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General Agreement on Tariffs & Trade (GATT) Funding—Managing Contribution Volatility

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Summary: The new funding rules can result in highly volatile contribution requirements. Managing the options available can help sponsors realize the funding pattern they desire. For example, the facilitators will evaluate the consequences of making an irrevocable election to amortize the additional unfunded old liability over 12 years.

Mr. Bruce C. Cable: My panelist is Heidi Dexter, who is a managing consultant with Foster Higgins also in our Seattle office. Heidi is chief actuary for Foster Higgins. In addition, she serves our profession in her work for the Actuarial Standards Board by chairing the Pension Operating Committee. I'm very pleased to have Heidi here because she is Foster Higgins' technical expert on subjects like the one we're discussing.

We prepared two case studies that present 1995 additional funding charges and contributions. We will expand upon those case studies, looking at results over the next few years under various scenarios. We will focus on the implications of choices you must make in 1995. What is the effect of making the optional rule one-time election in 1995? What's the best 1995 current liability interest rate to select given that you've made the optional rule election? What is the effect of the transition rule?

Case Study No. 1 illustrates the 1995 additional funding charge. In my presentation, I will show results for 1996–98 also. Our key questions are (1) whether or not

to make the optional rule election and (2) what current liability interest rate to select for 1995.

Heidi will present Case Study No. 2, which takes a longer look at contribution patterns and the impact of various elections under GATT. Case Study No. 2 will provide a framework for analyzing the sources of contribution volatility after GATT and the long-term implications of the optional and transition rule elections and 1995 current liability interest rate. It will provide some useful insight into the transition rule and its effectiveness. Hopefully it will generate audience discussion.

Before I jump into Case Study No. 1, let's review some general assumptions for our case studies. No future actuarial gains and losses were assumed. The plan sponsor wants to minimize contributions and is going to do so by electing the transition rule when it produces a lesser minimum contribution. The sponsor will contribute the minimum each year. After 1995, we will use the highest permissible current liability interest rate. To project the highest permissible current liability rate in each future plan year, we've assumed the monthly average yield on 30-year Treasury bonds remains constant in the future at the May rate of 6.93%. Therefore, we anticipate that current liability interest rates will decline over time. For instance, the gateway current liability rate will drop from 7.93% in 1995 and 7.62% in 1996, all the way down to 7.24% for 1999 and later.

Here are the case facts for Case Study No. 1.

After the design, the benefit is a fixed-dollar amount per year of service. The dollar amount is bargained with a three-year bargaining cycle. The last increase of 25% (to active employees) occurred on January 1, 1994. The plan year is the calendar year. Assumptions and methods are as follows—unit credit funding method, book value for assets, Group Annuity (GA) 71 mortality, and a 7.5% interest rate.

Some key financial information. The plan is deemed to be funded above 90% on the gateway basis for 1992 through 1994 under the transition volatility rule. The 1995 gateway current liability funded status is 82.63%, and the Retirement Protection Act (RPA) 94 current liability funded percentage is almost 73%. We have selected a 7.5% RPA 94 current liability interest rate to keep the RPA 94 current liability funded percentage above 70%. That avoids disclosure in the summary annual report.

What you notice right away is there's not going to be any additional funding charge for 1995. We're within the 80–90% corridor on a gateway basis and we are deemed 90% funded for 1992 through 1994, so the volatility rule exempts us from

1995 additional funding charges. For 1996, there won't be any additional funding charge unless we dip below 80% funded on the gateway basis.

The liability is dominated by active employees (Heidi's case study has much more retired life liability than mine does). We have a \$78,000 credit balance on January 1, 1995. I mention this because it's going to lower the 1995 minimum contribution. Because we're assuming the minimum is contributed, you'll see a little jump in the 1996 contribution level.

We're going to look at some potential changes such as updating the valuation mortality from GA 71 to GA 83. That's probably something that many of you are going to be facing in the very near future. You might also see a bargaining increase on January 1, 1997, of 20% to active employees.

Table 1 shows what the 1995 preliminary additional funding charge would have been if we weren't exempt under the volatility rule. For comparison, it also shows the Omnibus Budget Reconciliation Act of 1987 (OBRA 87) preliminary additional funding charge that would have applied if the RPA 94 hadn't been enacted. This table looks at 1995 results with blinders on. It doesn't anticipate any future assumption change or plan change. So if I'm not going to look into the future, what elections would I make based on Table 1? What RPA 94 current liability interest rate would I select for 1995? For simplicity and for the summary annual reporting reason I mentioned before, I've selected 7.5% and 7.93% as the two current liability interest rates I'm going to consider for 1995.

Table 1 clearly illustrates the effect of the optional rule election. Under this election, the entire unfunded current liability on January 1, 1995, is treated as unfunded old liability amortized over 12 years. Without this election, a large portion of unfunded current liability is treated as unfunded new liability, which is amortized much faster.

