend largely upon how you classify those products, and the extent that you can maintain and keep your classified contracts as insurance contracts. The work effort will be easier, and you'll probably be able to better predict what the earnings pattern will be. To the extent that some of your contracts now become investment contracts, the work project will be much more onerous, and the understanding of how profits emerge will also become much more difficult.

The legal form of the contract will have no bearing on how it's classified. It's really a matter of looking through to whether the contract has significant insurance risk. Here again is the definition of an insurance contract. An insurance risk is something other than a financial risk. "Significant" means at least one plausible scenario attainment of an amount that is not trivial. We in our group at Ernst & Young have tried to expand upon that a little bit and moved the words around. I don't know if these help. The EDs spend several paragraphs explaining what significant insurance

risk is. The implementation guidance also has several pages of contracts and how they should be classified. These are the words that are used to define whether a significant insurance risk exists. It's significant if, and only if, it is plausible that insurer event would cause a significant adverse change in the present value of the insurer's net cash flows. The insurer shall assess significance of insurance risk on a contract-by-contract basis rather than by the materiality to the financial statements. Finally, insurance risk is not significant if the occurrence of the insurer event would cause a trivial change in the present value of the insurer's contractual net cash flows.

Financial risk is defined as a risk of possible future changes in specified interest rates. Security prices, commodity prices, etc., and insurance risk obviously continued events other than financial risk. If a contract contains two elements, financial risk as well as insurance risk, it is classified as an insurance contract.

Obviously you're going to have to put your contracts into two different buckets: an insurance bucket, an investment bucket, and there's probably a third bucket with some corridor where judgment is going to be acquired. Certainly whole life contracts, term insurance, life-contingent annuities, etc., would fall into the insurance bucket and would probably meet the test of being an insurance contract. Investment contracts, clearly those without any mortality or morbidity risk, variable products with no additional death benefit, annuity certain financial derivatives, gifts, endowments, etc., would clearly be investment-type products.

There's going to be another area, as there always seems to be in the accounting world, where it's going to require some degree of judgment. Here are some examples of those unit link products with a 1 percent death benefit: pensions with return of premiums on death, experience-rated group business with premium on death. There are probably other examples that this group could come up with about whether they should meet the definition of insurance or investment contract.

But once you classify a contract as insurance, it always remains as insurance. There is some probability or possibility that it can go from investment to insurance, which should be rare, but there's really no guidance on that yet.

I'm going to talk about a high-level overview of the decision tree for phase one. If it meets the definition of an insurance contract, you use the existing accounting at local GAAP and that country, whatever that might be. But there are some key modifications. For example, if a local country GAAP permits catastrophe reserves, claim equalization reserves or gaining on reinsurance treaties, those would have to stop. Loss-recognition tests would have to begin, as well as the gross presentation of reinsurance. If you're deferring acquisition costs, continue to do that. Those are some of the key modifications that are allowed, assuming your contract meets the definition of insurance contract. The more robust framework refers to the fair value valuation that will come in 2007.



The question now is how do you account for investment contracts? That might be a little bit foreign to people who are used to dealing with insurance accounting. Here are some of the things from the European perspective that they are going to be concerned about. The liabilities and assets may not necessarily move together. Those may be a fixed or amortized cost, but assets could be obviously available for sale or trading. In phase two, when everything goes to fair value, there would be some opportunity to redesignate the investment portfolio from available for sale for trading so you don't have the mismatch.

Typically under IS 39, you can use an amortized cost approach or fair value approach. The literature in IS 39 refers to it as trading. But trading should ignore that. I think the question is whether it's fair value method or an amortized cost method. To the extent that your investment contract includes an embedded derivative, which you cannot separate in values, the contract automatically becomes a fair value contract, and you have to value at fair value. But you could decide to use amortized cost, and to the extent that your contract contains an embedded derivative, you'd still be required to separate that derivative, value it at a fair value, and carry the host contract at an amortized cost. That designation of fair value or amortized cost once it is made is irrevocable. You're stuck with it forever. We'll probably talk about some reasons why you might want to go with the fair value route initially.

The initial starting point is determined by what the initial value is. Under IS 39 it identifies initial value as the cost of the fair value of the net consideration, where net considerations are premiums less transaction costs. This initial value has meaning only if you're using amortized cost. If you're going the fair value route, it really loses its significance after day one.

