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Session 19 Seminar
Addressing the Financial Risks from Retirement Systems: Identifying Risks Inherent in Retirement Plans

Track: Pension

Moderator: Gerard C. Mingione

Panelists: Eric Boyd Feinstein
C. Ian Genno
Michael Walter Peskin

Summary: This session focuses on the risks faced by plan sponsors, and puts these into context with their operational risks. It covers what actuaries can do to help manage and mitigate risks, and how current regulatory frameworks can inhibit risk management processes. It also discusses the consulting challenges in helping clients find long-term solutions, and how to manage toward those solutions in the short-term.

MR. GERARD MINGIONE: Our charge is to identify the risks inherent in retirement plans. I've got a pretty good panel here with a broad range of experience. It includes Michael Peskin, a managing director at Morgan Stanley; Eric Feinstein, the director of pensions at Ascension Health; and Ian Genno, a principal at Towers Perrin. I'm Jerry Mingione. I'm also a principal at Towers Perrin.

We are going to cover a broad range of topics—defining risks, the current environment for assessing them, putting them in perspective, how regulatory frameworks affect them, and managing toward solutions. We may talk about the alternatives in terms of if defined benefit (DB) plans don't work well in terms of costs and risks, do defined contribution (DC) plans work better, and how are they better? This session is intended to be highly interactive. The thinking behind that is

Note: The chart(s) referred to in the text can be downloaded at: http://handouts.soa.org/conted/cearchive/neworleans-june05/019_outline.pdf.

that most of us are experienced. We have a pretty good grounding in the basics with regard to finances and risks.

What we're trying to do is figure out how to put these costs and risks into perspective in the following ways: What are financial managers at plan sponsor organizations thinking about? What are financial analysts thinking about? What are hedge fund managers thinking about when they think about organizations that sponsor large pension plans? What should they be thinking about? What’s really important in managing a plan? How do the regulatory structures get in the way or facilitate prudent financial management? We could start a dialogue about all the regulatory structures that are under reconstruction. It looks like funding is moving ahead of accounting at the moment. How should these structures evolve to facilitate prudent management? What's really important, and how could the regulatory structures be fixed?

My job as moderator is to guide the questions so we cover the full range, but I would like to hear from a lot of people in terms of their viewpoints. I'm going to kick it off by asking Michael Peskin to give us some insights into how financial analysts and hedge fund managers view the world. We'll go across the panel, and we'll have interaction with the audience.

MICHAEL PESKIN: I'll start with CFOs and then talk about analysts, differentiating between equity analysts and bond analysts. I’ll also include the rating agencies. All of these discussions have been migrating over the years, and migrating very rapidly. In discussions with CFOs, as little as two years ago the discussion was about what to do. The CFOs had gone through the period from 1999 through 2002 where, across the Standard & Poor's (S&P) 500, funded status had dropped from 130 percent down to 80 percent, and they were getting some very basic questions like, "Do you know what you're doing? Is this a manageable problem?" CFOs were wrestling with these issues. Should they continue managing in the old way? Was this just a blip or was this a significant change? They had to think about things differently. Right now the answer is very clear. The CFOs almost en masse—I can only think of two who are not there, though none of them in public, by the way—state their intention to de-risk their pension plans. The what-to-do part is over. The issue in front of them now is how to do it—when, how much, who to use, who to fire, which consultants can help them, which ones can't, etc.

Let me go to the equity analysts. I don't have to go back to the beginning of my career. Only 10 years ago, when I used to talk to the equity analysts at Morgan Stanley and others, I'd ask how do you take account of the pension plan? What should you be doing? And they're telling me it's cash flow. I looked into what they actually did. It wasn't cash flow. All they were doing was taking the numbers under Financial Accounting Standard (FAS) 87 and assuming this was representative of the economics of the pension plan. Even though I told them this was wrong, they paid absolutely no attention and went on simply taking the FAS 87 numbers.

MR. MINGIONE: Michael, which FAS 87 numbers were they focusing on that were wrong?

MR. PESKIN: Earnings. They were simply taking the earnings numbers being reported under FAS 87 and putting that into operating income as if that was the right answer. In about 2000, they started recognizing the error of their ways. I remember a very funny article about Trevor Harris. He was teaching the equity analysts, who were trying to learn how to read balance sheets and income statements on pension plans. They had to get it right, because they hadn't paid attention to this before and the world had clearly changed. Now you cannot see an equity analyst's report on any corporation that has a sizable pension plan without discussion of the pension plan. Furthermore, the equity analysts by and large are not accepting the FAS 87 numbers. They are putting in their own numbers. They're putting in their expected returns. They're putting in their discount rates because they figured out how to do these calculations. They're not that difficult. While they still are giving some weight to equity premiums, they're still using a higher expected rate of return than the discount rate. The differential that they're using has gone down pretty much every single year. Furthermore, many of them are doing what S&P is doing, which is splitting the income up into operating income and financial income and differentiating between those. And they’re only including the operating side when it comes to valuation in terms of applying a multiple to that.

Bond analysts have gotten to it much later. They were caught by surprise by the bankruptcies. This was especially true for the steel industry, and then the airline industry where those bankruptcies were caused by the pension plan. It was a surprise to them in the first place that a pension plan could actually put a company into Chapter 11 and into bankruptcy. They've started hardening their calculations, although by and large I would say they still get it wrong. There are a few who get it right. Bond analysts do calculations for two main reasons. One is to assess the probability of default on a bond. They're going to differentiate between a bond maturing in 2012 and a bond maturing in 2007. What they really want to know to do those calculations is what the cash flows are. What must the company pay to enter the pension plan that's not going to be available to meet the maturity of the bond when it matures?

Of course, those calculations are almost impossible for actuaries to do, let alone bond analysts, because they don't know what the current balance is. They don't know how half these rules work. They're an extremely complicated set of rules. So they use guidelines such as what the contributions were in the last year. Add some percentage onto that for variance. Look what happened to the unfunded. They take some percentage of that and get their answers. The lack of knowledge about what the funding is hurts corporations, because the more bond analysts can pin down what the numbers are, the less uncertainty they have and the less of that uncertain risk they are going to put around those bond calculations. The corporation's borrowing cost would drop. So corporations do their best to help the bond analysts with estimating what the contributions will be, but, of course, they focus on the absolute minimum required contributions.