TABLE 1
1995 ADDITIONAL FUNDING CHARGE (THOUSANDS)

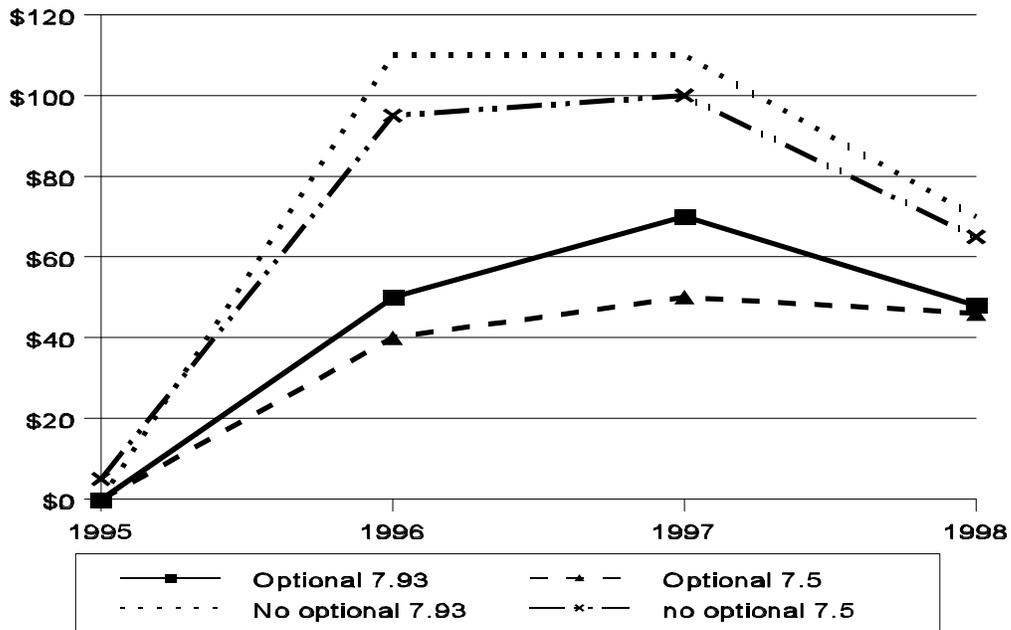
RPA 94 current liability interest rate	7.93%	7.50%
OBRA 87 additional funding charge	\$15.5	\$62.0
RPA 94 additional funding charge, optional rule is elected	\$18.8	\$72.2
RPA 94 additional funding charge, optional rule is not elected	\$71.2	\$149.4

When you don't elect the optional rule, you maintain all your existing OBRA 87 unfunded old liability amortization bases (amortized over the remaining 12-year period). You create a new 12-year amortization base equal to RPA 94 current liability at January 1, 1995, minus what I call the current liability with look-back assumptions to 1993. You subtract the total outstanding balances of all these amortization bases from the unfunded current liability and the difference is unfunded new liability. Any time you have unfunded new liability, the preliminary additional funding charge will be larger than if you had elected the optional rule.

When you select the optional rule, the OBRA 87 additional funding charge is a minimum. But the RPA 94 charge is larger than the OBRA 87 charge, so it doesn't come into play in this case. One further thing to note: the transition rule additional funding charge is zero in this case. But I'm not going to deal with the transition rule in my case study. Heidi will deal with that issue in her case study. So what elections do we make? It looks like we might make the optional election and select the 7.93% interest rate. But I'm not really sure without looking at the impact in future years. So now we will expand the analysis to 1995 through 1998. Chart 1 shows the additional funding charge at 7.5% and 7.93%, with and without the optional rule election. We've taken into account the gateway and volatility rules. As you can see, there is no additional funding charge in 1995, but there is an additional funding charge in 1996 because we're below 80% funded on the gateway basis. Keep in mind we're not looking at contributions in this chart—we're just looking at additional funding charges.

The two lower lines show the optional rule election (solid line at 7.93%, dashed line at 7.5%) and the higher lines are without the optional rule election. Again, electing the optional rule lowers the additional funding and selecting a 7.5% interest rate for 1995 generates lower additional funding charges than selecting the 7.93% rate. The reason is because the highest permissible RPA 94 current liability interest rate drops to 7.62% in 1996, and even lower in 1997 and 1998. If I use a 7.93% interest rate in 1995, the entire increase in current liability because of the drop in the maximum permissible interest rate, goes into unfunded new liability which must be amortized very quickly—over a four-to-seven-year period. But when we select the 7.5% RPA 94 interest rate in 1995, effectively what we do is anticipate the future current liability increase because of declining current liability interest rates. This lets us amortize the increases over a longer period (11 years from January 1, 1996, ten years from January 1, 1997, and so forth).

CHART 1
 BASELINE ADDITIONAL FUNDING CHARGE PROJECTION
 ADDITIONAL FUNDING CHARGE (THOUSANDS)



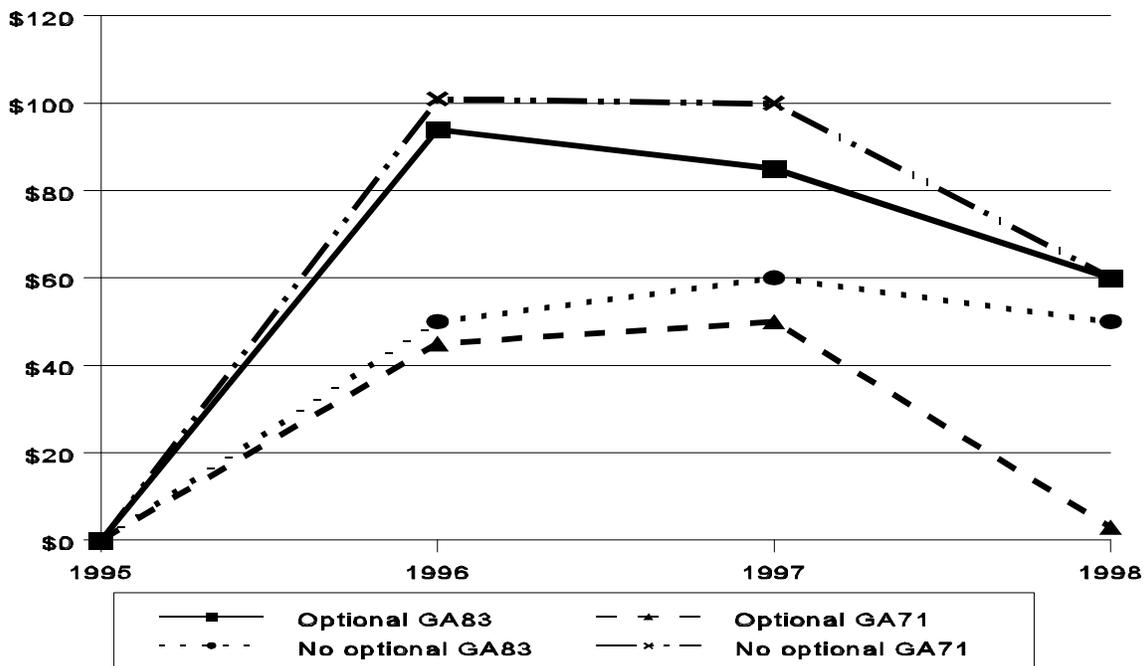
There's a fine art to selecting the 1995 current liability interest rate. If you select a rate that is too low, then you may actually increase future additional funding charges because the total outstanding balances of your unfunded old liability amortization bases exceed unfunded current liability. That is, the unfunded new liability amount is zero and the old liability amortization charges are higher than they really need to be.

