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Session 56 Seminar Addressing the Financial Risks from Retirement Systems Seminar: Plan Design

Track: Pension

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Summary: Before ERISA and SFAS 87, various provincial Canadian legislation and CICA 3461, there was little financial regulation of defined benefit (DB) pension plans. An actuary's advice to clients on funding and other aspects of plan financing was based on the costs and risks inherent in the plans themselves. With the passage of ERISA and parallel legislation in Canada, plan funding in most cases became a matter of meeting minimum funding standards without exceeding tax-deductible limits. The advent of SFAS 87 and CICA 3461 set similar but different standards for reporting pension plan liability and expense on the company books.

Over the last 30 years the inherent risk plan sponsors face from their pension plans has changed. Thirty years ago, DB plans were relatively smaller in relationship to the plan sponsor's core business or sponsoring government's infrastructure. A graying baby boom population, increased longevity and contraction of old-line industries have combined to increase the cost and financial risk engendered by pension plans. Once small fringe benefits, retirement plans have grown to become substantial financial commitments with the accompanying risk. Many plan sponsors have reacted by terminating or freezing plans and moving to defined contribution (DC) plans. In the meantime, the tight regulatory environment for private plans has

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led sponsors to lose sight of these changes in the bustle of compliance with myriad complex and obscure rules.

Actuaries must help plan sponsors get back to the basics: the costs and risks inherent in DB and DC plans before the accumulated overlay of regulation. From this perspective, it is possible to address more cogently some fundamental questions about DB and DC plans: Is eliminating DB plans the only possible solution? Are DC plans the answer? What can actuaries do to help corporate plan sponsors manage the risk of both of these types of pension plans? How can these risks be balanced to manage needs of sponsors, shareholders, plan participants, taxpayers and guaranty agencies? And what happens to a society where DB plans disappear? Do DB plans still provide other benefits to plan sponsors and overall society to make them worth the risk?

Addressing the Financial Risks from Retirement Systems seminar is designed to help actuaries better measure, discuss, manage and mitigate risks that pension plans bring to their sponsoring organizations.

When all is said and done, plan design may be the most powerful tool to manage and mitigate the risk of the pension plan. This session discusses how various plan design features can act to minimize risk, and others can act to exacerbate it, and how this can vary from sponsor to sponsor. It will also consider whether, given IRS regulations and recent court decisions, plan sponsors are able to modify design sufficiently, and what might have to change in current regulations to create effective plan designs for the 21st century. Finally, we'll disabuse the notion that DB plans are all risk and DC plans are all risk-free, and discuss why that is certainly not the case for employees or society, and why that may not be the case for plan sponsors.

MR. ALAN N. PARIKH: In today's session we'll be talking about plan design so it's really going to be a shifted focus. We want to shift the focus here to decisions about the design of retirement programs. The focus is really going to be on just what these plans themselves should be looking like, and less on the funding or accounting implications of these plans.

First, I want to introduce our panel discussants. Ed Burrows is an independent consulting pension actuary in Boston. He's a former member of the Actuarial Standards Board. He is a current member of the Actuarial Board for Counseling and Discipline (ABCD). On the Academy he is on the Pension Practice Council, Pension Committee and Social Insurance Committee all at once. He's a 2004 winner of the CCA Hanson Prize for his article on funding reform. The article appears in this year's April issue of the *Pension Forum*.

Next is Ian Genno from Towers Perrin in Toronto. He is a senior consultant in their retirement practice. He has experience working with clients in Europe, the United States, Latin America and Australia, so he has a pretty broad range of experience

there. He is recognized, in particular, as one of Towers Perrin's leading practitioners in Canada on issues relating to retirement plan design, DC plans, labor negotiations and employee education. Within the actual profession, he's recently retired as co-chair of the SOA Pension Section Council and has an ongoing role in helping to lead several of the Society's pension-related initiatives.

And finally, we have Tom Terry, FSA, FCA, Member American Academy of Actuaries (MAAA), EA. He is president of Chicago Consulting Actuaries. He's treasurer and board member of the Conference of Consulting Actuaries, a member of the Academy's Pension Practice Council and chair of the Academy's Stock Option Task Force. In addition, he's been a mentor to many people within the profession.

I'm a consultant with Mercer in Chicago. I've been in the business for about 16 or 17 years, and I'm an associate editor of *The Actuary*, where you occasionally see my scribblings on various topics.

I want to talk of setting parameters. It's really plan design, but we only talk about plan design in the context of risk, which is the topic of this set of discussions. However, it is also about reward, especially when we talk about a DC environment where risk and reward are kind of two sides of the same coin. In thinking about DC issues from a participant perspective, usually the selling point of the DC kind of approach is that the equity risk premium, if you will, is something that the employee gets. It's not something that's owed to the shareholders or anybody else. It's something that the employee gets to take advantage of.

As a pension actuary working with my corporate clients, in recent years I often have been asked about the design of DC plans to replace their DB plans. And as a DB actuary, of course, I go along with this kind of exercise because it's billable work and they're my clients and I want to do what's in their interest.

So starting off the topic, we want to talk about stake holders, because risk and reward is such a broad topic. We want to make sure that we cover everybody involved, including society as a whole. Now obviously, beyond the individual, family is the unit that's going to be supporting that individual if we haven't set aside enough for that person to retire on.

The company itself has a stake in this debate, as do shareholders themselves. Some of us might say that the company is an artificial construct and it really is a kind of vehicle through which the shareholders and employees execute their transactions. The financial economics viewpoint would say that really it's the shareholders and the employees negotiating these kinds of arrangements. The company's really just a vehicle. And that discussion probably affects the way we think about these design issues as well. The community as a whole also has a stake, as do industries. Government is also potentially going to be on the hook to the extent that people who don't have sufficient assets and wind up on Medicaid, or on the government roles in some form or another. Beyond the government,

ultimately, are the taxpayers that are on the hook for our decisions about plan design. And finally, society as a whole is shaped by the retirement systems that we are really key in designing. Our expertise in this kind of field is really paramount and we need to understand the level of respect that we're given and how influential our ideas and opinions are on these kinds of topics.

MS. ANNA M. RAPPAPORT: Alan, not on the list are organized groups of employees whether they be labor organizations or some sort of other groups that are organized around pension issues.

MR. PARIKH: And they may not be risk bearers in this system.

MR. MALCOLM P. HAMILTON: I have an office concern. When we put these lists of stakeholders together, we tend to put too many groups on it and then there's no hope of sort of simultaneously satisfying the interest of all the listed groups. As I understand the financial economists, they sort of focus on principals and agents and they don't try to make exhaustive lists of all the stake holders who might be affected by decisions because, ultimately, it's a group of agents working for a group of principals. And it's really those whose interests are to be advanced by the work that's being done. And might we be better served if we had a narrower focus and said as far as a company designing and adopting a pension plan, it's really about serving the interest of shareholders and working with management acting as the shareholders' agent to get there?