There is another factor that they have to take account, however: bond downgrades. They also have to worry about if a bond is rated such-and-such by the rating agency or wherever they're going to rate it, as well as what the probability of a downgrade is. Then they have to pay attention to what the rating agencies do. I'll focus on S&P and Moody's, although Fitch is also in the picture, but I'm more familiar with what S&P and Moody's do. S&P has a fairly simple approach. They say that the unfunded liability—take the unfunded projected benefit obligation (PBO) liability—is debt, and it's debt just the same as regular debt except it's not always included in the bond covenants. They treat it as debt for all their leverage calculations. However, they have not gone to the next step, even though S&P has warned about it, that the riskiness to the unfunded—in other words, the equity exposure in the pension plan—is leverage. S&P did warn about this.

I made the mistake last year of listening to an S&P conference call. It was three hours long and incredibly boring. There was only one point of this three-hour conference call that I could figure out. When I checked with our ratings experts, they agreed that there was only one comment that this whole call was about. It was to warn their clients that at some point in the future—they wouldn't throw out a number, though they did say 2007, but even that they put question marks around—they are going to include equity exposure in the pension plan as leverage. Now that's a very, very important point and makes a very big difference because the answers become even clearer to the CFOs if that's the case. If the CFO is confronted with a case, if he's got equity exposure in the pension plan, takes risk in the pension plan, and that equity exposure is going to count as leverage against the company, he now has a tradeoff.

Should he have the leverage in the pension plan or should he de-risk the pension plan, borrow more at the corporate level and have the leverage at the corporate level? That's a no-brainer for the CFO. Even if it weren't true, politically it's going to be very difficult for the CFO to argue that he's better off investing in everybody else's companies than in his own. If he does that, he's going to have a lot of questions to answer from investors. You won't invest in your company. You prefer to invest in this cross section of everybody else's companies. There's no doubt where CFOs are going to come out if that occurred. However, I just spoke to S&P recently, and they still would not give me a date. They are interested in having discussions on a company-by-company basis, but I don't want to spend too much time now and give my colleagues a chance to speculate as to why they're interested in those discussions and why corporations would be interested in having those discussions with them.

Moody's has taken a very different tack than S&P. Instead of looking at the unfunded liability on the PBO basis, they are focused, or are trying to focus, on the cash flow. The difficulty is the cash flow is very, very hard to calculate. They are, therefore, likely to pay much more attention to the changes in the funding rules that Congress is busy considering right now. Any tightening in the funding is going to move Moody's along that line toward treating the pension obligations as debt and treating equity exposure in the pension plan as leverage. We have to wait and see just what the funding rules are and exactly what Moody's does, but I hope that's enough background to get some thoughts and questions going.

MR. MINGIONE: Let’s stay with that for a little while and see if we get some reactions to what we just heard. The common denominator there is cash. If you want to get a bond rating, if you want your company to be viewed more favorably by analysts and the bond rating houses, you really need to get your cash contributions predictable, stable and manageable. If you think about what's driven companies under, what's driven industries under, it wasn't additional minimum liability. It wasn't pension income turning to pension cost. It was none of those things. It was always the next contribution requirement that they couldn't pay that forced them to terminate the plan, which forced them into bankruptcy. So I think the common denominator is cash. In my opinion, the action for pension plan sponsors is in Washington right now with the various funding reform bills being proposed. Absent funding regulation, all a plan sponsor is really responsible for is the benefit payments that become due at a particular point in time. Before those are due, they're responsible for advance funding, and that advance funding will be dictated by what happens in Washington during the next six to eight months.

FROM THE FLOOR: When you talk about the equity exposure treated as leverage, what do you mean?

MR. PESKIN: It's very clear that if a corporation borrows from the credit markets and invests in making widgets in the corporation, that's leverage, right? Borrowing money, investing in its own company, that's leverage. S&P is talking about going to the next step. If the money borrowed is from the participants, these are deferred wages. You pay less now. You give deferred wages later. You're borrowing long term from the participants. You invest it in other companies making widgets. You invest it in equities. That's leverage. That's the point.

MR. DAN CASSIDY: Just as an example, say their PBO is $100. Their assets are $80, and they're invested with a 50/50 stock-bond allocation. So there's $40 million of equity and $40 million of bonds. How would that leverage go? When you say leverage, I'm talking about leverage ratios, debt divided by capital.

MR. ETHAN KRA: My understanding of that would be that you would view that situation as if you've got $20 million under-funding that's corporate debt subject to tax adjusting. You've got $40 million of bonds in the pension fund, and if they were long duration they would be matched or viewed as hedging 40 percent of the liabilities of the pension fund. You would have $40 million of equities that would be viewed as corporate equity so that you don't have that $40 million hedged. It's just that much more of an unfunded promise. They would almost treat it as if it were a 40 percent funded plan instead of an 80 percent funded plan.

MR. PESKIN: That is correct. In that environment, if that were the situation, they would sell the equities in the pension plan and buy bonds in the pension plan. They then issue bonds in the corporation, buy their own stock back and reintroduce the leverage. Now they would be leveraged at their own corporate risk, which is much easier to rationalize to investors. There are a lot of other reasons as well. It's because of the asymmetry and because there's a tax arbitrage for doing that. That whole risk equation changes, and that is in part what is driving CFOs. Once the issue went up to the CFOs—what caused it to go up was the 2000 to 2002 meltdown—they then had to think whether they had the right structure or not. Once it goes to the CFO, risk in the pension plan is just the same as risk in the corporation. You've got risk in the pension plan. What are those risks? Where does he want to take these bets? Where are the best payoffs? When you deeply look into that, you find the payoff in the pension plan is a poor payoff because of the asymmetry. If the bet really pays off, and you get a big increase in the pension plan surplus, it's very difficult to get that back to equity-holders. There's a price for getting it back to equity-holders. On the other hand, if you lose, it's very costly. They all know about that. They've just been through it. Your PBGC premiums go up. It counts as a debt, just the same as if you'd lost money in the corporation and they have to fund the plan. If it's in the corporation, it's symmetrical. The upside is the full upside that the equity holders get. The downside is just as bad, although there are no additional penalties like PBGC premiums.

Then there is a tax arbitrage. Tax arbitrage has been in the literature a long time. It's been popularized more recently and very, very well by Larry Bader and Jeremy Gold, that from the investor's perspective, they prefer to own the bonds in a tax-sheltered vehicle and own their equities in a non-tax-sheltered vehicle, much like an IRA. If you've got money in an IRA and money outside of the IRA, you'd rather have your bonds in the IRA and equities outside of the IRA. It’s the same for investors in a corporation. They'd rather have the bonds in the pension plan and equities in the corporation. That is not a driver right now. That's what's been driving the theory, but it hasn't driven corporate practice. However, as it starts getting more and more transparent and as the CFOs get more and more reasons for doing it outside of the tax reasons, they'll also use the tax reasons as the rationale for making this change.

