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Current Equity Markets' Impact on Pension Plans

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Summary: The current market environment has had profound implications for companies sponsoring defined-benefit pension funds. Equity markets have fallen for three consecutive years, and interest rates are at 40-year lows. The result is underfunded defined-benefit plans for a larger proportion of employers. How did plan sponsors find themselves in this situation? How are sponsors reacting? What are the prospects going forward? The presenter will discuss these issues, the current funding status of defined-benefit plans and the resulting effects on balance sheets, income statements and cash flows.

MR. ADRIEN LABOMBARDE: My name is Adrien LaBombarde. I work with Milliman USA and have done a fair amount of work in the last several years studying what's been happening with the equity markets, pension fund investments and the effects on both accounting and funding.

I want to start by giving a little bit of a review of exactly what's been going on with the markets. To a certain extent, all of us know full well. The stock markets are getting pretty well beat up on in terms of getting a lot of blame for what's been happening with pension funds during the last several years—401(k)'s are feeling it, defined-benefit (DB) plans are feeling it, state pension funds are feeling it and funds around the world are feeling it. And a lot of the blame is falling on the shoulders of the stock market. I want to start by giving a little perspective by looking to the past. A fair number of us, as actuaries, have done presentations like this or looked at the past, to figure out where the future is going. The S&P 500 was flat during the mid-'70s, but then it went up at a steady rate. There's been a steady rate of growth in the market since the mid-'70s, all the way up to today.

During the period starting in the mid-'90s, there was a period that we know of as irrational exuberance—the New Economy, the dot-com craze, all of the other things that characterized the heady markets of the late '90s. The people who believed in the New Economy believed that other line in the late '90s that going up more

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rapidly represented reality. It was where things were really going. It was the new rate. You were hearing things in all the papers of people regularly expecting 15 to 20 percent returns, minimum, annually, from now to retirement. And they really believed that.

That wasn't the trend, and we saw the break that came back down. Now a lot of the bad talk about the market has focused on what we've seen since 2000. What we've seen since 2000 brought it back to the trend or maybe a little bit below the trend. What have we seen since then, not counting today, when the market fell? It's been something that I think can raise a serious question: has the trend really been broken? What's unusual? Is it the last three years, or was it what happened in the '90s? Is all that we're doing just bringing back the trend that we had there before? This is just price return here, not total return. Does anyone want to guess the rate at which that's increasing? Any ideas? Any guesses?

FROM THE FLOOR: Ten.

ADRIEN LABOMBARDE: About 10.25. Remember that number a little bit later, when we come back to the questions that have been raised about financial accounting standard (FAS)-expected rates of return because the rates of 10, 10.25 or 10.5 percent are getting soundly denounced. Then you take a look at this and ask, are they really all that far out of line? They're out of line if you think that history is represented by the last three years. Are they really out of line if you look all the way back here?

I'll repeat some of the guesses on the interest rate, which ran from 4 percent to 12 percent, and this is 10.25 percent. The comment from the floor was, don't you have to look at interest rates as well? We'll come back to that because, in a sense, that's where a lot of the problem lies in the equity markets—the degree to which the equity markets are or are not reflecting the way that interest rates are going.

With the Dow Jones Industrial Average, you see a trend that went from the end of the Depression, from the early '30s up until the '70s, that again, on a log graph, was really rather steady. If anything, I think the surprise of some of this, if you haven't actually gone back and looked and examined this, is exactly how almost predictable it was—dare I say, almost to the extent that you could say the expected future return is X, with a plus or minus, and have a fairly good certainty of it.

There was a flat period in the mid-'70s—because of OPEC or whatever was going on in the mid-'70s. If you believe that what happened early on, from 1900 to 1930, or what happened in the 1970s will be repeated now—that the break of this New Economy, together with some of the worldwide problems that we have, such as terrorism, is one of these basic breaks—then you may have a concern about the next 10 to 15 years. But there's something driving where these markets are going that is basically pretty intact—at least it has been for the last century, except for a couple of very key periods. Yes?

The comment coming from the floor is that regarding the second flat area, where it had no increase in the returns, it's probably improper to characterize it as just the mid-'70s. Your point is that it stretched as long as two decades.

FROM THE FLOOR: In 1962 the Dow was around the high 600s. In 1982 it was still in the high 700s.

MR. LABOMBARDE: Right, so there was a period when the price/earnings ratios (P/E's) got too high, and there was a period of stability. Then the trend resumes, and some saw the New Economy as finally picking back up, to pulling it where it would have continued on that line without the period during the '60s and '70s. I think a fair number of us felt that basically the trend that was established in the late '70s and ran through the late '70s into the '80s and into the early '90s was probably the basic trend, and what happened beyond that was, in fact, some irrational exuberance. Now, again, the purpose of this is not to predict. I'm not a stock market analyst, or an economist, and in case I forgot to say at the beginning, the views expressed by me or by any of the participants here do not necessarily represent the views of the sponsoring organization or my employer.

But I think there's a lot of food for thought here. Even if you think that we're on a plateau for a period, there's a lot to be said for not basing that plateau too much on the last three years. You don't want to base it on something that happened back in 1932 or in 1939 or something like that, but through wars and fantastic technology advances and worldwide change and everything else, charts of these events are showing a fair amount of stability. The returns on equities for extended periods of time have been in the neighborhood of 10 percent. Even if you include the years that were flat and so flatten the curve from the very beginning and throughout, you still have a relatively high rate of return on this.

Let's talk about the performance of NASDAQ—just the recent years, since the early '80s. And I don't want to be repeating a point until it becomes dead here, but this was the one that I think a lot of people saw as one of the principal causes of what drove some of the rest. The S&P, from the peak in 2000 to the trough in early 2003, lost some 40 percent of its value. NASDAQ lost something on the order of two-thirds of its value. The Dow Jones Industrial Average fared somewhat better. It lost around 28 to 30 percent, as I recall.