One final point on this chart is the lowest line equals the OBRA 87 minimum additional funding charge. So, based on this chart, I would select the 7.5% current liability interest rate and make the optional rule election. But I'm not satisfied yet. First I want to see the effect of changing the mortality assumption from GA 71 to GA 83 on January 1, 1996.

Chart 2 shows the impact of the mortality assumption change on the additional funding charge with and without the optional rule election. All four scenarios use the 7.5% 1995 current liability interest rate. I've looked at all the scenarios beyond this point, and I'll just tell you that they all favor using the 7.5% interest rate. So I'm not going to show the 7.93% interest rate in any other projections. I'm going to isolate the optional rule election as different assumption and plan changes come into play.

Chart 2 shows we are better off not making the optional rule election if we change to the GA 83 mortality table. What's happening here is the OBRA 87 minimum is pushing up the additional funding charge when the optional rule is elected. The mortality assumption change increases OBRA 87 current liability—remember it is calculated on the valuation mortality basis, not the RPA 94 mandated mortality basis. There's no offset for the 412(b)(2) amortization base established for the assumption change. When you don't elect the optional or transition rule, the OBRA 87 minimum doesn't apply. RPA 94 current liability is already calculated on a GA 83 basis, and you're offsetting the ten-year amortization base established under 412(b)(2). So the lowest additional funding charge results from changing the mortality assumption without electing the optional rule. So by anticipating the mortality assumption change, we would not make the optional rule election.

CHART 2
 ADDITIONAL FUNDING CHARGE PROJECTION
 1996 MORTALITY CHANGE; 7.5% 1995 CL INTEREST RATE
 ADDITIONAL FUNDING CHARGE (THOUSANDS)

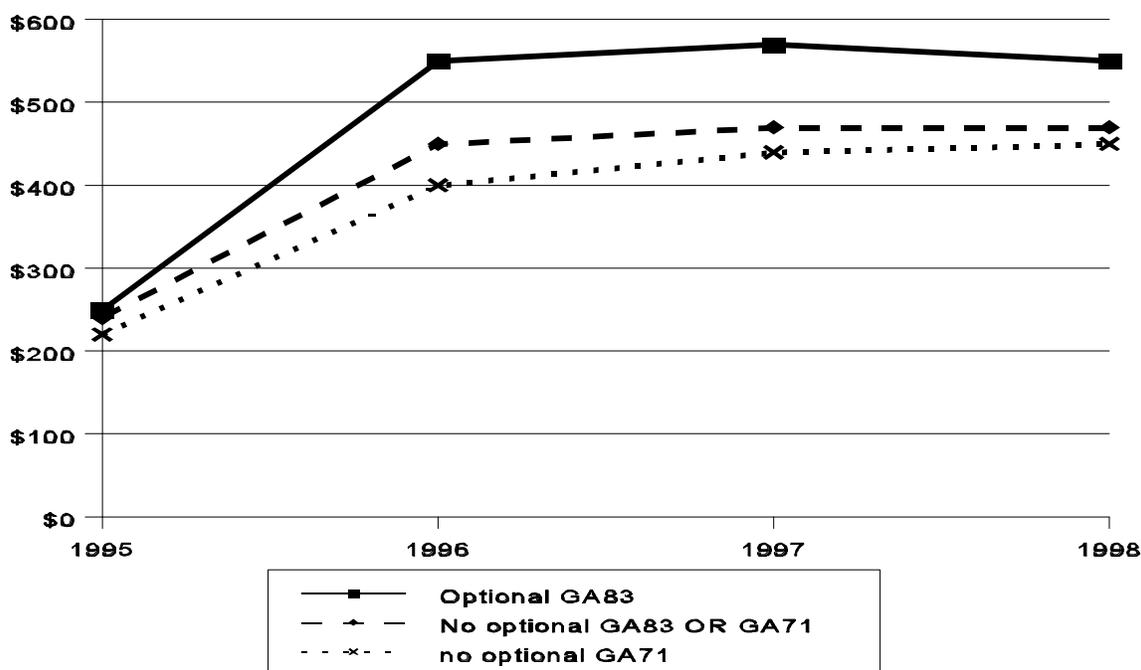


I'm not really satisfied with this analysis yet. I don't think that additional funding charges are necessarily the answer. We should be looking at the minimum required contributions. After all, when we make a mortality change, the regular 412(b) funding standard account charges change as well as the additional funding charge. We need to aggregate these two things together to get an appropriate analysis.

