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WHAT'S NEW IN PLAN DESIGN?

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This session will present creative approaches to plan design.

MR. JOHN A. RESCHKE: I hope to give you some thought-provoking ideas to consider. The session is what's new in plan design and, of course, you know that means cash-balance plans and age-weighted profit-sharing plans, right? True, these plans are generating a lot of interest, but there are other areas of retirement planning and plan design work that we think are just as interesting and just as thought-provoking. And since there was a session just before this one on cash-balance plans and age-weighted profit-sharing plans, we're only going to mention them in passing. We will cover some issues that affect our plan design work and ultimately will affect the retirement security of our clients and their employees.

First I'd like to share with you some general thoughts on how we approach our work. Those of you who were at the Conference of Consulting Actuaries Meeting in October 1991 were treated to a session on videotape. It was a session on paradigms and how we deal with them. The first thing we need to do is define paradigm. A paradigm is an example, a pattern. It's a model. It's a way we go about approaching our work, or our business, or whatever. It is over time that these paradigms shift. And to be of greatest value to our clients, we must recognize that a shift is occurring, and work with our clients and ourselves to work within these shifts.

Now the best example that came out at the Conference meeting was that if 20 years ago, maybe 25 years ago, I stood up here and asked, what you thought about the phrase *Japanese made?*, what would your answers have been? Just general thoughts. First thing that pops into your mind. Twenty years ago you probably would have thought, cheap. Japanese made means cheap. It's a toy. It's poor quality. Well, what do you think of now? If I say it's Japanese made you think it's expensive. You think it's high-tech. And it's high-quality. There definitely has been a paradigm shift, at least in the Japanese arena, and in the way we view Japanese-made products.

Who got caught in the paradigm shift? Obviously, carmakers got caught in the paradigm shift. Look at your wrists. Many years ago, maybe not too many years ago, the best made watches were Swiss watches. Now look at your wrists and see what's there. Seiko? Might be Japanese made. The Swiss got caught. They refused to change and recognize the shift. And they got caught. The electronics industry got caught. How many televisions or VCRs are made in the U.S.? Not many. The list can go on and on, but it is an example of the type of paradigm shift that we have to be attuned to, and I think we're going through similar type things in the retirement area in the U.S. We have to recognize what the trends are, see where they're going, and how we can design plans to meet those shifts.

So the first thing we're going to do is examine the trends that are affecting retirement planning. The first three trends that I see are really taken from John Naisbitt, and he was the author of *Megatrends 2000*. The first one he mentions is a shifting economy and a shifting work force, that has gone from an industrial to a service orientation. We see less and less blue-collar jobs. Something like 90% of the new jobs that were created last year are in the service or informational area. Long-term factory workers are being replaced by technicians, engineers, consultants, health-care providers. There are a lot of jobs in the service and informational area. That means that we're moving into a more highly technical area. That may require and possibly does require more education and training for these employees. And it very possibly means that they are a more highly mobile group. Health care providers are probably more likely to jump around a little bit in their jobs. The recent issue of *Money* magazine gives an example of a hotel manager. And this hotel manager, obviously in the service arena, jumped around from hotel to hotel, without any sort of retirement plan in mind. He's to the point now where he has to think about retirement, and he's got nothing. What's he going to do? I don't think he's alone in that whole area. The highly mobile work force is being left stranded without solid retirement income or retirement plans.

The second trend is from short-term planning to long-term planning. The book makes mention that many of the Fortune 500 companies are still in a short-term planning mode. Do whatever needs to be done now, so we can make profits for our shareholders now. Let's worry about the future when we get there. We see that shifting, though. We see it shifting to long-term planning, and perhaps it's starting with the smaller companies. We can see it maybe in the larger companies, but I think the smaller companies get there first. We also, hopefully, are moving out of the recessionary mode currently, and into a more productive mode, getting away from survival. A couple of years ago at a session like this a member of the panel was from business, and her whole point about plan design was, "We don't care. We don't care about plan design, just fix it. We just have to survive." Hopefully, we can move out of that as the recession moves to an end. We can get out of the survival mode, and look more toward long-term planning for our retirement programs.

We also see a plethora of quality-driven programs. I don't know how many of you have talked to your clients who have total quality management programs. It's becoming very big. These quality programs are permeating entire industries, the entire way of how they approach their business. The employers want highly efficient systems in all areas of their business, be it manufacturing or in delivery of employee benefits. The employers want their employees to be involved. That's an integral part of a quality management system, employee involvement.

And perhaps there's a movement away from what I will call a "rent-an-employee" concept. In the past, perhaps employers were more willing to hire somebody short term, use them, get rid of them. But as they get more involved with a quality program, there's going to be more, in conjunction with their long-term planning, of a need to retain, motivate, and attract. We always have those three words in the back of our mind for retirement planning. But somehow they have lost a little meaning as we get to this highly mobile group, and we're not concerned so much about long-term employees. We're just interested in the short term; use them, get rid of them. But perhaps we're moving away from that rent-an-employee concept. But here's an

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area where I think maybe the paradigm shift has caused a paradox. You still have a highly mobile work force, so what do you do? You have a highly mobile work force, yet you want to attract, maintain, and motivate them.

The third trend is from limited choices to multioptions; in short, more employee involvement. You can see this everywhere. Where do you do your banking? Well you can go to a bank, you can go to automatic teller machines, you can go to your grocery store and do your banking there. You can go to brokerage houses. There are many options for where you can actually do your banking. Where do you put your IRA? Open up any financial newspaper or magazine, and you will see unlimited options about what you can do with your IRA. What kind of car do you want? There are almost unlimited options, choices, styles. What classes do your children take in school? Before you used to send your kids to school and it was a set curriculum. Now, there are electives and modular scheduling, even down to the grammar school level. What kind of benefits will you, as an employee, take from your company? Flexible benefit programs are there. Employees have options, they have choices, these are 401(k) plans. Many more options are there for the employee to deal with and to use in planning.

The next area, again, is no great surprise. It's the graying of the work force; changing demographics. In 1989, about 12.5% of Americans were over age 65. By 2030, it's expected that won't quite double, but 22% of people in America will be over age 65. Not only will there be more of them, they're going to live longer. Life expectancy is increasing. They're going to need more benefits for a longer period of time. We have more women entering the work force. One statistic, I don't know how valid it is, says that there are more women in the work force now than there were in the labor shortage during World War II. Not only that, but women and other folks are entering the work force at different periods in their life. They may come in, go out, come in, and go out. There's a changing definition of what a career employee really means. And of course, there are fewer traditional households, single-wage earners and that sort of thing. You have double wage earners, covered under multiple-benefit plans. Again, there are more options, and there is a different definition of the demographics that are out there.