MR. MINGIONE: The financial economics dialogue and the view that Michael thinks CFOs will adopt is pretty much at odds with the traditional actuarial view. I want to put it in perspective. There is a presumption that there's no wall between the pension plan finances and the corporation finances. Most of us, when we do pension valuations, talk about the effect on the corporation only through certain filters. There's a wall, but it's a permeable one. The point I made earlier is that funding regulations are probably the key translation between the financing of the pension plan and the financing of the corporation. If you view the two as being the same, then if the funded status of the plan changes by $1 million, so does the financial status of the corporation.

I don't think companies view it that way. They view it through all sorts of conversion devices right now, and some of those are going to change. But if they didn't, if they viewed them as exactly the same, CFOs would come to the conclusion that Michael describes. But there's a big step before you get there. Maybe a financial analyst's view would be one lever, but I think the main lever would be if the contribution requirements move to a basis involving no smoothing, no amortization, mark-to-market, fund immediately. Then, obviously, pension risk becomes business risk. You decide whether you want to take that risk. In contrast, corporations now set their financial policies based on a presumption that they've signed on to provide something short of absolute benefit security for plan participants at all points in the business cycle. They're only committed to address the cash requirements determined through funding rules that do involve smoothing devices of all kinds. If their business hits some sort of calamity and they end up without enough money to pay all the benefits, then they end up without enough money. That's why there is a PBGC, to step in and address the gap under those circumstances. That's where we are at the moment, like it or not.

MR. MALCOLM HAMILTON: On this leverage issue, if you look at the bond-rating agencies or if you look at a bond analyst, at some point they're going to start considering the equity bet in the pension fund as being equivalent to additional leverage in the corporation. When you say that, do they just have one measure, i.e., here's the amount that's leveraged, or do they distinguish between an equity bet in a single corporation versus the holding of a broadly diversified portfolio of equities?

MR. PESKIN: There's an interesting discussion going on around that. It's clear that if you swap a diversified equity portfolio in the pension plan for a single stock, you increase the risk of bankruptcy in that company. But what you've essentially done is you've replaced systematic risk with idiosyncratic risk. The important issue about idiosyncratic risk is it can be diversified. Consequently, from an investor's perspective, if you own 100 of those companies, you don't only own one; you own 100 of them. Whereas the probability of any one of them running into credit difficulties is higher, the probability of, say, three or more of them running into credit difficulties at the same time is lower because the correlation between them is reduced. Instead of owning cross-holdings of each other's equities, they're all much more focused in their own businesses. Consequently, the equity pricing for those companies goes up rather than down, even though you've increased the probability of bankruptcy in that specific company.

MR. KRA: In discussions with CFOs, I was very surprised to hear them agree with Mike in some respects, in that they said they really believe that they should be buying very long-term bonds. I asked them why they aren't doing that. And they said it was because right now they are being judged by the incorrect benchmark of

FAS 87, and by comparison with their peers. They are being forced by the opacity of FAS 87 accounting and the way Wall Street judges them to do the wrong thing for shareholders. As soon as FAS gets it right, they will do it right, but until then they can't afford to because they will be punished for doing so.

MR. MINGIONE: Do you mean the return-on-assets (ROA) assumption?

MR. KRA: No. I mean the ROA assumption plus the smoothing. So, if FAS 87 were more like FRS 17, CFOs tell me they would be in dedicated bond portfolios tomorrow.

MR. MINGIONE: Why aren't they in longer bonds with regard to the 30 percent fixed they already have?

MR. KRA: Many of them are moving that direction.

MR. MINGIONE: Contrary to all the CFOs who may be thinking that, it seems a very small number of companies have done it.

MR. KRA: Part of it is because, as one CFO said to me, the people reporting to her don't get it. She has to break their arms to get them to understand what's right and wrong because the typical pension investment manager has been brought up, educated and rewarded to do certain things and is of a certain mind-set.

MR. MINGIONE: It involves more than changing FAS 87 then.

MR. KRA: It's about changing FAS 87, but she's not going to break their arms until FAS 87 is changed. As soon as that changes, she'll break their arms to do the right thing.

MR. PESKIN: I agree with everything Ethan said. That rings true. I want to point out one more thing about the accounting, which I find a lot of actuaries get wrong. CIEBA also got this wrong. The claim is that if we go to mark-to-market accounting, corporations will dump their defined benefit pension plans. That statement is false. It's exactly the other way around, and I've got two pieces of evidence for that. I was talking recently with some international sponsors, and the Dutch in particular were quite amazed that sponsors in the United Kingdom had frozen so many pension plans, and the United States was busy freezing pension plans. The answer is actually quite simple. The companies freezing pension plans are those that are in regimes where the equity premium looms high in the accounting. The Dutch never had that. They used to be all in bonds, then slowly gravitated somewhat out of bonds into equities and now have gone to insurance regulations governing pensions, which have to be fully funded. They priced their liabilities at 4 percent. They never had a problem, and defined benefit plans are thriving there because they've been properly priced and accounted for from the word "go." There haven’t been any unpleasant surprises.

What's causing CFOs in the United States to close their plans to new entrants is they know that they are digging a hole for themselves. They're digging a hole because at the moment the pricing of pensions is including the equity premium in the accounting. They know that that is false, and at some point that's going to go away. Even if the accounting does not change, the way investors perceive it is changing. I know of two major hedge funds that have made a major living in the last four years. They've simply taken the view that these have been completely mispriced in the marketplace. They are a bigger liability than has been measured, and the market's going to catch on to this.

The impact of the accounting moving to mark-to-market is that it makes the price of pensions go up, it makes it go up to a real price. It's a price that the CFOs already know is the real price, and they wish it would happen. They can't say so in public, because if they were to say in public that they really should be pricing on a mark-to-market basis, they would have to do it right now. Nobody wants to be the first to do that. You have to explain to investors why their liabilities have gone up, but it's good for the equity holders. CFOs secretly wish that FAS 87 would change to mark-to-market, which would help defined benefit plans because now they would be able to negotiate with unions, with employees, etc., with the proper pricing in mind, whereas at the moment they are underpricing pensions, and their instinct is simply to stop doing that.

FROM THE FLOOR: Mike, I want to try to understand a little bit better the sort of change that you're suggesting here, which is that the pension plan should sell the equities of other companies and buy bonds, but then get exposure to equity risk at the corporate level by issuing more bonds then buying back their own stock. I think you're suggesting buying back stock and the company holding the stock. Of course there's another option there, which is buying their own stock and simply retiring it. It would appear that there's a difference. If, in fact, all the companies go around and all buy back a lot of their own stock and retire it, then we actually have a diminishing number of shares, higher value per share, and you don't take on the equity risk. You then transfer that risk to the fewer number of shares that are still held externally.