Let's talk a little bit about transaction costs. If you want to equate this to deferrable acquisition costs, you certainly may. But it's much more restrictive. These are some of the words that appear in IS 39: "incremental," which is obvious, but excludes allocated costs for overhead; "directly attributable" means it must be acquisition related; "external" would suggest that you're going to exclude salaries and possibly employee commissions. This is clearly a different definition than what we would think of as deferrable acquisition cost. Maybe we shouldn't even be thinking of deferral of acquisition costs in this sense.

This is what amortized cost means. You're going to start with the initial value, the initial recognition, and move to maturity amount using the effective interest method. The definition seems to imply that the measure is applied to all individual contracts, but I think it's also done on a group basis, or can be done on a group basis. The question you're probably asking yourself is, What are the amounts? The gratuity amount is not well defined. The expected maturity amount is not well defined, and that's going to be one of the issues for using amortized cost, as we'll see in a minute.

The effective interest method is defined as follows: it's simply the internal rate of return. You know what the initial value is, you know what the cash flows are going to be, or you can estimate what the cash flows are going to be. You simply solve for the internal rate of return. That's the rate at which you'll then amortize the liability.

To make it even more simplistic for us accountants, we have an example in which the premium is \$1,000 and the commission is \$20. The commission in this case is going to be paid to either an independent agent or an employee agent. We have a production bonus that relates to several contracts of 10, a home office allocation of five, and a contract that matures very simply in one year to \$1,100. The initial value to demonstrate that difference for an independent agent using that definition that we talked about earlier would be \$980. If it were an employee agent, it would be \$1,000. It's using a different starting point and working up to the fact that the yield is going to be different for an independent agent versus an employee agent. The production bonus is ignored because it relates to more than just this one contract. Allocated internal costs are ignored as well.

Real life is probably not that simple, particularly when you get into the investment contract world, because you're going to have options in investment contracts, such as the ability to take cash surrender value, which may cause cash flows that deviate from the estimates underlying the effective interest rate calculation. When deviations occur, it seems logical that the evaluation should be adjusted to reflect the revised estimates of cash flow rather than contractual cash flows.

However, the board recently discussed this issue, and there was an expectation that further guidance will be issued. Indeterminate features, such as interest credit set by management that depends on market conditions, can cause cash flows to vary as well. These features further complicate the process of using amortized cost. Another difficulty relates to the duration of the investment contract. For example, it's not clear whether the period after a policyholder annuitizes should be considered an estimated cash flow, or whether the period during which annuitization occurs represents a termination of the old contract and the beginning of a new contract. Complicating all this is the fact that embedded derivatives that are not closely related to the host contract must be separated and measured at fair value. I'm sure many of you can think of other reasons why this is going to be a very difficult exercise to implement. Not impossible, but difficult.

The other choice is fair value. Much controversy, confusion and debate about this concept will undoubtedly continue for the next several years. This is a very time-consuming project, and it's going to require the talents of many actuaries, more so than the accountants. It will require sophisticated computer systems, great project management skills and a lot of time to get it done. The insurance industry is facing very difficult economic times, and this could come at a better time. But it is what it is, and we've got to deal with it.

**MR. HINES:** I'm going to talk a little bit about the actuarial issues related to the phase one ED. I think John did a pretty good job covering the basics of what's going to happen with investment contracts, and I think you can pretty much tell from there where actuaries might have a good chance of being involved. So I'm going to confine my remarks more toward the insurance contracts and where I see actuaries possibly being involved in the process under phase one.

There is a big difference between the standards of the ISB as it is developing and the standards we currently operate under in the United States and U.S. GAAP. The challenge is that the ISB is trying to put together a set of standards that are really based on principles; they are lean on specific rules. There are a number of cases where they've intentionally declined to provide more guidance in the phase one ED. The intent is to rely more on the professional judgment of actuaries and accountants in interpreting the rules. Many details are left up to those of us in the actuarial and accounting professions. This can be quite a change for those of us who are working under U.S. GAAP.

An insurance contract classification is the first step. John talked about the significant insurance risk issue, which is similar in definition to what you've seen. It's an important one, since we have all talked about it. The significance test itself could be a situation where actuaries couldn't get involved. John talked about that column of contracts where you're going to need some judgment. The test itself is based on the deviations and present value feature cash flows. It will depend on what the auditors are going to require for making that determination.

Another place where actuaries can become involved is in the loss recognition issue. The loss recognition test is required at each valuation date, and it's going to apply to the net liability. The definition is such that it requires the recognition of a loss if the current liability is insufficient, in light of the current estimate of future cash flows. This is something that is a little different, perhaps from U.S. GAAP, and this can be done on a contract-by-contract basis, or on a block-of-business basis. The other part of the definition is that the entire loss must be recognized in the current period. So the question is, Does U.S. GAAP comply with this? The definition of investment contracts under ISB accounting is going to be slightly different than under U.S. GAAP. To the extent that contracts move, contracts classified as insurance contracts, for example, annuities that might have a life-contingent annuitization option, the mere presence of the annuitization option qualifies it as an insurance contract under ISB accounting standards. You can use your current accounting policies for the valuation of those contracts. The loss recognition test currently applies to those.

