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Fair-Value Reporting

Moderator: Burton D. Jay

Panelists: Michael J. Hambro
Sam Gutterman
Alastair Longley-Cook
Roger W. Smith
Jane C. Taylor

Summary: The convergence of financial service providers, the desire for more consistent accounting methods across different countries, and Financial Accounting Standards Board (FASB) activity for consistent financial measures for all financial institutions has created an increasing interest in fair-value accounting.

Panelists discuss recent developments in the area of fair-value financial reporting, including:

- *Recent FASB developments*
- *International Accounting Standards*
- *Different approaches to valuing liabilities*

Practical examples of the application to life insurance and annuity products are included. The long-term implications for investors, customers, and regulators, along with the implications for the development of a Unified Valuation System (UVS) are discussed.

MR. BURTON D. JAY: We're going to use a roundtable discussion. I'm going to ask questions of members of the panel, and the members will respond.

First, I'll introduce our panelists. I'm a financial actuary from Mutual of Omaha. I've been the Chair of the Academy's Fair-Value Task Force. We have Roger Smith who's president of Polysystems in Chicago. He's also a member of the Academy's Committee on Life Insurance Financial Reporting. We have Alastair Longley-Cook. Alastair is Aetna's corporate actuary and the chief corporate compliance officer of Aetna. We have Mike Hambro who's senior consulting actuary with Ernst and Young and a member of the Valuation Actuary's Planning Committee that helped plan this very meeting. Sam Gutterman is consulting actuary of PricewaterhouseCoopers in Chicago. He's Chair of the International Actuarial Association's (IAA) Committee on the International Accounting Standards Committee (IASC) Insurance Standards. He's a member of the IASC Planning Committee on Present Value. Finally, on our far left is Jane Taylor who's a Fellow of the Casualty Actuarial Society and a member of the American Academy. She's a principal and consulting actuary at Taylor and Mulder, Inc. Her background includes primary insurance, reinsurance, and research consulting assignments, with a special emphasis on the weird and the wonderful lines of business. So with that, I think that we will jump into our program.

First, I have a question for Sam. Why did the idea of a new worldwide accounting system for insurance come up in the first place, and has fair-value been chosen as the basis of valuation of all financial instruments?

MR. SAM GUTTERMAN: You've really asked two questions, Burt. First, why is international suddenly important, and, second, are fair-values a *fait accompli*?

There are several factors that have made international accounting standards more important. First, in 1995, the International Organization of Securities Commissions (IOSCO) made a big push. They charged the IASC with developing a core set of international accounting standards. Then, as a result of the Asian crisis two years later, the G7, the largest countries, economically pushed both international standards and transparency.

But the IASC has been around for 27 years. They have been operating until the last couple of years in relative obscurity, at least to people in the U.S. Its standards were utilized mostly for companies operating in countries that didn't have their own independent accounting standards.

As a result of a push from IOSCO, they completed a core set of standards in late 1999. They started a couple of years ago in an effort to try to develop some industry-specific standards; insurance was among the first industry.

The second question was, are fair-values a done deal? That question has been asked a couple of times at this meeting. I would suggest that it is not yet a done deal and that the jury is still out. There is a lot of opposition to fair-values. I think it's coming from two general sources: first, it comes from banks and other industries; second, it comes from the continental Europeans. I'll tell you in a moment why the continental Europeans are concerned about it.

There are other factors in favor of it. FASB is pushing fair-values right now. At a recent meeting held in London of the Insurance Steering Committee of the IASC, a straw poll was taken to see who was in favor of an asset/liability measurement approach versus a deferral and matching approach. The Steering Committee's straw poll was unanimously in favor of an asset/liability approach to insurance accounting. As of now, deferral and matching, the old favorite of *FAS 60*, looks like it is going to be out. Nonetheless, it is far too early to tell whether fair-value will be adopted.

One of the important contexts of upcoming discussions is that insurance is being viewed as a financial instrument, although some believe that there's a continuum of insurance products between a financial instrument and a service-related product. The positions are just being taken in this.

I'll turn to the second part of the question that pertains to the role of various players. Some of you have heard about these players. I'll go through a few of them very quickly. G7 is politically powerful. IOSCO represents the primary user of financial reporting for general purpose accounting. The SEC is a very, very powerful organization that has members of IOSCO. They have agreed to the fact that international accounting standards are a good thing. They are gathering input now to keep them determining what they should do with international accounting.

Let's briefly discuss accounting organizations. We've talked about the IASC. Hopefully, most people are familiar with that. The Joint Working Group of Independent Accounting Standard Setters' paper on the fair-value of financial instruments, due to be completed in November, is going to be very important. Anybody interested in this subject should pay attention to it. If the IASC falters, FASB will probably be willing to take over.

MR. JAY: Speaking of FASB, I have a question for Mike. It has recently circulated its preliminary views paper. What was the background for that and what are the main points in FASB's paper?

MR. MICHAEL J. HAMBRO: FASB issued preliminary reviews on major issues relating to reporting financial instruments and certain related assets and liabilities at fair-value on December 14, 1999. In that preliminary review, the bottom line was that the board said that it had reached preliminary decisions about the definition of a financial instrument, the definition of fair-value, and general guidance about determining fair-value. It had not decided if and when it would be feasible to report fair-values in the basic financial statements. The board needs more information about potential problems and solutions.

