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PENSION TOPICS FOR THE NON-PENSION ACTUARY

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- o An overview of pension issues and recent developments for the non-pension actuary.
 - TRA 86
 - Regulatory developments
 - FASB
 - Plan design issues

MS. KAREN KRIST: This is pension topics for non-pension actuaries. We think that what we do is very important and we are very pleased to have the opportunity to at least give you an overview of some of the things that are going on in our part of the actuarial world which is changing our lives and making our lives more interesting.

I would like to introduce our panel. The recorder is Dan Matern, from Mercer-Meidinger-Hansen in Chicago. Deborah Stern is an ASA and an EA. She has been a consultant for seven years in retirement planning and is currently a Consulting Actuary with Johnson & Higgins. Deborah was educated at the University of Illinois. Stan Samples is an FSA and a consulting actuary in the Atlanta office of Mercer-Meidinger-Hansen. Stan's specialty is pensions, but he is now working more in the health insurance area. Joan Weiss is our third speaker. She is an FSA and a consultant with Coopers & Lybrand in Chicago, specializing in pensions and overall benefit plan design. Joan has a Ph.D. in economics from the University of Michigan, and before she got involved in actuarial work, taught business statistics at the college level. Deborah is going to talk about some of the issues involved with the FASB and the rules that came out a couple of years ago about accounting for pension plans.

MS. DEBORAH A. STERN: As you can see, accounting for pensions is not a new thing. It has been around for quite some time. Back in 1956, Accounting Research Bulletin #47 came out and in 1966, Accounting Principles Board Opinion #8 (APB #8) provided a way that corporations could put pension expense in their financial statements. Basically, that provided for a minimum and maximum within which the corporation could choose a method that they would expense every year as long as they were consistent from year to year, that had a range within which they could work.

FASB statements #35 and #36 came out in 1980 to provide for additional disclosure but basically that was the way to do things until the end of 1985. At the end of 1985 statements #87 and #88 came out. It sounds like they just appeared, but in fact, they were 11 years in the making. We now have both

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statement #87, which covers accounting for pensions, and statement #88, which is basically special situations. The reason that these were split was basically for political reasons within the Accounting Standards Board. Each one of these statements passed on a four to three vote, but each with a different four. Had they been in one statement, surely they would not have passed. It shows how controversial these statements were -- not only within the actuarial and corporate world, but also within the accounting world itself. You might see some of this kind of controversy coming up as you watch your other postemployment benefit statements go through the same rigamarole with the Accounting Standards Board.

Another note to back these statements is that these statements are not just for your qualified pension plans. They are for nonqualified plans, foreign plans, and such, although there is some delayed recognition for certain situations. One reason why FASB statements came out was in fact stated by the financial people, namely that the old method (APB #8) provided too much latitude to employers. Employers could choose whatever cost method that was done for the IRS, whatever interest assumptions they wanted, and many other things that were chosen, and the FASB found that costs were not comparable from company to company, from industry to industry, or within an industry.

The costs were not necessarily consistent, even within one company; they might not be consistent from plan to plan because of different cost methods and such, and in fact, unfunded liabilities could legitimately never be recognized. The FASB basically wanted to tighten things up. They wanted to make things more comparable. They wanted to provide for less latitude in the choice of assumptions, etc., and they wanted to provide that liabilities would eventually be recognized.

Under the old way, most people expensed what they contributed, unless it was a simple unfunded plan. Under the new method (it is an accrual accounting method) your contributions hardly ever equal your expense, and if they do, it is just sheer chance. As a matter of fact, there is a new concept here. You could have a paper income item on your financial statement, even though you could not get the cash out of the plan.

The other major change was the fact that severely underfunded plans now had to recognize some sort of minimum liability on the books, and it wasn't just in the footnotes. This could affect loan agreements and it could affect your interest rate for borrowing. The basic issues that the accounting board was struggling with while they were coming up with this were these three: Over what period should pension cost be recognized? What methods should be used to allocate or attribute pension cost to individual accounting periods? And should current information about the funded status of defined benefit plans appear in the balance sheet?

In a nutshell, I will give you quick answers to these that the FASB came up with. The first one, the period over which pension cost should be recognized, should be over the working lifetime of the employees involved with this pension plan. Basically, in the crudest way, they viewed these employees as a piece of capital equipment that could be depreciated over their working lifetime, and when it is time to turn them out to pasture, the cost associated with their pension should be recognized on the books. That is why it is over the working lifetime. The method that they chose was the projected unit credit method. They also specified certain amortization methods and such. They looked at all

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sorts of other methods, but they basically decided this was one that they could prorate over the working life, and they understood this one the best. It is interesting to note that it does generally produce the lowest expense of all the standard methods that are approved by the IRS. Not always, but generally. And the final question is whether some of this should appear on the balance sheet and to that they basically said yes, but only for underfunded plans, and it should not be offset by a corporation's well-funded plan.

The stated objectives of FASB 87 are thus: the first one is to provide a measure of pension expense that is more representationally faithful than those used in the past. This is important because it reflects the terms of the underlying plan. They wanted expense to follow the benefit formula. If it was a front-loaded formula or back-loaded formula, they wanted expense to follow the way that someone would actually accrue benefits, because it better approximates the recognition of the cost of an employer's pension over their employer's service period. Secondly, FASB #87 wanted to provide a measure of net periodic pension cost that is more understandable and comparable and is therefore more useful than in the past. The key words there are understandable and comparable, and go back to the financial people who really wanted this in the statement. The financial people wanted to provide disclosures that would allow users to better understand the extent and effect of an employer undertaking to provide employee pensions and related financial arrangements, and finally, they wanted to improve recording of financial position.