We cannot ignore continuing regulation. We've all seen it. I got into the business in 1974, and that was big time for ERISA, and it hasn't stopped since. It often forces what I think is a very short-term view. Let's just fix the plan, comply with this regulation or that regulation, and let's get on with business. But if we're moving to a more long-term planning approach, of course we need to use the regulations. Certainly we have to be aware of them, but I think we have to focus more toward what the ramifications are of long term, and look at it on that basis.

It is easy to say, hard to get clients to do, but I think we have to continue to pound on them to get it down. It has become very difficult to focus on objectives when you're just dealing with regulations. "How do you get this done? How do we work within this regulation to fix this plan?" This becomes the overwhelming and consuming task, not so much what the ultimate objective of this retirement program is.

And finally, I'm a pension actuary, but I've gone to a number of sessions here on health care, and it's clear that rising health care costs continue to be a problem and

will continue to be a problem in the future. It's adding cost pressure on the employees. More employers are limiting their contributions to these health care plans, therefore shifting the cost to the employees, which may add burden to the existing retirement plans. I say the words "may add burden." I think you can delete the word "may." It will add burden to the retirement plan, as more and more employers are seeking to limit their postretirement medical liabilities, for example, but the ultimate cost hasn't changed. The need hasn't changed, unless we change those things. The existing retirement programs are going to be asked to be used for more and more purposes. Someone who has been saving for retirement and has a nice living, suddenly has to spend a great deal of his or her retirement income just on medical costs.

Those are the basic trends that I see. The shifting paradigms, if you will. In the next section, I want to talk about what I think future plans that we design will have to consider, and what requirements will need to be in those plans to accommodate those shifts.

I think everybody is aware of replacement ratios. They are still a good planning tool. But I question, do we really go far enough in our entire analysis? Do we really take into account the plan design change after the Tax Reform Act (TRA) of 1986? If defined-benefit (DB) plans are becoming less prevalent, and we're switching more to a defined-contribution (DC) approach, is there really going to be enough retirement income there? Is inflation often ignored? I think it is. Postretirement inflation, I think, is generally ignored. Medical costs, in my experience anyway, have been ignored in terms of the escalation and the trends after retirement in the replacement ratio analysis that we do. And I think that's a mistake. So I think we have to get back to the basics and work in some other components.

Referring to defined-contribution plans, and specifically 401(k) plans, I think our future plan requirements are going to need plan investments that provide a real possibility for attaining the goals that we set. We do a good analysis on what income is needed for retirement. I think we need to provide the tools for the employees to attain that goal. The employer may be limiting his costs so the employee will have to make up the difference in a lot of areas, and our plan design again, must give the employee the tools and the options to attain those goals. And we'll spend a little more time on that later.

We have in America today, probably the most educated consumer of benefits that we've had ever. And we know that an educated consumer of benefits needs more options. Doug is going to talk about his mother, I'm going to talk about my mother. Even my 75-year-old mother regularly and frequently comes to me with questions about CDs, annuities, or mutual funds, and where she should put her money. Right away when she comes to me, I know she's in big trouble, but still, if a 75-year-old woman, by herself, is somewhat knowledgeable of all these different options, I think it's fair to assume that the average employee of our clients is at least as educated about the different investment options out there.

They're concerned about the rising health-care costs. They want to know what to do about them. But with respect to defined-contribution plans, what do some provide? They may be basically providing a GIC, and maybe some sort of equity fund, but

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essentially, many plans out there are pushing employees into GIC funds with low-yielding investments by plan design. It may not be enough to get them where they want to go.

Protection from rising medical costs, again, is a major concern, a major theme at this meeting. Employers continue to seek to shift and limit their liability in their plans; therefore, they're shifting liabilities over to the employees and shoving the trends onto the employees. And that's something that I think we have to consider in all of our planning. To a great degree, pension actuaries are no longer pension actuaries. They must be health actuaries and vice versa. We're kind of combining two groups.

And finally, future plans must deal with nondiscrimination regulations. We've been to sessions here that describe the updates to regulations, what's coming in the future. Our paradigms are shifting at one rate, and the Internal Revenue Service's paradigms seem to be shifting at a different rate. We would like to see some things make sense from a financial retirement planning standpoint, but you may not be able to get there from here. The same is true with funding or financing of postretirement medical benefits. A lot of things make sense, but you can't get there from here because the regulations and nondiscrimination requirements prohibit it. But it's something we're going to have to deal with.

With respect then to current plans, what are the implications of the trends and the requirements we just talked about? Benefit delivery from plans is something that Doug is going to address.

We have regulations out there, but what are people doing with respect to them? A lot of sessions have taken place that have gone through how people are managing plan design, using nondiscrimination regulations in a creative fashion. People now say they love primary insurance amount (PIA)-offset plans. It used to be that PIA-offset plans were nice, but very hard to communicate. Now the regulations come in and change permitted disparity, and suddenly people are saying, "Well that's even worse, so now I'm in love with my PIA-offset plan. I have to keep it." I think the general consensus is that you can keep PIA-offset plans, even if there isn't a safe harbor. It may not be too difficult to prove that under the general test, the PIA-offset plans can pass. You will have to do annual testing, which is the big problem, but it is possible to retain them. In answer to that, the Service has come up with the individual offset approach in 401(l). I haven't seen a lot of hue and cry from consultants, saying this is the greatest thing since sliced bread. It's extremely complicated. If people couldn't understand PIA-offset plans, I don't know how they're going to understand individual offsets under 401(l). But it does get you safe harbors.

Age-weighted profit-sharing plans are an ingenious use of the nondiscrimination regulations that allow employers to contribute more to their older employees, who tend to be the higher paid employees, and possibly the owners. There is some work going on with position-weighted profit-sharing plans. They're title-weighted profit-sharing plans. You use the same type of an approach, but instead of weighting it by age, you weight it by title or position. Both of these are highly dependent upon the demographics of the group that you have. They're not going to work in all situations. They're good ideas. They're going to require annual testing. It may work out better for small plans, but some larger plans can use it also. The position-weighted,

especially which I found very intriguing because it just doesn't seem right, can work with the right demographics.

If you're not enthralled with integration requirements, and many of us aren't, we're moving to nonintegrated plans, but implicitly integrating. It is a nonintegrated formula, but perhaps you can use the definition of compensation, for instance, to provide more compensation to some of the key employees or highly compensated employees. Perhaps use bonuses but no overtime. Again, it always requires additional testing. You can't get away from that, but in certain situations, it can work. We also see continued or more frequent use of backloaded formulas, within the limits.

With respect to 401(k) plans, they are great plans, but you have to do the average deferral percentage (ADP) test and the average contribution percentage test (ACP) and those tend to be a pain every year. Plan design can help solidify that you're going to pass those tests every year. One possible way obviously, is to encourage the savings from the nonhighly compensated group, and you can do that by modifying the matching contribution features. You can provide a higher match for the lower percentages of contributions. You can use dollar limits on the amount of the contributions. You can add the provision in the plan to provide supplemental discretionary profit-sharing contributions that may only go to the nonhighly compensated at the end of the year. Those type of things are going into plan design, all to aid in the passing of the ADP/ACP test. The great thrust of nondiscrimination regulations has been to merge plans to provide broader coverage, and get more plans together, I think. But, addressing the ADP/ACP problem, it might be best to separate the plan. If it can pass the coverage test, it is possible to separate the group between salaried and hourly plans, giving the salaried group perhaps a better chance at deferring more income, but it also gives you a possibility for later aggregating the plans for the testing. So we see some movement in merging plans, but also separating them, simply to address the ADP problems.