The background for the preliminary views was FASB started a financial reporting project in 1986, initially focusing on disclosure. The result of that led to two new FASB statements, including *FAS 107*, Disclosures about Fair-Value of Financial Instruments, issued in 1991. In 1991, a FASB Discussion Memorandum, Recognition and Measurement of Financial Instruments, was issued as a basis for considering the financial accounting and reporting issues recognition and measurement raised by financial instruments. The bottom line result of that was *FAS 115*, Accounting for Certain Investments in Debt and Equity Instruments, and that was in 1993. *FAS 133*, Accounting for Derivatives, was issued in 1998.

In its basis for conclusions for Statement 133, FASB said the board is committed to work diligently toward resolving, in a timely manner, the conceptual and practical issues relating to determining the fair-values of financial instruments and portfolios of financial instruments. The board also said that the techniques for developing fair-values were developing rapidly and that

all financial instruments should be valued at fair-value in the financial statements when the conceptual and measurement techniques had been worked out.

The major preliminary reviews in the December 14, 1999 preliminary issue were as follows. The ultimate objective is to resolve all of the issues in connection with reporting at fair-value. Insurance contracts that settle in cash are financial instruments. However, certain other insurance contracts that settle in kind, for example, property and casualty contracts in which the property is replaced once it's destroyed, are not financial instruments in FASB's viewpoint, but they should be treated under this project as if they were financial instruments. Fair-value requirements would apply to all financial instruments with limited exceptions. For example, investments are treated under the equity method or certain subsidiary operations would not fall into this project.

Fair-value is an estimated market exit price. It's the price between two willing, knowledgeable parties. It is the price that would be realized if one party had sold an asset to another party, or it is the amount that the party would have paid if it had agreed to have the other party take over the liability on the current reporting date.

Estimated market prices should be based on observed transactions to the extent possible. However, they should use the market price most closely based on the most advantageous price if two or more estimates are involved. Transactions involving an identical instrument are preferable. However, if you can't find an identical instrument, and you have more recent information on similar instruments, then that information should be used to provide updated market information in the valuation. However, you'd still want to base the market price on the identical instrument, but the movement could be based on similar instruments. If transaction prices of identical or reasonably comparable items are not available, then you have to come up with a valuation model. FASB recommends using a model that is already used to set transaction prices for items of the same or similar class of instruments. They should take precedence over an internally developed model.

If the best estimate of an exit price is to be based on the present value of expected cash flows, then the principles of the FASB Exposure Draft using cash-flow information and present value in accounting measurements should be used. That has several important points in it. One of the points is that, to the extent possible, you want to be able to estimate cash flows and interest rates on realistic assumptions about future events and uncertainties. Second, interest rates used to discount the cash flows should reflect assumptions that are consistent with those inherent in the estimated cash flows. For example, if there is a debt instrument that has a 12% interest rate, and if the expected cash flows already taken into account have default probabilities, then you wouldn't use 12% of discounted cash flows. You'd use some lower interest rate.

The estimated cash flows and interest rates should be bias free, and they should not contain factors unrelated to the measurement of the particular asset/liability or group of assets. For example, deliberately underestimating the net cash flows to enhance apparent future profitability of an asset would be frowned upon. Estimated cash flows or interest rates should represent the range of possible outcomes rather than a single most likely outcome. Finally, and this is very controversial, the estimated market price of a liability should reflect the credit worthiness of the debtor. The FASB, in its response to the IASC, said that this applies to insurance contracts. They would expect a lower rated company to use a higher discount rate in valuing its liabilities.

MR. JAY: Is there anything else you can say about the methodology or what financial instruments are?

MR. HAMBRO: The IASC came out with an issues paper in late 1999. That issue paper addressed at least two issues. Are insurance contracts financial instruments, and how should insurance contracts be valued?

What is a financial instrument? The definition that the IASC set forth is that it is any contract that gives rise to both a financial asset of one enterprise and a financial liability or equity of another enterprise. They defined the terms *asset* and *liability*. I won't go through that because it's not a big surprise.

The IASC Steering Committee also defined *insurance* as follows. An insurance contract is a contract under which one party, the insurer, accepts an insurance risk by agreeing with another party, the policyholder, to make payment if a certain future event (other than a specific interest rate change, a security price change, or a commodity price) occurs at a specified time. In other words, we're talking about a real transfer of risk, not just the change in some underlying index.

The Steering Committee concluded that insurance contracts are financial instruments, and if all financial instruments are, subsequently, measured at fair-value, then insurance contracts should be measured at fair-value. Note that the IASC did not say that insurance contracts should be measured at fair-value in the financial statements.

What is fair-value? The IASC definition says it's the amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties at an arm's length transaction today. It is not a forced sale or a liquidation sale. They further said that fair-value is best determined when there exists published quoted prices in an active market. For example, fair market values for Treasury bonds, stocks under major exchanges, or Standard and Poor's (S&P) options on the Chicago Board of Exchange (CBOE) are readily observable.

For most insurance contracts, no such market exists. Therefore, the guidance says that you'd want to use some sort of a different model, like a discounted cash-flow situation. There is a reinsurance market for insurance, but that market contains very limited information.

Transactions aren't that frequent. It is a source of some information, but it would not be the source in most circumstances to determine market values.