For the most part, FASB accounting for domestic plans has been implemented at this point. There might be one or two whose fiscal year started late in 1987 that are now just implemented, but for the most part domestic plans had been implemented. Earlier implementation was encouraged, but basically it was very large simple well-funded plans that implemented early, such as the AT&T plans. Those plans wanted to be able to recognize an income item on their income statement and they could not do it under APB #8, but they could under FASB. Basically all of the standard plans are now implemented. The additional balance sheet liability that I mentioned very briefly for simple underfunded plans is not effective until 1989 fiscal years, and I don't expect too many of them will want to implement that early.

Non-U.S. plans and small nonpublic plans do not have to implement until 1989. Earlier implementation is recommended. If you were to implement in one country plan, you would have to implement all the plans in that one country, not just one plan. There really are no special provisions provided for all those foreign plans and we in the pension business know German plans are not the same as Greek plans and are not the same as Japanese plans, but there really are no special provisions provided except this grace period. We have found that we have to really plan ahead with our foreign subsidiaries to try to get them to understand why they have to get this information, and that it is a different cost method, a different way. You just have to plan very much ahead.

What's new -- big thing, jargon, a lot of new terms and a lot of it is really just a new way of saying old things -- new ways of saying things that the IRS and actuaries say, but a lot of it is that you just can't talk to each other. One liability term is something called Accumulated Benefit Obligation. Anytime they say obligation they really mean liability such as actuarial liability. Accumulated benefit obligation is basically something that has been accrued to date, no future salary increases or anything. We will probably see something very similar to this under the new laws that Stan will talk about with regard to current

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liability. This is the liability which would determine whether you have to recognize a minimum liability on your balance sheet or not -- if you don't have sufficient assets to cover the accumulative benefit obligation, you must. The projected benefit obligation is very similar except it does recognize future salary increases. This is more like actuarial liability under the projected unit credit service prorate method. Another term used is something called service cost, which is what we in the pension field call normal cost. It's another term for pretty much the same thing. Another weird thing that came up is something called the gain loss corridor. That is something the IRS won't let us do but the accountants view gains and losses and changing assumptions as something that should net out over time (which could make a lot of sense) and they felt those gains and losses should not be recognized or don't have to be recognized as long as they are small enough and could fluctuate back and forth, so that they allow for a corridor within which you do not have to amortize gains and losses.

A few other terms have been around for a while, but most companies didn't have to deal with them: things such as book reserve and prepaid pension expense. Those are terms that have been around awhile, but as long as they expensed what they contributed, these were never on the books. All of a sudden, now, virtually everyone will have a book reserve on a prepaid pension expense because their expense does not equal their contribution.

One other sort of interesting way that the accountants look at things is amortization. We in the actuarial field like putting our interest in with our discounts. We all learned this in part IV, our A-upper 12s, where we had both interest and mortality all rolled into one number. They like separating out their interest from their amortization. So most of their amortizations are either a straight line or sum of the digits method, and then they put the interest in a separate item within pension expense.

Accountants also separate the discount rate of the liabilities from the long-term interest rate on plan assets. You would think that they should be together, but they are not under the accounting rules.

The next major thing that happened was they changed assumptions from being implicit, simply being reasonable in the aggregate and the long term, to explicit. In particular, the discount rate for liabilities. They want those to be current market rates, which as we know in the last few years have gone up and down like a yo-yo. This will cause great fluctuation in pension expense.

It's also interesting to note when you go back to the Omnibus Budget Reconciliation Act (OBRA), the new pension law just passed in December 1987, that now Congress again is following the accountants' lead, I guess, and saying assumptions for funding purposes will also have to be using explicit assumptions. It's interesting that they're following here.

The reason that the FASB wanted explicit assumptions on the current market rates with the discount rate basically was to try and narrow the range within which a discount rate could be chosen. Studies done for the 1986 fiscal years found that there isn't much consistency and, basically, the discount rates range from 7-12%, which is quite a difference for the same fiscal year.

Standardized methods of expense calculation: I mentioned that they decided to use only one method, the projected unit credit method, which generally produces the lowest liability. It is also the first method that their postemployment

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benefits FASB is looking at. Although the FASB is also looking at a couple of other methods, they seem to like this particular method. On the financial statements, they also wanted to see the market value of assets, although they do allow for some smoothing of the value of assets for pension expense purposes.

Initially, if you had a plan amendment which would increase past service costs, the FASB wanted to recognize that immediately. But they have decided that was such a change from prior ways of doing things and that they would allow for delayed recognition. So we therefore do have amortization of prior service costs, and we have amortization of gain/losses, and such things.

Balance sheet liability, which is brand new, is when underfunded plans must put something on their balance sheet. It's interesting to note again the new pension law for funding purposes. OBRA also is looking now at that same sort of thing -- not putting things on the balance sheet, but requiring much greater funding for plans that don't meet a certain minimum amount of funding.

The FASB also provided for greatly expanded disclosures. Initially, a lot of people thought that all these things would cause funding and investment policies to be changed to try to minimize the fluctuation in pension expense. Practically, we have not seen that to be that much. Another great practical effect is that this has caused almost everyone to have to run two valuations each year, and this has to be explained to your clients.

This is just sort of a thought. The last question is that with all this detail telling us what we have to do, we question whether the auditors are now treading on the actuarial turf . . . just a thought to keep in mind.

Mostly, in disclosure -- about half the disclosure items were old things. The amount of pension expense was always noted in a footnote, but now there are components that must be disclosed. The reconciliation of the funded status is something that is new. The description of the plan, funding policies, benefit formulae, the comparability from year to year, the related party securities were all things that were disclosed before. The interest rate and mortality table used were also disclosed in the footnote, but now they want additional disclosure, such as the rate of compensation increase and the expected long-term rate of return on assets. And the FASB wants the alternative amortization methods used to be disclosed -- and any regular amendment commitments -- they want those to be recognized in advance. And what does that mean? That can mean for any negotiated plan one has, that every three years they come back to the bargaining table and negotiate a 50% per year increase. Well, if there's a history of that, the FASB wants you to recognize that long in advance. They say that should be part of your assumptions, not something considered a plan change. That should be recognized in advance. This is different from the IRS that does not allow you to recognize that in advance.

