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Session 10PD
What's It Worth To You? (Asset Valuation Methods)

Track: Pension, Investment
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Recorder: MICHAEL M.C. SZE

Summary: Panelists discuss their experiences with asset valuation methods and address the following:
- *What makes an asset valuation method effective?*
- *Should recent economic activity influence the smoothing period selected in an asset valuation method?*
- *Does one method smooth valuation assets more than another?*
- *Do different methods for funding and expense make sense?*
- *Is the current asset valuation method accomplishing its intended purpose?*

Mr. Michael M.C. Sze: There are three speakers. Dick Joss is the Chairman of the Pension Committee of the Actuarial Standards Board (ASB). The ASB has been working on the actuarial standards for the asset valuation method (AVM) for over a year, and is getting close to a final product. There will be an exposure draft early next year. Please feel free to read it and then comment.

Dan Cassidy is a consulting actuary who has been working on the AVM for a long time. He is also on the Education Committee. He is the General Officer of Course 8 on retirement systems. He is well-versed with this subject.

We are here to talk about the AVM. 'First of all, if it is a method of valuating something, you better know what the something is. The method must reflect the underlying assets. It should, on the average, give no bias either too high or too low. The pension assets are a big part of a company's net worth. Therefore, these assets reflect the company and its pension plan needs. It must integrate all the proper plans and all the strategies for the pension plan.

Reflecting the underlying assets. What kind of factors do we need to look at? First of all, we must understand that different companies invest assets differently. They all have their own investment policies. Therefore, it is vital that the AVM reflects those investment policies. It is easy to say this, but doing it is another matter. As I look through all the valuations that I have done, and I invite you to think through in

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your mind all the valuations that you have done, let us ask ourselves if we have in each case looked at what the investment policy is and what the asset policy is before we settle on the AVM. Should we? Think about it. If the portfolio distribution is very high in stocks, do we reflect it differently from the asset that is invested mostly in bonds or in more liquid assets and money-market type of cash assets? Have we reflected the underlying assets?

What are the risk tolerance levels of the company? Is the company a long-range, ongoing company that would have a long time to average things out, or is it in a retrench mode where the timing is very short? I do invite you to think about it and to give your opinion. Dick Joss will need your input when he talks about setting up all the AVMs. Of course there has to be no bias. Examine some of the actuarial methods and asset methods that we use. If you plot the actual market assets versus the asset-backed valuation method that you use, a lot of times the valuation asset lags behind the market assets either when the market asset is going down or going up. Should you really be using that kind of asset method? We all talk about it, but this is a session for us to think about what we do.

Then we look at the assets. The assets are there for a purpose. We are not talking about the investment for a person or just the investment of the general assets of a company. We are talking about the assets that are earmarked to cover some obligations of the plan, and the plan is part of a company. Have we really looked at what the plan needs and what the company needs? How would this investment policy fit into the financial plan of the company? Indeed, we must really look at the asset method as part of the corporate plan and accordingly give it the proper attention that it deserves.

Let us illustrate these concepts with some examples. Suppose we have two plans. One is heavily invested in stocks. The other is heavily invested in cash. I'm sure that we have come across such plans before. Have we, when we were valuating those plans, used similar methods? Should we be using similar methods?

If we have a plan that is close to termination, or are involved in a merger situation where you may need to liquidate all the assets on a very short time horizon, have we immediately looked at the investment policy? Have we immediately changed all the asset methods to reflect the business reality of the company? I do invite you all to think about what you have done and advise Dick because he needs to know.

The following example actually happened to me, and it was on immunization. About six or seven years ago, I had a plan where the sponsor needed to get the profit up. The plan had a significant retiree liability. We helped them immunize all the retiree liability and bought bonds that had the same duration as the retiree liability. We argued with the government and convinced them to let us do so. We used the asset method and liability interest strictly according to the immunized rate.

We were lucky. As you remember, interest rates dropped. The bonds got much higher value. The company cashed out the bonds for an actuarial gain, and we

came out like heroes. Was that right or wrong? What if things had turned out the other way?

Mr. Donald J. Segal: In this situation it would seem to me you're still safe because if interest rates rose, you would have' still been immunized where you matched it because you said you did this by design and your liabilities would have dropped also. I seems to me you may have been in a fail-safe situation.
Mr. Sze: Don's comment is that we're probably still safe because whichever way the interest rate goes, the liabilities and assets would go up and down almost together. This is true on a plan termination basis, but are we doing ongoing actuarial valuation on a plan termination basis? I just want to give you some factors that you may have been taking for granted all the time. If I use some general smoothing method that the Revenue Canada or the IRS would sanction, I feel comfortable. But do we all feel comfortable as a profession? This is what Dick is trying to get from you. With that, I turn the mike first to Dan and then later on to Dick.