For insurance, the key is to develop a methodology that will simulate what insurance contract prices would be if an active market existed. One way to do this is to start with the projection systems that actuaries are already familiar with in determining the fair-value of liabilities in a discounted cash-flow model. The assumptions used for the respective cash flows would be market-based assumptions, unless there was a strong reason to use entity-specific assumptions.

Cash-flow assumptions would contain a market provision for risk. Similarly, the discount rate would reflect market assessment of risk. In general, even in the absence of an actively traded insurance market, the assumptions would be market assumptions, and the parameters would be market parameters to the extent possible. Expected cash flows, rather than single most likely estimates, would be used. Deviations from market-based assumptions would require supportable and justifiable documentation.

There are some important implications of moving to a fair-value system. The income statements would now be driven by the period-to-period change in the fair-value of assets and liabilities and by cash flows. You'd have to make appropriate adjustments so you're not double-counting if you have a profits-retained system.

Current U.S. GAAP models are based on a deferral and matching concept. For traditional life and term products, income emerges as a level percentage of premium. For universal life and some certain deferred annuity products, income emerges as a percentage of gross profits. For traditional life participating products sold by mutual companies, income emerges as a percentage of gross margins, so that would go away. Another thing is the deferred acquisition cost (DAC) would probably go away since the recovery of acquisition expenses would be embedded in the liability valuation. Finally, gains or losses could very well emerge at the exception of a block of contracts or upon a reinsurance transaction. Current GAAP rule practices do not allow gains or loss on such transactions, except in the case of assumption reinsurance.

MR. JAY: So the International Actuarial Association spent a long time studying the IASC's Insurance Committee's paper and developed a fairly extensive response to it. Can you talk a little bit about some of the main points in the International Actuarial Association's response?

MR. HAMBRO: The International Actuarial Association responded to the IASC on May 31, 2000. The report has an executive summary, which discusses the major IAA conclusions. It responded to each of the issues in a detailed basic issues paper. Separate papers were written on ten specific issues.

The major points to the response are as follows. The IAA believes valuation of insurance liability should be on a prospective approach, reflecting an asset/liability approach. *Asset/liability* means you're going to value the assets and the liabilities separately; it will not be done on a deferral and matching approach anymore. Since no deep and active trading market exists for these liabilities, the measurement technique would be a present value model, reflecting the expected values of all relevant sources of future cash flows, including market-value margins for risk and uncertainty. The resulting valuation should correspond to what a liability could be settled between willing and knowledgeable parties in an arm's-length transaction. That definition seems to be consistent among the various bodies.

The IAA also emphasized the importance of consistency. It should be consistent with the IASC's current framework of 40 statements. The IASC, like FASB, has statements. The accounting in it should be consistent with the accounting recognition and measurement of other assets and liabilities. For example, if assets are measured at fair market value, so should liabilities. It should be consistent across products, across industries, and across companies. Across companies, the implication would be that historical cost accounting would go away. I mean that the historical basis for assets and liabilities would go away.

The IAA also recommended an expanded definition of insurance. In addition to risk transfer, there should be a pooling of risks. The definition should take into account the long-term nature of many insurance contracts, including guaranteed insurability. The IAA paper lists 14 important characteristics of insurance.

These are specific issues that the IAA opined on. The type of insurance should not affect the accounting treatment. Second, and this is pretty important, the IASC should continue working with insurance regulators to develop a mutually acceptable accounting approach. So the same approach would be used for both the general purpose income statements and for financial condition analysis. The financial condition analysis would be disclosed in supplementary disclosures to the financial statements. Recognition and measurement of insurance contracts should be based on groups of portfolios of contracts rather than individual contracts. A closed-book approach should be used reflecting the renewal provisions of the contracts.

Characteristics of the in-force insurance contracts should be combined with a market-based objective estimate of future experience in the current operating environment. Fair-value measurement of liability should include provision for risk and uncertainty as perceived by the market, not the company's view of it. If there's market information, that should be used. For example, if the liability has an embedded call option, the volatility assumption for the call option should be the volatility implied by current option prices. Implied volatility does include the market's perception of risk of the volatility risk, and that should be what's used.

The design of insurance standards should include no distinction between general insurance and life insurance contracts.

Equalization and catastrophe provisions should be differentiated from one another. Equalization provisions should not be part of the liability. It should be excluded. But catastrophe provisions should be recognized and measured.

Equity should be allocated into the following categories: shareholder, policyholder and, in some rare cases, unattributed. Insurance contracts are either financial instruments or they should be treated as if they were financial instruments.

Finally, future investment returns would be projected, and they would include an investment margin. Usually, the investment returns would not be the specific returns on the assets backing the product, but they would be based on a replicating portfolio. In certain instances, for example, where the credited rates are based on portfolios, it might be appropriate to use the actual assets backing the product. Finally, the IAA believes that the credit standing of the entity should not be reflected in the liability valuation approach.

MR. JAY: Our Academy Task Force on Fair-Value also drafted a response to the IASC document and sent it in early in June. Alastair, can you give us some of the main points that our task force made to the IASC?

MR. ALASTAIR LONGLEY-COOK: Our response to the IASC was with regard to Item Number 11, Section A. We agreed that the insurance contracts are financial instruments, but suggested that they include the concept of contingent contractual rights and obligations in their definition. We also believe that service contracts should be considered. There are some issues there, but when you think about a lot of policies that have both cash payments and a service provision, you want those treated separately, or you'll have accounting arbitrage.