Another issue that some people have raised may be a little bit esoteric, but I'll throw it out here. The local accounting system has a loss-recognition test but allows the entity to amortize the deficiency into income over time, for example, over several accounting periods. That seems to be in conflict with the ISB requirement that you recognize the entire deficiency in the current period. For the company

thinking about the base mechanics of the valuation itself, FAS 97 might be a good example. It doesn't require loss recognition per se in the main mechanics. But in the unlocking provision, you come up with a new set of current estimated cash flows, put them into your deferred acquisition cost (DAC) valuation, and that resets the DAC, resets the 100 revenue liability, but also changes the amortization rate that you use in those calculations. This effectively spreads the impact of the changes in cash flows over the remaining amortization period. The question is, Does the loss recognition requirement under ISB accounting rules recognize the entire deficiency in a current period flow through to the underlying valuation base? This may be something upon which you may want to get some clarification.

Another place where actuaries could become involved is in unbundling. Most life insurance contracts have an insurance element and a savings element. The savings element often has economic characteristics that are similar to other financial instruments. These are issued by banks as well as mutual fund companies. Those products are valued under IS 39, not the insurance standard. The ISB is going to require limited cases that the savings element of insurance contracts be split out and valued using IS 39 as well. This is an important distinction for phase one accounting, because the requirements of IS 39 could be different than the requirements of your current accounting system. In many cases it's not possible to bifurcate the contract into its component pieces, which is why I believe the ISB decided to only bifurcate these contracts where the insurance element cash flows and the savings element cash flows are independent.

Which contracts can you deem to be independent? It seems pretty clear in most cases, but some people raise the question about the death benefit option on many universal life products, where the death benefit is equal to the face plus the account value. The net amount of risk is essentially fixed equal to the face, assuming you don't have any death benefit corridor tax issues. You can predict what the cash flows from the insurance component and the account value component would be. Does that qualify for unbundling? It's a good question. If it does, certainly there are going to be a lot of systems implications to try to split those. That's key fodder for actuaries. My personal opinion is that it doesn't require unbundling because there is still interaction there. But it remains to be seen.

The embedded derivatives in insurance contracts need to be separated and valued at fair value, if certain requirements are met. An embedded derivative is a contract feature whose value depends on some other financial instrument that, in this case, will be separated if the host contract is not fair value itself, if it's not closely related to the host. In other words, the derivative itself is not dependent on the underlying mechanics of the contract itself. The derivative itself is not insurance. It's not an option to surrender for account value. If it qualifies as one of these, you don't have to separate it. But you do have to put in some significant disclosures about it.

In some examples, separations are not required, but fair value valuation is not required for guaranteed minimum death benefits: options to take life-contingent

payouts, their insurance, or options to surrender where the value is a fixed amount or based on a fixed schedule. It's not the intention to force people to separate tabular cash values, for example.

Where fair valuation and separation would be required for contract features such as guaranteed minimum income benefits is where the payments are tied directly to asset returns, or with guaranteed payments that are only nonlife contingent. Guaranteed minimum equity returns, surrender benefits and maturity benefits—those are going to have to be separated in fair value. This includes surrender values, surrender benefits even where the value itself is based on some other equity index.

Those are key areas where there's a lot of activity in the United States. In this case, if you're under ISB rules, it's somewhat similar in that these need to be properly valued. They've deemed that fair value is the proper value, and they need to be separated in fair value.

The definition of fair value is the amount in which an asset can be exchanged for liabilities settled between knowledgeable willing parties in an arms-length transaction. It sounds pretty straightforward. This is an option for valuing investment contracts, as John mentioned. The statement values of insurance contracts will be required starting in 2006. The definition itself implies that it's an exit value. It's something that you're exchanging; you're settling a liability in the case here. The question is, How do you do that when there's no market to refer to for insurance contract liabilities? Some additional constraints have been talked about with regard to coming up with fair value, or financial instruments in total, and insurance contracts as well. It's very hard to calibrate something to an exit value when you have no market to look at. But there is a market price upon entry. You can figure out at what price you sold it to the policyholder. This is based on the expectations in pricing at the time. So you can calibrate to something like an entry price. That doesn't really solve the problem. What do you do a year down the road, or three years, four years, five years down the road when experience has changed? How do you recalibrate the fair value at that point?