Mr. Daniel P. Cassidy: First we'll chat about *Financial Accounting Standard (FAS) 87* rules vs. asset methods, talk about some general issues, and hope that we can have some discussion. We'll even chat a little bit about the SOA's AVM survey that was published in 1999, and then a case study at the end. Basically *FAS 87* allows smoothing for up to 5 years. Everybody knows this, but we're reviewing this. Asset gains and losses yet to be recognized are not amortized with other gains and losses. There's a 10% corridor election. As for amortizations of gains and losses, there's a minimum level. You can always amortize things faster and more consistently. The same goes for gains and losses. Of course, you have to disclose your method.

In an example of an unacceptable method of smoothing assets, a company wanted to smooth the assets based on the change in the accumulated benefit obligation discount rate. The Standards Board rejected the method because the method introduces a factor that is unrelated to the change in fair value of assets. Actually, at a former firm we discussed with a client doing something like this, and when we found this little paragraph we had to stop the discussions with the client. But it is an interesting idea to try to use some other factor that could help manage your expense a little bit. However, in reality the FAS doesn't want you to have that flexibility, and that's what Mike was talking about. The FAS requires that the asset method be relevant to the change in the fair value of assets.

I'd like to hear anybody's comment about the International Accounting Standards. As you all know, there is very little smoothing allowed on the International Accounting Standard, whereas FAS allows some. Is there too much smoothing? You have the combination of the asset gain or loss smoothing as well as the 10% corridor. The case study that I'll present later will show that perhaps there really is not too much smoothing, and we can make an argument that there probably is a reasonable amount of smoothing.

One point I'd like to discuss is this nontraditional asset class, and this is actually going to be part of the instructions that I'm preparing for the call for papers for asset valuation issues and topics. Judy Anderson wanted us to mention that if you still would like to write a paper, you can still do that.

From the Floor: How long should the paper be?

Mr. Cassidy: As long as it needs to be. I'm going to write a very short paper to try to open up a discussion about nontraditional asset classes and to see what people are doing—nontraditional being venture capital, real estate, and other issues associated with new asset classes that our pension plans are getting into more and more. As it creeps up to be 5-10% or more of the assets of a plan, I think it's going to be more and more important how we handle these assets in our valuation. Perhaps we may need to look beyond the trust statement that gets sent to us.

I'd like to talk about the asset survey. This was performed by the SOA, and I believe a lot of the major firms participated, as well as some of the smaller firms. It looked at funding and expense for both Canada and the U.S. Fair-market value is the most common method used. Funding and expense methods are highly correlated. If somebody uses fair market on their funding, they are much more likely to use fair market on their expense. Fair-market value is less popular as assets grow, and I do believe that someone is going to be writing a paper on that, Judy, and actually trying to look at that topic. As the assets grow, you might think that people would be more inclined to use fair-market value, or, conversely, as the assets are smaller, you would think smoothing would be much more important. However, the survey didn't show that. I believe someone is going to take a further look at that topic.

Mr. Ethan E. Kra: That may be because larger companies tend to be publicly traded. Publicly-traded companies want to manage earnings. Small companies, which are usually privately held, let the chips fall where they may.

Mr. Cassidy: Ethan just mentioned that companies that are larger and publicly traded may be more inclined to manage their expense on their balance sheet rather than smaller, private firms that may not be as concerned about the balance sheet. It may also be that the bull market we've had over the recent period has also influenced that, especially from the private employer side. Another observation: more equities, more smoothing. As the trust funds invest in more equities, people use more smoothing, I believe, over longer periods.

Moving on to the case study, basically I looked at the use of asset smoothing in correlation to the 10% corridor for *FAS 87* expense. I put together a hypothetical example, and I used the consistent gain and no other gains. I was just trying to focus in on the asset gain or loss.

As a percentage of first-year expense, I calculated the expense, rolled things forward, and just calculated everything as a ratio of that first-year expense. I had

a 20% gain built in, but, it drops off precipitously as it goes along. There is more smoothing of the asset gains or losses. And this is without the 10% corridor.

Now, with the 10% corridor. 'There is some initial difference using the corridor between the different smoothing methods: fair value, five-year smoothing, and three-year smoothing. However, over time, the differences between the asset methods almost go away, and they are almost equivalent. I guess it supports my argument that there probably is not too much smoothing available in *FAS 87* with or without the corridor and the smoothing that's allowed on the assets. I don't think there's a compounding effect because of those two different provisions in the statement. Basically, this shows that the asset smoothing method really doesn't impact the expense of this hypothetical example.

The corridor has the most impact when you're using the fair-market value. Its significance reduces over the smoothing period, and the differences between the different smoothing periods reduce over time.
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Mr. Segal: Dan, you mentioned the nontraditional asset class. Are you implying there that you should use a different AVM for different classes of assets? And, if so, how does this comply with requirements of both the code and *FAS 87*?