On 11B, we disagreed with the statement that it is normally possible to estimate the fair-value of a financial asset traded on the open market, as applied to insurance contracts. When one company is buying a block or reinsuring a block of reinsurance liabilities, the inability to measure the risks involved might result in a buyer or seller selling at a price that might not be fair-value.

In Section 11D, we talked about intangibles and recommended that cash flows during renewal periods (renewal premiums and deposits), should be included when the policyholder's guaranteed right to renew has a material reasonably estimable value. There are some examples there.

Section 11E pertains to how you aggregate the valuations. We agreed that insurance contracts should be grouped, not seriatim, but we disagreed that the group should be required to have substantially the same contractual terms. We felt that there would be some argument as to what those terms were. They also have the wording "priced on substantially the same assumptions," and we thought that was going to be problematic. We suggested instead that groups of contracts should represent similar underlying exposure to risk.

Section 11F. We agreed that fair-value should be established as exit values, but warned that reinsurance transactions are not necessarily exit values as the market thinks of them.

Section 11G discusses an important issue with regard to using the rate of return on the insurer's assets or some other discount rate. We concluded that the yield rate on the insurer's own asset portfolio *can* be the appropriate discount rate if the correct adjustments for risks are made to the

cash flows being discounted. In other words, you could start with a replicating portfolio rate, or a risk-free rate, or the asset portfolio rate, but you've got to make the right adjustments for risk to get to the right end point.

11H is a very important issue, which we'll get into again a little later this morning. It involves the provision for risk. We agree that the fair-value should include the premium that reflects the uncertainty inherent in the cash flows of the liabilities. We also said that actuaries are best prepared to do those valuations.

Regarding Section 11I, we did not agree that the insurer's credit standing should be reflected, agreeing with the IAA. Section 11J. We agreed with the Steering Committee's view that that DAC is not consistent with fair-value.

Let's move on to the main points of our response to the FASB's document. First, with regard to the definition of financial instruments, we agreed that it's definition would include most of the products that we're familiar with, but raised the issue that some policy features within a contract would be characterized as financial instruments and some would not. That would have to be dealt with.

Issue two is, what does fair-value mean? The definition of fair-value once again raised the issue that, in practice, it might be difficult to estimate an exit price for items that are not actively traded. We agreed that the estimates should include a risk premium. We warned that the reinsurance transactions might give some indication of fair-value, but only in some situations. We agreed with using discounted cash flows.

With regard to insurance liabilities and credit risk, again, our position is that it's inappropriate for the entity to use its own credit risk. We can discuss the pros and cons of that a little later. We recommended including dividends and nonguaranteed cash flows.

On the use of risk premiums, we stated that FASB's writing on this was unclear and not operational. At one point, it indicated that, if you can't guaranty it, you shouldn't make *any* adjustment. That's clearly not an acceptable position.

MR. JAY: One of the questions that keeps coming up is how will different product lines be affected under fair-value accounting, and how will earnings emerge. Roger, do you have something to share with us about your thoughts on that?

MR. ROGER W. SMITH: I have just done a little bit of experimentation pertaining to what fair-values mean. I just took a very simple insurance product and did some calculations here. I'm approaching this from the standpoint that I've just sold a block that happens to be a term insurance policy. Let's imagine there is a secondary market, and it will operate much like some of the mortgage markets operate today. If you take out a mortgage, your mortgage will be securitized relatively soon. Let's imagine that a similar market for insurance products exists.

I've done some base calculations. We have some premium income, some benefits we expect to pay, and some expenses we'll have to pay, so we do have some margin. Even without reading what's in the papers, it seems reasonable, if you're going to sell this, that there's going to be some division of that margin. Somehow there's going to be some sharing of the profits; otherwise, why would anybody buy it or sell it if all the margins will end up with one party?

I devised three possible fair-values. In one case, I had all of the profit staying, and that's my first base fair-value. I had a fair-value two and a fair-value three in which I had different assumptions for how the margins might be shared if we calculate fair-values in these different ways.

Here's the different patterns of earnings that I developed in just applying my assumptions. I also calculated *FAS 60* earnings for comparison. In the most extreme case, it's probably unlikely this one would work out. All of the profits are at issue and the logical consequence is there are zero profits thereafter. We have some different patterns of earnings if we just change our assumption. In two I assumed the percentage of premium would be shared somehow. In three I had a different view of what the mortality costs were going to be.

I find these interesting. No matter what we do for fair-value and assuming that there are margins in the premium structures to begin with, it seems quite clear we will end up with a system in which we report a lot more profit at issue than what we have to date. Chart 1 gives the first year profits to show you the comparison. You can imagine what the impact would be if you show this

chart to your marketing department. All of the profits are going to be on new business and that might turn into some unfortunate pressures on pricing. If we sell more, obviously, this is where the overall company profits will be larger. Chart 2 shows the different patterns of earnings in years two and later. The *FAS 60* pattern and others are declining, but EV #3 is increasing. A great deal more work and study will have to be done to understand what fair-value is likely to be.