Finally, the use of supplemental plans, I think, is increasing, but probably not increasing as much as it should. I don't know about you, but I've had clients who have had a tremendous coverage problem. They would have to add 2,000 people to their different plans, and we suggested that they just simply knock out some of the highly compensated from some plan and give them a supplemental plan. It met with a lot of resistance, because they were reluctant to go to their bosses and say, "you're out of this plan, we have to provide something else for you." But it sure solves a lot of problems if you can convince them to do that. Unfortunately, there's a lot of resistance.

Finally, we see a lot of activity in the use of qualified plans or quasi-qualified plans to provide for postretirement medical benefits. We see the establishment of 401(h) accounts, in DB plans. Of course, with that you have the restrictions on the contributions if you have overfunded plans, and the setting up of accounts for key employees. It's not a perfect solution, but we see a lot of activity there. We see a trend to increase benefits from the qualified plans. Use things like Social Security supplements at an early retirement age up to 65 to provide for postretirement medical benefits, and since that's not subject to the same vesting rules and accrued benefit rules, you can target the people you want. We see a lot of linking of 401(k) plans and matching contributions; there are increases in those amounts and creative ways of structuring

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those plans. Again, all of this is aimed at providing for postretirement medical. At one of the sessions yesterday, we heard that Chrysler seems to have come up with a nice program that links a voluntary employees' beneficiary association (VEBA) with the 401(k). If you're interested in that, you should get one of those handouts, because I think it was very interesting how the whole area was approached.

Our friends at Wyatt have developed something for Ball Corporation, which is not really a qualified plan, but it does use an old revenue ruling or revenue procedure, that allows the use of a group annuity and after-tax employee contributions to fund for postretirement medical. Right now they don't have a match, but they have the flexibility of adding that in the future.

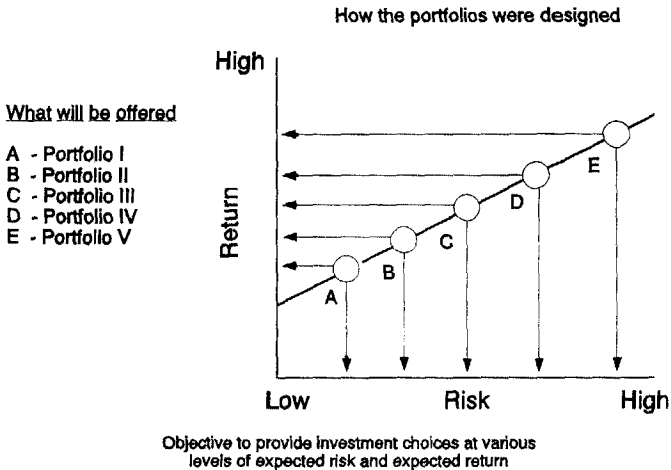
The one area where I think we can be of very great assistance to our clients is in the area of diversified investment choices. I'm glad to see the Society has put in an Investment Section, an investment series of examinations. We see an increasing number of 401(k) plans. We see increasing awareness of employees in the various investments. We have these proposed Department of Labor 404(c) regulations out there that will ask employers to diversify their investments in these type of plans, so as to limit their fiduciary liability.

We are looking to structure portfolios within a 401(k) plan that are designed to meet various objectives. We're doing this in conjunction with the Frank Russell Company, the mutual fund company. Again, we're getting away from, "here's your GIC fund, here's your equity fund, Mr. Employee, choose." We're trying to do a little more financial planning. Over the long term, it's probably best to be in equities. That's no secret; you can look up any statistics that you want. And in Chicago, we also have the rule of thumb in elections to vote early and vote often, and in 401(k) plans, we're encouraging people to contribute early, contribute often. All of this goes along with an intensive employee communication program to get employees to start contributing earlier, get them in more equity-based investments. Even a 1% increase in the rate of return over a long period of time is going to do wonders to their retirement income. And as DB plans fade out or stay level, and DC plans, especially 401(k) plans continue to grow, employees are going to need additional income, additional investment return to meet their retirement objectives.

So what we tried to do is structure portfolios. In Chart 1 we structured five ranging from a low traditional rate of return and risk factor to a high return and risk. The objective again, is to give people more options and get them more involved with equities. Give them a solid plan for a portfolio that fits their needs.

And one suggested approach might look something like Chart 2. We have five portfolios. We have one that is extremely conservative, a U.S. government money market fund. It is not going to yield tremendous amounts, it is very conservative. It might be appropriate for an older group. But then we structure balanced portfolios, II, III, IV, and V. As you can tell, the second portfolio is extremely conservative, heavily into fixed income, not necessarily GICs, but fixed income, maybe quality bonds. There are two different types that they had structured here: fixed income II and capital guarantee. But it introduces an element of equity, and two different equity funds. This approach uses a multimanager, multistyle approach, so you're not always getting small cap equity funds.

CHART 1
Portfolios Designed to Meet Various Objectives



You're getting different styles and different managers to balance out. The intention would be to limit the downside risk and increase the potential on the upside. You may not get great home runs with this type of approach, but over the long haul, we would hope that you would get slightly above average returns, and that's what we think employees will be in tune to.