I would exclude the interest of employees and the interest of the public in general. The interest of employees gets included in the sense that the shareholders are trying to offer the employees something as part of their compensation package so, presumably, if the employees detest the thing that's being offered, they won't attach much value to it, and then it's not economical for the shareholders to make the offer. But aside from that, if you go into these design things saying you're equally serving the interest of both shareholders and plan members, you're just going to get in trouble because the members are going to want great pensions with little risk, and the shareholders are going to want cheap pensions with little risk. You're going to have a very hard time finding the thing that works for everybody.

It's very dangerous to be in a position where you think you're working for people whose interests conflict and neither of them knows that you're working for the other party. You have to be very careful with that.

MR. PARIKH: That's a great comment. One thing that I would add to that though is that we could have a full discussion of this topic without focusing on anybody except the employees and the shareholders. But the playing field in which we're working, such as the tax code and the regulations environment, is really kind of society's baby. It's society working through government, so we need to at least be aware that there is a societal interest that often is imposed on us from the outside, and that may conflict with the shareholders or the employees' objectives.

MR. HAMILTON: There's another constituency that we deal with not as a consulting actuary working for our employer, but as the actuarial community, the Academy, the Society interfacing with the government. We influence public policy, legislation and regulation. We also educate the public. And in our roles working within the professional associations, we have a responsibility, I believe, to the larger community. In that role, we may be wearing a different hat than we wear when we're consulting one-on-one with a client.

MR. PARIKH: Ian, would you say is there any risk bearing that those professional groups have?

MR. C. IAN GENNO: I think the risk bearing is by the government, the taxpayer picking up the droppings if the Pension Benefit Guaranty Corporation (PBGC) needs assistance. Society also bears risk where the economy as a whole has to pick up the droppings from industries that are dumping their responsibilities on others because they overpaid workers at one point by overpromising them because somebody else would pick up the tab. I think the actuary's risk may be in failing to communicate and becoming marginalized. There is a risk of you just being a hired gun and not being a professional.

Do we want to be viewed as lawyers, as sharks, or do we want to be viewed as a professional?

MR. PARIKH: Ian's point, especially when involved in professional organizations, is that one of our risks is that if we're perceived by the public as nothing more than handmaidens to our clients, we will be ignored.

MS. RAPPAPORT: I think that there's another issue about stake holders. If we think about industry groups, there are also organized groups that represent labor and that represent participant interests, people like the Pension Rights Center. The failure of the groups that represent plan sponsors versus the groups that represent, or claim to represent, participants to reach consensus in the United States around legislative proposals has been a big part of why things have gotten into so much of a gridlock.

In terms of creating risk, that's created a tremendous risk for participants because the gridlock around a lot of issues has caused companies not to be able to move forward. But it doesn't mean that people get more benefits. It just means that things get stuck and that people give up and they don't get benefits. So I think that's been risk creating for the participants, risk creating for society as a whole and very troubling.

MR. PARIKH: Now we want to focus on retirement plan design features and talk about how they reduce, shift and even create risk. So let's start with the big topic, DB and DC. Before we drill down into some of the more specific details, I think we

can spend a fair amount of time talking about this thing we're facing every day and try to shed some light on it.

MR. EDWARD E. BURROWS: When we talked yesterday, we focused too much on unpredictable and increasing costs as a major risk. And there was a suggestion that the employer can avoid risk if he swings to a DC plan. I would suggest that costs and unpredictability of costs are just one of many of the risks that we face. When you're talking about whether a DC plan is the right answer, one key risk is the risk that the plan won't accomplish what the sponsoring employer thought it was supposed to accomplish.

Let's take control, for example, as a tool in helping to control the employer's workforce objectives. There have been many times when it was desirable for an employer to have an early retirement window. Have you ever seen a 401(k) plan with an early retirement window? You just can't do it.

MR. HAMILTON: Why can't you just pay a lump sum to people who retire?

MR. BURROWS: Does the more typical early retirement window involve special incentives for employees who accept the deal and decide to retire right now or within a specified period?

MR. HAMILTON: Maybe I'm missing something. Why can't you just say anybody who retires within the next six months gets \$100,000?

MR. BURROWS: Gets more than his account balance?

MR. HAMILTON: There's nothing to his account balance. The company just pays \$100,000 to anybody who quits in the next six months.

MR. BURROWS: Well, that's through, perhaps, a non-qualified plan or a non-qualified arrangement.

MR. HAMILTON: The only point I'm making is there are lots of ways to incent people to do things that don't involve pension plans.

MR. BURROWS: There are, indeed. Some of them are even legal.

MR. HAMILTON: Well, that's certainly legal in Canada. I don't know what's illegal about it in the United States.

FROM THE FLOOR: They're quite happy to get paid cash.

MR. BURROWS: Yes.

FROM THE FLOOR: That's perfectly legal.

MR. BURROWS: Yes.

FROM THE FLOOR: It's not tax-effective.

MR. BURROWS: It is all tax-effective, and, if we're not careful, we'll run afoul of the rules, at least in the United States, on when you should be funding your plan.

Phases to retirement. As longevity improves, we're going to be trying to push normal retirement ages higher. As we do that, we're going to be running into employee differences. For some employees, pushing the retirement age to a higher age is a good idea. Others are going to be unable to handle that either because of medical conditions or because they're simply too frail at the more advanced ages to continue doing their job. So a well designed phase II retirement program is a very useful workforce management tool. It's one that we're just now learning how to use. You can certainly have a phase II retirement program with a DC plan, but it's not nearly as effective. It's not nearly as flexible.

Deferred retirement. This is one workforce objective I run into quite frequently in connection with institutions of higher learning, and it's often to make sure that employees don't stay on past their usefulness. If we have a DC plan, we generally find that we have the equivalent of not just continued accruals for service beyond the targeted retirement age, but the equivalent of actuarial increases. When an employee sees the combination of those two pluses, it can be awfully difficult to convince him or her that it's time to retire.

Past service benefits. There are times when it's desirable to improve benefits for past service. Of course, we have to make sure that we are able to demonstrate to our shareholder owners that it's in their interest to do so. With a DB plan we have a great deal of flexibility to improve past service benefits and to use contributions as they become available where they're needed first to allocate the contributions to those who are going to be retiring first. This is very difficult to do with a DC plan.

Attracting mid-career employees. Often, it's an objective to augment your professional staff with employees who come to you already having some experience. If that's one of your objectives, it's easy to accomplish with a well designed DB plan. It's not so easily accomplished with a DC plan.