I would just offer one other comment on this. What if most of the profitability turns out to be from selling new business? I wonder if we will remain creatures of habit. Are we going to change some of our ways of approaching financial reporting? Let's say there's a financial officer that would like to have \$100 of earnings and the new business generates \$150 of fair-value earnings. If equalization reserves are not permitted, meaning you can't stuff something away for a rainy day, will we have the tendency or the temptation to look at some older blocks of business and find deterioration in some of the expenses or some of the mortality costs? Can we find a way to save excess earnings away for a rainy day in one fashion or another? It will be very interesting to see how these kinds of issues emerge.

MR. JAY: That's most interesting. You were primarily representing life insurance products. Jane, how will property and casualty (P&C) products fair under this kind of an accounting system?

MS. JANE C. TAYLOR: P&C products have divided essentially into two categories. One is the primary category, and the other one is going to be reinsurance. On the primary category the property lines for normal property claims will not be affected much. Property claims are the claims against your house and your car for which you are insured. Those are very easily settled and payments are made on those very quickly, so I assume that there would be very little difference in those.

Catastrophe claims from a hurricane or an earthquake will take longer to settle. The reason being is you have a concentrated area with a lot of losses. It means you have a shortage of supply and skilled workers to take care of those things. You will have a prolonged period of payment, because things have to be done in an orderly fashion. So the catastrophe claims might, indeed, recognize some significant impact from this.

Casualty lines are the liability lines. Workers' compensation and auto insurance are the casualty lines. Casualty lines come in different flavors. One of the flavors is an occurrence policy. In an occurrence policy, if you hit somebody with your car today, regardless of when that loss was reported, that loss will be referred back and insured today. In some cases, those losses take a long time to come to fruition. Workers' compensation claims can run for 60 or 70 years, sometimes with survivor benefits. So you can see that that is an extended period of time that we'd have to deal with. It makes it a little bit more like life insurance.

Claims-made coverage also depends on the length of settlement. Claims-made coverage is, generally, used in professional liability by lawyers, accountants, and those kinds of professions. It shortens the reporting time. It says that the claim must be reported in the year that the policy exists. That has a tendency to shorten everything, since you start the clock when the claim is actually recognized. So it will be affected, but it will probably be less affected than the occurrence.

Then we have a whole different category of insurance products called financial guaranty products. They are somewhat similar to some of your lengthier life policies. These have to do with mortgage guarantee. They also have to do with municipal bond guarantees. Frankly, I can't figure it out. Many of those things are discounted to begin with because it is more of a financial instrument. They're backing financial instruments.

The one problem that would take some significant study is there are statutory reserves called contingency reserves. Generally, those contingency reserves are 50% of earned premium. Those are reserves that the insurers and reinsurers of those businesses have to put in their pockets. They're not allowed to touch them for the duration of the bond, or the mortgage, or whatever. I don't know how those would be handled and what impact those would have.

The difficulty is that the reason we have those financial guaranty products today is because very astute people lobbied in the 1950s to reinstate these products. These products were very big in the 1920s. We all know what happened in 1929 with the Great Depression. Many of the people

who looked to this kind of insurance to respond were disappointed because it didn't respond. In the 1950s, these came back again with some very, very strict conditions, including the contingency reserve. Putting up a 50% contingency reserve is a fairly large and onerous burden. I don't know what that will do and what will happen.

Reinsurance could be similar to the primary if it's quota share. It means you're sharing 50/50. There'd be a little delay because of the reporting to the reinsurer of the excess. We have a lot of insurance on the casualty side that attaches at \$100,000, or \$1 million, or \$10 million dollars. In some catastrophe cases, we might see \$40 million, \$50 million, and \$60 million, and in some large buildings, it could be \$100 million. So all of that is going to take a while to work through the system. Again, the catastrophe insurance, because it tends to accumulate and because you have what they call the spiral, could take a long time and that could have a major impact on the financial resources of the insurance company.

Different methods of accounting would be impacted in different ways. The annual statement is still controlled by the NAIC. I don't know whether they would become more like the FASB. GAAP accounting would certainly impact our earnings. Recognition of the earnings would be earlier; on the casualty side, it would be much more volatile. I think it would make the results much harder to manage.

The Casualty Actuarial Society (CAS) has just released or is in the process of releasing a white paper on fair-value. Let me give you the quote on that. "There would be much greater volatility due to changing yield curves and risk adjustments versus undiscounted," which is what we hold now. Currently, all our reserves are undiscounted or conservatively discounted. For example, we discount worker's compensation at somewhere between 3% and 4%. So we have things now that would go into a more market-driven, and more real world. On the casualty side, the mutual companies do not do any kind of discounting and GAAP accounting whatsoever. Would they be forced into that if we go along these lines?

MR. JAY: One of the most difficult of all of the challenges that fair-value accounting might present is how to determine the market value margin. There are a number of ideas that have been suggested. Will we ever get the rules for doing that down so well that two actuaries who are in different rooms and don't talk to each other can examine the same block of business and come up with a reasonably close answer? Alastair, what do you think about that?

MR. LONGLEY-COOK: Let me go through the issues in a little more depth than we have so far. The issue here is, how should fair value of liabilities reflect risk?