Mr. Cassidy: Yes. Don Segal asked if I'm talking about using a different smoothing method for different assets of the plan. It is allowed. As probably everybody knows, you can use multiple smoothing methods for any of your assets. I really am proposing that we actuaries need to look beyond what the trust statement is that we receive. Take, for example, a venture-capital partnership pool. Our clients are entering into these agreements more often. From my understanding of how they report to the trust, it's basically a book-value number, and then there's also cash flow. There are' distributions paid out over time.

It's not as bad as I had thought initially. It's just kind of a book-value number, and then 5 or 10 years later the company cashes it out, and you have a 30-40 times gain on that asset. I guess 'I was worried that if there's just this big bump-up over time, you have a book value and then this market value—the trued-up number. But from my further research it seems that there are' distributions during that period of time, so it's not as bad as the sheer book-value number during that deferral period. But I still think that we should explore this topic as our clients are investing more and more into those assets.

From the Floor: Two comments. First, would you care to comment on the AVM that was in the regulations from the early 19'80s from the IRS, which basically spreads capital appreciation but nothing else, as to whether or not that is a biased method? I know some of us have looked at it and believed that there may be a bias to being significantly below-market over time—typically 50/50 asset-mixed equities and fixed income—and if you assume that the dividends are about 1.5% but that the capital appreciation is, let's say for argument's sake, 8% over time, the IRS methodology would average over the long haul about 92% of market. Does that cause anybody any consternation?

Mr. Cassidy: I agree with you.

From the Floor: That's item one. Does it bother anybody?

Mr. Cassidy: Yes.

From the Floor: The second item is for FAS purposes. Have you seen much of a method that spreads unexpected gains? In other words, deviations from expectation on, I would call, equities or other non-fixed income investments but values all fixed-income investments at pure market on the basis that fixed-income investments will fluctuate with the spot rate that you're valuing your liabilities. Those should be marked-to-market just like your liabilities, but the unexpected may be occurring in your equity portfolio, and there are some variations as to how to figure out what's unexpected in the equity portfolio. Have you seen much of that?

Mr. Cassidy: On your first comment I do agree that that method does, from my examination, significantly over time undervalue or underweigh the market, and I do agree that it's a valid method; the IRS says you can use it, so if you want to do that, feel free. On your second point on the FAS method, I've seen those type of methodologies where you break up the equity and fixed income and smooth those in different ways. I've seen it in a couple cases, but not too often in my experience. I think on the survey they had a couple people respond to that. I believe that, from some responses, people did do different smoothing for equity and then fixed income. I don't know about that particular one that you mentioned, but I do know that there were responses on that.

Mr. Richard Joss: I'm with Watson Wyatt in Bethesda, Maryland. I'm here today as the Chairperson of the Pension Committee from the ASB. We have been working on a standard for awhile, and I'm interested in any feedback and comments on the' current draft. I do want to add some comments to the things that Don and Ethan said a little earlier as it relates to actuarial standards.

Just as a background, we're trying to keep all of the pension actuarial standards in the same basic format so that the users will have a chance to see how they're laid out and understand them. The basic format is the purpose and scope. The effective date is in the first section. Key definitions are put in the second section. The third section is the one with all the meat. It's called "The Analysis of Issues and Recommended Practices." As a general operating principle, the Pension Committee or the other committees from the ASB try to embrace what the actuarial community is doing. This has relevance in the comment that Ethan just made, that perhaps the IRS method might have a bias towards understating assets, but Mike Sze said asset methods were not supposed to have a bias.

As a committee, we're certainly entitled to write a standard that raises the bar and says, "Hey, even if the IRS says this is OK, we might write an actuarial standard that says, no, it's not OK." I'd certainly be interested in any comments that people have on that particular point.

The final point on the standards is that there's also a section on communications and disclosures. With regard to the raising-the-bar point that we just talked about, the actuarial standards that are already out there have in some cases raised the bar. In particular, the IRS code allowed plan sponsors in the U.S., or actuaries working for plan sponsors in the U.S., to judge assumptions in the aggregate, whereas the actuarial standards dealing with assumption selection says that each assumption should be picked individually to be accurate.
The asset method standards have been under discussion for about a year. There's been considerable committee debate, and if you've ever participated in an actuarial standards committee, you know what I mean. Sometimes the debate can get rather heated. The committee is made up of a very diverse group of pension actuaries, some of them from larger consulting firms such as my own firm, others from smaller consulting firms, and others who work primarily with small plans—plans covering maybe one, two, or three participants. Obviously, trying to write an asset standard or an assumption selection standard or any kind of standards for this diverse group requires a lot of debate and an agreement as to what the overall purpose is.

An exposure draft later this year is definitely not in the cards. We're going to have another meeting of the Pension Committee on November 4–5, at which time we plan to continue discussing the AVM standard. We hope to get an exposure draft out early in 2000.