Controlling preretirement death benefits. How many DC plans have we seen which don't provide a death benefit for death before retirement equal to the account balance? A death benefit is probably lowest in many cases when it's most needed for a younger employee with a large family. As the employee grows and his need for death benefits may be reducing, the account balance grows and the death benefit is higher, perhaps, than it needs to be. There certainly are DC plans that don't provide the account balance upon death before retirement, but they are very, very rare and I think one would raise eyebrows if you suggested designing one.

Controlling turnover costs. This can be a two-edged sword. If we want to emphasize long service, a long duration with the employer, there is probably no better way than a traditional final pay plan, which involves a very small expenditure in the case of employees who leave long before reaching the normal retirement age. As it happens, there are many employers today who don't have that as their objective. Those are the employers with respect to whom we're more likely to be suggesting career pay arrangements or, perhaps cash balance plans and the like.

The long and short of it though is that with the DB plan we have the flexibility to design a plan that meets our particular needs. With a DC plan, to a certain extent, you can have any color you want as long as it's black.

Meeting cyclical business conditions. How often is it the case that the fortunes of our client company rise and fall in sync with stock market values? So when our client is at a point where he would really like to reduce staff because business conditions aren't all so hot and he wants to save money, it's quite possibly true that DC account balances are at a low point. Is it going to be easy to convince the employees that this is the time that they really meant to retire? Not necessarily. Conversely, in good times when the employer wants to retain his entire workforce, account balances may be high, and the employer may have found that employees are voluntarily retiring at a time when they would rather not have them retire.

MR. GENNO: First of all, I'd like to echo what Ed said about the fact that DC plans are not risk-free for plan sponsors, and I think Ed gave a lot of very good examples of that. Fundamentally, when you look at plan design, when you look at managing plans, the fundamental risks exist regardless of what your plan design is. At the end of the day, the purpose of the plan is to accumulate capital over the course of an employee's working career and then to disburse that capital in some orderly manner during the balance of the employee's lifetime, during his or her retirement years. In essence, what plan design decisions do is simply assign risk associated with those two stages to different parties, basically to employees, to employers and to society.

Traditionally, plan designs have done that in a way that assigns a lot of that risk back onto the employer's shoulders, and in the past that's been for very sound reasons historically. Some of the reasons include the idea of an analogy to group insurance. So if you can take advantage of the law of large numbers, then it makes sense to run one of these plans, and employers traditionally review it as being best able to take advantage of the law of large numbers.

The nature of the employment relationship traditionally called for people to work for an organization for their full careers and to retire from that organization. In that context it, perhaps, made sense to have the employer take on more responsibility for the risk of accumulating capital during that full working career. Also, as Ed said, to support an early workforce plan.

There is a perceived ability on the employer's part to take advantage of investment

returns to finance the plans, essentially what can be referred to as mis-pricing, and I think that erroneously caused a lot of employers to sign on for setting up DB plans a number of decades ago. There was a perception that employers had longer time horizons and higher risk tolerances than plan members did and, essentially, also there was a sense that employers would, indeed, take on a role in balancing responsibilities between employers, employees and society at large. So there were a number of sound reasons decades ago why employers were assigned most of the risks of running DB plans or plans in general.

And very clearly, over the 21 years I've been practicing, I've just seen every one of those assumptions shattered or called into question at the very minimum, and it's resulted in radical shifts in design. We've seen it manifested in different ways in different countries. Obviously, in the United States we saw a shift a couple of decades ago to 401(k). In Canada, we see some shift to DC, but also a shift to plans that offer more choice or more focus on ancillary benefits. In the U.K., we see freezing of DB service and focus on DC for future. In Australia, you're looking for an even more complete shift from DB to DC. So there are different manifestations in the different countries.

DB plans get a bad rap, and even though I agree with Ed's comments about DC plans exposing employers to risk, for the sake of debate I'll talk about some of the areas where DB plans just don't do a good job as they're currently designed. In essence, a lot of this relates to not necessarily just unwanted risk on the part of employers, but also uncompensated risk. Employers may be willing to take on risk if they feel that they're getting adequate compensation for it.

That compensation could take many forms. It could even be as simple as employees actually perceiving and ascribing value to the plan. If employees genuinely said, I understand this DB plan and I like it, and I appreciate the fact that you, my employer, are taking on some risk and offering it to me, that might actually change employers' attitudes towards these plans. Yet, there are some fundamental problems in how plans are being communicated and how some of the design features have been developed. Some design features have been over-engineered by a lot of very clever actuaries that have really pushed back the ability of the employer to effectively communicate these plan designs to employees so that employees really appreciate them.

There are things about DB plans as they're currently developed that just don't work, that just expose employers potentially to a lot of unwarranted or, if you will, uncompensated risk. Some examples are things like including bonuses and overtime in the definition of pensionable earnings. How many examples have we seen both in the private and public sector of where plan costs can suddenly skyrocket or employers can be exposed to unwanted risk because of the effect of the variability in bonuses or the ability of employees to, perhaps, have high overtime during their last few years before retirement?

Early retirement subsidies can potentially expose employers to significant risk. It's

tough to envision how DC plans can support employers' goals in managing the outflow of employees at retirement age. I think it's really easy to do early retirement windows in DC plans. You just pay people cash. Cash gets them out the door if that's what you want to do. And if anything, it might be simpler to do it that way than to do it through a DB plan where you have to worry about a variety of regulatory and funding mechanisms, but early retirement subsidies are still a concern for employers in the DB world.

Depending on the country or jurisdiction that you're looking at, phase retirement in some circumstances can be difficult to accommodate. In Canada, the way the rules are developed makes it very difficult to accommodate phased retirement in a meaningful way through a DB vehicle.

Having a fixed normal retirement age is particularly problematic. We've talked a lot more about this in the context of Social Security, but the same debate really comes up in theory within the private sector as well for DB plans. Having fixed 65 as the notional normal retirement age in many countries as working conditions improve, as people's health improves and they're able to work longer. And, indeed, as longevity improves, there should be some ability of the DB to respond to that and, perhaps, the appropriate response would be to increase the normal retirement age, but that's a pretty difficult line to move in practice.

Employee contributions. These are more prevalent in some countries, and less prevalent in other countries in the DB designs, but employee contributions themselves even increase risk for the employer. First, this is because of the obvious leveraging of the cost to the extent that employee contributions are a fixed percentage of pay, for example, and the employer picks up the difference. Obviously, it leverages the employer's cost and risk exposure. But it also, in a more subtle way, exposes the employer to risks that might come up in future years. The whole debate over surplus ownership that's come up to varying degrees in different jurisdictions in part derives from the fact that employees themselves have put their own cash into these plans. Once you put your own cash into the plan, it starts to become easier for a lawyer to argue on your behalf that you, in fact, own some of the surplus because it's your money out of your pocket that's helped build up some of that surplus.