Career average updates occur in a career average plan that regularly, or every four to five years, decides to update its benefits to a final average pay plan, and/or any regular postretirement cost of living increase that isn't in the plan document but happens every three, four, or five years. Those should be recognized.

Very briefly, the first cost component of pension expense is the service cost, which is normal cost. The second component, the interest cost, which is the interest on the liabilities, is separated out from the service cost and separated

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out from the actual return on plan assets. And then the last three items are under the category of amortization and deferral, and they basically are lumped together on the financial statement itself.

Very briefly, two plans that have very similar demographics and very similar plan provisions can have very different expenses. The major reasons, we assume, are the fact they might have very different returns on plan assets and also early on when first implemented, one might have been well funded and had an actual income item and the other would have had an expense, and so you can see great differences in income versus expense.

The additional minimum liability has a limit. If you are severely underfunded, you have to recognize a liability. You have a corresponding intangible asset but it has a limit too. And as a result, this is sort of bottom line that I wanted to show, if you are limited to your intangible asset you must take a charge to equity. This can affect some of your loan agreements and such.

Another conflict is the measurement date, which basically is the date that assumptions are set, assets are set, and liabilities are discounted to. This must be within 90 days of the reporting date, which is normally the fiscal year-end. Whatever you choose must be consistent from year to year. The practical effect of this really comes down to the timing of your data preparation, making sure you have your data long enough in advance that you can get your liabilities.

This new accounting will affect any acquiring company's allocation of the purchase price, and unlike normal pension expense where you amortize certain unfunded liabilities, the acquiring company could actually recognize some of those things in full right away when it buys a company, depending upon what kind of sale it would be.

Briefly, all that I just mentioned is for defined benefit plans. For defined contribution plans, there was not much change from before. Basically, contributions equal your expense. Taft-Hartley plans, multiemployer plans would fall under this category too. They are treated just like defined contribution plans for pension accounting.

One final note under FASB 88, which as I've mentioned, is the special situation. Three major areas which would have to have special treatment are: (1) when you would have settlements. That would include any time you would want to buy annuities for some of your liabilities. Perhaps you want to get rid of your retiree liabilities and just remove that risk from the corporation or the plan sponsor's books, and they will go out and purchase annuities from an insurance company. Perhaps they want to terminate the plan. They would have to buy annuities for all plan participants. That would be considered a settlement. (2) A curtailment is anytime you reduce the expected future service of your employees. That could fall under plant closings. It could fall under any major set of layoffs, or if they decide to freeze the benefit formula under the plan. This would reduce the expected working lifetime and therefore would produce a curtailment. (3) Termination benefits basically are early retirement windows, or anytime there is an additional liability produced by a plant closing or a massive amount of layoffs. These are special benefits, one-time deal type of things, which would also come under FASB 88. These often will produce special treatment in that one year, where you would recognize a great amount of liability or the income, if you're a well funded plan, right away in that one year. This was a change from the prior accounting rules because prior accounting rules did not

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allow you to recognize these any faster than ten years. Now you can recognize these all in one year.

MS. KRIST: As you can tell from everything that Debbie just said, 1986 was an interesting year for pension actuaries because we had to learn a lot more about accounting than any of us wanted to know, and the accountants were certainly having to learn a lot more about pension matters than they wanted to know (and some of us believe that they still haven't quite caught up).

While we were busy doing that, Congress was busy putting together the Tax Reform Act of 1986 (TRA 86) and they not only gave us the TRA 86 but gave us some other legislation which has impacted significantly the work we are doing for our pension plans. So we not only in the last couple of years have had to go through all these accounting matters with our pension clients, but Stan's now going to discuss all of the legislative issues and all of the things Congress has done to us in the last couple of years.

MR. STANLEY C. SAMPLES: I will review the reasons for and effects of recent pension legislation, and will summarize what we as pension actuaries have had to deal with over the past two years. There have been what I consider to be two major and two minor acts passed by Congress over the past two years. I will discuss the majors first, followed by the minors.

The first one is the TRA 86, which we in Mercer refer to as "TRAC." This act, as you know, affected each of us in various ways, especially participants in almost all benefit plans.

Prior to TRAC, the limit on how much employees (especially highly compensated employees) could contribute or defer to a 401(k) plan was \$30,000. However, this amount was further limited by the nondiscrimination test that allowed the highly compensated employees to defer only so much more, on average, than the non-highly compensated employees. Congress became concerned that the rules permitted significant contributions by the highly compensated employees without comparable participation by the rank and file. And they were also concerned that there was excessive reliance on individual retirement savings, and this could result in inadequate retirement income security for many of the rank and file. So, how did they address these concerns? First, by reducing the limit on deferrals to a 401(k) plan from \$30,000 to \$7,000 per year, and by reducing the gap between the average amount the high-paid employees and the low-paid employees could defer. Because of their concerns, Congress also extended the "GAP" test to employer matching contributions, as well as after-tax employee contributions, which before were not subject to these tests.