MR. PESKIN: They both translate into exactly the same thing. In other words, whether the company buys back its equity and then holds it in treasury, or whether it simply retires the equity, boils down to the same economics.

MR. MINGIONE: This leaves you with a riskier capital structure because they end up with a lot more fixed income at the corporate level, a much higher fixed stream of commitments. The only counterbalancing advantage that makes that palatable is the fact that their pension cost is more predictable, which ties into the point I made earlier that it's all about cash flow requirements. If the funding rules give plan sponsors funding requirements that are relatively predictable rather than volatile, there's no need to do any of this capital restructuring. If the cash flow requirements for the pension plan become extremely market-sensitive and unpredictable, then this conversion makes sense. The fulcrum is funding requirements. Without funding requirements being market-sensitive, none of this makes any sense. If that happens, the environment is totally different. It's like you first poison the patient, then you try to cure him with an antidote.

MR. MARK RULOFF: Mike, you made a distinction there that I don't quite understand yet, and that is about the bond analysts approaching it one way and the rating agencies approaching it another way. Let me also say a few bond analysts might approach it this way, and some others would approach it a different way. Is there a sharks and minnows concept, i.e., if there are just a few of them that are smart, are they really going to drive the market?

MR. PESKIN: Yes. Let me take that last question first. While hedge funds are only a trillion dollars, and this might be in a $40 trillion+ liquid capital market universe, they trade in a pretty focused way. They're very active traders, whereas the liquid capital markets tend to be more indexed, and what trading they do is across the entire index. In fact, that's part of what hedge funds take advantage of. Consequently, hedge funds play a very disproportionate role in setting pricing, and it's hedge funds that have really taken on the role nowadays of setting pricing in the capital markets, because they move in and out in a big way and in a focused way.

There's been a real change in price/earnings (P/E) ratios across, for example, the S&P 500. They've fattened a lot because the hedge funds are so good at finding mispriced companies, and if hedge funds had a way of causing things to collapse to market value, then that causes them to act. That causes them to get in big wherever they see a mispricing, then push to cause it to get marked to market so they can earn their returns. And hedge funds, because the demand for returns has gone up at the same time as the opportunity set has gone down in a low-return world, are extending their reach, and pension plans have definitely been a part of what some of them have focused on. They believe that the funding rules are changing, the accounting rules are changing, and consequently they're getting marked to market in some sense, and they saw this as something they could take advantage of and have.

The hedge fund managers are right on top of these pension-funding rules. They want to know any change that occurs in the accounting. They keep on top of what the rating agencies are doing, and they cannot be underestimated. Corporations are learning to pay far more attention to them. They've also learned that hedge funds pay much more attention to their shorts than they do to their longs because they've got much more risk exposure with the shorts. Consequently, if a corporation's got a bunch of hedge fund managers in the room listening to their analysis, they figure that the hedge fund managers are largely there to see if their business plan makes sense. They really want to short them if they can, which fuels the move to market values.

With respect to the difference between the bond analysts and the rating agencies, the rating agencies have a longer-term focus in mind when they rate companies and bonds. The bond analysts tend to be much more focused on specific bonds as opposed to a broad rating of unsecured debt of a corporation. Consequently, the bond analysts tend to focus more on cash flow, but they also have to pay attention to what the rating agencies do. Bond markets are usually ahead of the rating agencies. On pensions, both the rating agencies and the bond analysts are still somewhat behind the equity analysts. I think that as we get clarity on the funding rules, they'll move faster, because cash flow really underlies the bond analysis. At this point, they just throw up their hands because they've just got no idea what the contributions are, but if the contribution calculations become clearer, we'll see greater clarity in the bond markets.

MR. MINGIONE: I think the dialogue we've had so far might have gone backward, and I take the blame for that. We've had the cutting edge financial economics view way beyond what's in current regulatory structures. Next up on the podium is Eric Feinstein, whose employer is at the other end of the spectrum, because it's a privately held, non-market-analyzed organization. I think Eric's going to tell us that there's a lot more attention paid to exactly what's in the accounting rules as opposed to looking through them.

MR. ERIC FEINSTEIN: First of all, I have a question about when we say the S&P is splitting the operating and financial aspects of pension expense in reviewing, why would they do that? We've had this discussion at Ascension Health. Pension expense rules everything at Ascension Health in terms of our operational performance and how we're viewed or how we think we're viewed by the rating agencies. I only get the secondhand story because I'm director of pensions, and our CFO and VP of finance are the ones that interact with the rating agencies. My question is why do we say that? We've had that conversation about splitting it, and the reaction we've gotten is that DB plans are, in fact, a risky proposition as is an operating decision to have a DB plan. The financial effect of having a DB plan and the expense that's attributable to the underfunding that's emerged is part of an operational decision.

MR. PESKIN: The reason for splitting it is that if you look at the pension plan as part of the capital structure of the corporation—which is the right way of looking at it—instead of borrowing from the capital markets, they borrowed from participants. But the pension plan is debt, and the assets are part of the equity of the corporation. The pension expense consists of service cost that's clearly an ongoing cost of keeping the organization going. But the rest of it, the interest cost on the liabilities, the return on the assets, are financing costs. It's the interest on debt. How do you account for that? Is that operating cost or is that a financing cost? There, it's clearly a financing cost. The difference between them is when analysts are going to apply a multiple to the earnings. They want to apply a multiple to the operating income of the corporation. This is what the company can rely on going forward.

The financing costs are not ongoing costs. They're financing something that has already been promised: legacy benefits. It's a one-time impact, and it's a recognition that one's a financing cost, and the other's part of the operating cost of just having a business. We're finding not only S&P but most equity analysts now are differentiating between those two. Morgan Stanley, as a matter of interest, is now getting all of our equity analysts to do that as a matter of course. It's just part of the way they have to divide up the corporation's operating and financing, and they split the pension costs now into these two. So just the service cost goes into operating income; pretty much everything else goes into the financing.

MR. MINGIONE: From what I understand, that's almost definitely the way mark-to-market accounting would be implemented, because otherwise you don't have anything to put a multiple to. Ongoing results and one-time financial events get mixed in a big stew, and you couldn't project into the future very easily without deconstructing it.

MR. FEINSTEIN: I think financial managers look at the financing cost and say, if we didn't have the defined benefit plan, we wouldn't have that additional expense. Having the costs related to a defined benefit plan versus having a predictable, defined contribution plan cost is an operating decision, part of any decision you make around benefits compensation.

MR. KRA: The financing of the unfunded liabilities from the past is not this year's operating cost for having a defined benefit plan. That's the cost of paying off the debt from prior years. So why should that be considered part of the operating decision?

MR. FEINSTEIN: I'm saying that there are people out there who would argue that the fact that you have that plan, it does affect your financials.