We're going to have a fairly extensive discussion on voluntary participation and some anti-selection risks that are posed by plan design so I won't dwell on that now.

There are other elements as well. If we look at things like administrative risks, communication risks and the risk of what happens if past service improvements are adopted suddenly, we can see those elements. And I often wonder why past service improvements aren't phased in on a more gradual basis in a lot of DB plans. Suddenly, going to the negotiation table once every three years or five years and negotiating improvements now can have a very undesirable and unpredicted effect. A lot of that effect really rests on the particular business circumstances that the

employer and the industry are facing that year, at that time. So it's luck of the draw whether you happen to be going to the table in a good year or a bad year for your business and for your industry.

Over-engineering on design. I mentioned a moment ago the idea of clever actuaries. All of us are very smart people, but sometimes you can be too smart and you can over-engineer plan designs and make them far more complex than they should be. That, therefore, makes them difficult to administer, difficult to communicate, difficult to ensure that employees ascribe appropriate value to them when they look at the value of the plan design and, potentially, exposes the unforeseen risks relating to litigation and changes in legislation if you're being a little bit too clever with your plan design.

A lot of this demands that we ask the question: How can we de-risk the plan? In an earlier presentation, a lot of the focus on that question was on de-risking the plan by re-examining assumptions, funding methods and reporting methods. I think identifying these types of risks with respect to DB plans and also DC plans forces us to ask the question: How do we look at plan design as one of the levers that we can use to de-risk the plan?

MR. BURROWS: And, of course, de-risking from one standpoint can mean increasing the risk from another. You talked, Ian, about making sure that we don't go overboard in including bonuses and overtime in our definition of pay in a DB plan and, quite commonly, I agree. However, if bonuses, in particular, are a very important part of the compensation package, by excluding them from our definition of pay, we're running the risk of having a plan which is not going to achieve its objectives and it's not going to be satisfactory to employees. So I think in all of our discussion we need to first make sure we understand the client's characteristics and means, and then talk about balancing risk and expected return from that risk in formulating our plan design.

MR. GENNO: I'll give you one example of how you can manage exactly that point, because it's a fundamental issue that you draw about balancing the needs of different participants in the plan, such as employers, employees, if you're looking at the issue, for example, of covering bonuses and pensionable earnings.

I had a discussion with the chair of the compensation committee of the board of one of my clients just recently about some changes that they were contemplating making to their total rewards package for senior management. Part of the focus was exactly on this issue of what's the interaction between the pay increases that they were contemplating and the plan design and bonus opportunities for the executives. The chair of the compensation committee was just stunned when I showed him examples of what it would do to their pension expense and to their cash contribution costs for their supplemental plan if they paid out bonuses at a certain level for key management people that year. He was absolutely stunned at the leverage and effect it had on the cost of paying a bonus.

And one of the very simple solutions that I talked with him about was, to Ed's point about the fact that, perhaps, bonuses are indeed a key part of the compensation package for the individual. So it is important from the pay replacement perspective to acknowledge that bonuses are there and somehow have to be covered.

We looked at a very simple solution and we said what if we look at defining pension earnings based on the target bonus as opposed to the actual bonus paid. And then we got into the discussion about what percentage of target bonus would be appropriate. Does it need to be 100 percent or is it some other percentage like maybe 50 percent? But there are mechanisms that you can adopt that still honor some of the fundamental principles of things like pay replacement, adequate benefits and so forth but, at the same time, significantly mitigate the risks associated with variability of factors outside the pension plan like the actual bonus paid in the year.

MS. TONYA B. MANNING: Looking at compensation, I've talked to employers and it's all about how they're trying to pay their employees. I work with a lot of hospitals and hospitals get into really creative ways of paying employees what they consider regular pay and overtime pay. A lot of them are carving out those bonuses really as a cost-saving measure on the pension plan.

But when you get to the higher paid execs at the hospital, the conversation kind of shifts gears and, suddenly, they realize they're losing out on their benefits. And it's a matter of looking at the total compensation as current compensation and deferred compensation and you have to consider the pension benefits as part of the total compensation package and whether you're going to provide higher bonuses and exclude them from the formula or lower bonuses, but include them and kind of have that more of a deferred compensation concept. It gets very interesting in conversations about which part of those bonuses they have to include in that type of thing. But that's what you have to talk to your clients about.

When we were talking about all the different types of risks, I think one of the biggest risks is the level of benefits to the employees. I think you alluded to that as far as trying to phase in the benefits to the employees, especially if you have a negotiated plan. But it seems like here of late the worst thing you can do is give a really good pension plan to your employees because if the company starts going bad, that seems to be the scapegoat and the thing that's going to get beat up right now. So it seems like it is actually working to the employees' disadvantage now to have more of their compensation in that deferred arrangement of a pension plan.

MR. GENNO: Your point's very well taken. Going back to your first point about the total rewards package, a lot of it boils down to bang for the buck. So when you're looking at providing any kind of a compensation increase to individuals through whatever program it is, whether it's through direct cash compensation or whether it's through other elements of the total rewards program like improvements of the

work environment or learning and development opportunities, employees, in fact, ascribe significant value to: you have to ask the question, where do I get the most bang for the buck, where's the greatest perceived value? So, you're absolutely right.

MR. BURROWS: Your point that there need to be tradeoffs has so many aspects to it. One key aspect is the question of whether we should have a final pay formula. Our conventional wisdom today is that final pay plans are bad and we should be swinging towards career pay or, perhaps, towards account-based plans. But if you have a compensation structure that has employee compensation rising rather dramatically throughout the employee's career, a benefit, which is related to career pay, is not going to be too meaningful to the employee. And when he finds out what his benefit is, you have run the risk of having a plan which doesn't meet your objective of making the employee satisfied that he's being properly taken care of.

One key, then, is if you feel you need a final pay plan to educate employees to the way costs are bunched in final pay plans. They're bunched very aggressively towards the end of the employee's career. And if the employees understand that, through good careful education, we may be able to convince employees that their pay increases that they pay in the pay envelope should be slowed down as they approach retirement to compensate for the dramatically increased pension cost that's being incurred at the same time.

MS. MANNING: But I think it's really important to frame this whole plan design conversation around what's really driving the decisions on plan design in those situations that I've observed with my clients, and that is truly a cost basis. So although a final average pay plan may make much more sense if you're trying to target a certain replacement ratio or you're trying to do what's right for the employees, or what's easiest for them to understand or what's most appropriate for those employees whose pay spikes through their career, that's one thing. But that's not what's driving the decision. The chief financial officers (CFOs), the financial statements and what the cost is are the factors driving the decision. There's a budget for your benefits and a tolerance for the variability. You back into the benefit that kind of matches up to that, and if it happens to be a career average plan, then that's often the design that you're left with. It's very different.