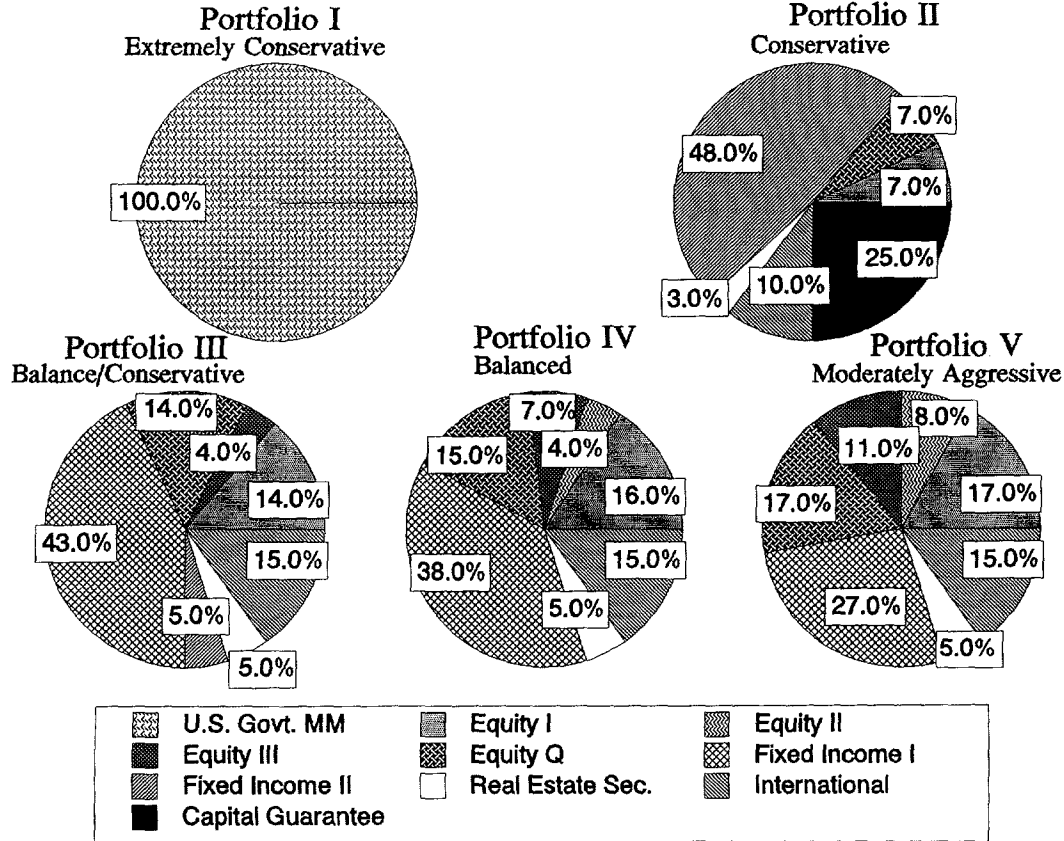
So the second portfolio adds an element of equity, still heavily in fixed income. You'll notice we added a real estate fund. I think we're crazy, but that's what we did. And also an international fund. There's international money to be made out there, but, it's riskier. I'm not sure the 10% is where we're going to end up being in this portfolio, but it can be structured. This is just an example.

The third one goes from being a little less conservative to being more balanced. The fixed income side decreases, and more equity accounts, different types of equity funds are added. The real estate and international funds grow a little bit.

The fourth portfolio is more heavily into equity in different types of equity funds, but there always is an element of the fixed income.

Finally, the moderately aggressive, as we call it, has only 27% in fixed, and most in equity. The international is limited. This would seem to be a way, with an employee communications program, to give employees the options. They know of these type of funds. It gives them the ability to invest in a managed portfolio that makes sense to them and they can pick one and choose to stay with it for periods of time. Younger employee's might be encouraged to go into the moderately aggressive ones. As they get older, perhaps they can move out of that into a more conservative portfolio.

CHART 2
Investments: Asset Allocation



As they go closer to retirement, maybe they move to the money market portfolio, but it gives them options right from the start on how to approach their retirement planning. You just can't throw all of this at the employee and say, "Here it is, choose." You must educate the employees, but we think the approach is good, and it's a little different from what typically is seen in 401(k) plan investments.

MR. DOUGLAS L. THOMPSON: I find this portfolio approach particularly fascinating, in that I can see where employees, who might look at the investments that they would be making with their retirement benefits, might be, with some amount of education, very willing to adopt what would be perceived as a balanced approach to the investments. There's no way that they would select a portfolio that would look like that, if you just gave them the options of what amounts to maybe a dozen different funds. I can't see putting a dozen different funds in front of an employee and saying "Go make your choice as to how you want to invest in these 12 different funds." But if you construct a balanced portfolio, and if the employees get an understanding of what that means, they then gain a certain amount of comfort with going with portfolio IV, because it is a balanced approach. They end up with a much better investment portfolio than they would have just trying to construct that on their own. Even if you put a lot of information in front of them about what each fund meant, and the risk elements of each individual fund, I can see that the individual probably would not duplicate that portfolio or anything looking very much like it, and probably would end up being much more conservative. They simply would not have a level of comfort in putting a bunch of particular kinds of funds together to accomplish what would be perceived as a balanced portfolio. And you end up with, in the final analysis, the individual making the better choice for his investments in his retirement benefits, and therefore, getting much more effective use out of the plans. And to me, that's a critical issue these days. I'm going to be talking more about that in my own part of this. It is becoming much more critical for employees to make effective use out of the retirement resources that are available. Because there are going to be less subsidized resources available on an ongoing basis.

I'm particularly interested, John, just thinking about it now, in portfolio II. Since it's considered to be a conservative portfolio, I'm a little surprised to see international investments in there as any part of that. I guess I would expect the international investments would show up in the moderately aggressive portfolio.

MR. RESCHKE: I'll only say that the investment manager was particularly aggressive and wanted to show them the international fund. This is probably not the portfolio that we'll ultimately arrive at. I think the international may get driven out of that, but he was hot and heavy on international a while back and maybe his fervor has cooled down some now. But that was in the initial proposal.

MR. MICHAEL ROBERT RAHN: I want to make a comment on this, because I saw another presentation one time that had the classic risk-return graph up there that you had in Chart 1. And there was a little point way out on the right and down; very heavy risk, very little return. It was the state lottery index. The gist of the presentation was that it's an understanding of risk. So it was the presenter's point that if they understand the risk, they'll invest in it.

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MR. RESCHKE: And in this approach that we're using, since it does use multi-managers and multistyles, you get sort of a balancing, and perhaps there's an element that you're doing a lot of work for just getting back to having an index fund of some sort, so why don't you just pick an index fund and use that? But the retort to that is, that with an index fund you're going to get an index return: with the managed portfolio, you always have the chance of exceeding those returns and getting slightly better, so it's best to have an actively managed portfolio, but using different styles, different managers in the various funds to manage the money professionally.

MR. THOMPSON: I'm going to talk about some of the global implications again, like what John was doing in the earlier part of his talk. John was talking about trends that we're seeing now and will see in the future that are going to have an impact on retirement planning. I perceive that there are a lot of very serious economic pressures on our clients that have a direct or indirect effect on their ability to provide subsidized retirement resources for their employees. And we're just starting to see a lot of those changes now. A lot of cost is associated with change; changes are now occurring and we're going to be seeing a lot of costs in the future. For example, the cost to repair the environment is something that is just starting to be dealt with now, and we're going to have to deal with this a lot in the future. We're going to see the cost to reeducate the American work force, from an industrial work force to a service-providing work force. A lot of studies have been performed about how poorly educated the U.S. work force is, with respect to the types of jobs that employees are going to have to perform in the future. And it's going to be a significant financial burden on our clients, to provide some, or all of that education, so that their workers are brought up to snuff on the types of jobs they're going to have to perform.