MR. KRA: Wasn't it the Coronado-Sharpe paper that identified that analysts had mispriced stock? That 30 percent of the bubble of 1999 was attributable to the opacity of FAS 87 accounting and the mispricing of stocks by the analysts?

MR. PESKIN: Yes, and that study was based on data up to 2000.

MR. FEINSTEIN: So I'll bridge into how we've looked at it, specifically, how our CFOs come at this. I'll be brief in saying that our CFOs really attack this from three perspectives. First of all, our CFOs started from a design perspective, and, of course, it was balanced with other factions of the organization. The instinctive reaction was "we've got to cut the DB plan off." We talked about the notion that if we could get predictable cash flows, the DB plan might make some sense.

I think our CFO would look at that and say that if we were at predictable cash flows valued in a DB context at 4 to 5 percent, if that's all we can earn on our money, then providing these benefits becomes terribly expensive, not just in the short term, but over the long term. This is the CFO's view: I can spend just 3 to 5 percent of payroll on a DC plan that is much cheaper, and essentially transfer all the risk and be done with it. And so the immediate reaction by the CFO resulted in our closing our DB plan off to probably 70 percent of the organization as we move forward and move toward defined contribution approaches.

Another reaction was, "We've got to deal with the unfunded obligations that we've had emerge." So we've gone out and borrowed $650 million to address the deficit in our $3 billion trust and put it all in the pension plan. We’ve also moved to a long-duration strategy. We’ve levered out our bond portfolio so as to be 60 percent hedged on the interest rate risk.

MR. MINGIONE: What percentage equity do you have there?

MR. FEINSTEIN: We're 60/40, and we've maintained that. We've just used synthetic securities to go way out there on the fixed income side. So those are the three main strategies. One other thing that has been driven by our finance group is we have 10 defined benefit plans that we knew should be merged. But the accounting methodologies differ between these plans.

So my hands end up being tied from an operational standpoint from merging these plans. Because where we've got the five-year smoothing, 10 percent corridor, if we change the plan or we merge the plan into the big plan and get this consolidation, that's going to mean x million dollars more expense. We can't tolerate that from a profit and loss (P&L) standpoint. We've got the accounting rules in this case driving what otherwise would be a pretty good operating decision. You can probably hear my sense of frustration on this. Michael is saying that everybody's focused on cash flow, but I cannot get our CFO over that hurdle.

MR. MINGIONE: Eric, who looks at operating results that the CFO feels he's engaging here?

MR. FEINSTEIN: As a privately held organization, basically it comes down to the fact that we issue bonds. Moody's, S&P and Fitch are going to be our primary audience.

MR. MINGIONE: So, contrary to what Michael said, they're not looking beyond the apparent FAS 87 operating results.

MR. FEINSTEIN: I've challenged a little bit on that. When you're inside a corporation, and as consultants I've been on the consulting side, you have to pick and choose your battles. I've pick and choose my battles carefully with the CFO**.** So this is one that I haven’t fought hard.

MR. MINGIONE: So, let's make it really clear. The rationale for phasing out DB plans and moving to DC plans is to attain level cost and reduced cost volatility?

MR. FEINSTEIN: It's definitely both, and I can tell you within at least our organization, the CFOs are driving the operating decision—or the benefit decision—and the HR function is having very little say.

MR. MINGIONE: Of course, you could choose to stay with DB approaches and lower the cost by cutting benefits. It's just that participants might not react well if you did that.

MR. FEINSTEIN: We've had a couple units do exactly that. We've gone to a model where our operating units have a fair amount of flexibility. Without getting into detail, we have had a couple operating units stay with their DB plans while cutting benefits. We've redone the design to something like pension equity. It's a lump sum design, final average pay, but it's calibrated more to a retirement age as opposed to at employment termination. We've made a couple of those changes, but I would say 70 to 80 percent of the units are still moving to close their DB plans to new hires.

MR. MINGIONE: That brings us to defined contributions. Why would a smaller DC benefit be perceived as better by either management or employees than a similarly small DB benefit?

MR. FEINSTEIN: From management's perspective, it's basically cost volatility, the predictability of cost—a decision that we want to spend x percent of pay. Within the health-care industry itself, we're in a position where retirement benefits are not terribly high, so there isn't a lot of competitive pressure to stay with the defined benefit plans. In fact, there are some CFOs out there who note that since the other hospitals in town all offer DC plans, why should I build a DB plan into my cost structure and take the risk involved with that?

MR. MINGIONE: In addition to that, is there the sense that you can do it through matched savings plans? And by doing it that way, are you actually getting the employees to pay some of the cost for the benefit that the employer would ordinarily have had to pay the full cost for?

MR. FEINSTEIN: To some extent, that is happening. Fortunately we also have social considerations that we address as a Catholic organization. Every one of our operating units has to have at least some level of automatic defined contribution or defined benefit, and so there's a certain level of contribution that goes in regardless of participation.

FROM THE FLOOR: If you're worried about the cost volatility, one option would have been to buy something like a dedicated bond portfolio or deferred annuities within the DB plan. That realigns your cost structure to a 4 to 5 percent interest rate environment. That becomes too expensive. So then you can cut the benefit but still provide the same level of guarantee. You can decide to spend what you're willing to spend in the DC environment. If you're looking to provide retirement income, the DB world is more efficient because of pooling, etc. So the only reason you would go for DC instead of DB at a skinnied-down level would be because employees appreciate the DC more right now. So it's really the lack of education of the employee, the lack of employee understanding of risk that leads to the DC solution instead of the skinnied-down DB.

MR. FEINSTEIN: There's a strong perception—partially because of what others in our markets are doing, but also due to the fact that our own turnover is high—that we aren't catering to the interests of career people. We don't want a plan that is going to reward the person who comes and stays here 30 years, and we're not hiring a lot of 45- and 50-year-olds. So the focus in terms of discussion on DC approaches has been to pick a plan that's going to do a better job of taking care of those who are going to be working here for maybe five to 15 years.

MS. ANNA RAPPAPORT: I want to build on that with a couple of questions. I am curious to what extent you are looking at what's going to come out the other end in terms of benefits. The research increasingly shows that there's a segment of people that stay in whatever the defaults are. You want to enroll them? They'll enroll. If you don't want to enroll them, they're out, whatever the investment options are. So I'm wondering what focus you've had trying to protect those employees who will stay in the defaults and get a good result for them, as well as looking at benefit adequacy.