MR. BURROWS: Well, is it not one of the objectives to make sure that employees feel they are being properly compensated? And in certain circumstances, if you go for a more modest career pay plan, employees are going to say, fine, show me the difference in my paycheck, and that may or may not be a good idea.

MS. RAPPAPORT: Yesterday, we talked about the issue of enterprise risk management (ERM) and a broad range of risks: hazard, operational, financial and strategic. This morning we really talked about plan design in the context of meeting our workforce and business objectives, which are kind of strategic and operational versus financial. I'd like to say that also we think about design and big design issues

that are operational issues. If we make mistakes with regard to DC plan administration, there could be big consequences. The problems of unwinding DC mistakes may be worse than DB mistakes. There are fiduciary liability issues, and litigation was mentioned only briefly. For people who are unable to retire, there are reputational risk issues. So we can think about this design question and the range of risks on a much broader context than simply the financial and meeting the workforce objectives, and I think part of the ERM for pensions exactly involves doing that.

MR. GENNO: I agree. And, in fact, if we had the time, we have an entire script that talks about DC plan design in the context of ERM and identifies, as you said, a plethora of risks that plan sponsors face.

FROM THE FLOOR: Ed, you pointed out that one of the efficiencies of DB plans is flexibility. And I'm going to put on record that I, too, believe that DB plans properly designed are superior to DC plans. But I'm going to take issue with your point that giving past service and funding it later as a flexibility is an advantage over the DB plan. Essentially, the reason why corporations can give a past service benefit and fund it later really translates into that they are borrowing money from the participants. They're giving the promise before they're funding it; they're borrowing it, and they're paying it later.

Why should it ever be more efficient to borrow money from the participants rather than from the capital markets? You'll find that the answer almost always lies in moral hazard, because that risk is being borne by the PBGC, meaning other corporations or taxpayers. And if you didn't have that moral hazard, it would not pay to borrow money from the participants. If you make a promise, you send it immediately, and that's the better way of doing it, but it takes away that flexibility you referred to as an advantage.

MR. BURROWS: I agree, but consider this technique, which is very rarely used. This year we will improve past service benefits with respect to any employee who is 65 or older. Next year we will improve past service benefits with respect to any employee who is 62 or older. We will phase in the improvement in past service benefit and fund those improvements as we phase them in. At that point, we have not been borrowing from our employees.

FROM THE FLOOR: On the subject of the balance between DB and DC from the employee's perspective, I think we're going to be facing a paradigm shift in employee understanding and appreciation. Go back a generation. My mother's generation grew up during the depression. They understood the value of a DB promise. My mother always talked about somebody who was a teacher, worked for the school system for 35 years and retired on a good pension, or somebody who was an accountant for the state, worked for 40 years and retired on a good pension. She never talked about how much they made, how high they were promoted or what responsibilities they had; they got a good pension. That was the mindset.

Our generation wanted the 401(k). Well, as we saw, all those people who retired in 1998 and 1999 on their big 401(k) account balances became Wal*Mart greeters in 2003. As we saw, all those people who intended to retire in 2002 and 2003 continue to work. As we saw, those 401(k) account balances became 201(k) account balances. I think that we see a paradigm shift in the perception and understanding of the employee. As the employee, noticing what's happened to their friends, their peers, their parents, their friends' parents and their friends, all of a sudden, now appreciates that DB promise that much more.

It's the old game of Monty Hall, Let's Make A Deal. Put out your hand, we'll put in something. It's worth 100. We have three doors out there. Two of them are worth 200; one of them is worth 50. Two to one, we'll double your money. One and three you'll fall in half. Well, what does it mean? Do you want to take the risk? Before you tell me, remember it's a 50 percent return on your money, expected value 150. That's the expected value. What's the utility value? Remember, what you have in your hand is the skinny guarantee we promised. It's a hamburger on your plate every night for the rest of your life. The three doors are sirloin, prime rib and cat food. Now which do you want?

MR. PARIKH: I think that's an excellent point. One thing that actuaries probably don't do as good a job as we need to on is illustrating that variability to our clients. I think that if you think through the kind of exercise maybe that Tonya was referring to, you've brought in the DB plan cost is spiking. They want to come in with a DC plan that is cost-neutral with the DB. They don't want to think back. It's a cost-neutral kind of exchange.

Okay, in our spreadsheets or our modeling tool, we're going to run out a formula which is X percent of pay and roughly the same cost of the DB plan. We're going to run it up to age 65 at a 7 or 8 percent return. We're going to convert that to an annuity at whatever the current lump sum rate might be or maybe a little bit more like a long-term average. We're going to put that side by side with the DB benefit and we're going to treat them as if they're fundamentally equivalent and totally glossing over. The reason we're able to gloss over the variability is because right now we're not really in a world where we have had to confront that variability too much until the last few years.

Right now we're living in a DB world where millions of retirees are receiving DB pensions. The 401(k) started in 1978. Then you need 30 years to build up a full career with this kind of a program. You then need to have another 15, 20 or 30 years post-retirement to spend down those assets before you really get a sense of how effective that was. You also need a couple of decades of experience of the variability in the capital markets to really understand what that really is. And right now, that fuller picture of the DC world is just beginning to emerge.

PANELIST: To give you an illustration of the kind of variability that you can see in

results, I had some of my colleagues do some stochastic analysis of the DC plan design. And exactly as Alan said, rather than going through the traditional notion of just projecting out deterministically my account balance building up on an Excel spreadsheet to retirement age and dividing it by an annuity factor to get my annual income for the rest of my life span, we actually modeled this stochastically.

As an illustration, suppose you had a plan that calls for 5 percent employee contributions and 5 percent company contributions each year. You hire somebody at age 30 who makes, let's say, \$50,000 a year roughly, and we'll make some reasonable assumptions about future pay increases. We build up that account balance to age 65, but rather than doing it deterministically, we do it using stochastic modeling. We actually take today's economic environment, but build in some of the variability in the economic environment.

Let's say the individual talks to a financial planner and says, "How should I invest this money in my DC balance, my 401(k)?" And the financial planner says, "Well, one rule of thumb that you typically see is let's put equity exposure into your plan equal to 100 minus your age." So you're 40 years old, let's say. You have 60 percent equity exposure. You're 45 years old; it drops to 55 percent. You have sort of a standard thing that a lot of people think as a rule of thumb for how to invest their money. It all sounds reasonable. Let's plug it into a stochastic model and see what emerges.