Those are still outstanding numbers, but remember, that's if you took all of your cash, you took everything you owned in March 2000, and put it in stocks that were represented by NASDAQ. Then at the bottom of this, you had about one-third of your value. That's not what most of our pension funds have done. They've been investing all along, over a long period of time, over a long term. For pension funds that have invested over a long term, what's happened in the last three years? They've lost gains that they had built up in the late '90s that, to some extent, may have been some excess gains. But in theory, you would think when you look at

these charts that they should be right back to where they would have been if you had simply continued trends from the mid-'90s.

So what's happened? What's wrong? I think one of the gentlemen pointed out one of the problems by pointing to the interest rates. I think another problem you can point to is that any time you look at any of these peaks, where it hit the peaks, many of those funds were hitting something called the full-funding limit and couldn't put money in. In other words, if you had been at the bottom line of this and gone all along, many of these plans might have continued funding throughout the entire period, instead of being cut off at the peaks, whenever they went up on this peak. So there are a number of problems that happened, but I just wanted to start this by at least giving a little bit more perspective. This is not just a matter of looking at the last three years and saying, well, the stock market is terrible, and pension funds don't belong in the stock market.

After Black Monday in 1987 was when 412L came into existence, the Deficit Reduction Contribution, in December 1987. Needless to say, it was not lost upon people working with the Deficit Reduction Contribution introduced in the Omnibus Budget Reconciliation Act of '87 that they were in the final throes of developing this provision during October, November and December after Black Monday had happened. And they were frequently asking the question, "Do we need to do anything to the minimum funding standards to protect against something like Black Monday?" You'll notice that the market essentially protected itself by coming back above where it had been on Black Monday and continuing further along.

Similarly, somewhere right in here was the foundation of ERISA, the minimum funding standards that we pretty much have today. They've gone through a fair number of changes since then. But essentially, you tend to look at this and say, were it not for these other elements that we're going to look at—the interest rates and the full-funding limit and the like—if you had not been in stocks throughout all this, and stocks had all been purchased up here, you would be losers. Pension funds that had purchased stock all along throughout this period, even through the Black Monday period, even through all of this, you really have to ask yourself a question, I think, at some point: If there hadn't been the bumps and the curves in this and you had purchased stocks throughout all of that period and had prices rising at this rate—at the line rate instead of the up and down here—if you had purchased the security that had given you a steady rate of return, why should you be underfunded? Why should you have a problem? Why should there be any problem at all from that? I think that's some of what we'll be trying to talk through here and trying to look through.

What I wanted to emphasize, before getting into pension plans specifically, is that what we were looking at was just the price return, and once you take dividends into account, it adds approximately 2 to 2.5 percent, 200 to 250 basis points, onto that 10 percent that we were getting. During the past year, prices in the Dow Jones Industrial Average dropped 14 percent. Taking dividends into account, you only lost

12.3 percent.

The last three years have been the real troublemakers. Over the last three years, the annual rate of return has been -9 percent. But again, taking dividends into account, it's been a loss of only 7.6 percent per year. That's a pretty sad three-year run. We really haven't seen something quite like this, I think, in history, even going back to the very beginning of the charts that I showed. So it really is a significant thing, but many of the stocks that pension funds are holding have not just been in there for three years. They've been in there for 10 years or longer. And any stock that represents the same experience of the Dow Jones Industrial Average, which has been there for at least 10 years, has an annual rate of return of more than 10 percent, not counting the dividends. Taking the dividends into account, the annual rate of return is 12.35 percent.

Now, again, I've been careful to state this—and I appreciate the comments that have already been raised—there remains the question: have we entered a period like we had in the '60s and '70s or like we had at the beginning of the century? It may have been irrational exuberance that popped up in the late '90s. We simply popped back to the curve now, and we've popped back to the trend. Now, it may be that what's happened since March of this year is that we're back on track with the trend, and we'll be back up to our 10 percent annual rate of return.

On the other hand, we do have a lot of problems in the current economy. I mentioned that probably one of the number one economy killers, if you will, would be terrorism. It's a worldwide event that has put a drain on economies and does represent a very serious threat. Is that enough to level things out for a period of five, 10 and possibly as long as even 20 years? I think those are questions that need to be looked at and need to be very seriously considered. But only if you look at the past three years do things look as bad as everyone is making it out.

FROM THE FLOOR: Can you talk about the impact of turnover on the portfolio?

MR. LABOMBARDE: Yes, this was buy and hold. The question was would I talk some about turnover. I'd like to make a comment or two about it.

I guess one thing I would want to raise is that I've just been talking about the stock market in general. One thing that I suppose is a concern whenever you look at charts is that this is the Dow Jones Industrial Average since when—1900? Does anyone really believe the Dow Jones Industrial Average today has the same 30 stocks it did in 1900? So even there, it's not the kind of turnover you were talking about, in a sense, but it's still something that I think can start the turnover discussion and take a look at the issue.

To a certain degree the Dow Jones Industrial Average and the S&P—and maybe even NASDAQ tries, but sometimes without a whole lot of success—represent the winners. If you turn into an Enron or WorldCom, you are bounced out of these

averages. You don't stay in there to continue to show your weaknesses, or your losses or anything further. Now, sometimes they bounce them out of the averages after they've had some of the losses, and there's been some weakening. But at the very least, they don't continue to weaken the average. So to a certain extent, it could be said that a Dow Jones Industrial Average is an average of winners. It represents companies that are still here or will continue to be here. So is it really fair to look at it and say that it shows a 10 percent return and that's what your pension fund should be doing? Well, maybe, but maybe not.

That's where it comes to the turnover that's in the fund itself. A fund will have turnover. It may not get a stock and hold it for 10 years, but the fiduciary standards that control the investment and the investment policy that's in place should prevent against undue turnover that is simply recycling the stocks just to keep the fees up or something like that. They should also prevent a severe amount of the same thing that the Dow Jones is protected against. Dow Jones doesn't have losers in it, while a pension fund that has a loser stock, at some point, needs to face the question of whether that stock belongs in the portfolio. The pension fund managers, and even the plan trustees, need to keep an eye on the pension investment policy and the way in which that's being carried out. Suffice it to say, we've had lawsuits before, and now they're coming out of the woodwork. There are lawsuits all over the place, challenging the investments that are in not only 401(k) plans, but in stock funds and in DB plans themselves. Questions of potential fiduciary liability are being raised from that.