Chart 3 shows the impact of the mortality change on the minimum required contribution with and without the optional rule election. You will immediately

notice that there are only three lines—when you don't elect the optional rule, the minimum contribution is the same, regardless of whether you change your valuation mortality table. There's a reason they're the same. When you don't make the optional rule election, the mortality assumption change simply moves charges from the additional funding charge to the regular 412(b) funding charges. You create an amortization base for 412(b) purposes, with an associated amortization charge. But you reduce the additional funding charge by the amount of the new 412(b) charge. So the sum of the 412(b) charges and the additional funding charge produces the same minimum contribution. That will not be the case for other things we look at.

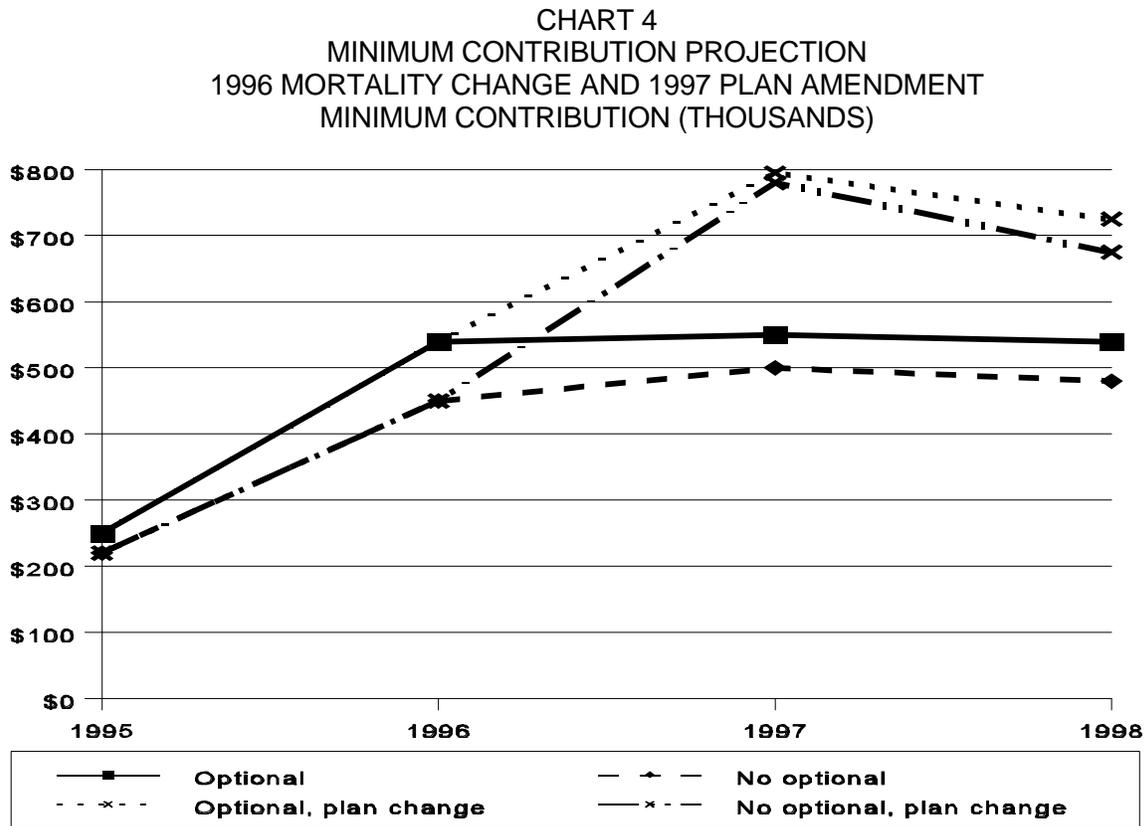
CHART 3
 MINIMUM CONTRIBUTION PROJECTION
 1996 MORTALITY CHANGE; 7.5% 1995 CL INTEREST RATE
 MINIMUM CONTRIBUTION (THOUSANDS)



Another thing to notice about the contributions is we start out about \$250,000; we end up a little over \$400,000 and that increase is due in part to the funding standard account credit balance that is used up in 1995. The January 1, 1996, mortality change affects optional rule results. Current liability interest rates are also declining. So there are a few reasons for the jump in contributions in 1996. Looking at Chart 3, I still conclude that we shouldn't make the optional rule election.

The key point of this illustration is to remind you that double counting of assumption changes and experience gains (losses) continues to affect the OBRA 87 additional funding charge, which is a minimum if you elect the optional rule.