What you'll find if you try that out is that for a \$50,000 earner with 10 percent of pay going in that kind of an investment policy per year, by the time this individual after 35 years of service reaches normal retirement, the deterministic model produces, I think, around \$800,000 as an account balance. The stochastic model for this on a 90 percent confidence interval will give you a range from \$400,000 to \$1.2 million—an absolutely enormous variation around that central tendency. And that's assuming that everything else is being held constant. So that's assuming that the employee has put in 5 percent and the company has put in 5 percent.

It's not even allowing for the fact that, if it were a voluntary plan with matches, some employees might choose to put in less and some employees might choose to put in more. It's not allowing for the fact that not every employee will follow this particular investment policy. Some people will be in GICs. Some people will be in bonds. Some people will be in foreign equity. So once you build in the other options people have regarding their participation in their investment choices, imagine the variability you can have in results.

PANELIST: The employer or the plan sponsors care more about the possibility of what the benefit the employee *can* get from the program versus what they *might* get from it. So the deferrals, I don't think, are much of an issue if they're responsible. Give me that first range. They don't really care if they aren't good and they don't save. That doesn't seem to be quite as much of an issue.

PANELIST: You're right. Some employers don't care as much. And that's sort of symptomatic, I think, of the changing relationship between employers and employees. But I would still suggest that for us as actuaries advising our clients on issues to consider when they're looking at plan design changes, that's at least incumbent on us to examine this as one of the issues to present to clients. And then you're right. It's up to clients to decide what to do with the info.

MR. ERIC BOYD FEINSTEIN: I'm going to speak to the health care industry, so to further Tonya's comments, but I'm sure this applies to others I want to comment on the inclusion of overtime. We find that labor shortages in our industry are such that we need people working overtime and to not include it would be a disincentive for people. At least including it creates an additional incentive to work the overtime. Margins in the health care industry are very low, and so the risk of DB plans and the leverage that has on earnings can be fairly substantial.

We're finding in our discussions that the CFO is driving the discussion and HR is going along with it. The rationalization sort of starts with cost management and the DC plan being so predictable in terms of what cost is. But it's rationalized by the fact that many people these days are not going to come and stay all the way until retirement, but, in fact, will actually end up in a better position. The CFO will turn around and say, "And I'll pay a little bit more. I realize the DB plan would give that person less if they stay five or 10 years. But I'll pay a little bit more and I'll get that cost predictability and I'll kind of let them take that backpack pension with them."

That's just what we're finding. I don't know if you have any response. I hear you in terms of our job is to educate. I also feel that sometimes in our roles as DB actuaries as consultants as an extension of our background, we come at this and people look at us as somewhat biased in the equation.

PANELIST: As we're talking about this, I see a couple of lines of thought. One is retirement security programs are a form of insurance. It's insurance with a premium, whether it be a funding cost or defined contributions. On one end of the spectrum, a DC is an individual insurance product where the individual is asked to be an insurer for their own benefits by making the decisions, taking all the risks and having the smallest risk pool.

As we move along the DB scheme, we can have small employers, which are also acting as insurers and getting into the insurance business with a relatively high degree of variability because of the small risk pools. And for large employers, of course, it's far more justified because of the value of large numbers.

The moral hazards, I think, run along the same line except in the other direction, which is, at least on an employer basis, leaving all of the risk to the individuals. It is a moral hazard because we're saying we're not focused on whether the individuals will adequately meet their needs through their own choosing. As you move along, we're reducing the moral hazards except when we let employers use the DB plan to

manage their workforce. Then they're stepping out of the retirement security piece and using it to manage both financial conditions and workforce needs.

Now they're abusing it versus an approach in which you would go out and buy an insurance product for all of your employees, and you step away from the ability to manipulate it. You put yourself in a position where you can't manipulate it either on the individual's basis or on the employer's basis for your own purposes and say, here's a premium and here's how we fit this social need that the shareholders care about. You just define how much you're willing to pay for it.

I think along that spectrum, the third approach may be the worst approach for the profession because we've gotten into the business of marketing, selling, managing and consulting as it relates to making our clients self-insure and taking all of the risks that would otherwise be an outside insurance product.

FROM THE FLOOR: I just want to make a short observation. If I hear what I think I'm hearing, one would have to predict that the defined plan was in ascendancy right around the world and that DC plans were in retreat because they have a zillion serious systemic problems and all the DB problems are easily remedied by subtle redesign. If the story is true, we're the most inept group of sales people the world has ever seen because we're not even able to persuade most of our loyal clients that that's sort of an even telling of the tale. From my own perspective, I think we're seriously underestimating the competition here; that most of the things we say are systemic and unavoidable. DC plans just require a better design in administration and communication. A lot of the problems with DB plans are very, very hard to deal with. That's an observation.

PANELIST: Let me build on that and a couple of other comments. I'm going to suggest that we have a great deal of influence in the retirement plan world; that we are driven more by rules and working around rules; and then we're also driven by convenience and facilitating management to make convenient decisions rather than good or right decisions in some other broader context. I think that risk management, assessment of risk, proper pooling of risk or assignment of risk is way down the totem pole in terms of how we spend our time in the retirement plan realm.

Let me go back, as an example and just to be devil's advocate, to something that Ed said earlier. I think this builds on what you were saying. One of the supposed fine attributes of the DB plan is the ease with which in a DB plan you can trigger an early retirement window. If I sit back and take the opposite view, I might ask what social good is done by an early retirement window? It's simply a device that's a management convenience to maybe gloss over the unwillingness of management to step up and make some tough management decisions and, perhaps, respond to the fact that we have some other rules around age discrimination that somehow handcuff us.

We have this device that allows us to kind of skirt around the edges. We don't think

about the fact that it's expensive and may be directing dollars in directions that don't make a lot of good sense. We don't look at that. It's hard for me to sort of look at an early retirement window as anything other than a management convenience. I don't know that it's a worthy plan design tool that we can hold up high and say, this is why we ought to have a DB plan.

The other thing that hits me about cost as well, is that if, in fact, companies are making decisions about final pay versus career pay versus cash balance on a cost basis. If cost is really the driver and I really want to reduce cost, why don't I just get rid of all my retirement plans period?

I have one other comment. I think we as actuaries tend to focus on the capital accumulation period, and we ignore the retirement period. None of us really have spent any time talking today about the risks, or the longevity risk. There are so many DB plans. We work towards defining an income replacement target and all the rest of it and then the employee gets up to retirement and what do we do? We cut him a check and pay him a lump sum. It seems, in a way, absolutely outrageous that we should do that, just outrageous. So to me, it's kind of hard to defend a DB plan that pays out benefits in a lump sum. At every level it just seems insane.