There's been a lot of talk about demand deposit floors and cash value floors as a minimum to any type of liability, including fair value. This particular issue is problematic, given that policyholders do not behave in a manner that's consistent with financial economics or rational expectations. You don't surrender a contract to get 50 basis points more across the street. People continue to hold on to their contracts. And the question is, Why do they hold on to their contracts? One of the issues that's being debated is how do you deal with renewals of contracts? You don't have contractual rights to future premiums. You don't have the right to require a policyholder to pay you for next year's premium. How can you count that in the valuation?

One of the other issues is discount rates. What rate of interest do you use to discount the future cash flows when you come up with them? Risk-free rates need to be consistent with option pricing theory and financial economics. Is that consistent with how products are priced? Is that consistent with the way the insurance market works? That is an area where it will be quite interesting to see how things play out.

Another key issue in fair value when you're talking about insurance contracts is risk margins. Think about an exit price. How much would you pay someone? How much do you need to pay someone to take over your liability? It's not the present value of your best-estimate cash flows. You can agree on what you think the best estimate is. But you're going to need to pay more than that for someone to take over your liabilities because of the risk involved in those cash flows. The exit value has to include something more than the present value of your best-estimate cash flows. It has to include some risk margin. How do you come up with a risk margin for insurance contracts that aren't actively traded?

For phase one, one of the biggest issues that involves actuaries is in the area of disclosures. There are several other types of disclosures that are going to have to be put into place starting 2005 and are not waiting for 2006. I thought it would be helpful to review the three principles that the ISB put into the ED to guide them in choosing what disclosures they wanted to see put into this statement.

The first principle is they want explanations of the reported amounts in the financial statements. There are a number of quantitative disclosures required, but qualitative ones as well, for example, mortality. The insurer needs to describe the objective of the mortality assumption that was used in developing the liability. Is it a best estimate? Is it something that was used to get a certain level of sufficiency, deliver a certain confidence interval? To disclose the source of the data used to develop the assumptions, the assumptions must be consistent with market or published data. You need a description of any trends that were projected and how those were derived, as well as a description of how the insurer identifies correlations between the various assumptions. You will also need its policy for distributing values for nonguaranteed elements, as well as information about how the insurer selects and manages the risks that it takes on.

The second principle is to present information concerning the amount timing and uncertainty of future cash flows of the entity. Included in this category would be things like your risk-management practices, your asset-liability matching procedures and your mechanisms for monitoring and mitigating risk. You need lots of information about the risk itself. You need the types of risk under written concentrations of risks, as well as the significant guarantees that are offered in the products—and even the level at which market prices or interest rates would start to affect the expected cash flows of the insurer, as well as the nature of the participation features that are in the contracts. The third principle is to disclose fair value of insurance liabilities and assets.

There are several sensitivity analyses that the actuaries are probably going to be getting involved in. One is the requirement to disclose information about the sensitivity of reported profit, end equity, changes in variables that have a major impact on them. Typically they want to give you minimum qualitative information. If you are able to do it, they want you to disclose quantitative information. That's a significant increase in the disclosures and the types of disclosures that are required.

One of the more interesting requirements is the requirement to provide analysis of the recognized liabilities by the period in which the cash flows—I think I should say net cash flows—are estimated to occur. The analysis needs to be put into the following bucket. If you have a block of whole life contracts, where you expect net cash flows in each year over the next 30 years, do you need to cut up the liability and put them into these buckets? If you've got all these cash flows, how do you do that?

You also need to provide a narrative about how those liability amounts would change if the policyholders exercised their lapse or surrender options in an option that is least beneficial to the insurer. You need to disclose the average effective interest rate and put it in the liabilities in each of those buckets. This is going to be quite interesting to interpret and could easily develop into a major systems implementation.

I mentioned a little bit about guarantees and options. You need to summarize all the significant guarantees and options. These relate to the ones where you don't do the fair valuation or disclose as much information about the guarantees and options that the insurer is exposed to. So this is the exposure amounts themselves, what you're exposed to for each of the guarantees, and the levels at which those guarantees start to bite.

Here is a summary of where I think actuaries are going to be involved. The modeling capabilities of an insurer are going to be paramount, such as being able to comply with the ISB requirements in phase one alone, never mind phase two. Each of these categories will definitely require significant modeling capabilities, especially the sensitivity analysis. It's key to be able to do that, and do it robust enough to capture the optionality of the risk involved. But it has to be compact enough to be able to do it within the financial closed cycle. That's a significant challenge. Imagine doing that for all your contracts, not just the annuities, but all the guarantees in all the contracts.