Fiduciaries that are found to have behaved improperly and not dispensed with stock when they should have or something like that can, under ERISA, be held liable for the losses. So it's something that they need to watch. Maybe that's not a sufficient argument to hold it up and say, you can always keep track with the S&P or with Dow Jones. But I think it's sufficient to say that if a plan is turning over securities and, because of that turnover, has a rate of return significantly less than the market as a whole, that's a plan that had better start watching out for potential lawsuits. I don't say that to give a legal opinion or anything; it's just something that they need to watch.

MR. ETHAN E. KRA: Adrien, you've been describing your perspective based on historical trends, almost a chartist-type viewpoint. Can I throw out for discussion an alternative perspective? Or do you want to wait for these for later?

MR. LABOMBARDE: Go ahead. You can be my second speaker here.

MR. KRA: Viewing the equity markets' total return as being comprised of a number of components, one of those you've had up there, which is the dividend coupon. The second one is earnings growth. Basically those are the only two pieces. Earnings growth comes from inflation and real growth of earnings beyond inflation, as well as changes in the P/E ratio. If you take those four total components—inflation, real earnings growth, change in P/E ratio and the dividend coupon—you

get the total return on your equities. Forward looking, you start with where your dividends are today. To the extent that you get a higher dividend rate, it's either going to come from P/E ratios ...

MR. LABOMBARDE: Or changes in the tax law.

MR. KRA: Or changes in the tax law, but that's one-time. That's a one-off adjustment to the basic pricing model. But for the long-term trend, you'll get those four components. The dividend coupon is probably at record lows. It was a few years ago. Now it's improved a little because the prices came down.

MR. LABOMBARDE: Because the prices came down, but that's all. You're correct.

MR. KRA: Right, but it's still around somewhere between 1.5 and 2 percent. If you put the share buy-backs in, that probably puts you at about 2 percent. I would say even when you had something under 2 percent—in the mid- to upper ones—you're probably closer to 2 percent because of share buy-backs.

Unless you assume inflation will rear its head, you start where you are today, which is somewhere about 1.5 to 2.5 percent. Real earnings growth historically has been no more than about 3.5 percent, and the rest has been P/E ratio change. So since 1982 to wherever we are—whether you measure it in 2000 or in '03—you've had a P/E ratio change from something like seven-point-something in the market to a P/E ratio that probably at the exuberant high—whether you're forward looking or backward looking, whether it was 25 or 40—still was pretty high. Now, in order to assume that the market would continue, even at your lower trend line, is assuming that over the next 20 years our P/E ratios will continue to grow, whether to 40 or 50 or some other number. Is there some point at which you say this doesn't make sense unless we're going to have 1 or 2 percent interest rates? At some point, the bond becomes a more attractive investment.

MR. LABOMBARDE: I think that's a fair appraisal in the sense that it's looking forward. I posed this several times here, but maybe I should separate out the two questions. One question goes in the direction that the gentleman before asked about interest rates, and the other question, I think, is the one that you're steering toward.

One question is, look, yes, we've had three bad years of markets, but those three bad years have only brought us back. In a sense, you can look at it as only taking away what the late '90s gave us. Why is everybody crying so much now? Where's the pain coming from? What's the problem? That's a backward-looking question that I want to get into. I think you're focusing on the forward-looking question of, if I'm going to look at those charts and say, look—10, 10, 10—I'll keep assuming 10. I have a problem with that, and there I would agree with you that when you look to the future, you can't just look at these charts. When you look at where the numbers come from and where they're going, I think it's been pretty well agreed by

a number of economists in stock brokerage firms and the like that the years of 10 percent returns may very well be behind us. So if you're considering it from a futurist point of view, then I think looking at it with the components that you mentioned is a sound approach, and it does raise the question.

Before I finish here, the only other thing I would then, though, object to is that you ended what you were saying by then comparing it against bonds. I guess I still am a believer that at some point stocks always have to have a premium over bonds, or else why buy them?

MR. KRA: Right. Well, long-term bonds are maybe in the mid- to upper fives. I think you can make a good argument that equities will return somewhere maybe around 7.5 to 8 percent over the next 10 to 20 years.

MR. LABOMBARDE: I wouldn't argue with that. There's a later example that I have in my presentation. You might be amused to see that I used 6 and 8 percent for the stocks because it's about synchronous with what you're saying.

MR. KRA: I believe, yes, that long-term equities will outperform, but maybe we won't get the same types of returns that we've had. You won't see that 10 percent blind, and if you take out the dividend coupon, the price appreciation may be somewhere in the range of 5.5 to 6.5 percent over the next period.

MR. LABOMBARDE: All right, I wouldn't disagree with that. I guess I should just reemphasize that to some extent I should have said we segregated a little bit better the retrospective versus the prospective in some of the comments on this. The 10 percent that you're looking at still begs the question. If you're taking the long-term returns of a buy-and-hold strategy or even if you replace the stock with something of equivalent value, why have the last three years shaken things up so much?

FROM THE FLOOR: I just want to go back to the turnover issue again and address what you just said. If a portfolio has high turnover, then our clients were turning over the portfolio at the peak, so they've experienced worse results than that buy-and-hold strategy. Is that a correct conclusion?

MR. LABOMBARDE: Yes, I would imagine that's true if they're turning it over at the peak and they're turning over cash into stocks or bonds into stocks. If you had a portfolio that was 60/40 in stocks, and you had a portfolio manager who saw what was happening in '98 and '99 and was getting hounded by the plan participants or by the executives or something: "Why are you still only earning this, and the whole market is going like crazy?" If they jumped out of bonds and suddenly shifted to 80/20 or 90/10 or something like that, oh, they're going to be hurting. They would be hurting badly if they shifted their investment strategy at that point.