I have a lot of questions in my own mind about how good a job I'm doing as an actuary really digging into the question of risk, because there are so many ways in which I compromise my risk management principles and move towards either management convenience or simply digging into the rules and designing clever plans that sort of work around a set of rules that themselves are simply arbitrary.

FROM THE FLOOR: I have a two-part question, but I have a comment on the last remark there. I think that's an extremely great point in the sense that, perhaps, we, maybe even more the employers, are dropping the ball by not worrying about continued distribution life annuities after retirement. But that raises to me the further question of the idea of DB versus DC. We've been talking a lot about the notion that the employers maybe see those as equal risk overall, but I really wonder. If there's DB, is the employer's really taking on the risk, and do the employers really worry as much about the risk that falls upon the employees in a DC situation? To what extent are our pensions really put out just as a mechanism to keep employees happy while they're working and to want to have them work with your firm? And later on in their career when they retire, as evidenced by the fact that we don't mind giving them a cash-out, really who cares? That's the comment.

The question is in a little different direction. For all of you who are practicing, when you're talking about advising your clients on the kinds of plans that they're working with, especially on something like Ian suggested with the 100 minus age rule, to what extent do you talk with them? Are they thinking and are you thinking in the context of Social Security benefits as a DB being there as we know them now? To what extent are you discounting the possibility that Social Security benefits may not be there as a DB at least fully in the form that we have? The third part of the question is: If Social Security were to be modified to be less of DB and more of a

DC, how would that change your advice and your thinking on the 100 minus age rule and just your whole DC versus DB thinking in terms of advising clients?

MR. BURROWS: In terms of the extent to which we're all looking over our shoulder at Social Security, my take is that matters right now are so unsettled it probably would not make sense to assume that Social Security is to be converted in part to voluntary personal accounts. If that happens, the importance of privately sponsored DB plans, in my view, will become even greater. But things are now so unsettled that I don't think that we can rationalize taking the future of Social Security that much into consideration.

FROM THE FLOOR: My view is that a lot of the benefit design questions of DB versus DC in America and the U.K. are relatively moot until the accounting standards get revised in some meaningful way. If I'm a CEO of a Fortune 500 Company in America and I see the volatility of the accounting standards as currently in place, I view that as an unbelievable disincentive to have a DB plan. I view that as tragic, but I really would like to encourage the actuarial profession to start getting involved and seeing if there can be any meaningful revision in the accounting rules on a going-forward basis.

PANELIST: If I might ask, what kind of revisions are you looking for?

FROM THE FLOOR: Well, the basic one would be to treat pension plans the way I think they should be treated: as a long-term animal. I don't think pension plans should be treated as short-term profit centers subject to short-term market volatility. I think that has created a lot of swings in companies' bottom lines. If you're a CEO, you're trying to manage risk. You're not trying to increase risk.

MS. EMILY K. KESSLER: Going back to what Alan was talking about before, it's not that we're the worst salesmen in the world and we can't sell the DB plans. I would argue that demographically things have changed and DB plans are designed and frozen, at least in the United States, in terms of the rules under which they operate, for a very different era. Back then we wanted things like early retirement factors, early retirement windows and a way to move people out of the workforce. And they don't work in the demographic conditions in which we're now working and into which we're moving.

The problem that employers and U.S. consultants are faced too often with is it's DB or DC because there's nothing else based on the current rules and regulations. As a profession, I guess, I would challenge us to define what we really need going forward. What's the right plan design going forward? It probably doesn't look exactly like DB, and it probably doesn't look exactly like DC, but let's, as a profession come up with what we think a good model is going forward and then work to make sure that we can design that and then provide that to the plan sponsors.

PANELIST: I think that's an excellent point, Emily, and, in fact, within the Pension Section Council, a couple of years ago, we had a significant amount of discussion about exactly this point. When you're looking at plan design, it really should not be characterized as a pure dichotomy between DB and DC. In fact, it's a spectrum of solutions in which you can incorporate plan design features that, in some respects, have DB characteristics, but, perhaps, in other respects have DC characteristics. Or you can build programs in which you have a DB piece and a DC piece together.

In Canada, everybody talks about DB going away and the world going toward DC, and I don't deny that there's heavy pressure to go DC. I can count on one hand over my career the number of companies for whom I've set up DB plans from scratch. So given a blank slate, there aren't a lot of companies these days setting up DB plans north of the border.

If I take a look at a sample of companies over a four-year period, from 2000 to 2004, to see what companies have done with respect to plan design as a lever for managing their benefit costs. I look specifically at a period that includes 2000 to 2002 and the so-called perfect storm. It includes a couple of years after that to respond because it takes a while for companies to respond and actually consider and implement changes to plan design. So looking at 2000 through 2004, what did I see happen? These plans I examined were non-negotiated plans, so these were plans where the employer actually had some latitude to take action if it chose to.

In this world where we just faced the perfect storm and have had some time to respond, I found that out of all of the DB plan sponsors in that group, only about 10 percent shifted from DB to DC. So notwithstanding all the talk about everybody wanting to go DC, I actually only saw about 10 percent of those plan sponsors make the move and, in a large part, that reflects the difficulty of moving DB. It's a very heavy boulder to move. It also reflects the fact that when we surveyed employers and asked why they haven't moved, a lot of employers were just looking at pulling other levers in the equation rather than the benefit policy lever. They were looking more at investment policy funding policy and things like that as the first levers that they wanted to pull.

Just as importantly, though, when I looked at what other changes were happening in this group of companies, 15 percent move from DB to a combination approach. They were still preserving some element of DB, but, perhaps, introducing DC with that. So I thought at least north of the border it was interesting that I saw companies shifting, but the shift wasn't just a black and white shift. It wasn't a dichotomy, but it was rather, in many cases, an adoption of both DB and DC characteristics.

MR. THOMAS NAFFE RICE: I think the comment about the accounting issue is a good one. In government we have the Governmental Accounting Standards Board (GASB) instead of the Financial Accounting Standards Board (FASB). But the point is the whole problem with DB plan actuaries is the problem that we've had to face

over the last 20 years. I kind of liken it to the same problem that brick and mortar companies had to face when all these new companies sprang up and there was a thrust to keep up with the dynamics of what was happening in the economy with young people coming out of college and the workforce changing like it did.

I think that there was basically a look at actuaries and what we do because what we do is very difficult. We don't just have an easy thing that could be put into a computer to get results. We have to think about things and analyze them. We have a broad spread of knowledge that goes into helping our clients with their pension plans and retirement issues. We deal with the future.