I think another big example is what's happened and will be happening in the U.S.S.R. It is a very significant change for the world and for the U.S., with respect to our military industry and the change from going from the cold war to helping the U.S.S.R., with its move to becoming a capitalistic society. A tremendous amount of change is going on there. And all other kinds of changes that we don't even know anything about will be occurring in the future. There are probably dozens and dozens of examples of such very large scope, economic pressures, that will be placed on our clients in the future, in addition to the things that have already been happening.

In addition to the aging of the work force, and the aging of the population that will be in retirement, the demographic trends will show population growth on a global basis. That's going to be putting pressure on the world economy, and therefore on the U.S. economy, and again, indirectly on our clients. A good example of an economic force and a demographic force coming together to put a lot of economic pressure on our clients is retiree medical costs. The cost of medical benefits is going up dramatically, in and of itself, and when you combine that with the aging retired population that we're going to have in the year 2030, with 22% of the people over age 65, the cost of providing medical benefits for retirees is going to be enormous. And again, more economic pressure is going to be put on our society.

This economic pressure is, over and over again, transferring the responsibility for managing retirement resources from the employer to the employee, both in

preretirement and postretirement. And associated with that is an issue that I've become more interested in very recently, and it's that the perception that employees have of the risks that they're under have been greatly accelerated over the past several years. And I'm going to talk about both of those.

The transfer of responsibility to the employees takes place most dramatically in terms of the growth of the defined-contribution plans. With defined-benefit plans in the years past, the classic American company would have just a pension plan for its employees. There were probably very few choices for the employee to make with respect to retirement planning. The benefit was provided by the company. The benefit was funded by the company, and about the only choice that the employee had to make was with respect to the benefit option at retirement.

That's changing because of the mobility of the work force and because of the economic pressures on companies with respect to being able to maintain their work forces. As a result, there is a tremendous move toward companies putting in defined-contribution plans. With a defined-contribution plan, the employee has a lot of decisions to make. He has to decide, first of all, about contributing to the plan. He has to make the decisions about investments. He has to make decisions about how to manage that defined-contribution balance at the point where he retires. A lot of decisions that have to be made on the part of the employee. The growth of defined-contribution plans is, in part, the result of the economic pressures. Companies are putting in defined-contribution plans because of the cost constraints that they are under. Defined-contribution plans are much more predictable in terms of their cost than defined-benefit plans are. And that's attractive to some employers.

And the economic pressures that are placed on our government create revenue problems that tend to lead to more regulation. The regulation in the defined-benefit area tends to be very complex, and creates more of a shift over to defined-contribution plans.

With the growth of the defined-contribution plans, there is more shift of the contribution requirements from the employer to the employee. The typical 401(k) plan, of course, has employee contributions, but for the employee to get any portion of the company contributions, he's got to put some money into the plan. I haven't seen any study on this myself, but I would expect that the percentage of employee money in retirement plans today if you just look at all the assets in retirement plans in general, is significantly higher than it probably was 10 years ago or 15 years ago.

And another area that is becoming more important, because of these other pressures, is cost-of-living allowances. The typical large pension plan in the past may very well have provided some cost-of-living increases for retirees on an ad hoc basis, and perhaps on a reasonably regular basis. Companies are much less likely to do that now, even if they do have a pension plan. Less companies are providing the ad hoc increases. They're less likely to be making that financial commitment, and in any case, if they have a defined-contribution plan, as a primary vehicle, they don't even have the proper vehicle available for providing the cost-of-living increases. So the responsibility to deal with inflation after retirement, therefore, becomes the responsibility of the employees. They have to figure out how to do it themselves.

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I think the average employee is much more aware of the risk that his or her retirement resources are under. If I ask about their perception of social security benefits, what they think about the availability of those benefits at the point where they're going to be retiring in the future, or if they're already retired, whether or not those benefits are going to be there for as long as they live, the answer I'll almost always get is, "I don't think so. I don't have a lot of confidence that money is going to be there." That to me is a serious issue. It's maybe not all that clear, just exactly what the risks are for the long-term viability of social security benefits, but at least the employee very often perceives that there is a lot of risk there.

The problems that some major insurance companies have undergone in the last couple of years have attracted a lot of attention. I don't think that employees have anywhere near as much confidence in large insurance companies and their ability to provide whatever is insured, as compared to the same perception that employees might have had even three years ago.

I think the financial problems that are associated with the Pension Benefit Guarantee Corporation are becoming somewhat better known to the public. There have been more articles in the newspapers about the PBGC, notably, with the coverage of the Long Temco Vought (LTV) case, but even in other areas, I see articles about the PBGC coming up in the newspaper more often than what they used to. I think employees are becoming more aware of the role of the PBGC and how important it may eventually be to them, because of the other risks that they're under with respect to their employer and how long that employer might be around in the future.

This takes me to the last point, which is the employer itself. I think employees are less secure about their jobs. I think the employees are less secure about how long that employer might actually exist. Even if the employer that they're working for does continue to exist in the future, that employer may be more willing to remove benefits that are in place now, especially retiree medical benefits. That employer may be more willing to change their retirement benefits from where they are now, at some point in the future. Replace a pension plan with a defined-contribution plan. Cut back on future accruals. They may have already seen it take place with their employer and therefore, they don't have the same confidence in the future that they would have had even five years ago. At the very least, the employer is perhaps less paternalistic about its employees than what it used to be.

So with all this, there is a very significant need on the part of employees to be able to manage their retirement resources. They need tools for managing their retirement resources much more so than they ever had to before. Certainly our clients are going to be less willing to add additional benefits to what's there now, because of the cost associated with it, but if they can incur some small amount of administrative costs, so that the employees could help manage the benefits themselves, then those same employees are less likely to be coming back to the employer for additional benefits, because they were unable to make good use of what they already had. And certainly an important part of providing that kind of assistance to employees has to do with financial education and individual information. Employers can help provide their employees with tools within the retirement plans themselves, to allow the employees to make effective use out of whatever information they have available.

I'm going to be talking about distribution options. I'm going to be focusing primarily on distribution options from a defined-contribution plan. The situation that I'm assuming that we have here is a couple; both people are age 65 exactly at the point of retirement. And their total retirement resources consist of social security, a pension plan, and a 401(k) plan. There are no personal savings in addition to that. And this is when I'm going to talk about my mother. In this example, there is a 401(k) plan balance of \$250,000. My mother doesn't have a 401(k) balance, but she has a pot of money that she draws on for retirement. She does occasionally come to me and ask me about investments, less often than John's mother does. But she invests it very conservatively and draws down on the interest. She does not touch the principal. She wants to leave it to me and my brother. I keep telling her, "No, ma, don't do that. Spend it. Use it up, don't save it for us." She won't do it. She will not touch the principal amount of that significant retirement resource that she has available to her. She basically has social security, and that's everything there is. She will not touch the principal. And that is very ineffective, inefficient use of the retirement resources that are available to her, because it is not doing her any good to leave the money to her children.