Again, I'm not threatening anything, but if they did so without due process to the

written policies on investment policies and such, they are at grave risk because those sorts of things are very ironclad, coded into ERISA. There have been quite a number of lawsuits already, and I'm sure there will be more in the years to come. But in terms of the actual process of that, yes. Now, if all they did was trade out of Intel and trade into Microsoft, they'll be fine. The biggest place they'll get hit is if they traded out of IBM and traded into babies.com or some dot-com enterprise that's since gone belly-up.

FROM THE FLOOR: I had a client who changed his investment manager. They were spun out of a large company, right at the peak. In that case they were cashed out one day and invested at the peak, and so they've experienced quite a tumble. I don't know how common that is.

MR. LABOMBARDE: I imagine it might be common to some point. I'm sure there was a lot of investment manager turnover during those particular years. Again, even with the new investment manager, the investment policy should have remained intact. Is there a question or comment?

FROM THE FLOOR: My impression has been that while you quoted the dividend return on the Dow Jones, a lot of the new companies have a policy of not paying dividends.

MR. LABOMBARDE: That's right.

FROM THE FLOOR: So that the dividend return on the NASDAQ might be a lot lower than 2 percent.

MR. LABOMBARDE: That's right. The comment from the floor was that although the dividend for S&P adds 200 to 250 basis points, a lot of the newer companies don't have dividends. So, an investment policy that has some Dow Jones firms or some of the old-style firms and some of the new firms in some kind of reasonable mix might have additional basis points added on to whatever return we're getting with respect to the historical return. It may not be as high as 200 to 250 basis points. That's a good solid point.

FROM THE FLOOR: During this time of extraordinary returns, a lot of companies stopped contributing to their pension plans because the earnings were so high. Now that things have come down, can you comment on what they now have to contribute?

MR. LABOMBARDE: We'll touch some on that. A fair number of the companies have built up credit balances, so when they're going through this period right now when cash flow is strained and they don't necessarily have the cash there, then I think the answer is, not necessarily. Just because the stock market is down doesn't necessarily mean that they'll put the cash in if they don't have the cash to do it. But then you still see things like last week, when GM, if it doesn't have the cash, will

float a bond to get it. There are firms out there that need the cash badly enough for the pension plans that they'll go out and borrow to do it. I have seen not just GM, but a fair number of companies, already considering that. I think you'll see more of it. Some of them are companies that even have credit balances and don't have to, according to the minimum funding rules, but they may be wanting to because of the effect of this on their balance sheets.

The biggest problem with the past number of years, as I think was already pointed out from a comment that was raised, is that at the same time that stock markets were behaving as they did in the past three years, interest rates were going down. In fact, as a segue on this, since the bottom of the markets, just before the war began, markets have generally risen on the level of 20 percent or so, again not counting today.

If we did year end right now, if June 30 was year end, have pension funds dug themselves out of the hole that they were put in with the last three years? The answer on that is no. Since 12/31/02, long-term interest rates that are typical of the kind that are used for accounting—Moody's AA and the like—have dropped 75 basis points. So essentially you have a stock market that's chasing a disappearing target. As the market's been increasing 20 percent, the liabilities in pension funds have been increasing faster. In many companies' annual statements, you would see the comment that if the equity markets turn around and investment returns start popping back up, then we'll be fine. And if you ended the year right now, many of them would have returns that might be close to 20 percent or more now—not really because they're usually equities mixed with bonds and the like. But you would see returns that would certainly make it look like we're back to double-digit days. And suddenly, those pension funds would still be reporting: "Not only has our problem not been solved, but it's worse than it ever was."

What's the heart of the problem? And I would say the real problem, except I don't want to put everything on the shoulders of the interest rates. It's the interest rates combined with the equity markets. If you want to ask what the current equity market's impact on pension plans is, you can't do that in a vacuum. What's the current impact of equity markets on pension plans? If we were just looking at what the markets have done, have they been yielding us good money? Has it done well for an investment if we invested our own personal savings in it? Maybe we should all be looking at our own personal savings this way too. But all of that aside, it's not viewed in a vacuum. When we're looking at DC plans, maybe we can just say that the investment risks are on the participants and it's not our problem. When it's in a DB pension plan, that equity investment is backing an obligation that's measured using interest rates. I can say this, and I think many of you know it already, but we're just seeing it in a whole new way after these last three years. But I can almost say this and say, "Okay, session over."

It's not just that the equity markets have gone down the last three years; it's that the equity markets have gone down while interest rates have plummeted. We have

interest rates that are at 40-year lows. The argument between the *Washington Post* and *The Wall Street Journal* is whether the Fed will cut interest rates again on Wednesday. The argument is whether it will cut it another 25 basis points or another 50 basis points. Remember, this is a rate cut from 1.25 percent, so definitely 7,300 back to 9,000 doesn't do it. A Dow Jones that would go to 10,000 right now doesn't do it. If you slip 75 more basis points off the interest rate, a Dow Jones of 11,000 doesn't do it. You'd have to see a market recovery right now that is gigantic, just to bring things back to 12/31/02. And that's just talking to 12/31/02 after we've had three bad years of declining interest rates combined with declining markets. So we are in a very, very serious hole.

FROM THE FLOOR: Adrien, aren't you getting to the point just that it's the equities, and the liabilities are more like bonds. And because we chose to mismatch on the expected rate of additional returns, when the expectations didn't work out—the interest rates went down, the liabilities went up, the equities went down, the assets went down—guess what? The funded ratios plummeted. Those who like Boots Group, PLC, in March 2000 moved all of their equities into bonds—fortuitous timing—maintained their nice big surpluses. So isn't part of the question here the appropriateness of equities as an investment vehicle within a pension fund?