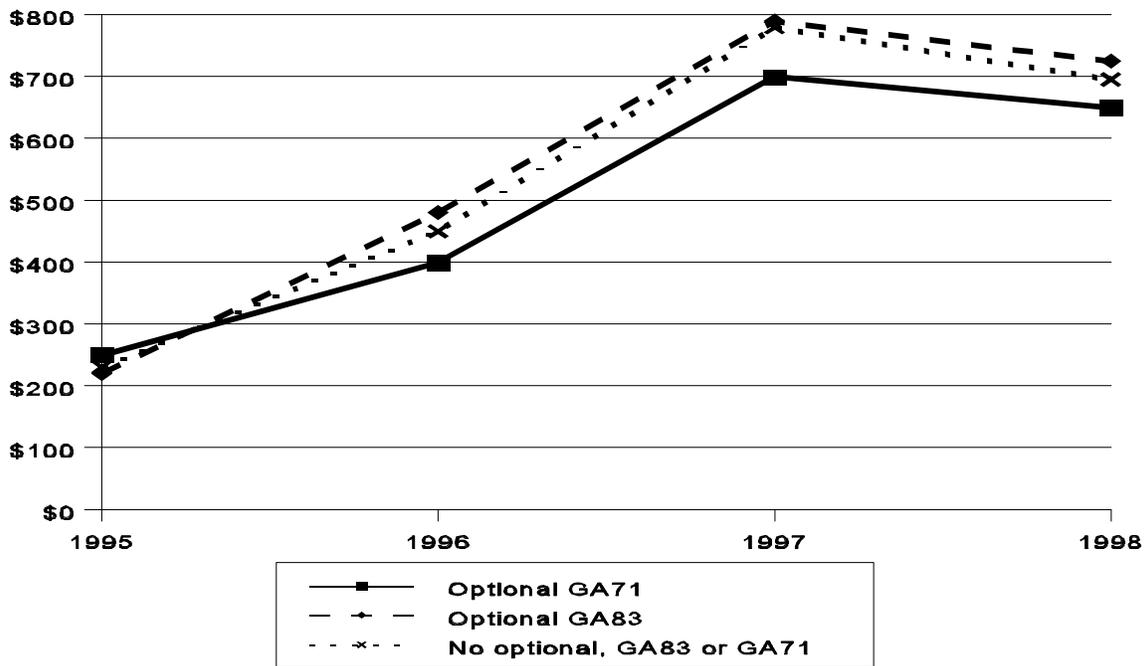
Finally, let's look at a January 1, 1997, plan amendment that has increasing benefits of 20%. Chart 4 shows the impact of the amendment on the minimum required contributions.



The plan amendment is on top of the mortality change I've already discussed. We still have the double counting of the mortality change in the OBRA 87 minimum, and that's why the minimum required contribution is less when you don't elect the optional rule. When you elect the optional rule, OBRA 87 is still controlling as a result of that mortality change. Again, we would not make an optional rule election based on adding the plan change on top of the mortality assumption.

But what if we didn't make the mortality change and just had the plan change on January 1, 1997? What would be the difference? Chart 5 shows the impact of the plan change, with and without the mortality change and with and without the optional rule election. Like Chart 3, if we don't elect the optional rule, the contribution is the same regardless of whether we change the mortality assumption. But if we don't change the mortality assumption, we don't get double counting in the OBRA 87 minimum, so the optional rule election lowers the contribution. So if we didn't plan to change the mortality assumption, we would make the optional rule election.

CHART 5
 MINIMUM CONTRIBUTION PROJECTION
 1997 PLAN AMENDMENT ONLY
 MINIMUM CONTRIBUTION (THOUSANDS)



I have a couple of concluding remarks before I pass the microphone over to Heidi. You have to look at the future impact of your 1995 elections. You don't want to make decisions based on a snapshot of 1995, as I first did. You need to consider potential changes in assumptions, plan provisions, and whatever else is going on with your clients. You need to look at how the various potential changes affect the minimum required contribution—how things work their way through the OBRA 87 formula versus the RPA 94 additional funding change formula. Last, but not least, is the client concerns. You need to watch out for things that trigger participant notification and avoid surprises, if possible.

Ms. Heidi R. Dexter: Some of the facts in Case Study No. 2 are quite similar to Bruce's Case Study No. 1. It's also a flat-dollar-per-year of service plan, but the plan sponsor is a larger organization that's quite diversified. The plan covers all of the hourly employees, so it covers several different bargaining groups that have different flat dollar multipliers and different bargaining cycles. As a result, some plan amendments are effective every single year. Depending on who bargains that year, some groups will get an increase and other groups won't see any change. The covered group includes 7,100 actives, and 1,250 retirees. The retirees represent 34% of the actuarial accrued liability and 40% of the current liability. It's a much

more mature group than exists in Bruce's case study, but it's certainly not as mature as you would see in some industries.

Our actuarial cost method is entry-age normal. We determine the normal cost as a level dollar amount per year of service. We are using an asset valuation method that smooths unexpected market returns over a three-year period. Our key valuation assumptions are a 9% interest rate and 1971 Group Annuity Mortality Table (GAM). They have almost a \$1.5 million credit balance as of January 1, 1995. I'll also mention that we've modified the facts in this case. The liabilities are based on an actual client, but we reduced the assets to get more interesting results for this presentation. The real plan is not this badly funded.

The 1995 contribution amounts are developed on each of the four different options: the optional rule is elected, the transition rule is elected, both rules are elected, or neither rule is elected. The results are summarized in Table 2. If RPA 94 had not been enacted at all, the contribution would have been \$2.5 million. If we don't elect either the optional rule or the transition rule, the contribution would be \$5.3 million. Electing the optional rule brings it down to \$2.6 million. Electing the transition rule brings it down another \$100,000 to \$2.5 million. These are total contributions—reflecting the fact that the OBRA 87 minimum additional funding charge is overriding the transition rule additional funding charge. That's why if you elect the transition rule or both rules you get the same 1995 contribution you would have had under OBRA 87. All these calculations use a 7.93% current liability interest rate.