A friend of mine, who just recently retired, has exactly the same attitude. He has much more significant resources. He was part owner of a medium-sized company, he is getting very large distributions from a money-purchase plan and a profit-sharing plan, and I talked to him about what he's going to be doing with the distributions. He's going to let the principal sit, and draw down on the interest. Now he's probably going to invest it in a more sophisticated way than what my mother is doing, but he's doing exactly the same thing. He won't touch the principal. He wants to leave it to his children. And the only reason that he's leaving all that to his children, is because he doesn't know how to manage what's there. When I asked him how much he wants to leave to his children, it was only a very small portion of the total. But he's afraid to touch it because he doesn't want it to run out. That's inefficient use of the retirement resources that are available.

Another couple has some very specific goals about what they want to accomplish with their money. First, they don't want the money to run out any more than anybody else does. They want to be able to manage the inflation that they'll be seeing in the future. They don't want to take out too much money early, and get used to a higher level of income that they won't be able to sustain later on. They want to maintain some flexibility with their investments and with their 401(k) balance, and they want to make sure that there is survivor protection if one of them were to pass away.

Now in this particular example their specific goal for survivor protection is 66.6%. If they can maintain 66.6% of their level of income when both of them are alive for the remaining survivor, then that's fine. There are three resources here: the 401(k) plan, social security, and the pension plan. There is an \$18,000 social security benefit. This takes into account social security benefits of one person, with the 50% additional benefit being provided for the spouse. I'm assuming there is only one income in this particular family. So that at the point of retirement, they'll be receiving \$18,000 per year, and that is a benefit that is inflation protected. At least right now. That's something that could change in the future, but it is inflation protected. And if either one of the two dies, then that does revert back to 100% of the primary

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insurance amount, so in fact, it goes from 150% to 100% and there is indirectly a 66.6% survivor benefit. So the social security benefit is exactly the form that they want to have for their particular planning.

I'm assuming in this example that they have as an option available under the pension plan: a \$24,000 annual benefit in the form of a 66.6% joint-and-survivor benefit. And so they select that particular form of benefit because it fits. The only problem with it is that there isn't inflation protection in it. The only option that's available under the plan is the level annuity with the survivor benefit.

Now also in this particular example, one of the things that the couple wants to provide is an estate. They want to use a portion of their 401(k) balance to provide an estate. And they've decided that \$25,000 adjusted for investment earnings is about the right amount of money. They're going to take 10% of their 401(k) balance and consider that to be reserved for providing for their heirs after both of them have died. And so after using up that portion of the 401(k) balance for the estate, they want basically to take the rest of that 401(k) balance, and wrap it around the social security benefits and the pension benefits, so that their total annual income will grow at a specified rate of 5% per year.

They're going to draw down on the 401(k) plan, so that the sum of the 401(k) balance, the social security, and the pension will grow at 5% per year. Now they are willing to forego inflation protection after a certain point. And so we're going to assume that at age 80 they will be willing to forego continued inflation protection. I do have to point out, by the way, that in this particular presentation here, I am not worried about regulatory problems with the forms of distributions. I'm not worried about minimum distribution requirements in this particular example. I'm going to try to construct the distributions in a way that will accomplish what this couple wants to do. And then we'll look at the problems that it creates.

We have to deal with this couple's need to not run out of money at a later point in time. They don't know how long they're going to live. They want to take a portion of the savings plan balance and at the point when they retire, buy an annuity that commences at age 80. That's the point in time where they're willing to forego inflation protection that will, in effect, pick up where the savings plan distributions ran out.

Now they're estimating what inflation is going to be, but if inflation were to actually come out according to their assumptions, and if the funds were to earn whatever they were willing to assume, then at age 80, the savings plan distribution will have increased so that, except for whatever is being reserved for providing for an estate, the savings plan balance would run out, and the annuity would pick up where the savings plan balance left off.

So they're really creating five different pieces to this distribution here. They have a pension benefit, a social security benefit, they are drawing down in installments over a 15-year period from the savings plan (increasing installments, calculated to provide total income increasing at 5% per year), and they're going to use a portion of the 401(k) plan to buy this annuity, which will pick up where the savings plan installments ran out. And they'll also be providing an estate in exactly the amount that

they originally intended. And at this point they would have basically satisfied all the requirements that they had for their retirement planning.

Now, by the way, in this example, I have assumed that one of the two people dies at age 85, and the second person dies at age 90. So that's a point in time where all the money runs out, and the estate is provided for the heirs.

This is, for this couple, efficient use of their retirement resources. They're providing for their heirs in exactly the amount that they want to. They are dealing with inflation in a very effective way. They have the comfort of knowing that they are not going to run out of money. There will be lifetime income for as long as they happen to survive. And they are managing the savings plan balance for a very long period of time into their retirement. They are not giving up that balance to one particular type of investment vehicle. And in fact, one important part of this whole scenario is the way that this helps to deal with the employees' perception of risk. This is a very diversified investment portfolio in a sense. Part of the benefit is provided by the pension plan, part by social security, part by the savings plan, and in this particular case, not a very large part, but part is also provided by the annuity contract. And every single one of those resources has very different risk characteristics to it.

For example, the savings plan balance is fully funded at all times. But a lot of investment risk is involved. They have no guarantee as to what is actually going to be provided from that savings plan. They can estimate, but they have no guarantees as to what's going to be provided. But it is fully funded.

The annuity contract is guaranteed by the insurance company, which is not necessarily a guarantee these days, but it is a guarantee on the part of the insurance company. The social security benefit is, for all intents and purposes, unfunded entirely, but there's a very significant societal commitment to the social security benefit. And although a lot of people don't have a lot of confidence in that, it is nonetheless, a different type of protection than what exists with the other resources that they have. And then there's a pension plan. The pension plan is not necessarily fully funded, but it is guaranteed in a sense on the part by the employer; the employer has a commitment to make contributions to the plan, if the benefit is not fully funded. The benefit is also further protected by the PBGC. So there is kind of a double guarantee there. Every single portion of the retirement resource that this couple has available is guaranteed in a different way. And I think it's very important to people planning for their retirement to have that diversity to the risk of their various resources. If it's all in the defined-contribution plan, that's risky. If everything was in social security, certainly that would be risky. If it was all in the pension plan, that's risky. Or having all the retirement benefits insured by one insurance company could be risky. But if it's spread around and diversified, and if the retirees understand that, then they would hopefully have a more secure feeling because of the diversity of their retirement resources.