When it came time for employees to begin taking their money out of their retirement plans, Congress was aware of the fact there was not a uniform benefit commencement date for all of these tax-favored benefits. Neither were there uniform minimum distribution rules. They believed these types of rules were needed to ensure that the plans fulfilled their purpose and justified their tax-favored status, which is the replacement of income after retirement rather than an indefinite deferral of tax. So what they did in TRAC was to establish a date by which all retirement plans, including IRAs, must begin paying benefits. That date is April 1 of the year following attainment of age 70.5, even if the employee is still working. They also imposed an excise tax if the employee did not start receiving by that date at least the minimum required distribution, which is to be determined by regulations. This excise tax is a 50% nondeductible

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tax on the amount that should have been paid and wasn't. Of course, with Congress, if they impose minimum requirements they must also impose maximum requirements. Because any individual employee could have more than one retirement plan, for example, an IRA or plan with a former employer, Congress felt the need for an overall limit on benefits paid out. So they set a limit and, if that limit is exceeded, the employee must pay a 15% excise tax on the excess. Well, if they establish a maximum age to start receiving benefits, then, of course, they must establish minimum ages or conditions. There are many rules there that say that, if you start to receive benefits too early, then you must pay a 10% additional tax on the amount you can receive. As you can see, TRAC has narrowed the gap between the timing of the benefits as well as the amount of the benefits.

Next are the nondiscrimination rules for retirement plans. Prior to TRAC, there were minimum coverage requirements that every qualified plan had to meet. The intent of these was to make sure that the lower-paid employees received some coverage. Congress became concerned that these rules permitted too large of a disparity in the coverage of the high-paid and the low-paid employees. As a matter of fact, I've had plans that on the surface were discriminatory in favor of the higher-paid employees, but we were able to prove under the existing tests that the plans covered what we call a fair cross-section of employees, and therefore we were able to get them qualified. With TRAC, Congress put more teeth into these minimum coverage requirements. Beginning in 1989, employers will have to pass more specific and, in some cases, more difficult tests to prove they are not discriminating in favor of the higher-paid employees. What this will mean for many employers is that they may no longer be able to have the separate plans for the salaried and the hourly employees in the forms they have them now.

Integration: When we design retirement plans, Social Security benefits are taken into account. This is because we look at the replacement income the employee will have when they retire. Part of this replacement income is Social Security. So, we have been able to integrate the retirement plans with Social Security. Congress became concerned with this because the Social Security integration rules were too complex and, by using these rules, you could in effect design a plan so that some employees would receive no benefits. They decided to address these two issues. What they did corrects at least one of these. That is, you can no longer exclude employees based upon the integration rules. However, whether or not they simplified the integration rules is another story. What they did do was to change the rules in such a way that, unless the employer decreases amounts payable to the highly paid, the cost of the plan will increase.

Regarding the vesting of benefits, ERISA established various vesting schedules that an employer could use, as well as other rules relating to vesting. The most common of these schedules is known as the "Ten Year Cliff," which means that you are not vested at all for the first nine years, and after ten years you are fully vested. Keep in mind that these schedules were established with ERISA back in 1974. Since that time, things have changed. Congress recognized that many workers, in particular women and minorities, were more mobile and therefore shorter-service employees. Under the current vesting rules, these groups were not likely to receive a benefit. Therefore, what Congress did was to improve the vesting schedules for employees. Beginning in 1989, an employer will be able to choose between two vesting schedules -- one in which employees

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will be fully vested after five years, and the other which phases in vesting between three and seven years.

Our last item under TRAC regards the limits on the contributions to a defined contribution plan on an annual basis and the maximum benefits that can accrue under a defined benefit plan. Before TRAC, the limits were \$30,000 for a defined contribution plan and \$90,000 for a defined benefit plan. Both of these amounts were to be adjusted for cost of living beginning in 1988. Congress began to look at the rules under which you could receive these various benefit limits and decided that maybe they were not doing what they wanted them to. The defined contribution limit was, in many cases, a better deal than the defined benefit limit. On the other hand, the defined benefit limit was set up in such a way that it encouraged and, in some respects, subsidized early retirement. So they decided to make changes. Now, the limits are tied to each other in that the defined contribution limit is still \$30,000 but it will not be indexed until the defined benefit limit hits four times that amount. And then it will remain a 4-1 ratio. The defined benefit limit, on the other hand, was set such that is tied to the Social Security normal retirement age. And, if you retire before that age, that limit will be reduced significantly more than before.

Now, let's turn our attention from amount and timing of benefits to some relatively new rules that affect how these benefits are funded in defined benefit plans. On December 22, 1987, the President signed into law the Omnibus Budget Reconciliation Act of 1987, which we refer to as "OBRA 87." Now, there were many things in this act, as the President indicated during his State of the Union Address. What is of primary interest to us as pension actuaries is the fact that this act significantly affected the funding of pension plans, probably more so than any act since ERISA. And what is very interesting is that they made most of the provisions effective beginning in 1988, even before many of the provisions of TRAC become effective. Well, what did they do?

The first thing Congress did was to look at all of this money that employers were putting into pension plans, on which they received a tax deduction. Then, in some cases after a few years of "shielding this money from taxes," some employers would terminate the plan, pay employees the amounts they had earned, and then take back any excess money in the plan. Congress, of course, didn't like this idea. Plus, they saw this as another revenue source that they, Congress, should tap into to help reduce the deficit. So under OBRA 87 they have restricted the amount that employers can contribute. This doesn't necessarily stop employers from contributing, but if they do, the excess amount over this limit that they contribute, even though they do not take a tax deduction on it, is subject to a 10% excise tax.

As we said before, when Congress puts limits on one end, they also like to put limits on the other end. So, they changed the minimum contribution required of employers. In effect, for most employers, the only effect was to shorten the time period over which certain events could be amortized, such as annual gain and losses and changes in actuarial assumptions. Congress also added something called the "Deficit Reduction Contribution." This deficit refers to the pension plan deficit, not the national deficit. And if you are one of the roughly 2% of the employers in this country affected by this, the change basically decreases even more the time period over which you can fund the plan.