TABLE 2
1995 MINIMUM REQUIRED CONTRIBUTION (MILLIONS)

RPA 94 current liability interest rate	7.93%
OBRA 87	\$2.5
RPA 94, neither rule is elected	\$5.3
RPA 94, optional rule is elected	\$2.6
RPA 94, transition rule is elected	\$2.5
RPA 94, both rules are elected	\$2.5

If we had just looked at these results, we probably would have elected the transition rule to minimize the contribution. We would probably also elect the optional rule, even though it makes no difference in 1995. We want to put as much unfunded current liability as we can into the 12-year amortization base instead of amortizing it as unfunded new liability in the future. But we want to see how those decisions hold up over time.

For my projection, many of the assumptions are the same. We're still assuming that there aren't going to be any actuarial gains or losses. For the initial baseline projections, I'm assuming there are no future changes in either my valuation methods or my valuation assumptions. I am building in future bargained increases in the flat-dollar multipliers based on what increases have historically been and the time when the various groups bargain. I'm using the same current liability interest rates that Bruce used, including the range that comes down over time. But I'm extending my projection out to 2001. The current liability interest rate actually comes up a little bit when you get out to the end of the period. It ultimately levels off at 7.28%. For the baseline projection, we select the highest permissible current liability interest rate for RPA 94 and OBRA 87 each year. I'm throwing in a wrinkle that Bruce didn't show. I'm assuming that for plan year 2000 the IRS will come out with a new mandated mortality table for current liability (2000 is the first year that such a table could be issued).

For starters, let's just look at the three-year projection period that Bruce used—1996-98.

In Chart 6, the lower dashed line (the lines are the same in 1995 and 1996) is what the contribution would have been under OBRA 87 if RPA 94 had not been adopted. The solid line shows what the contribution is under RPA 94, assuming I elect both the optional and transition rules and I use the highest interest rate each year. Keep in mind in looking at this chart that I have a \$1.5 million credit balance in 1995, so \$1.5 million of the increase from 1995 to 1996 is simply the fact that I'm using up my credit balance. Then, when I go from 1996 to 1997, a large gain base from three years ago is fully amortized, increasing the contribution further. But this really doesn't look too bad. The only year when RPA 94 makes any difference in the total contribution is 1997.

Now let's see what happens when I project out to 2001. In Chart 7, this contribution pattern does not look nearly so appealing. I have a huge contribution increase in the year 2000. To understand where that increase is coming from, I think it's helpful to look at what's driving the additional funding charge. Chart 8 shows the same solid line, where I have elected both rules, and it also shows the contribution assuming I had elected the optional rule only (the dashed line) and assuming I had elected the transition rule only (the dotted line that is the same as the solid line from 1995 to 1999).

CHART 6
 BASELINE THREE-YEAR PROJECTION
 MINIMUM CONTRIBUTION (MILLIONS)

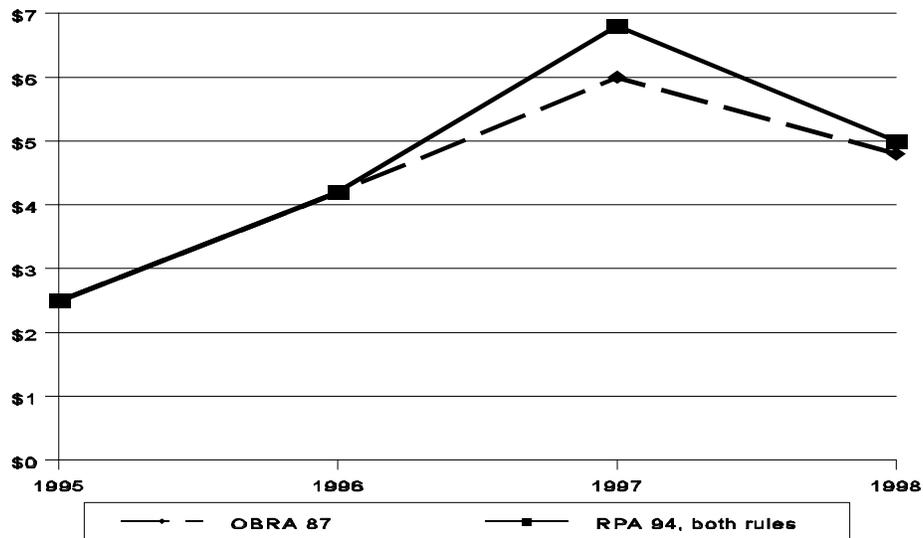


CHART 7
 BASELINE SIX-YEAR PROJECTION
 MINIMUM CONTRIBUTION (MILLIONS)