The basic outline of the draft that we're working with is not to provide a cookbook for AVMs. I think Mike alluded to a standard that might have a variety of acceptable or unacceptable methods, but most standards aren't written that way. We're going to leave the basic education as to what the various options are out there to the general actuarial literature. The standard is going to deal with what I'll call problem areas or assessing the appropriateness of the standard. Certainly one of the goals we're going after is, why would anybody want to adopt an AVM, other than, let's say, market value, anyway? Certainly, one of the key ones is asset smoothing, to recognize that natural fluctuations in assets over time could cause some disruption in funding pattern and in budgeting from an expense standpoint, and then perhaps some smoothing out of normal fluctuations is a desirable goal.

Another one is consistency with liabilities. Let's give a brief illustration of what Mike talked about where he may have had an immunized bond portfolio. Let's' even say that Mike is clairvoyant and picked that immunized bond portfolio and yield rates for maybe 12% or 13%. Well, let's say interest rates drop. The market value of the portfolio goes up because the interest rates drop, and the client says, "Cool, let's change to market value for valuing our assets, but, oh, by the way, we'd like to stick with 12% on valuing the liabilities." That's an area that we think could be of some concern. If we value these things with 12% when they were an immunized bond portfolio, and the rates have dropped so that the market value of the assets has risen, then we need to be concerned that at least we're consistent, that the assets and liabilities were both valued in the same ball park.

Another concern along with the consistency issue certainly has to do with the purpose of the valuation. If you're getting close to a time when the plan is shutting down and you anticipate a group of payouts, you tend more towards trying to come up with a fair value of the assets or market value of the assets instead of using a smooth value. In other words, you want to know how much you actually have to pay.

Dan talked about the new or nontraditional assets. In our committee we've referred to some assets as difficult-to-value assets. What role should the actuary play in dealing with difficult-to-value assets? I'm going to talk more about that a little later on as to what I mean by difficult-to-value assets. Just to give you a flavor, let's consider insurance company insolvency. That's a situation that a lot of pension actuaries have had to deal with.

Unfortunately, when insurance companies go out of business, one has to deal with a state guarantee association in terms of how much money one is going to get. The final thing we' talk about is projections. What we are dealing with here is the issue of what happens when the date on which we get the asset value is different from the date that we are valuing the liabilities. Accounting for the differences in timing is tricky.

The next part of the proposed outline tries to assess the appropriateness of the selected method. To give an illustration, let's say we have a method that's producing a value that's quite different from market and it's to be used for valuing a plan for shutdown purposes. That would be an inappropriate method. It would rate a low score on the assessment. Obviously we're struggling with exactly how to write this. How do you assess the appropriateness of a method? And for anybody who wants to offer suggestions, I'll be glad to take notes later on in the session. We are concerned about changing the method, particularly frequent changes in the method. This would include the case where the plan sponsor, in conjunction with the actuary, tries to pick a method that produces a low asset value, trying to increase deductible contributions, or a high-method that produces a high asset value, trying to help a client avoid contributions.

Finally, the disclosure. So far we're just looking at disclosure as to what is the asset method. If you make a change, what is the impact of that change? Our concern as a committee has been that people have changed asset methods and just said, "Hey, I changed the asset method from some sort of smoothing to fair market value or vice versa," without disclosing the impact to enable the users of the actuarial reports to understand fully what's going on.'

Are there practices out there that actuaries are engaging in either because they're too close to their clients or worried about losing business or other problems that do happen in actuarial situations to the point where they might be pressured to do things that as a society and a profession we'd look at as not being acceptable? Certainly the concept of frequent changes to manipulate the results is one of the practices that the standard has proposed to say is not acceptable. And method design to either understate or overstate the true asset value would be deemed

unacceptable. In this regard I will respond to Ethan's comment where one of the methods written up in IRS regulations appears to understate assets when looked at on a reasonable basis. In short, the standard as currently drafted would say even though the IRS is blessing that method, since that method tends to understate what we'd call the true asset value or market asset value over the long period, it would not be acceptable for pension actuarial purposes.

The final area of concern 'is an inappropriateness for the circumstances. Once again, instead of plan termination consider the case where someone uses the market value of assets in a situation where it's a negotiated fixed contribution stream, for example. Maybe the market value fluctuations are causing the fixed contribution stream to look like it either undersupports or oversupports a given formula. Under such circumstances, the market value might be an inappropriate AVM.

Here are some of the difficult issues that we're struggling with. Is market value always acceptable? I'm going to say the committee was at one point divided about 50/50 on this. There were those who said, "How can actuaries possibly hope to substitute their judgment for the marketplace in picking an AVM?" They argued their case rather vociferously. I would then go back to the situation with the plan sponsor who immunizes, buys a group of bonds and then, as those bonds rise in value, uses market value on his or her elevated bond portfolio but leaves the liabilities unchanged. Now, maybe that's an issue with the valuation of liabilities and not the valuation of assets, but somehow the situation needs to be addressed.