MR. LABOMBARDE: Indeed, and I'll try to at least brush against that. I'd be happy for any other comments from people who would state it a little bit more bluntly. While I said that none of the comments here represent the comments of the sponsoring organization, I'm not sure how close that gets to something that investment advisers should say, but I think it's a very serious question. I don't want to put words into your mouth, but essentially, when you ask the kinds of questions you asked about where the future return of equities is going and how do they stack up against bonds, without advising a client to move everything to bonds, you can come awfully close to advising them of that simply by saying if you don't move them to bonds, then the margin or the reserve that I'll have to carry in order to represent this process properly will penalize you if you're not in bonds. And without saying invest in bonds, you really almost have to represent what you just said there. Anyone who has been in equities the last three years in pension plans has to answer that question.

FROM THE FLOOR: Or maybe disclose that the process is one that is more complex than has generally been represented, that equities have expected greater rates of return in exchange for greater risk. If that risk is willing to be borne, the consequences of the risk have to be recognized and borne. I think that both investment advisers and actuaries may potentially be accused of having too many nice charts that show the good expectations and not enough showing the tales of what the bad stuff is.

MR. LABOMBARDE: By the way, if that's what was suggested at the beginning, I really should say it was basically a prelude to asking, why are we where we are? And that's where you get to the turn that we are where we are because those

charts don't represent the return on the obligation that you were protecting. And the returns that you get—however they can be argued, however they can be charted, however they can be made to look like nice returns—aren't always enough. You've had a nice return this year of 20 percent. It's not enough. You really still wanted it to be in bonds if rates were going to drop 75 basic points. We can't predict where it's going tomorrow. We need to do the kind of analysis that he was referring to, but we can't predict where it's going tomorrow. But you still need to be conscious of the fact that these are not investments in isolation. They're investments that are protecting a particular obligation that is measured using interest rates. If you don't take that into account in your equation, then there will be problems.

The comment from the floor was that if you looked at the total return from long-term bonds since 1990, would that not exceed the long-term return from equities? Yes. Now, the question that needs to come back at some point is: if you had asked this same question in 1990, would you have known that would be the case? And better yet, if you had asked that question at a Society of Actuaries meeting in June 1999, would you have gotten tomatoes thrown at you? Did anyone in 1999 and 2000 take all of their equities and invest them in bonds? Want to raise your hand? I did. In February 2000 I took every single cent that I had in equities and put it in bonds because I did believe that this was ridiculous. It had gotten far too high, and it turned around. So today, I can sit here and laugh and be happy.

But I'm saying it's easy to look back right now, three years later, and say the people who switched at that particular time were lucky. They were going against the grain. Everybody else was telling them they were wrong. Now, who's to say what's right and what's wrong now? But I think the answer is in actually what's been put together from some of the several comments that have come here in terms of recognizing that what you are protecting is an interest-rate-sensitive obligation, and you need to be sensitive to that when you go to do your investments. It's not enough to say, "That's an interest-rate-sensitive obligation. I can protect it with some bonds that yield 5 percent. Hey, equity markets should earn more than 5 percent. They should have a risk premium with them. So even with the risky stocks, even with the ones that go belly-up, over time I should earn 6 or 7 percent. If I could have protected it with 5 percent, couldn't I just go over and do the 6 or 7 percent and make out extra?"

I think the answer to that has to be probably no, not unless you're prepared, as the one speaker, I think, was suggesting, to recognize there's an apparent obligation and liability that you're taking on there that probably hasn't been fully recognized, probably hasn't been properly dealt with, or properly managed from year to year to year. If the IRS will not let you put amounts in because of full funding, or you don't want to put amounts in because the stock prices are high, you still need to manage. You need to manage this as if it is a year-to-year-to-year-to-year process, and that was not done through the late '90s. You also need to prepare for what happens when there is the mismatching.

MR. KRA: When I buy large corporate stocks, am I buying a company that provides service and manufactures widgets, or am I buying a mutual fund? And am I buying the company because I think it's an excellent manager over a diversified investment portfolio? There are large companies out there with pension plans that are larger than the rest of the company. I don't think the average individual buying stock realizes that they're not buying a manufacturer of autos or an airline; they're buying a mutual fund with a little business on the side.

MR. LABOMBARDE: Yes, that just happens to make cars.

MR. KRA: There are companies out there in which the pension funds are multiples of the market caps.

MR. LABOMBARDE: The airline industry and the auto industry in particular had significant amounts of pension liabilities that are being carried on the books. Essentially, it's almost fair to characterize them as mutual funds that are invested in other mutual funds. To a great extent, they should be viewed in that way.

MR. KRA: Without naming any particular company name, at one point in the past year, my view was that if you wanted to buy a cheap call option on the stock market, there was a particular individual stock that, if the market went up, it would go gangbusters, and if the market went down another 10 percent, it was out of business.

MR. LABOMBARDE: Solely by looking at the pension.

MR. KRA: Solely looking at the pension. If the market would have dropped about another 10 percent, that company would have been bankrupt, and if the market goes up 20 to 30 percent, that stock price will double and triple. So if you want a very cheap option on the market, buy that company's stock.

MR. LABOMBARDE: I'm not sure if I can capture all of the comment that was just made from the floor, so if I don't capture enough of it, feel free to repeat it. But the argument throughout most of our careers has been that part of the pricing of a stock has a lot to do with the dividends and the variability of the dividends as contrasted with what you could get on a bond. Okay? With the changes that have occurred in the world and the markets, in economies in general, that's probably no longer valid, and we need to revisit the model and ask ourselves the question, what is the appropriate basis? Yes, precisely. I think when we look at this and ask ourselves, what's the effect of equities on pension funds, it still comes back to asking ourselves the question of those expected future prices—dividends, be that as they may, whatever they are, and the future cash flows that are expected from these equities. I need to remember that they're protecting obligations that have a sensitivity that I'm not sure these stocks are representing.