I'd like to give a little background because I think it's important to understand where the accountants are coming from on this. On the asset side, we have a security valuation approach that generally follows a paradigm of asset value in which the present value of cash flows are discounted at a risk-free rate, say a Treasury rate, plus a market-value adjustment. For bonds, for instance, that market-value adjustment would be the spread representing default risk and other contingencies. Most assets, as we mentioned, are actively traded. Fair-value is determined by the marketplace. For those assets that are not traded that way, there are, generally, two approaches used by modern portfolio theory. One is the equilibrium approach, which is maximization of expected utility. That's found in the Capital Asset Pricing Model (CAPM) and Black-Scholes. The other is the nonarbitrage approach, a replication of a security by existing traded securities. You find that in option pricing, Monte Carlo simulation, et cetera. Generally, the risk is reflected by adjusting the discount rate or the probability assumptions or by using existing traded securities whose prices already reflect risk. So much for the asset side.

On the liability side, we have a number of problems. One is we don't have freely traded insurance liabilities. Second, we're unable to diversify the nonsystematic risk (which you do on the asset side), through the absence of efficient markets and risk parameter uncertainty. Third, future cash flows depend on exogenous factors, such as the policyholder behavior, legislation, and social policy. They don't lend themselves very well to the kind of statistical models that Wall Street uses. Finally, there is the inappropriateness of financial no-arbitrage models in cash-flow projections that use actual probabilities.

In light of this, our task force came up with their assessment. All of this is in our issues paper, which we haven't distributed yet. Many of the generally accepted asset pricing methodologies are not directly transferrable to the liability side. While there is no general agreement among the actuarial community on how risk should be accounted for, actuaries are best qualified to develop the appropriate methodologies because of our training.

There are future steps. We need more research in the actuarial community. We need standards of practice, and we need methods that would make these risk adjustments, which might resemble one of those approaches used on the asset side, for instance, a discount rate spread or a direct risk adjustment.

I'll conclude with a couple of examples of how this might be done to get us all thinking and to provide some input to this process going forward. The starting rate for discounting liability cash flows would equal the expected rate of return on the assets, not the Treasury rate. If you use the Treasury rate you have, for instance, immediate losses on a GIC that you sell, because a liability would be greater than the assets. The market value margin would then be a subtractive item, not an additive item, to that discount rate, representing the additional risk adjustment to the value of the liabilities to account for the uncertainty and liability cash flows. I call the starting rate the liability risk-free rate, not the asset risk-free rate. (So that's not the Treasury rate.) That would be, say, the expected rate on assets, which would be free of liability risks until you make the risk adjustment, but it would not be free of asset risks.

Two other possibilities would be to add the market-value adjustment to the cash flows before you present-value them, and then discount at the liability risk-free rate. Finally, you could make an additive adjustment at the very end after you have taken the present value of cash flows and the liability risk-free rate. These are possibilities, but, as we've said, research needs to be done and guidelines need to be created.

MR. JAY: There seems to be a lot of possibilities that can be used in different situations. One of the most controversial issues that I think could be a show stopper that would cause fair-value accounting to work well is the cash-value floor. Can you give us some ideas of some of the issues here?

MR. GUTTERMAN: A significant issue is that, in several different accounting systems, a minimum floor for liabilities has been used in the past, particularly in regulatory accounting. The obvious product involved is cash-value life insurance where a minimum or a guaranteed cash value might be considered a floor. There is also term insurance where the minimum floor would be zero. What is particularly relevant to this issue is the banking demand deposits where the amount of the demand deposit might be considered to be the minimum liability.

Arguments in favor of a floor include concern for liquidity, a need for an objective measure, and the regulator's general conservatism. It would also be consistent with the current accounting for bank demand deposits. Banking will be a powerful political force in the fair-value discussion. Some people feel that moving away from a floor will be impossible to do for financial instruments as long as banks can't or won't be able to take into account the value of their relationships with their clients.

An argument that has come up recently, which was presented by a FASB staff member, is that the cash-value floor is consistent with a serial option concept as policyholders always have the option of continuing to pay premiums on a continuous pay policy. As a result, a liability below a cash-value floor should not be allowed.

An argument against a cash-value floor is that it is fundamentally inconsistent with fair-value accounting, which is a prospective approach far more consistent with present value approaches. If a prospective approach is not used, a totally mixed set of standards would result. It might lead to large losses at issue as opposed to breakeven or even profits. We're really talking about the fundamentals of value at a group policy, not an individual contract. As a result, you should be able to take into account probabilities. It is okay to have a negative liability.

Let me add one other thing in terms of one of the fundamental factors involved. This pertains to the regulators. In continental Europe, the European Commission has come out with some tentative comments saying that regulatory accounting should be consistent with general purpose accounting. Therefore, a lot of the regulators and continental European insurers are really focusing their attention on this. They think that their regulatory accounting will, by definition, change, and that will, in turn, impact their taxes. So that's a very quick summary of the issue.

The IASC Steering Committee recently and unanimously voted in favor of not having a cash-value floor. I think that is a movement in the right direction.

MR. JAY: It looks like it will be talked about for a while to come. Another issue that was espoused by some of the European actuaries and the Institute of Actuaries (IA) was the concept of an embedded-value reporting method. Roger, what is that exactly and why would they be proposing such a method?

MR. SMITH: The embedded value method reporting, as used in Europe, was a way to recognize the margins in those blocks of business. Many of the European accounting models would be their statutory models, which are very, very conservative, as conservative as any of our statutory reserves would be. The embedded value method was an attempt to show what kind of margin would be in these products. It's used a lot for management reporting. Based on all the fair-value and DAC discussions, I believe it would go away. The papers seemed to show a lot of hostility toward DAC, because they mentioned three or four times that DAC had to go away. Only once did they mention that embedded values had to go away.