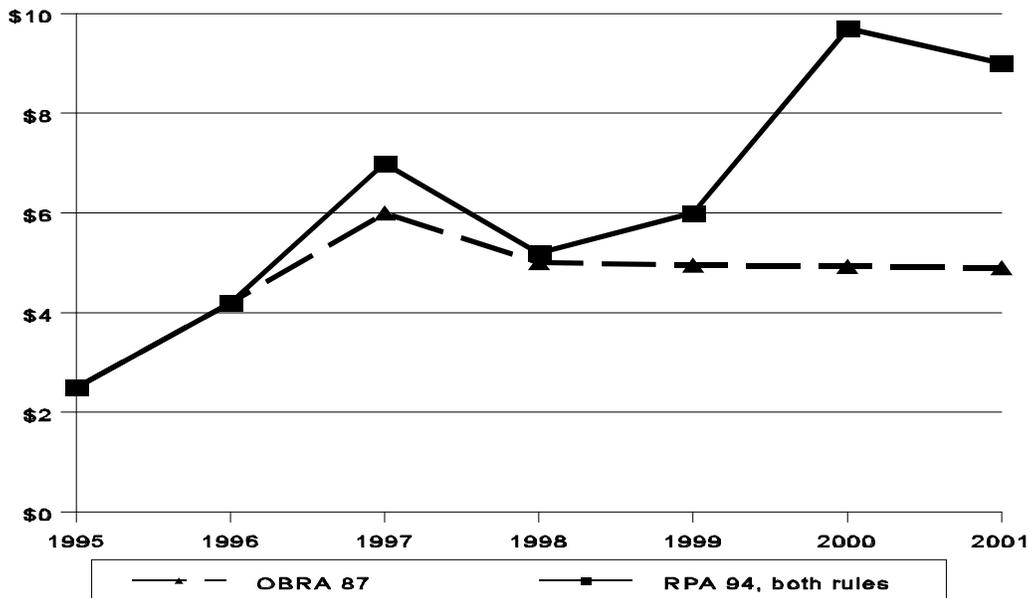
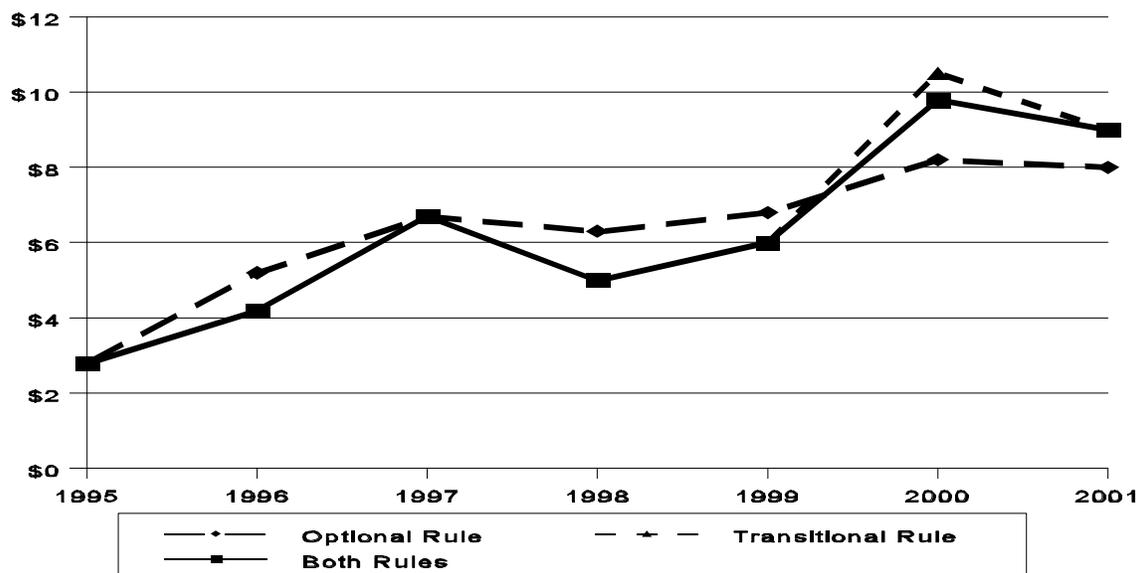


CHART 8
 BASELINE PROJECTION OF OPTIONAL AND TRANSITION RULES
 MINIMUM CONTRIBUTION (MILLIONS)



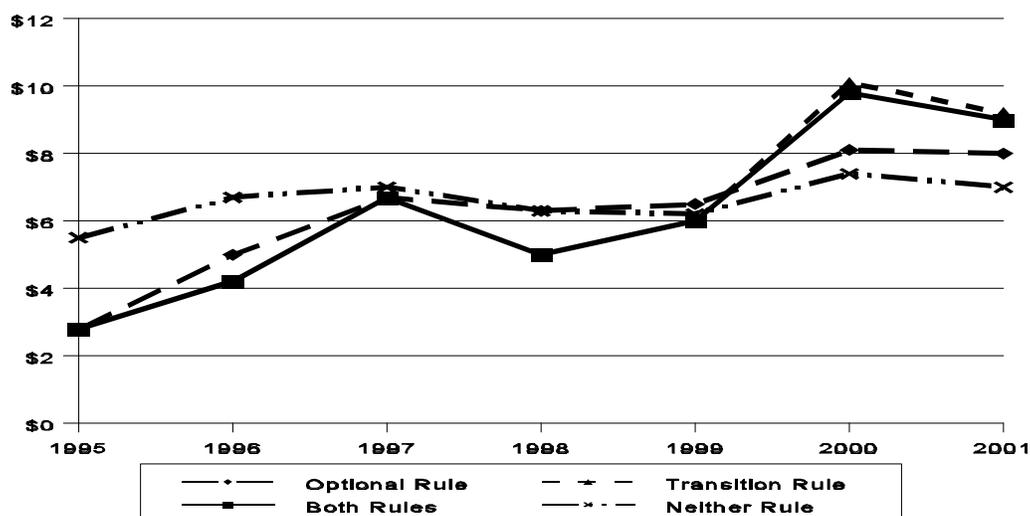
You can see that through 1999, the transition rule governs the contribution calculation. It's keeping my contribution down. Then, in plan year 2000, the transition rule amount goes way up. Since the transition rule can't increase the additional funding charge, it doesn't apply after 1999.