I don't know that it necessarily comes down to following the result of what has happened a lot in the United Kingdom, where there's been apparently massive disinvestment in the stock market. If I thought that, I'd stay out of the market for quite a while longer because you may be seeing more disinvestment, and the market may be sick for years, simply from pension funds revisiting this question and dumping out a lot of stocks without some good buyers in there.

I think trustees and fiduciaries need to ask the same question that's being asked here in terms of when you look at these past trends, not only have they failed to keep pace with where the interest rates have gone, but there are dynamics that are taking place here that should be changing where things have gone.

We've looked at the markets. Let's look at pension funds. If we can say that we need to have investments that protect us from interest rates as well, to a certain extent that means that pension funds themselves provide a bit of an armchair kind of benchmark, if you will. I could prepare charts that would take this and instead of looking at it on a log scale, I could do a log scale and adjust it for the interest rates and the like, and I've done that. It looks pretty interesting. You get some of the best results simply by looking at pension funds themselves because they are a natural benchmark in terms of keeping track of where the interest rates have gone versus where the investments have gone. We may throw a lot of stones at FASB for the engine that they set up and ask ourselves a question of whether this settlement rate is the proper rate to measure it. But given this, once you use a settlement rate, if you're fair in setting the interest rate, it gives you a very good measure of how good or how bad your investments are doing in terms of whether they're keeping things up.

On a study of 100 large employers, I'm just going to reel off a number of results here. This is for 2002 primarily. It involved 100 large U.S. employers with large DB plans. Surplus assets declined for these 100 firms by some $172 billion in 2002. That was after a decline of $168 billion in 2001. You're always hearing things in terms of how much one of these B-1 bombers cost. We're talking about quite a fair number of these—more than one-third of a trillion dollars has been lost in terms of this surplus assets.

Projected benefit obligation (PBO) over accumulated benefit obligation (ABO) from just 100 firms during the course of the last two years: Funded ratio on a PBO basis declined from 124 percent at the end of 2000 to 102 percent at the end of 2001 and 82 percent at the end of 2002. Now, that's just the last two years. If I were to go back to the previous year, we've had an even larger decline. So, by and large, it came from an overfunded position on a PBO basis to 82 percent. Eighty-seven of 100 were in a net deficit position at the close of 2002 versus 60 in 2001 and only 20 in 2000. Now, again, I'm on a PBO basis, but this to me is really—more than the other figures that I cited—starting to talk of exactly how major this is. In 2000, only 20 of the 100 were in a net deficit position. Now there are only 13 that are in a net positive position. We've had an entire reversal in terms of where the plans are in a

funded position. Yes?

MR. KRA: I did a little quick analysis for between January 1, 2000, and March 31, 2003. Now, granted, that's cooking it by looking at what people thought was the bottom of the market. But as you pointed out, since then, while the market recovered, interest rates have continued to plummet. So I did my analysis over that 39-month period. During that period, the liabilities grew from $100 to $168, between the 200-basis-point interest drop and the passage of time, and that $168 was just looking at total return of a Solomon Brothers Pension Index.

During that time, for a typical pension fund—we did a typical portfolio—the $100 became $82. So if you were exactly 100 percent funded on January 1, 2000, ignoring accruals, benefit payments and contributions, you were about 49 percent funded 39 months later. To put it in terms of going from 100 to 49 percent funded in 39 months, that is just devastating.

MR. LABOMBARDE: Yes, but again, not to beat a dead horse here, but a fair amount of that was not just the markets, but interest rates. But I don't want to just blame it on interest rates. At the same time that this was happening, in fact, there were several firms in this study that we looked at that actually had positive returns last year. In fact, two of them were to me rather striking. It happened to be the two firms that had the lowest expected rates of return. One of them had an expected rate of return on assets for their FAS 87 of 6 percent; another one had an expected rate of return of 6.5 percent. Do any of your clients have expected rates of return that low? One was Merrill Lynch and the other was Berkshire Hathaway. Both Merrill and Berkshire Hathaway had the lowest expected rate of return but were outstanding last year in terms of actually making it.

I don't know how Warren Buffett does his math. I think if any of us knew how he did his math, we all wouldn't be sitting here. I do know that his pension fund is invested almost entirely in bonds, so you do a bond matching and come up with 6.5 percent. Nobody has seen any of the midyear reports or anything. We won't know until the end of the year, but I'd be pretty well willing to bet that—although I can say most pension funds are in worse positions now than they were at the beginning of the year, because even though the stocks have gone up, there's been a decline of 75 basis points—Berkshire Hathaway is not there because at the same time the interest rates were going down 7.5 percent, what was happening to the investments in his pension fund? What's that?

Okay, the comment was that he might be in mortgage-backed fixed securities, so he might not actually get the full effect of the 75 percent drop in the interest rates. That could be the case. I'm prognosticating from the evidence. We only know but so much that you can read from the reports that are here. The point I guess that I'm making is, this isn't a 100 percent everybody's lost kind of thing. In other words, Ethan's example of going from 100 to 50 percent and all of my other examples—there are standouts. There are a number of standouts, and I just, at

least anecdotally, find it interesting that two of the standouts happen to be Merrill Lynch and Berkshire, companies that we credit with having investment wisdom, if you will.

FROM THE FLOOR: After spending an hour talking about how we got to where we are, it seems to me that it would be really interesting to hear what pension plans should be doing right now. Should they be buying all the long bonds that they can to match their liabilities, yielding 5 or 6 percent, locking in their losses? If they follow Ethan's line of reasoning about what expected returns might be on the stock market, should they be continuing to take the basis risk and staying in equities? What do you think is the answer? Should our clients just start terminating their DB pension plans?

MR. LABOMBARDE: If I could jump to that after first doing this. I want to jump a little bit ahead and address one other major point that I wanted to bring out from the study of the 100 firms that we did. There's a lot I can talk about here. What's happened to pension income? For some years we've had pension income being reported by these firms, even while we had these losses. That's explainable, and that's understandable. It won't remain long. It's pretty much about the dive under, but I won't go into details on that. I can talk about what's happening on the assets recognition in terms of smoothing. I can talk about what's being done to the expected rates of return because they've come down, and they'll be coming down more. Right now they're still probably a whole lot higher than a lot of people believe they should be.