I'm the Chairman of the Pension Committee of the ASB, and I get to exercise a chairman's prerogative every now and then of saying this draft standard will not say that market value is always acceptable as long as I'm on the committee. Now, I'm stepping down on December 31. It probably will be released in January. It might have that statement in it, but it's a difficult issue. I encourage you to think about it.

Does the asset method need to address hard-to-value assets? Dan made a comment about looking over the trust statement. That's an excellent comment that I, once again, would like some feedback on. Do our responsibilities as actuaries go beyond just taking what either the auditor gives us for an asset statement or the bank trustee gives us as a statement of assets? Are we challenged to say, "Wait a minute, I can't just accept those assets as an actuary working in the pension area." I need to dig beneath the numbers that show up on the trust statement, even an audited financial statement, to ask, are they appropriate for this particular person and are they appropriate for this particular purpose?

Certainly, with some nontraditional assets such as venture capital or real estate, we're dealing certainly with the issue of insurance company solvency and, more and more, issues involving litigation. We know the pension plan has either won a suit against an outfit and has some money coming or the plan is involved in litigation over an asset transfer. We then ask, how are we going to value those unknown

assets at this given point in time and what's an appropriate method of recognizing them? A really difficult issue for the pension committee trying to draft an actuarial standard is, how far should a standard go down this path in terms of requiring an actuary to do these sorts of activities?

With regard to disclosure, as I said, the primary focus so far that we've looked at is the disclosure of the impact of a method change. If the actuary or the plan sponsor wishes to change an actuarial AVM, go ahead and do it, but you need to disclose the impact. The other one is possible disclosure of changes in circumstances. Mike talked about the investment policy as being a driver in terms of AVMs—certainly the plan formula. If the plan changes from a traditional final pay plan to a cash-balance plan, should that be grounds for looking at the appropriateness of the AVM? Do you need a different AVM for a cash-balance formula more than you do for a traditional final pay? Do you need special methods under plan circumstances, such as plan termination?

Finally, I'd like to open this up for discussion. From my standpoint the issues that I'd like to hear about are: Do we need a standard? Are there other examples of what might be considered questionable practices? Keep in mind that one actuary's questionable practice is another actuary's creative consulting. This needs to be handled very deftly. What are the actuary's duties in the method selection? I believe right now the methods in many cases are still left up to the plan sponsor. The plan sponsor has the right to select an AVM certainly with advice from the actuary. This draft standard says it applies not only to situations where you as the actuary are selecting an AVM, but where you as the actuary are giving advice to a plan sponsor or somebody else who's selecting a method. And, finally, how much disclosure is appropriate?

I'd like to point out that the standard is not going to go through a litany of proper methods but is more inclined to focus on good and bad behavior, if we can use those terms.''''

It's not unusual for a company to say we would like our AVM to move with the liabilities for *FAS 87* purposes. As the discount rate drops and the value of the liabilities goes up, it seems rather natural to me as an actuary and to many of our plan sponsors, that the AVM rise somewhat to offset the drop in discount rates. This was exactly the question that Dan addressed, but the question in *FAS 87* actually had an adjustment for the change in liability because of a change in discount rates. In other words the asset values changed based on a change in liabilities and the *FAS 87* board said correctly, That's not acceptable.

Now let's go back to our plan sponsors who are faced with this problem of how to get asset values to move with liability changes in value. Certainly they can invest in a bond portfolio, and if you're a bond salesperson, that's a great answer to the question—go buy a bunch of bonds. As the discount rates drop, presumably the value of your bond portfolio will rise in the same fashion, as your liabilities would rise because of the drop in the discount rate.

Being creative consultants, we wrote a letter to the FASB and asked, "How about this method for valuing equities?" Over the long haul, equities have outperformed bonds by 4%. Each year we're going to adjust our equity portfolio by a change in a bond index plus 4% and that will be our estimate for equity values. Well, as the bond portfolio rises, I get to adjust my equities up. As the bond portfolio drops, then my equities come down. The goal is to once again get the asset value to move with the liabilities. The FASB declined to rule on our request for that AVM.

Looking beyond the trust statement, you' made a statement that somehow the asset smoothing method doesn't ultimately impact the expense. That's' true. It shouldn't, ultimately. I think a goal behind an AVM is that it should smooth assets on the interim but certainly not impact the overall long-run expense of the plan. That's the end of our formal comments.

From the Floor: I heard the term unbiased used several times at the beginning by the first speaker, and I was wondering how that is actually defined. What does it mean to say an asset method is biased? Let me give an example to make the question clear. Would that mean that if you did a projection of assets, assuming that the assumed rate of return was always actually achieved, that assets would approach market value?