MR. FEINSTEIN: Every single situation where we're looking at a DC plan, we're presenting management—and to a lesser extent management controls what goes to the local boards—a chart that shows adequacy that would emerge. In this day and age, to assume an employee's going to earn 7 percent through his career on a DC balance is probably somewhat aggressive. But that's the rate that we've been using. The DC plans that are being adopted out there aren't very generous. We've got some units going down to a 2 percent of pay commitment to a defined contribution plan. Maybe that's done as a 50 percent match on the first 4 percent contributed. Sometimes our HR department does not have the weight to get that adequacy issue addressed much better.

MR. MINGIONE: Another way to look at it, though, would be that's a 6-percent-of-pay plan, two-thirds of which is paid by the employee, which means everybody got a 4 percent pay cut when you moved to that plan. But the benefit that results might still be adequate.

MR. FEINSTEIN: We are preserving the DB plan through this conversion for everybody who was hired as of the effective date. So there's a feeling in the organization that this is what we're going to offer as part of the employment deal going forward, and people really don't make their decisions on retirement benefits. Even in this day and age, there's still a feeling that people are making the decisions based on the relative cash compensation.

MS. RAPPAPORT: The other part of my question is about the defaults and what you're doing. Given the research about behavior in segments of the population, are you auto-enrolling?

MR. FEINSTEIN: We've decided not to auto-enroll. We have about 45 to 50 percent enrollment in our 403(b). We're dealing with a business in this case where probably 70 percent of our workers make $45,000 to $50,000 or less. About 90 percent of our workers make less than $100,000.

MS. RAPPAPORT: How about the investment default?

MR. FEINSTEIN: The investment defaults are fixed income. There has been some discussion more recently about going to lifestyle funds as a default. We are also looking at products to offer lifetime annuities within the context of the defined contribution plan, and there are some interesting things emerging in that regard. On the DB side, it's a combination of lump sum or annuity, whatever an individual selects, but we're seeing fairly high take rates on the lump sum.

MR. BRIAN SEPTON: Eric, you mentioned that as a Catholic organization there's been some degree of paternalism that permeates your organization. Can you talk about how that influences the reality of your plan design and how another organization without that feeling might react in similar circumstances?

MR. FEINSTEIN: It comes down to providing a minimum level of benefits from the top down. Let me put it in the context of a single life annuity at 65. It's a 0.7 percent defined benefit plan, final average pay at 65, or on the defined contribution side, a minimum level of 2 percent of pay. There are flat-dollar minimums on both the defined benefit and defined contribution, so that our lowest-paid employees may receive benefits above those percentage-of-pay minimums. That's the extent to which the social values of the organization have permeated the design of the program.

MR. MINGIONE: We have one other subtopic that we'd like to get to, which is enterprise risk management (ERM) and its view of the total corporation's finances. It's about how that way of viewing pension and corporate finance might help in developing prudent financial management practices. We perhaps should acknowledge that this is an embryonic area at the moment in terms of the tools and analytics we have available to us. Michael's views are consistent with an enterprise risk management view of the world. Michael was clearly looking at it through the financial economics filter, which I don't think is necessarily a requirement for adopting an enterprise risk management view. Ian promised to give us some insights into the ERM approach and its implications for analyzing pension plans.

MR. IAN GENNO: Looking at it from an enterprise risk management perspective, we've already had some discussion about what the key definitions are, so we'll look at strategic, operational, financial and hazard risks. Each of these is a different important perspective to take. Organizations are doing this much more actively in some other markets around the world. If we look at the United Kingdom, for example, and the Turnbull Report that came out in 1999, it really prompted organizations, particularly those that were in the public market, to examine the types of risks that they were taking on across their entire business operations—not just a pension perspective, not just financial, but their entire business operations—and identifying exactly what types of strategic risks they were taking on. It addressed the risk of setting business objectives and not meeting those objectives, the type of operational risks they were taking on, the risks of messing things up in the day-to-day operations of the business, the financial risks, the risks of not being able to deliver on the financial objectives that have been set, and then hazard risks, the risks that things could go off the rails. The Turnbull Report does a really good job setting out a framework for doing this. As an actuary, I feel it's unfortunate that the impetus for this didn't come from the actuarial profession in the United Kingdom, but, in fact, the Turnbull Report was a product of the Institute of Chartered Accountants in England and Wales. So it was the accounting profession that drove this, as opposed to the actuarial profession.

When you read the Turnbull Report and look at some of the examples it cites of different types of risks, you can map very clearly the examples that are given in a business context into corresponding examples in the pension world. So you can see things that are cited as business risks. You can see direct parallels in the types of risks that employers face when they sponsor pension plans, whether it’s DB, DC or funding through equities versus fixed income, and different elements of operating or running those plans on a day-to-day basis.

Let’s look at some examples of strategic, operational, financial and hazard risks. On the strategic side, plan sponsors have a finite ability to take on risk. In essence, it creates a risk budget that the plan sponsor needs to allocate among different elements of the business. One key strategic risk that you face if you're a plan sponsor when you're looking at pension plans is how much of your risk budget are you allocating to the pension plan versus other parts of your business? And is that risk budget allocation to the pension plan appropriate for your business? We've also talked about DB and DC, and if you look beyond the risk budget and start to look at elements of plan design, there are critical strategic issues that you're facing with respect to plan design.

The whole DB-versus-DC debate focuses on who the target audience is for the plan. Are you trying to draw in younger employees versus people 45 to 50 years old, or maybe mid-career hires? What's the expected duration of employment in your organization? Clearly defined benefit and defined contribution designs allocate the budget available for benefits in quite different manners for those different constituency groups. The underlying strategic risk is that you misallocate that money. You're trying to carve the pie among your plan members in a way that best meets your needs as a business and best meets the needs of your shareholders and other stakeholders.

You can drill down into some of the more detailed elements of the plan design and identify strategic risks there. When you look at traditional DB plans, they have a plethora of different design elements that inherently create strategic risk and that often aren't recognized. These include elements like pensionable earnings definitions, whether you include bonuses and overtime, the use of final average earnings as the basis for determining pension amounts, and early retirement opportunities that may have been built in 30 to 40 years ago to address a completely different set of economic and work life/work environment circumstances. Anna mentioned the idea of having defaults and involuntary participation. Voluntary participation itself as a plan design feature creates very significant strategic risks. DC designs entail significant risk. So there's a whole range of elements in traditional plan designs that create significant strategic risks for organizations.

We've already talked at length about financial risks in this session. But the financial risk question, I think, boils down to a question of what would happen if the pension plan were consolidated directly onto the corporation's or the plan sponsor's balance sheet? In that kind of an environment, how would the volatility and net assets and liabilities affect a number of key measures for the plan sponsor? What would it mean for banking covenants? What would it mean for rating agencies' opinions as those rating agencies start to become more aware of impacts that right now are viewed through an opaque lens? What would happen to financial analysts' stock ratings? What it really demands from a plan sponsor's perspective is that you ask some probing questions.