The next area that Congress changed should, and, I believe does, concern us as actuaries. And that is, they changed the manner in which we select actuarial

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assumptions. In the past, we have been able to select assumptions and state on a government form signed by the EA that the assumptions, in aggregate, are reasonable. This means that if you had a low interest rate, you could adjust the salary scale such that, when considered together, they would produce reasonable results. Congress thought that this approach could be a little bit too manipulative. Therefore, they changed the rule. Now, actuarial assumptions must be individually reasonable. What this means for us as EAs is that we can no longer just look at the overall gain or loss of a plan. What we must now do is look at each assumption and determine whether or not it was realized. If, over a three- to five-year period, it does not reflect actual experience, it should be changed. Of course, many of us have done this all along. But, some of us have not. I think this change will put more pressure on those of us who have not.

The next area, timing of contributions, is an interesting one in that Congress changed this to catch the relatively few that were abusing the current law. In the past, and even right now, companies are allowed up to 8.5 months after the end of the plan year to make their pension contribution. For example, if you have a January 1 plan year, for 1988 you have until September 15, 1989 to make your 1988 contribution. Congress was concerned that, especially for those employers that had not funded their plans very well, contributions were not being put into the plan fast enough. Especially if there was a chance that the plan would terminate before the contribution was made. So, Congress decided to require employers to contribute a minimum amount each quarter, beginning in 1989.

Our next item, funding waivers, concerns companies that are not able to contribute the minimum required amount because of business hardships. If you prove to the IRS that you deserve a waiver, you are allowed to skip the contribution for that year and amortize it over the next few years. Congress was concerned that the waivers were being taken too frequently and that the hardship applied only to the employer requesting the waiver and not the entire controlled group of which the employer is a part. So they changed the rules. Now you are limited on both the number of waivers you are allowed and the period over which you can amortize them. Also, Congress tightened up on the definition of business hardship, requiring the entire controlled group to be so classified.

The last two areas under OBRA 87 I want to discuss basically deal with plan terminations. The first one is the increase in the amount of premium that you pay per participant to the PBGC. These are the premiums that you pay to guarantee benefits in the event the plan is terminated without enough money. As some of you may have read, the PBGC was faced with a couple of plan terminations that placed the solvency of the PBGC in question. So, Congress allowed them to almost double the per participant premium for all defined benefit pension plans, and interestingly, based upon the funded condition of the plan, added what is called a "risk-related" variable amount. For some poorly funded plans, this amounts to a premium of \$50 per participant.

My last item under OBRA 87 relates to the actual plan termination process. Of all the changes in this area, the most interesting is the one that now says a company can no longer terminate an underfunded plan just because they filed Chapter 11. After OBRA 87, this type of termination can take place only if the bankruptcy judge approves and finds that the entire controlled group of which

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the company is a part cannot pay its debts or stay in business unless it is relieved of its pension obligation.

There are a couple of acts passed by Congress that have not made the headlines the way that TRAC and OBRA 87 have. Both of these acts primarily affect the older employees.

The Age Discrimination in Employment Amendments of 1986 did away with a mandatory retirement age for most employees. Prior to the Age Discrimination in Employment Act of 1986 (ADEA 86), employees could be forced to retire at age 70. Beginning in 1987, employees can no longer be forced to retire because of age. There are some exceptions, of course, such as tenured faculty.

Passed around the same time as ADEA 86 was OBRA 86. This affected pension plans in two ways. The first was you could no longer stop accruing a benefit for an employee at the normal retirement age, usually age 65. It was very common for employers to tell employees that if you worked after age 65, when you retire, you will receive the same benefit you would have received if you had retired at age 65. Now you cannot stop crediting benefits just because the employee attains age 65.

The second area under OBRA 86 concerns the maximum participation age. Under defined benefit pension plans, an employer has been allowed to exclude employees hired at age 60 or older. This was allowed primarily for cost reasons. Congress decided to no longer allow a maximum participation age. They did permit employers, however, to continue to require a service requirement in order to be eligible for a benefit.

MS. KRIST: Over the last two years, while we have been dealing with all the changes the accountants have given us and all the changes the federal government has given us, we still in our spare time have been acting as pension actuaries helping our clients not only to deal with the immediate problems which we've just heard described, but in fact designing pension programs which make sense for them and for their employees going forward into the next century. Joan will discuss that process as it exists after all the development we've just heard about.

MS. JOAN M. WEISS: This is going to be somewhat of a case study. I'm not really looking at one company, but a company that's a composite of a lot of companies I've dealt with in my practice. This is an older line company; a manufacturing company. They adopted a traditional defined benefit plan in the early 1950s. It's the cornerstone of their retirement program, and the employees have come to expect the kind of benefits the plan provides. Over time they've improved it. They do subtract some Social Security, but they also heavily subsidize early retirement and provide what's called a bridge benefit for employees who leave before age 62, which is when they can get their Social Security.

Service cost, which as I think Debbie mentioned, is in some sense the cost attributable to the service employees are earning that year, is running about 5% of payroll.

For reference, the plan is a little bit over-funded, but for this particular plan there's not much to be gained by terminating it and taking the surplus because

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the cost of the extra benefits, the actuarial work, and so on would just not be worth it.

This company has also tried to stay modern. Employees clamored for a 401(k) plan and the company said, "Oh, well, we like our pension but we want to keep our employees." Therefore, in the early '80s, this company put in a 401(k) profit sharing plan.

To provide incentives for employees to reduce their salaries into the plan, the company agreed to match 25 cents per dollar on the first 6% of pay the employees are contributing. This plan has been running the company about 1% of payroll based on employee elections to defer.