Mr. Sze: To give a really detailed definition of unbiased might confuse the issue, but we all know when a situation is biased. For instance, if an asset method would always produce a value that is below the market value of assets, obviously that's biased. A more difficult question relates to some asset methods that are basically giving, say, a three-year average of the market value adjusted up with investment and the actual contributions. Would that kind of method be called biased or unbiased? That kind of method, too, always produces an asset value that lags behind the actual market in an up market as well as a down market. Therefore, that kind of method might be on the borderline of being considered biased, but there are other examples that obviously understate or overstate market.

Mr. Joss: I think Mike's underlying premise then is that the biases are measured against market value; that somehow market is considered the unbiased result. I still think it's a legitimate question. Let's say I have an asset method where I start with my actuarial value of assets at the beginning of the year and I project it forward to the end of the year I expect assets to grow at x. I'm going to leave x as sort of an undefined variable right now, and I'm going to argue that this method is unbiased" because I pick x by looking at the last 70 years of asset performance, and x is 7. I'm going to argue that it's unbiased because I looked at the last 15 years of asset performance and x is 12, so I have 2 different methods producing very different results in the same family of methods, both of which I'm purporting to argue are unbiased.

Even underscoring the basic question, is market value the right measure for biases? I think the Pension Committee is using market value as the underlying bogie. I think Mike was referring to market value when he was referring to biases. If other people have suggestions as to what the underlying target is for biases, we'd

certainly love to hear them. And if you have any suggestions as to how to deal with this quandary of how far back we look in terms of adjusting the assets or whether that is a legitimate way of deciding whether a method is biased or not, we'd love to hear them as well.

Mr. Segal: Didn't Mike say early on that over the long run, the actuarial value should track the market value? I guess underlying all of our AVMs is a presumption that the market does not always move in the same direction; that a market sometimes goes up and sometimes goes down.

Mr. Joss: Don was saying that the market goes up and down. I'm not going to dispute that. I think the concern that perhaps Ethan was feeling with the other question is that the IRS method, by looking at just capital gains, essentially assumes that on the long haul, capital appreciation or depreciation is zero.

Mr. Segal: On average.

Mr. Joss: Is that an unbiased assumption in and of its own right? Is it one of the illustrations that I had? If you roll assets forward at x, can I roll them forward at x equals zero and play that game, and then adjust at 20%? These are getting to be esoteric examples, but they're important in terms of trying to draft a standard and 'doing our work as well.

Mr. Segal: This is a bit of a change in the topic currently being addressed. I'm concerned about new starts. We've seen a number of times that an asset smoothing method is dropped, and a new start is introduced for the value of assets. Will the committee in its discussion of the subject of asset smoothing address when it is acceptable to use a new start concept? Most recent recognition of this is in valuing pension plans for the city of New York.

Mr. Joss: The comment was about restarts. It' appears to me from most of the restarts that I've seen that they tend to be restarts when the market value exceeds the actuarial AVM. Now, does it preclude you from restarting when the market is less than the actuarial asset value method? Most of the ones I've seen have been restarts when the market is in excess of the method. The concept of restarting is essentially an acknowledgement that my asset smoothing method has worked perfectly. It's been unbiased, yet the market somehow beat us, but we're going to make up for that one-time hit and then get back into an unbiased asset predictor.

It's an excellent question. I think we're trying to address it in terms of perhaps the questionable practices area and, in particular, with the amount of time between restarts. If you had a track history of restarting every three years when market was bigger than your actuarial value of assets, but waiting five if the market went the other direction, you might get into the questionable practices area. How do we write that up in a standard? It is one of the toughest questions of all, but I think it's a legitimate concern.

From the Floor: Just in the interest of responding to your request for comments, I would think that market value should always be acceptable in the absence of external restrictions on discounting the liabilities.

Mr. Joss: In my illustration of the immunized bond portfolio that went up, I might have a liability valuation question, not an asset question. How many in the audience here think that market is always, and I emphasize the word *always*, acceptable as an AVM? The majority of the audience felt that market was always acceptable.

From the Floor: On the issue of the actuary's duties on method selection, as far as I'm aware that's only for U.S.-qualified-plan-funding methods. The plan sponsor is responsible.

Mr. Joss: The plan sponsor? I don't know. Maybe you can help me there. I'm a technical actuary for a company. I should know the answer to this, but is the actuary responsible on Schedule B for selecting the asset method?

From the Floor: No.

Mr. Joss: I think he or she is. The plan sponsor is responsible for choosing the valuation method, and I think as a default the asset method gets lumped in with that, whereas the actuary signs off on a Schedule B in U.S. plans saying those are his or her best-estimate assumptions, whether they be economic or demographic assumptions.

From the Floor: It seems like a good method should be one that the value doesn't change if a security is sold and bought on the same day. I have been myself guilty of using such a method in the past.