MR. JAY: One of the main points given from our task force to both the IASC and FASB was the principle of consistency. Can you maybe give us a little background on that, Jane? What did we mean by that?

MS. TAYLOR: As far as I can tell, there are layers of consistency. First, there are the layers among all industries. That means that a car manufacturer and an insurance company can be evaluated in the same general scheme. All financial instruments have to be evaluated on the same basis so we have that kind of consistency. That includes all insurance companies, all lines of business within an insurance company, and all classes within those lines.

We also have consistency within. We have to have consistent valuation of liabilities and assets. All the underlying assumptions have to be consistent. Someone talked about how the interest rate and inflation rate must be reasonable and consistent within your assumptions.

You have a problem on the casualty side with actual versus expectations. I assume it also exists on the life side. We know this is true at any point in time from the past to the present and we're projecting from today forward on some reserves. If there are differences in your actuals, you have to make your expectation consistent with your actual. Sometimes, on the casualty side, we sort of gloss over that.

All the financials have to be consistent. That says that your accountants, your actuaries, and your claims adjusters have to be reading from the same page.

Finally, you want consistency across time. That doesn't mean that you have to have exact numbers across time. As a matter of fact, it means the exact opposite. But if you are using an interest-free rate that's evaluated as of a given date in the year 2000, you need to do that same technique and use that same process to get the fair-value for the next year.

One other point. There are other issues. There are risk margins, relative strengths of reserves for property and casualty (P&C) and the pricing of location.

MR. JAY: I was at the recent NAIC meeting, and I could feel the emotion when people get up and talk about what they think about reflecting the entity's own credit rating. Mike, do you have something to say about that? Almost no one that I know likes the idea, except some of the accountants at FASB think that it's a necessary place to get to. What do you think?

MR. HAMBRO: Let me give a simple example to illustrate the point of controversy. Let's say you have two insurers. You have insurer A and insurer B. They hold identical assets and have identical in-force business, including their contract provisions and their rates. Company A has a higher credit rating than company B. If the credit ratings are used in the valuation of liabilities, then company A is going to have higher liabilities than company B. Company B is going to have higher surplus, all other things being equal. Furthermore, if a company receives a rating downgrade, the surplus is going to go up. So it doesn't seem right that it is happening.

Substantial differences of opinion exist on this issue. The IASC report said that incorporating credit ratings extended beyond the scope of its report and that the Joint Working Group on

Financial Statements is also considering this issue. However, FASB, in its response to the IASC, said that an insurer's credit rating should be considered in fair-value measurement of insurance liabilities. So this would mean lower ratings and a higher discount rate. In response to the IASC, the IAA recommended that an entity's credit rating should not be considered in determining the fair-value of insurance liabilities.

What do the proponents say about that? They say that the fair-value of most debt reflects the credit rating of the borrower. The fair-value of insurance liabilities should similarly incorporate the insurer's credit rating. If liabilities are measured at fair-value, and if that computation excludes credit rating, then an insurer might report a loss that results from the measurement.

For example, let's assume an insurer with a low credit rating has to issue its products at lower premiums, reflecting its low rating. If the liability measurement process excludes a credit rating, a subsequent valuation might show that the value of the liability is higher than the amount on which the product was issued. Then the move from the initial premium to the subsequent measurement will result in a reported loss.

Incorporating credit ratings properly takes into account the put option that entity shareholders have. That is, if the insurer becomes insolvent, the shareholders are only on the hook to the extent of their equity contribution.

Some arguments for not including the entity's credit rating are as follows: (1) The fair-value of the liability is the exit value of the liability, which is the price that knowledgeable, willing parties would expect to receive for assuming that liability today. In this context, the credit rating of the original insurer is irrelevant. (2) Insurers, in some ways, would be rewarded for achieving lower credit ratings since their liability values would decrease. (3) Changes in a credit rating will result in confusing and misleading results. A company whose credit rating increases will have its liability values increase with a resulting decrease in earnings and equity. That's a very controversial issue.

MR. JAY: Jane, I know that the level of aggregation issue, whether it's one contract or a bunch of them together, was an important issue to the casualty actuaries on our task force. Maybe you can shed a little bit of light on that for us.

MS. TAYLOR: Insurance, in general, is subject to the law of large numbers. We all know that. The credibility considerations say that you need a certain aggregation of things in order to apply the law of large numbers and have something reasonable come out of that exercise. So the individual contract concept is only applicable in the very, very, very largest cases, and even then, it can be suspect, depending on the line of business.

How might we group these? Obviously, you want similar characteristics. You could have similar insureds. You could look at similar loss potential. You could look at line or class of business like we do now. You could look at geography because, obviously, New York City, Washington, D.C. and Mulvhill, New Jersey, where I'm from, are very different from each other. You could also look at contract terms. Many of the contracts have very specific terms that could make them more alike. You could look at the pricing assumptions. You could look at limits or liabilities. Is a \$10 million policy different than a \$1 million policy? We could look at special conditions. We could also look at some of the rating characteristics, like age, race, sex, marital status, and credit rating. With all the privacy issues and additional pressure from support groups, those might actually be prohibited by law.

MR. JAY: Our last question is, where is this going to go? What's the future likely to be? People ask me and I think it's something that probably makes sense. It seems to be rolling like a snowball, but it might still take ten years to get where it's going.