Where we are right now is what you've heard from Stan. This company realizes they have to change some things. Their plan's integration probably no longer meets the requirements of tax reform. They're going to have to change their vesting. They're going to have to change a number of their provisions to take into account the need for earlier or later payment, and so on. Instead of just taking the quick fix, that is, just making the minimum changes necessary to make their plan comply, the company has said to us, "Let's spend some time and some money to reassess why we're where we are and what different kinds of plans could do for us. Maybe we'll wind up with our old defined benefit plan, but at least if we do we'll know why we're there."

As part of this, the company would have looked at their income replacement goals. That is, looking at employees at various pay levels and deciding what the company thinks is fair to provide for them at retirement. The company also would have taken a hard look at its finances and decided what are the constraints in the total cost of all their plans. How much does this company want to spend on retirement benefits?

As I see it, there's a whole continuum of things the company could do. The company wants to look at all of them, at least in overview, so that the pension committee can convince its board of directors that they really have looked at all the alternatives. But, as a practical matter, you can't look at all these alternatives in depth with all their various aspects and still come up with anything that anyone can grasp. Therefore, we want to take an overview, eliminate the choices that are not for us, and then pursue some of the choices that seem most promising.

As I look at the situation, there's a whole continuum of strategies. Strategy #1 is kind of the obvious. We've always been a pension company, we'll continue to be a pension company. We'll redesign our plan to comply with the requirements of TRA. We'll fine-tune the replacement ratios. We won't eliminate our 401(k), of course, but we won't put any more money in it. We'll continue to spend most of our retirement dollars on our pension plan.

Further along on the continuum is a middle range that says, yes, we'll still keep our defined benefit pension plan, but we've been emphasizing it too much. The younger employee really wants to see his 401(k) account grow. We'll allocate less of our money to the pension plan and more of our money to the defined contribution plan. We might even let the employee buy into our results somewhat by some sort of new profit sharing plan.

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On the far end, or suppose I would say radical end, but that's editorializing, and I have really had some clients who've chosen it, the CEO, chief financial officer, or whoever says: "The pension plan's just gotten out of hand. The regulatory requirements (all the extra valuations that Stan was talking about and the more complicated expense calculations that Debbie was talking about) are just too much for us. The higher PBGC premiums are a waste of money. Let's say goodbye to the pension plan. No one appreciates it anyway, and let's have a really nice defined contribution plan. Let's leave enough resources to really give the employee something to be proud of."

I've had clients who've come in all the way across there. In order to really decide where you are and to work with the client to decide where he wants to be, it seems important to me for the management to completely understand the strengths and weaknesses of each of the two types of plans. This is pretty basic, but it's also very important because if you don't understand what the plans do, you really can't decide which of them is important to you.

Just to recap briefly: A defined benefit plan has a very specific benefit goal. The employer promises a specific amount of benefit and makes the contributions as necessary. The employee does not have a balance or an account in his name. When it comes time for him to retire, he will get the benefit as promised by the plan's formula. In a defined contribution plan, the employee has an account in his name. When he leaves, he receives the value of that account, whatever it may be. An individual balance is maintained in his name.

You can see very obviously where this leads us in terms of risk. The employee bears almost all the investment risk in a defined contribution plan. If the account makes money, he gets it. If the account loses money, he doesn't get it. Whereas the investment risk belongs all to the employer in a defined benefit plan. The employer has got to make the participant whole on the benefit he's been promised. The inflation risk still belongs to the participant in the defined contribution plan. In a defined benefit plan, the employer has it, at least in a final average pay plan, until retirement. After retirement, it's traditionally the employee's risk, but some employers have granted cost-of-living increases to help the employees bear the cost after retirement.

A defined benefit plan has different kinds of flexibilities. An employee can receive credit for past service, early retirement can be subsidized, and the benefit level can be more easily changed. In a defined contribution plan it might be harder for older employees to accumulate adequate benefits.

In valuing the plans, forfeitures are looked at differently. In a defined benefit plan, the employer makes the contribution, reduced in advance for what he thinks the forfeitures are going to be. In a defined contribution plan, the forfeitures can either go to the participants or to reduce employer contributions.

So far, it may sound like defined benefit plans have a little bit of an edge. But, in fact, in employee perception, defined contribution plans, in study after study, seem to come out ahead. Employees really identify with defined contribution plans. They can see a balance. Every half year or year when the employee sees his statement, he watches his account grow, in most cases. He says this is my money." He can see himself taking it in a lump sum at retirement and spending it. And this is very nice. Most employees react very, very positively to this. Employees, in some ways, don't react as positively, at least younger employees, to saying, "Well, we'll pay you 40% of your final average pay less

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half your Social Security if you're still with us at 65." That, traditionally, has not been a winner.

Moving on to the funding flexibility. The employer, as Stan has indicated, can make a maximum or a minimum contribution. There's still some flexibility in the methods and assumptions. In a defined contribution plan, the employer has no flexibility if he's committed to a formula, let's say 3% of pay. If he's only committed to making contributions if profits warrant, he has a lot of flexibility in any one year, but of course, over time he has to make some contributions or the IRS may doubt his sincerity in setting up the plan.

Another really interesting point that I think the employer should understand is that for a given contribution level a lot more money goes to retirees in a defined benefit plan. Let's think about why this happens. This happens because of the way benefits accrue. In a defined contribution plan, an employee gets the same benefit for the same pay, generally, if the plan is structured that way, no matter what his age. In a defined benefit plan, when you think about the discounts for mortality and interest, the younger employee gets a whole lot less than the older employee for a given year of service, in general, and for given pay. Therefore, younger employees who terminate get a lot more of the benefits under a defined contribution plan. What this reduces to is to provide the same level of retirement benefit, the employer has to put more money into a defined contribution plan.