Mr. Joss: In other words, if I own a certain security, say, shares of IBM stock, and I buy and sell them on one day, does that impact my asset valuation?

From the Floor: Sell and buy.

Mr. Joss: That's a good idea. Let's sell before we buy. That's a good point. That has actually' come up, and I think that will be one of the reasonableness tests or assessments that we've talked about. Good point.

Mr. Segal: In terms of disclosure we've said on one occasion that the IRS tells us that AVM is in the purview of the plan sponsor. What are the committee's thoughts in terms of the actuary's obligation to disclose if he or she disagrees with the selection of the AVM?

Mr. Joss: I don't know. I think so if it's in the purview of the plan sponsor, and we have some other standards out there where the actuary may disagree with things that are couched in law. The most recent example that comes to mind is a qualified domestics relations order standard versus the method dictated by some

state for pension assets to be divided in a divorce situation. The actuary may not agree with the method prescribed. One draft of the standard said the actuary should disclose such a disagreement, and if the actuary is compelled to use a method or assumption from a binding authority, the actuary's responsible for disclosing the source of the statement. The actuary would have to say the asset method is such-and-such as picked by ABC Corporation, but the actuary would not have to say that he or she either thinks that's reasonable or unreasonable or disagrees, but leaves it in the disclosure of the authority that told him or her to use this particular asset method. Whether that goes far enough or not, I don't know, but that's probably where we'll wind up based on prior standards.

Mr. Sze: Excuse me. Is there any chance that it will be stronger than that? Because if you clearly disagree, and you still don't say it, you are acquiescing to their method.

Mr. Joss: I'm open for debate if people think we should have a stronger disclosure. In particular, Ethan gave a situation where the IRS-approved method may systematically understate the market value of assets, which some people may disagree with. If you use that method for your plan, should the standard say that you are disagreeing with the appropriateness of that method, if you do so disagree?

Mr. Sze: My argument is if the actuarial standard says one thing and the law allows you to do another, and the plan sponsor wants to comply with the law which doesn't comply with the actuarial standard, I would probably go as far as saying that the actuary has the obligation of stating that the method would not comply with the actuarial standard.

Mr. Joss: Pretty strong statement to say that my sponsor is using an AVM which, while it complies with the law, does not comply with the SOA's asset method standard.

Mr. Segal: Consider the example I think Mike raised earlier where he had his matched portfolio. The interest rates went down, so the value of his assets went up and the value of the liabilities didn't necessarily go down. There may be other examples where the assets, let's say, may be inflated in relation to the manner in which the liabilities are measured. In the U.S. you're the enrolled actuary engaged on behalf of plan participants. Your obligation is to calculate the minimum funding requirements. I could make a case that you as the enrolled actuary, if you acquiesce in the employer's and the plan sponsor's selection of the funding method, which, admittedly, the IRS approved, thereby understating the minimum funding requirement and potentially endangering the security of the benefits of the plan participants, you as the enrolled actuary have this obligation to the plan participants. Where does this put us?

Mr. Joss: That's a good comment. Anybody else want to add to it?

From the Floor: If the actuary feels that there are substantial risks involved to the plan participants, then disclosure should be required. Ultimately, the actuary has fiduciary responsibility to the participants.

Mr. Joss: It gets down to the point that we are professionals, and we're called on to make judgments from time to time. We do need to walk the line, Don, between serving our participants and yet keeping our customers happy because if they decide to terminate the plan, then the participants are probably worse off than if we hadn't gone down the line.

Mr. Kra: In many valuation reports, many actuaries, and many practices across the country, I've come across a method of average of book and market because they say that they are complying with the regulation because it does reflect market. But it certainly seems odd to say that the value of the assets will depend on whether or not the money manager sold and bought stock yesterday.

Mr. Joss: Yes, absolutely.

Mr. Kra: I would hope that the standard would be an unacceptable practice.

Mr. Joss: I think most people would argue that the book has no capital appreciation factored in, so if I average book and market, I'm essentially averaging in half my capital appreciation.

Mr. Kra: Of unrealized.

Mr. Joss: Yes, the unrealized capital appreciation that probably understates or is biased again. It would flunk on two different assessment criteria. Good comments.

From the Floor: Just a quick question on whether market value is always appropriate. It seems to me that if you can say that market value is always appropriate, then your funding target should always be the termination liability. If you're funding towards something in the future, then current market may not be telling you what you really have in your assets.

Mr. Joss: I think you're saying that you might not have voted in the camp that was always in favor of market. Back to your other comment about the termination liability being the funding target, I think funding targets is a topic of a whole other standard. That would be called the actuarial funding method standards.

From the Floor: I do have one other question, and that concerns discounted cash flow as a method. In my mind at least there's a logical connection between discounted cash flow and the way we approach the liabilities and keep them working. It's not used very much in North America. It's used a great deal, I think, in the U.K. I was just wondering if anybody had encountered this method and could say anything about how well it does or doesn't work.