Now, Table 1 is the ideal distribution pattern. Actually you can't do this. Most notably, we have a section of the code called 401(a)(9) that we have to deal with, minimum distribution requirements. Starting at age 70.5, more money has got to come out of the plan than what this is indicating. This does not satisfy 401(a)(9). The plan couldn't buy the annuity for \$33,463 at age 65, deferring payments until

EXAMPLE 1
IDEAL
DISTRIBUTION PATTERN

Age	Total Income	Pension	Social Security	Annuity/ Installment	Distribution From 401(k) Plan For			Outstanding Balance
					Total	Income	Annuity Estate	
65	50,258	24,000	18,000	8,258	41,721	8,258	33,463	250,000
66	52,771	24,000	18,900	9,871	9,871	9,871		222,859
67	55,410	24,000	19,845	11,565	11,565	11,565		227,897
68	58,181	24,000	20,837	13,344	13,344	13,344		231,475
69	61,090	24,000	21,879	15,211	15,211	15,211		233,400
70	64,145	24,000	22,973	17,172	17,172	17,172		231,430
71	67,352	24,000	24,122	19,230	19,230	19,230		227,054
72	70,720	24,000	25,328	21,392	21,392	21,392		220,058
73	74,256	24,000	26,594	23,662	23,662	23,662		210,144
74	77,969	24,000	27,924	26,045	26,045	26,045		196,986
75	81,867	24,000	29,320	28,547	28,547	28,547		180,230
76	85,960	24,000	30,786	31,174	31,174	31,174		159,490
77	90,258	24,000	32,325	33,933	33,933	33,933		134,346
78	94,771	24,000	33,941	36,830	36,830	36,830		104,342
79	99,510	24,000	35,638	39,872	39,872	39,872		68,983
80	104,486	24,000	37,420	43,066	0	0		73,812
81	106,357	24,000	39,291	43,066	0	0		78,979
82	108,322	24,000	41,256	43,066	0	0		84,508
83	110,385	24,000	43,319	43,066	0	0		90,424
84	112,551	24,000	45,485	43,066	0	0		96,754
85	76,552	16,000	31,841	28,711	0	0		103,527
86	78,144	16,000	33,433	28,711	0	0		110,774
87	79,816	16,000	35,105	28,711	0	0		118,528
88	81,571	16,000	36,860	28,711	0	0		126,825
89	83,414	16,000	38,703	28,711	0	0		
90					135,703		135,703	135,703

age 80. If the plan buys an insurance contract, then that insurance contract is going to have to satisfy 401(a)(9) in and of itself. And this one doesn't, because it has benefits commencing at age 80, not age 70 1/2. So even if it would be the ideal thing for this couple to buy, they couldn't buy it at age 65 and satisfy 401(a)(9).

And even if they could, even if 401(a)(9) weren't there, there would still be a problem. Because they would have a real tough time buying that annuity. I recently had our office ask some insurance companies what the cost would be for buying an annuity at age 65, deferred to some later date. We were able to find an insurance company that would provide an annuity of this type, commencing at age 78. For some reason, 13 years seemed to be about as far in the future that they were willing to go. But it's a pure life annuity, in a sense that there would be no payments if anybody died, the payments would be deferred for the 13 years. I compared the purchase rate that they were quoting, to a maturity value based upon 7% interest, using 1983 basic group annuity mortality tables. And the purchase price was about 2.6 times what the 7%, 1983 basic table actually indicated, which is not the same result you would get if you were looking at an immediate annuity.

If we didn't have a 401(a)(9) problem, if that could be fixed, and if the insurance companies were to make this kind of annuity available on a practical basis, then it could be a very effective tool for the couple in dealing with their concern about money running out and still being able to manage inflation.

So what I'm going to do is replace this distribution pattern with what I'm going to call an "acceptable distribution pattern." (See Table 2.) We're going to do the same kind of thing, but instead of buying an annuity at age 65, we're going to hold off. We're not going to buy the annuity at age 65. We are going to buy the annuity at age 80. Just leave the money in the plan, until you get to that point in time, where you want to buy the lifetime income. It's still secure. The amount of that annuity is going to be subject to the investment earnings that you realize between age 65 and age 80, and it's going to be subject to the purchase rates available at age 80, and it may not necessarily be any better or worse than what they are right now. In fact, it probably would be better than right now, with interest rates being where they are. So we wait until age 80 and purchase an immediate annuity at that point. And as long as we've reserved the money for that purpose, then in effect, the lifetime guarantee is still there. Because there will be money that will be used specifically for that purpose, and there will be some amount of guaranteed life income available at age 80, without the inflation protection.

The only other thing we're going to have to do is start drawing down sooner, according to the minimum distribution requirements, on what is going to be provided for the estate. In effect, what this couple could do is set up an account outside the retirement plan, to accept distributions from the plan. They're going to have to pay taxes. They're not going to be able to defer the taxes on that portion of the distribution, but just draw down whatever they have to, that is above and beyond what they plan on using for income purposes. So there is exactly the same kind of distribution pattern, for the installments that were under the other example. And whenever the minimum distribution requirement exceeds what they want to use for income, then it just kicks off into this savings plan and they pay taxes on the distribution at that point. Because of the loss of the deferral of the taxes, it may provide something a

EXAMPLE 1
ACCEPTABLE
DISTRIBUTION PATTERN

Age	Total Income	Pension	Social Security	Annuity/ Installment	Distribution From 401(k) Plan For				Outstanding Balance	Minimum Distribution
					Total	Income	Annuity	Estate		
65	46,466	24,000	18,000	4,466	4,466	4,466		250,000	0	
66	48,789	24,000	18,900	5,889	5,889	5,889		262,721	0	
67	51,228	24,000	19,845	7,383	7,383	7,383		274,810	0	
68	53,789	24,000	20,837	8,952	8,952	8,952		286,147	0	
69	56,478	24,000	21,879	10,599	10,599	10,599		296,599	0	
70	59,302	24,000	22,973	12,329	13,883	12,329	1,554	306,020	13,883	
71	62,267	24,000	24,122	14,145	14,754	14,145	609	312,587	14,754	
72	65,380	24,000	25,328	16,052	16,052	16,052	0	318,681	15,758	
73	68,649	24,000	26,594	18,055	18,055	18,055	0	323,813	16,720	
74	72,081	24,000	27,924	20,157	20,157	20,157	0	327,161	17,674	
75	75,685	24,000	29,320	22,365	22,365	22,365	0	328,494	18,606	
76	79,469	24,000	30,786	24,683	24,683	24,683	0	327,558	19,499	
77	83,442	24,000	32,325	27,117	27,117	27,117	0	324,076	20,192	
78	87,614	24,000	33,941	29,673	29,673	29,673	0	317,746	20,913	
79	91,995	24,000	35,638	32,357	32,357	32,357	0	308,238	21,339	
80	96,595	24,000	37,420	35,175	233,950		230,396	3,554	295,193	3,554
81	98,466	24,000	39,291	35,175	5,061		5,061	65,530	5,061	
82	100,431	24,000	41,256	35,175	5,258		5,258	64,702	5,258	
83	102,494	24,000	43,319	35,175	5,504		5,504	63,605	5,504	
84	104,660	24,000	45,485	35,175	5,696		5,696	62,168	5,696	
85	71,291	16,000	31,841	23,450	8,184		8,184	60,425	8,184	
86	72,883	16,000	33,433	23,450	8,037		8,037	55,898	8,037	
87	74,555	16,000	35,105	23,450	7,846		7,846	51,211	7,846	
88	76,310	16,000	36,860	23,450	7,608		7,608	46,401	7,608	
89	78,153	16,000	38,703	23,450	7,319		7,319	41,509	7,319	
90					36,583		36,583	36,583		

little bit smaller than what was originally intended for the estate, but it'll basically come close.