The probing questions entail looking at different scenarios. What would the impact of those scenarios be if they emerged? Look at them from a short-term perspective and a long-term perspective. For short-term, you have to ask the question: If certain things happen, and they're cyclical, so they're just part of the regular up and down cycle, what does that mean for pension economics? Also, what does that mean for your business? What if you see that these changes are becoming more secular in nature? What does that mean? You're looking at fundamental questions such as what happens if CPI changes? What happens if interest rates change? What happens if there are currency changes? This is a key element for global organizations. There are a whole variety of things that are basic questions that need to be examined in the context of both short-term cyclical as well as long-term secular changes. They need to be examined in the context of this pension plan being a fundamental part of the corporate balance sheet.

I have a couple of last comments about some operational and hazard risks. On the operational side, robust plan governance becomes a key element of the solution. Ensuring that there's a practice in place for looking at how the plan is governed, how decisions are made, how those decisions are reviewed, how they're communicated to key stakeholders all become very critical to managing the risk on the operational side. Also from an operational perspective, the element of employee communications becomes key, especially regarding what happens if people don't make appropriate choices. The lack of education that a lot of employees have on issues will impact them in retirement.

On the communication side, the plan sponsor communicates plan provisions and the available options to plan members. The employees then take on the responsibility of making decisions. For every decision that an employee makes, there's going to ultimately be either a good outcome or a bad outcome. Depending on the outcome of those decisions, it potentially creates risk that could translate back to the plan sponsor. So you're looking at questions like employees making decisions about joining or not joining an organization that affect the organization, or participating or not participating in a plan. In a DC world, what level of contribution do they make to the plan? When the time comes to draw benefits, what kind of benefit payouts or benefit options do they draw upon? What happens in the event a plan design changes? Every one of these things that people face in their retirement planning and face as part of the decisions they have to make with their pension plan deal with the organization, which creates risk and creates potentially positive or negative outcomes. These are some of the operational risks that you would look at in an ERM framework.

Finally, there are hazard risks, the risk that things can just go off the rails unexpectedly. Look at Australia and the impact of changes in legislation there in the early 1990s that completely redefined the pension world. Look at Canada and some of the impact of courts weighing in on issues like who owns surplus and how surplus can be used. What happens if you terminate a small group of employees in a plan and all of a sudden the courts step in? That potentially has ramifications with respect to a need to allocate surplus to those employees. There are a lot of hazard risks, things that can happen out of the blue that you don't expect, that fundamentally alter the landscape that you face. From an ERM perspective, those are some broad examples of things that you could examine within those four elements of ERM.

MR. MINGIONE: I'd summarize ERM and what Ian just discussed as three steps, some of which we're proficient at now, and some of which we aren't. We're very capable of quantifying risk across a broad spectrum. The second really important stage is analyzing the linkages between the various risks. What's the chance that something terrible happens to the business operations and to the pension plan at the same time? We have some ability to do that, but it's limited. It's really hard to do that across the broad spectrum. What's the correlation of adverse events in the capital market and bad judgments from the judicial system? There's a correlation there, but how high is it? The one we struggle with all the time in our asset/liability modeling work is defining the appropriate level of risk for an organization to take. We can say that the 10th percentile result is this, and the fifth percentile result is that. It's very difficult to determine whether that's acceptable or not. In our current level of thinking, we have to leave that to the CFO's judgment. CFOs will judge it based on their own personal risk-taking biases. There's always the agency problem in that managers and shareholders and employees all have a different spin on what kind of risk is acceptable, because the outcomes that affect them are different. We see that all the time in design and financial-management decisions.

MR. MALCOLM HAMILTON: In Canada, and I suspect in the United States, people are much more focused now on governance than they used to be. They didn't used to pay any attention to it at all. And in the pension area, like a lot of the analysis that we're hearing starts with the premise that one should view the pension plan as a financial extension of the corporation. If we were totally transparent and everything got on the balance sheet and the income statement, then we'd get rational choices. It's long been my contention that that will never take off in a court in Canada. The pension investment decision is not a shareholder decision. It's not a corporate decision. It's a fiduciary trustee decision that's supposed to be made for the benefit not of the shareholders, but of the plan beneficiaries. One of the reasons it'll be bad to have equities is because of this asymmetric access to gains and losses. If you take that same decision from a member's perspective, it's not clear to me you wouldn't end up with a conclusion that overfunded plans significantly invested in equities were the way the beneficiaries would like to go, especially if it's a deep-pocketed corporation that can guarantee no loss of benefits. But at the same time, the members will fare very well if these equities produce large surpluses in the plan. So at what point do the legal realities have to get aligned with the financial models?

MR. PESKIN: I'd love to address that question if I can. It allows me to talk about our state and city and the public retirement systems, which have something in common with that governance. In the states and cities, the governors have no control over the investment policy. There are almost three independent bodies. There's one that sets benefits. Somebody else sets investment policy; it's usually a layman’s committee that sits on top of that. And a third sets funding. And there is a very noticeable political imbalance in the system. The political imbalance is that the participants are extremely well represented. Unions represent them, and the unions have continuity. They understand the pension plan. Obviously, as any rational group would, they want to negotiate for the highest possible benefits. They particularly love well-funded pension plans with a high equity exposure. When you look back, you find that whenever funded status goes up, there's a benefit improvement. The benefit improvement is either a direct benefit improvement or a reduction in employees’ contributions, which is exactly the same thing.

When, however, the funded status goes down, there’s no reduction in benefits, simply higher taxes. And it's this old adage: don't tax you, don't tax me, and tax the fellow behind the tree. And the fellow behind the tree here is the future taxpayer. In the public system, cost and risk is passed on to future taxpayers. This has happened to an extraordinary extent in some states and cities. What is starting to surface is political unrest. It's going to end up with a full taxpayer revolt, because not only is this political imbalance, but they've measured the liabilities wrong. In the public system here, it's still common to measure liabilities using the expected rate of return on the assets. The states and cities all report their liabilities using something like 8 percent.

The liabilities can be replicated with bonds. Use either real bonds or nominal bonds, or some combination of the two. The right way of really measuring the price of the liabilities is using bond rates. Duration is very long. Consequently, the liabilities are underreported by something like 50 percent. It should be 50 percent higher. I've done a very rough calculation. It has to be rough because I don't have enough information to do it. The real unfunded liability in the public sector, states and cities is more like $2 trillion instead of the $300 billion mentioned. This has a huge impact. Taxes are just going to keep on rising, and these issues are going to surface more and more. They're not going to go away. They're going to get worse and worse until there is a taxpayer revolt and benefits get reduced.