MR. GUTTERMAN: Let me give my thoughts. First, I think this is going to be an increasingly hot topic over the next two years. Second, I think that the IASC is looking for pilot tests on this. I think that this is going to be effective somewhere in the next five-year to seven-year time frame. I think that it's going to be a challenging one, and many of the issues will have to be resolved in the next two years. But the next step on the international side is a statement of principles that will come out sometime in the middle of next year.

MR. EDWARD C. JARRETT: One dealt with just the idea of insurance contracts not having a good market or a secondary market. I think we do have one primary market, and that's our buyers and sellers. It's only the relative difference in knowledge between the buyers of our insurance contracts and the sellers of our insurance contracts. There is a giant marketplace. There are many trades that go on daily. I think there will be pressure for the companies not to value their contracts at issue at either greater than zero or less than zero. If they're less than zero, that means the price should be lower. If it's greater than zero that means we're not going to sell those contracts. So there will be a lot of pressure to value at zero at issue.

In terms of Alastair's comments, there are more variations. We can kind of get into nuances, and they could deal with things like different perceptions of the probability distribution of certain paths occurring and they can change the value of your present values. There are different utilities or aversions to risk of buyers and sellers. Our buyers have a particular utility of the value of paying a death claim. The company, as the seller, has a very different utility of that payment of death claim because we've sold a million contracts. There are a lot of areas we can work in. The FASB is doing something that's forcing us to think about these things. I think we're going in the right direction. Obviously, all the answers aren't there, but at least we're going in the right direction.

MS. GRETCHEN S. McRAE: I have a comment on the use of the credit rating in determining what the discount rate should be. I think that no one has mentioned the fact that the entity's credit rating is already predicated on what their liability position is. It's already dependent on what their other obligations are in order to determine whether they can meet their debt obligations. So turning around and using that in determining a liability obligation is a circular reference, and I don't see how it can work.

MR. JAY: That would be double counting.

MS. McRAE: Yeah. If you turned around and used that, you would make your surplus stronger, and you'd get a better credit rating. Now you have to go around and do it again, and you've reduced your surplus again. It just is a circular reference, and it doesn't make any sense because you are talking about two totally different purposes. The credit rating of the company is

for determining whether they can meet their debt obligations, which means that their other liabilities have already been satisfied because the policyholders will have to be satisfied first.

MR. STEPHEN HUMPHREYS: I'm not sure what the situation is in the United States, but in Canada there's an organization funded by the insurance industry that insures the benefits to the policyholders in the case of a company default. So it seems to me that, in that situation, a liability on the company's books is not the same as the corresponding asset that the policyholder has. What the policyholder has is the liability of the company, plus another liability from the insuring organization. So I don't think that you necessarily need that mirror image in the financial statements.

MR. JAY: Yeah, we have that here, too. The liability of the guaranty fund, plus the liability of the insurance company would be combined and then compared with the asset on somebody else's balance sheet.

MR. HUMPHREYS: So if you follow it, then the liability for the company falls. The liability for the assessment or for the insuring agency increases to the asset.

CHART 1
Earnings Comparison of First-Year Earnings

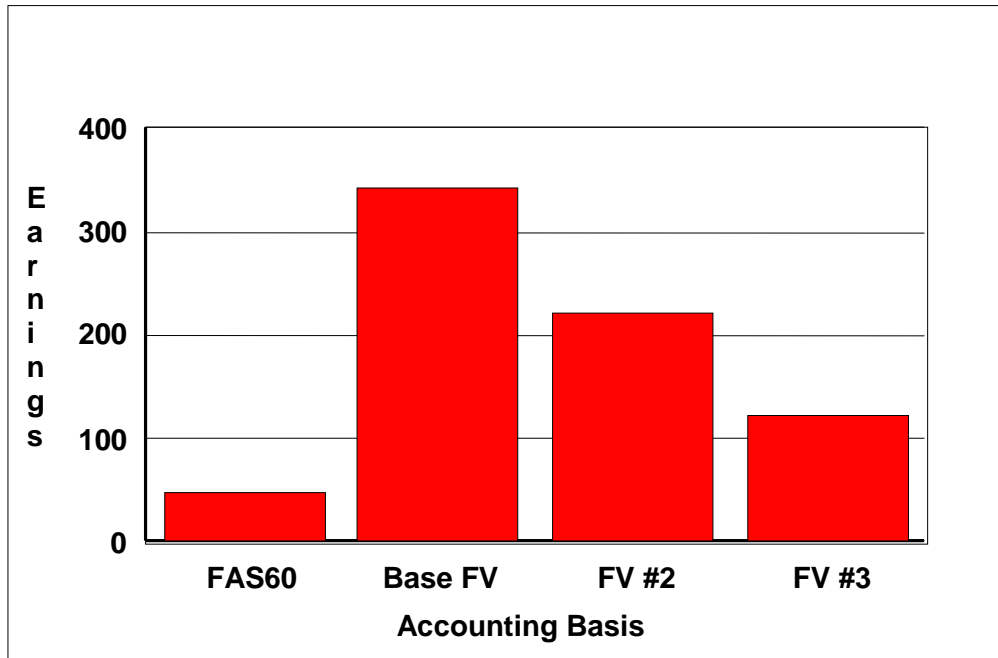


CHART 2
Earnings in Year Two and Later