But let me cut through all of that and come to something that maybe will lead us toward where Bill wants to take us. This past year, during 2002, we saw something come out of the woodwork in November and December that those of us who have worked enough with FAS87 had seen coming for at least 1½ to 2 years before that, maybe longer. You could certainly see it coming. There were newsletters from some of our firms out there before it ever happened, long before it ever happened. It still caught a fair amount of the market by surprise—and I think it will continue to do so—and that's the charges to shareholder equity that happen when you have a minimum liability.

I mentioned the funded status on a PBO basis, but when you get to the point that your mismatching is so bad that you develop an underfunding on an ABO basis—your assets have declined at the same time that your liabilities have gone up, such as Ethan pointed out, and you suddenly develop an unfunded ABO—FAS 87 calls for there to be a minimum liability. That minimum liability can be offset to some degree if you have a prior service cost. It creates an intangible asset. Suffice it to say that in the years since we've had FAS 87, we've gotten to the point where the prior service cost tends to be a small part of the equation. It's not a real heavy part of the equation that gave us the problem at the end of 2002. For most of the companies that had problems at the end of 2002, prior service cost wasn't going to give them a whole lot of protection. That means that essentially any minimum

liability that you have to report then goes as a direct charge to equity. Now they actually call it "accumulated other comprehensive income" or something like that, which throws a lot of people for a loop because they think it's income, "other comprehensive income." Doesn't that mean it's good?

No, it's really retained earnings. It's like we're saying that we're taking part of the shareholder equity, and it's there to protect the pension fund. And the worst part of it for many firms was that they had just come out of a period of years and years and years of having pension income. When you have pension income, you have negative cost. You can't have negative contributions, so these companies were building up what? They were building up a prepaid asset, prepaid pension costs, a balance sheet asset. When you have an additional minimum liability, you not only have to report the unfunded ABO, but basically, you also have to back out anything that you already had on the balance sheet. If you already had a liability on the balance sheet, then you're only showing the additional liability that you're showing. But if you were showing an asset on the balance sheet, you basically have to back that out.

Just to go to the extreme of the argument, say you were showing an asset on the balance sheet of $100 million, and you come to the point where you have $1 of unfunded ABO. You suddenly get a kick to shareholder equity of $100 million in one because of that $1 of unfunded ABO. Now, that never really happens. If you get to a point where you have $1 of unfunded ABO, they'll ask you to make sure that you check your rounding and get rid of the $1. But I'm basically trying to emphasize that there is a cliff there. There is a very good reason why certain companies, such as IBM, put tons of money into their pension funds, even though they didn't have to, at the end of 2000. If they had the cash, they were doing it. IBM put contributions in to the degree of $3 billion. Some of that was in terms of corporate stock, but it was a huge contribution. And it was entirely to avoid the hit to shareholder equity, which would have been completely disproportionate to the amount it had to put in. The $3 billion that it put in, if I recall, saved the company something on the order of about $10 billion in terms of a hit to shareholder equity, if I recall the figures correctly.

With other firms, you saw similar sorts of things. Now, in some of the firms that have hits to shareholder equity, such as GM, it's just a matter of degree. At a certain point, you have a certain amount of hits to shareholder equity, death covenants start to be at risk, and you start to encounter other problems. But basically, during the past year of all the problems that we could look at, what's happening to volatility of pension costs, what's happening to your contributions and what's happening to the minimum funding standards? Equities have ripped a lot of funds there. You're getting ripped with the variable rate premiums for some of these plans, and many of those are severe. Don't get me wrong. You're seeing places where plans are getting increases in contributions that are triple, quadruple or 10 times what they had before, and they're finding it hard to swallow. They're saying they can't take this.

But one of the things that's driving the equation the most of all of these—and in my mind, one of the places where you can see some of the things that I think start getting to Bill's question—is when you look at this hit to shareholder equity. Once that hit the shareholder equity takes place, then it is very much like what Ethan said before about the company that's basically a mutual fund. At that point you have no smoothing. You have no protection. A dollar lost in the stock market is a dollar lost to the value of the firm. A dollar gained in the stock market is a dollar gained to the firm. You're right there. No deferral and no smoothing were used on these things, even in funding. You see where the assets went last year, and you smooth it into the future. You defer and you smooth and you delay the recognition. For unfunded ABO, you cannot do that. At the end of the year, if you have an unfunded ABO that you have to show on the balance sheet, that's treated like you lost a dollar in the market, you lost a dollar to the value of your firm, net of tax.

For anyone who is listening, there is a small debate going on on the floor that the figure is net of tax, although it was pointed out that under FASB rules you can't just do that automatically. There has to be a reasonable expectation. Of all of the firms where I was examining and going through the calculations that had been done for the hit to shareholder equity, I know of one firm—I can't remember it off the top of my head, but there was one firm—that did not do the net-of-tax calculation. I would not be surprised if, when you walked through that firm and determined why, that they may be getting to what Ethan is pointing to in terms of the other rules that need to be in place for that to be the case.

For every other firm, you look to the footnotes and look at how the unfunded ABO was developed. It takes a little bit of doing because some years ago, FASB said you didn't have to disclose what the ABO was. So you basically have to back into a lot of the figures and go through the calculations.

For much of the work you're doing for clients, you do see those figures from the front end, so it doesn't really matter. You do see all of those figures. Suffice it to say that when you get the figure that would be charged to equity that you would be showing in the footnotes, yes, in the overwhelming majority of the cases, the number that actually shows up on the hit to shareholder equity is in the range of 60 to 65 percent of that number. Some tax calculation is taking place in terms of netting that out.

How this gets back to Bill's question, at least in my convoluted way of thinking, is something that we also see in the funding equations and that we see with a lot of pensions. I see it as the juxtaposition of the settlement way of looking at pensions, or the termination basis of looking at pensions, the snapshot view, with the view of an ongoing plan and a view that spreads things, a view that takes a long-term view of things.