On recording and administration, there are a lot of different things going on. I don't think I'm clear as to which one is cheaper. Conventional wisdom had always said that defined contribution plans were a lot cheaper. But thinking of the time I've spent with clients discussing all the nondiscrimination tests, how to give money back, how to administer the plan, it's not at all clear to me which of the two is cheaper to administer. The defined benefit plan, however, does have PBGC premiums that must be paid each year.

Now that we've looked at the varieties of plans, I want to talk about each of the three alternatives in a little more detail. When I do this with an employer, I just try to throw some of these out to get the employer thinking. It really amazes me how with the same prompting I get very, very different answers from different boards or committees.

The current pension emphasis would say, "We're going to redesign our plan to meet tax reform." One way of looking at this is, "We're happy with the costs, we're happy with the approximate benefit level. Again, we're going to do the minimum amount of redesign to comply."

An alternative is saying, "We think employees are just getting too much. The plan has gotten too rich. It's time to look at some cost reduction." But employees are in many ways hard to fool, and anything significant is going to take some selling to the employees.

The third approach is a conscious effort to reduce benefit levels at least for younger employees. My editorializing here would say, "If you're going to do this, it's probably easier to adopt the mixed approach." One thing of which I actually find hard to convince employers, although I think Debbie and Stan have hinted at it, is you can't make everyone at least as well off as they used to be without spending some money. The slope of the curve has changed. And to the extent that you want everyone as well off, you're going to have to incur the

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cost. The good news here in many companies is that this provides the kind of benefit that gives at least the older employees warm fuzzies.

It's somewhat possible to redesign from a typical plan, which would be 2% of final average pay times service, less 1.5% of Social Security times service. This to me has been a very typical integrated formula over the years. A new formula that meets tax reform might be an excess formula where you're going to 1.25% of final average pay times service plus 6/10% of final average pay over \$16,800, which is this year's covered compensation level, times service. I think my point here is that within a reasonable range that encompasses in the typical manufacturing client maybe 60-70% of your employees, you could do a redesign that's going to keep everybody more or less whole without greatly increasing your costs. Of course, there have to be some losers, or your cost is going to go up.

You can extrapolate from this and see that the very highly-paid employees may not be as well off, but generally, if you want, you can treat those people with some sort of supplemental plan.

The more intriguing alternative, I think, is the combined alternative. What this usually means is redesigning the pension plan to lower benefit levels. It's funny. Karen and I were discussing this issue and we came to the conclusion that there used to be one pension answer. That answer was the kind of plan I showed you before. Now there are a lot of intriguing alternatives, some of them are somewhat complicated but there are a lot of niches where some of these apply. One, fairly obviously, is a less generous final average formula. That's just instead of having the 2% of pay we had before, maybe go to 1.5%, change the Social Security a little bit, and use the extra money to put some money into a defined contribution plan.

Another possibility is a career average. That is, instead of basing benefits on final pay, we base benefits on the person's pay in each year. The other two are somewhat more complicated and, to me, very interesting. I wish I had more time for them.

Basically, the feeder-floor is setting up a defined contribution plan but saying each employee is guaranteed a minimum defined benefit, but I'll subtract the value of the defined contribution plan, convert it to an annuity, from whatever target I've set up, and that difference will be provided in the pension plan. This is an interesting thing because it can ease the transition between a defined benefit plan that has most of the benefits provided for older employees to a defined contribution plan.

The cash balance plan is really a defined benefit plan that looks like a defined contribution plan. If someone wants to ask a question about it later, I'll talk some more about.

Here, if the defined contribution is going to do a little bit more of the work, you've got to be a little more careful in defining it. We have to think about all the alternatives. And there are actually quite a few. And a typical plan may combine more than one of these.

The first is a guaranteed contribution. It could be a money purchase, but you can also put a guaranteed contribution in a profit sharing plan. This would just say, for instance, I'm going to put in 3% of each participant's pay each year.

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A second variant, which this particular company has a small one of now, is let me encourage my employees to save. If the employee saves, I'll give him a match on the money he's agreed to save.

A third possibility is a discretionary profit sharing. I will try to entice my employees to work harder by saying I'll share my profits with them. The contribution in the plan will be directly dependent on my profits according to some formula which I may or may not want to reveal in advance.

Another wrinkle here is to also entice employees using company stock. The company stock actually could be part of any one of the three alternatives above. One that I've seen used a lot is the match for the 401(k) in employer stock.

There really is a wide range of alternatives here. There are also some employee stock ownership plan (ESOP) designs. Again, it's important to set out the company's goals.

To come back to the cost issue a little bit, the cost in total could be the same as the current cost, or possibly reduced. The cost reduction is less evident if you change the form of the plan than if you just stay with the defined benefit plan. If you still have a defined benefit plan, the transition is not particularly difficult from the current arrangement. Let's say you're very concerned about a 55-year-old having counted on his retirement benefit. You can grandfather benefits in the defined benefit plan. Even though you've changed the formula, you can maintain the old benefit for certain nondiscriminatory groups of people.

I guess I would define this combined solution as the best and the worst of both possible worlds: You wind up satisfying the younger employees who want to see their balances grow, yet you provide the security to the older ones who are afraid of being left out in the cold. You have a vehicle, the defined benefit plan, for early retirement windows which Debbie mentioned at the end of her presentation. You can give past service updates, you can subsidize early retirement, and so on.

But at the same time, you have all the headaches of two plans. You have two documents, you have two sets of filings. Whenever time comes to update, you have two things to think about. You also have both actuarial work and defined contribution record keeping. You have PBGC premiums due too.