Now this annuity purchase at age 80 will satisfy 401(a)(9) if this couple is using recalculation of life expectancy under 401(a)(9). If they were not recalculating life expectancy, you could not buy a life annuity which begins payments after 70 1/2 and satisfy 401(a)(9). You could buy a certain annuity that only went as long as the original life expectancy that they were using for the distributions, but that wouldn't solve this couple's problem. They want to have the guarantee of not having the money run out. Term-certain annuities are just not going to do that. So in order to be able to protect their right to buy, at some later point in time, a true life annuity, they need to recalculate life expectancy on the distributions from the savings plan as they go along.

But that doesn't necessarily create any problems. They can do that. Then they can buy the annuity at age 80. They still have the same lifetime income protection that they had before. They just don't know at age 65 exactly what that's going to be. And it may not be a bad idea to wait until that point in time. Because maybe with waiting until age 80, they'll be able to plan a little bit more closely how the installments and the annuity will actually tie to each other. When they're estimating at age 65 what inflation is going to be out from age 65 to age 80, they're not necessarily going to have a good handle on that. They may not get that good of a fit. Even if they could purchase the annuity at age 65, they may not get that good of a fit between the annuity and the installments.

So this may be even preferable. I thought originally that the idea of being able to purchase the deferred annuity at age 65, deferred until age 80, would be attractive from the standpoint of getting, with the deferral of mortality, some excellent purchase rates. But exactly the opposite was true. And of course, like I say, they just have to draw it down from the balance, reserving everything that's left over from whatever the income requirements were, using that for the estate. And so the effect is that they accomplished the same thing that they would have under the other scenario.

Now by the way, I have my own interpretation here about the minimum distribution requirements, at age 80 for this annuity. In the proposed regulations on 401(a)(9), they discuss taking the entire balance from a plan and using that to purchase an annuity and effectively eliminate the requirement for the plan to make a minimum distribution, as long as the annuity satisfies the minimum distribution requirement. Now here I have part of the balance at age 80, part of the balance of the plan going out to purchase an annuity, and there is still some money left in the plan. I'm assuming in the calculations that I've done here, that I immediately have a transfer from the plan of the minimum distribution requirements associated with that annuity purchase. That goes out of the plan, and the plan is left with the distribution requirement for what's left.

It's worth pointing out that if you have a rollover type of situation, that is not true. If you roll over money from one plan to an IRA, in that year, the plan still has a minimum distribution requirement. The IRA doesn't have a distribution requirement associated with that money. So it works out a little bit differently with rollovers. And the proposed regulations didn't explicitly deal with a partial annuity purchase, which is

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what I have happening here. But logically, this is what makes sense to me. You would just take the portion that is going to the annuity purchase out of the minimum distribution requirements in that year.

This to me is an example of how this couple could make effective use of retirement resources that are available to them. The thing that the employer needs to do is just have that option available. There's some administration that goes along with allowing the individual to make annual distributions from the plan, watching out for the 401(a)(9) requirements. Probably associated with this is providing some information to the individual about how big these distributions should be. We are presuming here that we have a well-educated couple, deciding that they need to take out \$4,466 from the 401(k) plan in the first year. How do they figure that out? We can figure that out. *But how do they figure that out? They need that kind of information made available to them, and this really presumes that there is an environment where the employer is providing that type of information to them, providing the administration within the plan to allow them to accomplish that. This is not adding additional retirement benefits, not adding additional subsidized costs to the employer other than the cost of the administration associated with doing it, so that the employee actually learns something about how to manage these resources that are already available to him.*

Table 3 is another example. It just looks at them retiring a little bit earlier and considers the use of the pension plan to provide leveling options as another distribution tool, to help the employee manage this type of retirement distribution pattern.

EXAMPLE 2
LEVELED PENSION

Age	Total Income	Pension	Social Security	Annuity/ Installment	Distribution From 401(k) Plan For			Outstanding Balance	Minimum Distribution	
					Total	Income	Annuity			Estate
60	33,072	32,500	0	572	572	572		200,000	0	
61	34,726	32,500	0	2,226	2,226	2,226		213,388	0	
62	36,462	32,500	0	3,962	3,962	3,962		225,943	0	
63	38,285	32,500	0	5,785	5,785	5,785		237,520	0	
64	40,199	32,500	0	7,699	7,699	7,699		247,956	0	
65	42,209	17,500	18,000	6,709	6,709	6,709		257,075	0	
66	44,319	17,500	18,900	7,919	7,919	7,919		267,892	0	
67	46,535	17,500	19,845	9,190	9,190	9,190		278,171	0	
68	48,862	17,500	20,837	10,525	10,525	10,525		287,810	0	
69	51,305	17,500	21,879	11,926	11,926	11,926		296,695	0	
70	53,870	16,000	22,973	14,897	14,897	14,897	0	304,703	13,824	
71	56,564	17,500	24,122	14,942	14,942	14,942	0	310,092	14,637	
72	59,392	17,500	25,328	16,564	16,564	16,564	0	315,811	15,616	
73	62,362	17,500	26,594	18,268	18,268	18,268	0	320,194	16,533	
74	65,480	17,500	27,924	20,056	20,056	20,056	0	323,061	17,452	
75	68,754	16,000	29,320	23,434	23,434	23,434	0	324,215	18,364	
76	72,192	17,500	30,786	23,906	23,906	23,906	0	321,836	19,158	
77	75,802	17,500	32,325	25,977	25,977	25,977	0	318,785	19,862	
78	79,592	17,500	33,941	28,151	28,151	28,151	0	313,305	20,620	
79	83,572	17,500	35,638	30,434	30,434	30,434	0	305,115	21,123	
80	87,751	16,000	37,420	34,331	228,760		224,868	3,892	293,909	3,892
81	91,122	17,500	39,291	34,331	5,384			5,384	69,709	5,384
82	93,087	17,500	41,256	34,331	5,593			5,593	68,828	5,593
83	95,150	17,500	43,319	34,331	5,855			5,855	67,661	5,855
84	97,316	17,500	45,485	34,331	6,059			6,059	66,132	6,059
85	66,395	11,667	31,841	22,887	8,706			8,706	64,278	8,706
86	67,987	11,667	33,433	22,887	8,550			8,550	59,462	8,550
87	69,659	11,667	35,105	22,887	8,346			8,346	54,476	8,346
88	71,414	11,667	36,860	22,887	8,093			8,093	49,359	8,093
89	73,257	11,667	38,703	22,887	7,786			7,786	44,155	7,786
90					38,915			38,915	38,915	