I'm going to expand on asset classification a little bit. Asset classification and valuation under ISB standards is very similar to FAS 115 and FAS 133 under U.S. GAAP. When an entity adopts ISB accounting standards for the first time, it has the ability to classify all of its assets into one of those three categories. It is held for sale, held for trading or held for maturity, regardless of what you've done in the past. It's going to be important to carefully choose those classifications so that your

financial results down the road make sense. Think of situations in which you have held all of your assets at market value and designated them all as held for trading. Your liabilities are held primarily in amortized cost; you're going to have one side of your balance sheet moving around based on changes in the financial markets, while the other side is not. That's going to cause significant volatility in your earnings that will more than dwarf the volatility associated with the underlying business.

I've been involved in a joint research project between the ACLI and the IAA that has focused on this item extensively. We're lucky enough to share that with the ISB, and it's something that we need to take into account and be very careful of.

These issues are also relevant to the classification of investment contracts, because you have a choice in valuation methods for investment contracts. You can choose amortized cost or fair value under the proposed amendments to IS 39. You also have to choose carefully when lining up how both sides of the balance sheet react to changes in the financial market.

I talked a little bit about fair value. We have a lot of financial instruments that are traded. Assets, primarily in the financial markets, seem to behave, or at least they are expected to behave, in a way that's consistent with financial economics. The question that is often raised is can you value insurance contracts in a similar way, or under similar theories? Is there something about insurance contracts that makes them different from other financial instruments? Therefore, they should be valued in a different way. I think these are parts of the questions that we're going to be struggling with as we move to phase two, and really try to get into the fair value of insurance contracts.

Whatever happens, the ISB is going to set a precedent that may end up here in the United States, with FASB adopting it. I'm not convinced it's going to happen any time soon. We heard about 2007 as probably being the earliest time for the ISB to come up with a phase two standard or implement a phase two standard. It will be some years after that before we see it in U.S. GAAP. But if there is a fair value standard out there, it's going to be hard for FASB to ignore it. Now is our chance to influence the process and have our voices heard.

**MR. EDWARD C. JARRETT:** I have a comment in terms of phase two. Most people, including myself, would think, "No way, this could never happen." But if you think back just about 10 years ago, most of us were just starting to use the Internet. Today it's commonplace, it's all over the world, and we do things we couldn't imagine doing 10 years ago.

Ten or 20 years from now, the world is going to be totally different. We're not going to be working; our kids are going to be out there. What are their expectations going to be? Are their expectations really going to be that there's not just one number that's a correct number, there's not one set of financials that is the correct set of financials? The financial results are what happened in the past, as well as your



expectations of what you think is going to happen in the future, and how you evaluate that. In financial economics lots of times we break it down into three different subjective aspects, or subjective expectations about what's going to happen in the future: subjective value of money, or time, or utility or subjective aversion to risk. So if you look 20 years down the road and you say, "What are people going to be doing then?," people are going to have the ability to come up with their own financial value of a company or an enterprise. They will be able to change the assumptions just by going on the Internet and change the lapse rate, change the assumptions. They are going to be able to do some of the things that we think today are just impossible; it will be second nature to them.

So in terms of phase two, where's the world going to be 10 years from now? We've got to move in that direction, so whatever we come up with today has got to be in the framework of, Are they going to laugh at us five years from now, or 10 years from now, about what we come up with in phase two?

**MR. COPE:** That's a very interesting statement and one that bears a lot of thinking about. Financial statements are a bunch of estimates, and principle-based standards mean that it's going to be more judgment in standards, in accounts, and not less, as Bill said. The gentleman is exactly right. You know, come XBRL (extensible business reporting language), you'll be able to drill down into financial statements and manipulate them to an extent that we can't even comprehend at the moment. The ways in which I think accounting standards setters are responding to that are in some of those disclosures, which some people think are excessive. But you have the kinds of things that Bill was talking about, where you acquire narrative information about the assumptions that are made, how the estimates are developed and what kinds of inputs go into the numbers that are in the statements. In addition, you ask for sensitivity analysis: whenever we ask for the sensitivity analysis, we're told there are far too many interdependencies. So the numbers aren't viable. But in the kind of environment that you're suggesting, we'll be able to deal with all those interdependencies. We'll have the information available to us. Everything that you're talking about is exactly right. It requires us to focus even more on the kinds of disclosures that accompany the financial statement.