In Canada, in the corporate environment, if that roughly describes the corporations—that they set benefits, but then everything else is set outside of corporate control—that means there is a ratcheting up of costs to the corporation. It must work that way. Corporations must have some choice in the end. If the only choice is to go bankrupt, then that's what they're going to do. But if they've got other choices, if they can cut back benefits, if they can just dispense of the DB plan, that's what they're going to do. In the ultimate analysis, that becomes a very inefficient way of providing the retirement promise, and the one thing we have to get right now is we have to provide it very efficiently. We've overpromised all around. The federal government is the worst. Medicare is $68 trillion underfunded. Social Security is $13 trillion underfunded. Total net worth of the United States is something like $50 trillion. We've got a problem. We've got to cut back on benefits. It's the same with states and cities, and the same in the corporate arena.

We have to provide sufficient retirement income. How do we do this? When you ask individuals, they're going to take risk with their retirement monies. What are they willing to give up on? And it turns out that what they are most willing to change or fluctuate is their retirement age. They would like to try to retire at 50, and, in fact, everybody you ask at 30 thinks they're going to retire at 50, but it doesn't, of course, work out that way. They are willing to work longer. They are much more willing to take that risk on the retirement age than they are on the level of retirement income that they receive. This implies that we really need to change our regulations, because right now the choice is between DC and DB. We really need a system where there is risk-sharing between the sponsors and employees, and one of the areas of risk-sharing is a flexible retirement age.

MR. MINGIONE: It's good that Anna's going to speak up because I recall her saying that benefits were already inadequate, and Michael just said the benefits are incredibly overstated versus what sponsors are willing to pay. So, there's more dialogue needed on that.

MS. ANNA RAPPAPORT: I want to make a couple of points. I think the inadequacy of benefits is a big issue. I want to go back to the ERM topic from a slightly different perspective. The notion of strategic, financial, operational and hazard risk as a general framework is very appealing. But I think this creates some real problems because as actuaries we're used to certifying things. We're also used to dealing with things that are subject to certain kinds of analysis and modeling, and when we look at this range of risks, over the range there are certain ones that are subject to statistical analysis and to modeling and to studying data. There are others that are not, and the question of what are the tools and the framework for doing analysis is an intriguing question. I think we can contribute to the dialogue, and I certainly hope we're there. But I don't see anyone doing the kinds of certifications that people are used to from actuaries. To me, that's a big issue.

I have just two more comments to make on the wealth-building and the DB/DC notion. Another way to analyze this from an ERM perspective is to say that DB vs. DC is the wrong way to frame the plan design decision. We should be framing the plan design issue around the various ways to help people build wealth that can be used for retirement and other purposes. We need to be adding into the equation other ways to build significant wealth. You see corporations scaling down their commitments to retirement plans, but I don't believe that's the end of the story. I think they are going to be paying out more money in the shorter term. We ought to be thinking about that if we are ERM-focused.

My other comment relates to a big risk resulting from regulation and litigation. Some of the things that we're doing today as a society generate lots of risk with regard to litigation, but also to the potential of further adverse legislation on employment. For example, in many countries you can't fire people. You can't terminate people without huge penalties. So, I applaud the ERM thinking, but I think there's other big picture stuff that you have to think about.

MR. FEINSTEIN: One thing I would say is that all the talk I've heard about ERM, the quantitative standards and analytical standards is very different than what actuaries are used to. Of course, the rebuttal is that some analysis is better than none.

MR. GENNO: I agree with everything you said, Anna. The big challenge that we're going to face as actuaries, regardless of whether we're looking at pension practice and pension finances or whether we're looking at other things that affect all of us as actuaries, is that going forward we need to be better at being business advisors and less focused just on quantitative methods.

How do you certify something if you can't quantify it, or how do you determine that an actuary is able to give this opinion and no one else is able to? More and more, we're going to be working in a business world where we don't have a unique stake, where we're competing with other professions that are equally capable, if not sometimes more capable than we are to do some of this work. We're going to see that particularly in the areas that are qualitative in nature. In ERM, there is a lot of qualitative stuff, not just quantitative.

The other key issue that you raised fits in the paradigm of hazard risk: risk of litigation and risk of changes in regulations and changes in legislation. It's almost counterintuitive, but my sense is that every time the courts or the regulators step in and try to change things in a way that protects plan participants, ultimately it has the opposite impact. To the extent that legislation has changed to impose more stringent funding requirements, plan sponsors either cut back to the absolute minimum amount that's required by the law or they seek other ways to cut their costs, and they may seek investments in riskier assets. Down the road, that has an unintended or undesired consequence, and yet the initial motivation to make these laws more stringent was well intentioned. But it just doesn't have the intended consequence five or 10 years down the road when things play out.

Michael, you talked about the idea of efficiency in managing pension plans in response to Malcolm's question about the trust element and the independent role of the plan's fiduciaries rather than simply the plan sponsor. That's playing out in different ways in different countries around the world. In Canada, you've got the law and the court saying that there is a distinct role between the plan sponsor and the plan administrator. In the United Kingdom, there's an even clearer distinction between the plan sponsor and the plan trustees. That dual role really illustrates this battle that we face between trying to balance economic efficiency in running plans and making decisions that are purely based on the economically efficient perspective. How do we ensure the plan participants keep trusting that their benefits will be delivered as promised down the road? Having those dual roles is intended to provide a balance of the interest of competing stakeholders, and yet it inherently can damage the ability to deliver defined benefits down the road as well.

MR. DICK WENDT: I'd like to challenge Michael on something. With respect to the municipal and governmental plans, you said that they are underfunded and that the costs will increase principally because they're using a discount rate of 8 percent or so. I think you said that as a definite statement, which I think is an overstatement of the possibility. Certainly if they do achieve their assumption of the 8 percent return, I would say don't expect the costs to increase. Things would go per the schedule that the actuarial funding process has set up. So, if the assumption's achieved, pretty much everything is OK. You may make the argument that perhaps they're not recognizing the risk, but I don't think you should make such a strong statement that costs will absolutely and definitely increase in the long term. That's certainly not a foregone conclusion.

MR. PESKIN: The only way you get an 8 percent return in a 5 percent interest rate environment is by taking a lot of risk. You'll never get 8 percent, 8 percent, 8 percent, 8 percent, and 8 percent. The way it works out is you get 20 percent, then you get -5 percent. You may average 8 percent. The history of what has happened with state and public plans when that occurs is every time you get the 20 percent and the funded status really shoots up, you get benefit improvements or employee contribution reductions. Every time you get a -5, you get no cutback in benefits. Consequently, even an 8 percent return will not keep costs stable. You'll have rising costs if you have to get the 8 percent by taking risk, which is what you have to do.