In a very perfect world, if we had no pension plan terminations, if we had none of

that risk and if we didn't need to report the snapshot position of the pensions for the accountant's basis, would there be any real problem with carrying things forward, smoothing out the highs and the lows, taking a long-term interest rate when we look at things? Maybe even looking at the calculations that Ethan was pointing to earlier, and saying, "Well, let's invest in equities now. So it hasn't matched in the last three or four years. I have equities that will still return to me—I have a reasonable expectation that they're going to return to me—8 percent per year. And if they really do present 8 percent per year for me, and I've done cash-flow projections that are 8 percent per year, what is the problem with saying my pension plan is not funded 50 percent now, it's funded 100 percent?" Ethan has an answer, I imagine.

MR. KRA: Well, let me share with you, not a hypothetical, but a real-life situation. It's March 2002. We're visiting a prospective client. At that point in time, they have a situation in which the pension plan is the tail wagging the dog. It is far larger than the rest of the company, which is downsized tremendously. We go in and tell them at that point in time, "You still have enough money left in your pension plan, notwithstanding the losses of 2000 and '01, that you could basically immunize or dedicate a portfolio so that you'll never have to contribute again to the pension plan for your retirees, your best of terms, your actives—even the entire present value of benefits—because you don't have that many actives left. But if you don't, you take risks."

We were thrown out. The pension fund manager, who was an internal employee, basically said to us, "You guys don't know what you're talking about. The market's been down two years in a row. It's never down three years in a row. Get out of here. You don't know what you're talking about. Why should we hire you?"

FROM THE AUDIENCE: That's a case in point.

MR. LABOMBARDE: Yes, to me, that's a case in point. But now part of the issue and the problem is that we have to wind up here quickly. Anyone who still wants to talk about this can talk more, but let me wind it up. In a sense, that's part of what I was going to throw at you because part of this whole discussion, of this whole meeting, gets down to at least one part of the question, and that's the assumptions part. But it's not just the assumptions. It's nowhere near just the setting of the assumptions. It's the question that Bill's asking. Do you reinvest? Do you have to reinvest? It's the question that many employers are asking, saying, "I don't want to take this risk." So they move toward defined contributions. They freeze the plans. We are seeing a lot of sponsors freeze the plans. Legislators and others who are saying, "That's just Chicken Little saying the sky's falling," aren't looking at what's been happening to pension funds. A lot of pension funds are doing it, and part of the problem is this risk. Once you bring home to them this risk that various speakers here pointed out in terms of this mismatch—this liability that you've got on your sheets that you haven't really properly disclosed—and once FASB comes up and says that we have to disclose it, at least in terms of the additional minimum

liability, I don't want that anymore.

I think, Ethan, what you just said there to me, more than ever, emphasizes precisely that juxtaposition, the intersection of the snapshot with the ongoing view. Maybe they're trying to hold to an ongoing view that's unrealistic. And they need not only to look at the ongoing view, but also to reassess the liabilities and the obligations and matching that they're doing. You said that they threw you out. I'd be really curious about where they stood a year to two later if they suddenly had something like a pension plan termination. This hit to equity is basically almost like a termination view look. It's almost like a shutdown value type of looking at things.

If they were that way in September 2002, the market was about the lowest that it could have been there. I know of a fair number of firms that had September 30 reporting dates that were almost exactly in the same situation that you're citing, and one of them may have been the firm that you're talking about. They're kind of sad cases to look at. But again, after September 30, 2003, it will be really interesting to look at their financial statement because right now things have only gotten worse. It's like I say, even coming up from the September bottom in the market, it doesn't cover where interest rates have gone. I have a real hesitation to say this, and I guess I don't know why I do. It comes awfully close to really saying that pension funds should give serious review to matching concepts.

But if you have not done so and if you have equities, as many of our pension funds do, then if you were a pension fund manager, you would need to have this assessed, investigated and projected and figure out what to do about it, whether you'll modify the design of your plan, your pension plan assumptions or your investment policy. If not, the government and the accountants will, whether it's through this minimum liability right now or the accounting provisions that are likely to be coming in the future. There are changes coming in the future that make this even more direct and more obvious and more transparent. The changes that are being considered by the federal government for the funding rules would offer some relief on the interest rate side. But at the same time, there's serious thought being given to things that essentially will make you ask and answer some very hard questions. Equity markets may have looked fine over all these years, but they haven't protected the risk that they are there to protect. And therefore, you seriously need to ask the question. It either means get rid of these investments and get investments that will protect the liabilities that you're there to protect, or build into the calculation and build into the function something that will properly reserve for the additional risk that the plan is taking care of. As I said, it's a personal opinion and the kind of thing we're talking about these several days here.

MR. KRA: I have one closing thought. When I broke into this business and looked at pension plans, first at Prudential and then at Mercer in the mid-'70s, the typical DB pension plan cost about 7 to 8 percent of payroll. That was the expected norm. That was the typical plan. Companies decided to provide those benefits based on that cost level. Over the ensuing quarter of a century, the cost came down to zero

and became negative. During that period of time, companies still spent the same amount on employee benefits; it just went to medical. Well, now the pension plan will again cost somewhere in the range of 5 to 10 percent of payroll, and companies no longer feel that comfort level because of the medical.

MR. LABOMBARDE: Right, they don't want to add the 5 to 10 percent on top of the medical.

MR. KRA: Right. I think part of our responsibilities will be to help explain to companies, to corporate America, where a DB plan is appropriate, where the value added is and why it's worth that 5 to 10 percent of payroll. If we don't, there will be no DB world.

MR. LABOMBARDE: I would agree with that, and in connection with what we've been talking about here, I think part of that explanation will have to deal very hard with the pension plan sponsors, with what investments they use to fund for that liability, for that obligation, if they, in fact, continue to carry that obligation for the retirement benefits.