I think that a lot of what happened with the accounting was there was an attempt to place us into a square hole and we didn't fit. It's trying to fit us in where really, the idea of pension is long-term goals and longevity. We can weather the peaks and valleys of the economy and what's happening in the workforce, and we'll still be there. Is it really fair to force a company to be scrutinized because this year the market fell 5 percent and our liability, all of a sudden, looked outrageous? Nobody said anything when it was higher. But the fact is that with reasonable and smart trusteeship and fiduciary aspects of a pension plan, it's gradually going to get to where we want to be, and an accounting statement doesn't reflect that.

The state, I think, is in a position in which we get young people to come in right out of college and want go to work for the state. We have plenty of applications. We have people who stay with us awhile then leave and get their DB payments. We are looking at raising the retirement ages, as everybody should, because people are living longer, and we do it with new people in the future. I suggest to actuaries DB plans aren't for everybody and a lot of new companies, new ideas and new innovations came in during the 1990s that really were fast-paced. It was very difficult for the actuary to keep up with what was happening.

I think we need to look now and see which employers really benefit from DB plans and which ones don't. Obviously, a lot do. I think I saw 22 percent of employers and most of the Fortune 500 do. The state also does. We had an option for one of our employee groups. They could either take the DB plan we have or they could have one where it's a reduced one with a DC. Nobody went into the new one.

PANELIST: Michael, you made a comment earlier today about a DB plan properly designed, so I wanted to focus on that. Given that the employer's role is kind of defined by what they can add to the process, number one, it's less important now than it used to be. The employer was the gatekeeper to the tax benefits of ERISA; a gateway to the DB plan exemptions from investment return taxation; enforcer of savings through DB or mandatory DC kinds of plans; provider of efficiencies through negotiating with the various investment advisors; and a pooler of risks, especially longevity risks. They're the agent that would pool longevity risks among the employee group. Unfortunately now, also legal target is an increasing part of the employer role, so it's something that figures into their decisions. Finally, they were

bearer of legislative risk, as we're seeing as the law changes every two years and changes the landscape in which they have to design these plans.

Given that, given that the employer does have things to offer, but also is subject to these kinds of risks, we had the whole conversation yesterday about the financial side of those risks. What's the right kind of employer plan? What really would make sense in the future, even thinking through some of the possibilities? Say it would require that all the DB plans were invested in fixed-income securities. Say we would accept the financial economics argument and say, okay, now we've managed the cost volatility that way. It costs a lot more, but if we kind of get over that hump, what are the right kinds of arrangement to have?

MR. HAMILTON: We spend a lot of time with questions like what's the right thing for the employer to do. But the right thing for the employer to do is to act in the interest of the shareholders. To the extent that those interests align with the plan members, that's fine. But the objective of the employer is not to write all wrongs or to create a riskless happy world for employees to live in. I mean if that happens, fine, but that's not the objective. They have to run a business. They have to attract employees to do that. They have to compensate them to attract the employees. But we shouldn't lose sight of just whose interests are supposed to be represented when employers decide how to design a pension plan.

MS. RAPPAPORT: I think an important right thing for the employers to do is, first of all, recognize and understand within the framework of their workforce which employees, if you give them choices, are going to make choices or just go into defaults, and which employees are able to manage or not. The employers should have some reality about what the consequences of the plan design are going to be. I am very much a person who is a proponent of plans that will work for people that don't make choices, whether they are our pilot DC plans or DB plans. I hope that the environment will change so that the right choice for employer meeting the shareholder needs will be DB in more situations. But right now, I think our pilot DC plans have a very big role and that we should be paying more attention to them and how they work.

FROM THE FLOOR: I think, Eric, I remember from yesterday's session you made just a casual comment about 403(b) plans and annuity options that are coming up, that are becoming available there. Do you want to elaborate on that a little bit?

MR. FEINSTEIN: From what I'm understanding, and I've seen some literature on this, there are some companies out there that are actually bidding within the investment options, and not just 403(b). The 401(k) plans are including the ability for one of the investment options to essentially be purchase of deferred annuities. So embedding that kind of an option within a 403(b) or in a 401(k) plan is something that I think we'll look at.

Another thing that we've seen out there is that some firms, at least one I know of, are connecting online with insurance carriers and doing it at group rates because of

the volumes that are out there. So, at the point of retirement with these lump sum balances somebody can go online as an extension of our own Internet site with the retirement portal and basically link into information how to consider alternatives on spend down of those assets with one being annuity and if, in fact, you take annuity, you can click on it and immediately get a quote. This, again, is based on group rates because of the volumes that they're driving through the Internet. So there are some creative things that are starting to emerge in this area. We haven't done anything yet because our DC plans are so darn new, but it's certainly something that we're going to think about doing.

FROM THE FLOOR: I want to make just two observations and then raise my point here. The first observation is that DB promises long-term promises and because the corporate business cycle has shortened and because of international competition, it's not likely to get any longer. It's likely to shorten further. And there are no corporations that can be sure of what they're going to be able to afford 10 years down the road, yet alone 20 or 30 years down the road. So consequently, it is not clear that DB plans are properly financed out of the corporations.

Consequently, there are two other alternatives. The one is to have a DB option within the DC plan, and there's nothing to stop employees from electing a DB option within a DC plan. It clearly needs to be developed further.

The second, we could have completely independent institutions exist, much as in the Netherlands, that provide DB promises but with a caveat that they're sharing risk in some form or another with the participants. They take some of the risk themselves and they take risks wherein everybody knows what they're going to take. If the risks turn south, either retirement age goes up, benefits go down or some combination of the two, these are specified and negotiated with the employees and then the participants pick which risks they want to take and what they want to move. It is a politically different kind of system, which is more flexible, but still essentially DB. We need the regulations to change to allow that kind of flexibility either within the DC plans or within the separate institutions.

PANELIST: I think the plan you're describing, if I'm hearing this right, sounds like the variable benefit plans that still exist in some cases in the United States, in which you have the retiree's benefit actually growing or shrinking every year with the investment return on the assets that are backing up that benefit. And so you can see the benefit dropping in any given year. That kind of a design has a lot of appeal, especially if you're a financial economist and you want to make sure you understand where the risk is and where it belongs on the balance sheet. It's something that I think, as part of a financial economic discussion, has a lot of appeal and is certainly something that I would like to hear more about in the United States.

MR. HAMILTON: The Dutch plans right now don't work exactly like that. You don't reduce benefits for retired people. What you can do is suspend indexing, and they

don't have a final average. They have a career average where the career accrued benefit gets indexed the same way the retired benefit does. So if the fund doesn't perform, instead of getting an indexed career, you get a career. Instead of getting an indexed pension, you get a frozen pension. And basically, they fund on the riskless rate. They only fund the unindexed benefit and then they rely on whatever returns they earn over and above the risk-less rate to basically provide the inflation protection that isn't built into the design. They haven't had it all that long, but it's a pretty powerful mechanism if you look at it, and it seems to have some advantages.