There is a third item on the continuum (I've seen very few really large companies go here): a lot of smallish, medium companies have given up their defined benefit plans for a defined contribution alternative. We can have the same kinds of designs as in the mixed case, although my comment here is that you have to be much more careful in your design because there is no defined benefit plan as a floor. For instance, as your only plan you wouldn't want a matched 401(k) because what about the employee who can't afford to give you anything. He would then have nothing for his retirement. So you have to think a little more carefully about design here because this is your only plan.

It represents a very definite change in philosophy that your employees may or may not buy into readily. Any of these changes take a lot of employee communication, which is somewhat beyond the scope of this presentation. But, if you're going to a defined contribution only, you really do have to communicate carefully and you have to assuage, especially the older employees, and you may wind up having to worry about just how you are going to provide for them.

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However, this alternative has the greatest potential for cost reduction and, year-to-year, at least, contribution flexibility. As I said before, you get the lowest pure retirement benefit but the biggest termination benefit per dollar spent. And, of course, you have to deal with the actuary, the IRS and the PBGC in terminating your pension plan.

The purpose of this is to get one thinking about some of the alternatives that are available and the best way to address them.

FROM THE FLOOR: Guarantee Mutual. From Part 6 I've learned that pension plans are not a major source of income for the agcd. Is that changing now? And the second question is a little more specific. What are the liabilities of the company that terminates its pension plan?

MS. KRIST: Let me address your first question, and then one of the other panelists can pick up the second part. As of 1983 or 1985, if you looked at the nonearnings income, that is the income which didn't come from work, of households which had a head of household over age 65 (which is a lot of qualification), all of those households had somewhat over a quarter of their income provided by private pensions. About 40% of the income came from government programs and the rest came from individual savings. So I think that with the expansion of pension plans since World War II we've had an increasing amount of retirement income provided by pension plans, and probably more now than when the exam materials were written.

MR. SAMPLES: Yes, I think the liability of the company has increased each time we've seen a new act passed. It used to be just the vested benefits under the plan to the extent funded. Which means if the company didn't have enough money, then whatever the vesting schedule said was the amount that was guaranteed to the participants. That has grown now to the point to where it's basically the entire accrued benefit under the most recent act, OBRA 87, to where the company is pretty much on the hook for the entire accrued benefit not only the amounts in terms of money that the person could get at 65, but the timing of the benefit as well. If you give a very favorable what we call "subsidized retirement benefit" say at age 60, then you must take that into account in determining the liability.

MS. KRIST: And we did have a court case this winter which, of course, is under appeal, where a judge decided to take all of this one step further and awarded the employees their projected benefits to retirement before a company could get a reversion from the pension plan. Obviously, a number of companies were upset about this and that is under appeal.

MS. WEISS: That particular decision Karen's referring to has been vacated, which means that another panel has agreed to hear it. The lawyers tell me this means that, basically, they're starting from scratch again on it.

MS. KRIST: Nobody but the judge thought that was a good idea.

MR. JAMES C. MODAFF: The actuarial assumptions that you would use to value a pension plan. How do those compare with the assumptions you might use to value a retiree medical program?

MS. KRIST: Hopefully, since there's one economy, there should be some relationship, at least when we look at what we are assuming the assets are going to

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earn, if we're looking at a funded postretirement plan or trying to help a plan's sponsor guess what that might do. I think that the big difference is in the medical inflation assumption, which is something which pension actuaries don't have to deal with because even in plans which provide increases after retirement they're typically capped. So you'll have a cost-of-living adjustment (COLA), but it will have a 3% cap, which is something I can get a handle on. By simply promising to pay somebody's hospitalization, it's an entirely different kind of game.

MR. SAMPLES: I'm beginning to get into the health and welfare area from pensions. And one of the things I ask when a client wants us to value a post-retirement medical plan is if we're not their pension actuary to look at their pension assumptions. If they look reasonable, I will try to be as consistent as possible when I'm using the various interest rates or turnover. Retirement is especially important. I don't want to assume radically different retirement in the retiree health plan than the pension actuary is assuming for pension purposes.

MR. MODAFF: I know that a lot of our life actuaries are concerned with not only valuing a reserve model for the life blocks of business, but now they are also required to look on the asset side to make sure that those assets will be timed in such a way that they will be available to pay expected benefits. Are there any of those types of issues coming to pass on the pension side?

MR. KRIST: The issue has always been there in that it's necessary to warn the plan sponsor that his plan has certain outgo needs as well as income needs, because sometimes the plan sponsors forget that and want to lock up their money some place. So we do perform cash flow projections. I don't think that's changed much since ERISA. ERISA required plan sponsors to have an investment policy and part of that tended to be a cash flow projection from the actuary -- just what are our cash flow needs as a basic part of an investment policy.

MR. SAMPLES: I believe you are talking about something like a dedicated bond portfolio to match the liabilities. I've had a couple of situations where we "immunized" the retired life liabilities at some very large companies with many, many retirees. But there was a period of time when that seemed to be very popular to do in the pension area and the IRS made it more difficult because you had to file not only for a change in funding but a change in asset valuation method. So it complicated the issue and made it more difficult. I'm not sure that many were done, but there are a few out there like that.

MR. MODAFF: The reason I asked the question is that I was dealing with a client on a health issue and he came to visit our office at the end of last month and he got a call from his employer's pension administrator that even though they had \$75 million of assets they didn't have any money to pay the checks. And so he had to deal with that problem. It just seemed a little odd to me that you had that much money in assets and you wouldn't have enough to pay your pension.

MS. KRIST: That would seem odd to me, too. Frequently, if the money gets locked up in some way, an employer in the simpler days when we had more room between minimum and maximum contributions and employers felt they had some room, they might pay the checks out of an accelerated contribution for the current year and that sort of freed the investment policy. But as plans have

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become better funded and we have more retirees and less contributions, frequently the retiree outgo is greater than the current contribution. And so that's less of an alternative now.