Mr. Joss: Any comments on the discounted cash-flow method?

From the Floor: I'm from the U.K. The method's been used now for about 20 years, but it's now being called into question. The main thing about it is when you have' a bond portfolio you can get a clearly defined answer, but when you have' an equity portfolio it involves making an assumption about dividend growth, and just a tiny change in that assumption can have a dramatic effect on the asset valuation.

From the Floor: There's increasing argument now in the U.K. for going back to market values and adjusting the liability assumptions.

Mr. Joss: The people I talk to in the U.K. also seem to say that there's an interest in moving towards market valuation methods and away from discounted cash flow. The comment made, though, actually reflects a very good argument. Anytime you have an asset method involving assumptions, whether it be a discounted cash-flow method or a project roll-forward using an asset assumption or an asset growth assumption, there is the potential for manipulation. The committee is extremely concerned about manipulation. Somehow we're going to have to take that circle and figure out how best to deal with what kind of assumptions fall in the purview of being manipulative, and what kind of assumptions fall outside the purview of being manipulative.

From the Floor: I think that's a lot of people believe that market value is the best measure of the value of assets. I don't really share that belief in the sense that a lot of plans have plan years that end on December 31. The plan year ends on December 31. And, as I remember, December 31 is one of the days when there's the smallest amount of transactions in the stock markets, and if you're talking about manipulation, it can lead to manipulation. A lot of investment managers clean up their portfolios around that time of the year, but I don't think the December 31 value is particularly representative of the true market value.

Mr. Joss: The comment was that the December 31 value might not be representative of market value. In addition to all those well-made points, I will comment that some analysts have said that frequently an executive's bonus might be tied to the stock value on December 31, and there may be some outside trading or something like that that's going to help impact that December 31 valuation as well.

From the Floor: But I would argue that if the December 31 value did not reflect true market value, the market would not allow that to go on for very long. I think the market moves in ways perhaps more efficient than our choice of data.

Mr. Joss: As actuaries we know that we usually have to pick a date for valuing assets and a corresponding date for valuing liabilities, and if December 31 can be shown to be argumentatively 5% higher than all other corresponding dates, maybe the standard should say whenever you take a December 31 value you knock 5% off for the December 31 factor. I don't know.

From the Floor: Yes. If you can show that, I would not disagree.

From the Floor: A comment about change in method leading to what seems to be at times manipulative. Why is it not appropriate for the committee to promulgate rules requiring disclosure whenever there is a change that would require the actuary to prepare and present results both ways?

Mr. Joss: A good comment, and actually that is the one point of disclosure that we're looking at, and it gets back to these reset questions that you brought up earlier, i.e., if you're going to reset, what is the impact of resetting at this particular point in time? What would it look like if you had not reset? What would it have looked like if you had reset? That is what we're talking about—the impact of the change in the AVM is likely to be part of the disclosure, at least in the exposure draft. If you're concerned about it, then please comment on the exposure draft.

From the Floor: With regard to the comment that you made about the use of an assumption in the AVM, I guess I would suggest that when that's done there's probably a need for a relationship between that assumption and the way the liabilities are valued. That would also address the idea of the immunized bond portfolio as well. I personally would think an assumption can be used, but there can't be a disjoint between that and what's done with the liabilities.

Mr. Joss: I think the point is well-made that if your asset method requires assumptions, that there needs to be a connection between how you're valuing your assets and how you're valuing your liabilities.

From the Floor Another disclosure question. What 'if they change the investment philosophy, or, as you mentioned, if they change to a cash-balance plan? Are there obligations to change methods?

Mr. Joss Does the current draft of the standard have any highlighted times when there's an obligation to change methods? The answer to that question is no. The standard would say to look at such things as the circumstances. Is this an ongoing plan or a terminating plan? Is this a plan that's changing its benefit formula? Is this a plan that's changing its investment policy? You should think about those things when selecting an AVM. Furthermore, as with the assumption standards, it says you need to think about your AVM each and every year. That does not mean to change the method every year, but you need to think about it. I think that was one of Mike's points—that these are critical issues that you do need to think about. Certainly you don't change methods every year, just the same as you don't necessarily change a demographic assumption every year, but you have to think about them. The standard is unlikely to say these are things requiring a change of AVM. In particular for all those in the audience who felt that market is always appropriate, if you're using market, then change would never occur.

Ms. Judy Anderson: I just wanted to repeat the plug for the call for papers on the effectiveness of AVM. We had a good discussion here, and I think it would be neat

if we got some more papers going on it. I think there are some differences of opinion that could come out.

Mr. Joss: Along that line, I'm willing to write a paper on where the equities should be marked up at a long-term bond portfolio rate plus some percentage if you think it'd be worthwhile. .