What's going on in the year 2000? That's the year that a new current liability mortality table is assumed to be mandated. For this projection, I've assumed that the increase in liability would be approximately equal to the percentage increase going from 1971 GAM to 1983 GAM, which may be a little bit pessimistic. When the new table goes into effect, you get hit with a triple whammy—it increases the contribution three different ways. First and most obvious, you set up a ten-year amortization base for the current liability increase because of the mortality change. Amortization of this base increases the unfunded old liability amount. The unfunded new liability amount increases too. You'll remember that the unfunded new liability amount is the product of the unfunded new liability and an applicable percentage. That applicable percentage is based on the current liability funded percentage. Because the new mortality table has increased current liability, the current liability funded percentage has dropped. Therefore, the applicable percentage increases (unless the plan was less than 60% funded before the mortality change) the applicable percentage caps out at 30% when the plan's funded percentage is 60% or less). So if the plan is more than 60% funded, the unfunded new liability amount is going up as well as the unfunded old liability amount. We're back to the old double counting problem.

The third thing that happens is the transition rule becomes irrelevant. The target percentage for each plan year is fixed based on the 1995 funded status. To reach that target percentage, you will have to fund that percentage of the increase in current liability. And you don't have any offsetting 412(b)(2) amortization charges because you've only changed the mortality assumption for current liability, not the valuation mortality assumption. For example, if the target percentage in 2000 were 75%, under the transition rule, I would have to fund 75% of the increase in current liability because of the new mortality table in that one year. But the transition rule cannot increase the additional funding charge over what it would have been without the transition rule election. So that means the transition rule no longer helps you after a new mortality table is adopted. And that's why we get such a big jump in the year 2000 when this new table is enacted.

Let's look at one more line. Chart 9 shows the contribution if we had not elected either the optional or the transition rule (the dot-dash line). The contribution would have been much higher in 1995, somewhat higher in 1996, but thereafter it's much better behaved than if I elected both of those rules. Depending on what your client's goals are, you might want to consider simply not making the election.

CHART 9
BASELINE PROJECTION
WITHOUT OPTIONAL AND TRANSITION RULES
MINIMUM CONTRIBUTION (MILLIONS)



But we have some other tools we can work with and, as Bruce mentioned, one of those is the 1995 current liability interest rate. That rate is important for a couple of reasons. One, it determines the amount of the additional unfunded old liability base that you establish in 1995. In general, the lower your current liability interest rate in 1995, the bigger that base will be. The other thing the 1995 current liability

interest rate determines is the starting point for all the transition rule calculations in the future. The target percentage in each future year is determined solely from your 1995 RPA 94 current liability funded percentage. The lower the interest rate, the higher your current liability, thus the lower your funding targets are going to be in the future.

Chart 10 keeps two lines from Chart 9: 7.93% interest rate electing both rules (the solid line) and 7.93% without electing either rule (the dashed line). It also shows three different interest rates: 7% is the other solid line; 6.8% is the dotted line, and 6.55% is the dashed line. As you'd expect, when you make both elections, the higher the 1995 interest rate, the lower the 1995 contribution. That is just what everyone intuitively expects. But as you go forward, the relationship changes. For example, if you focus on the 6.55% line, it produces the lowest minimum in 1996, 1997, 1998 and all the way through 2000. Then in 2001, it jumps up to the middle of the pack.

**CHART 10
ALTERNATIVE 1995 CURRENT LIABILITY INTEREST RATES
MINIMUM CONTRIBUTION (MILLIONS)**

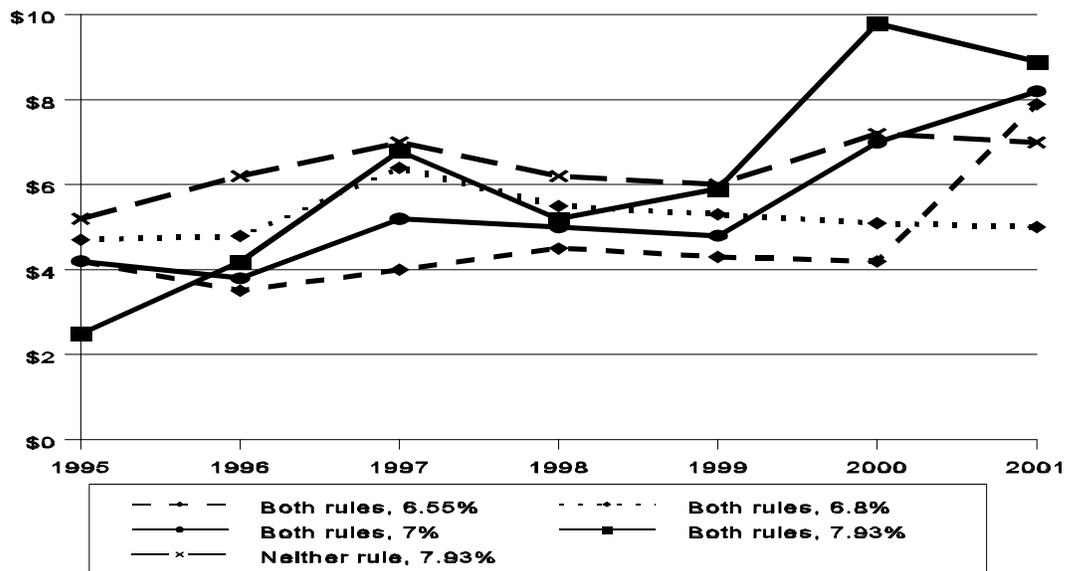


Chart 10 also illustrates a general principle when you're dealing with poorly funded plans, you either have to fund now, or you have to fund later. The people who crafted this transition rule were very smart. They have a funding objective that they want you to get to by 2001. They want to increase the funded percentage of poorly funded plans by 25%. So if you were 50% funded, they want you to be 75% funded by 2001. They also want to minimize the impact in the first couple of years so employers don't get so upset with them for enacting this legislation, (they know many employers won't look beyond that). In general, whatever is going to give you

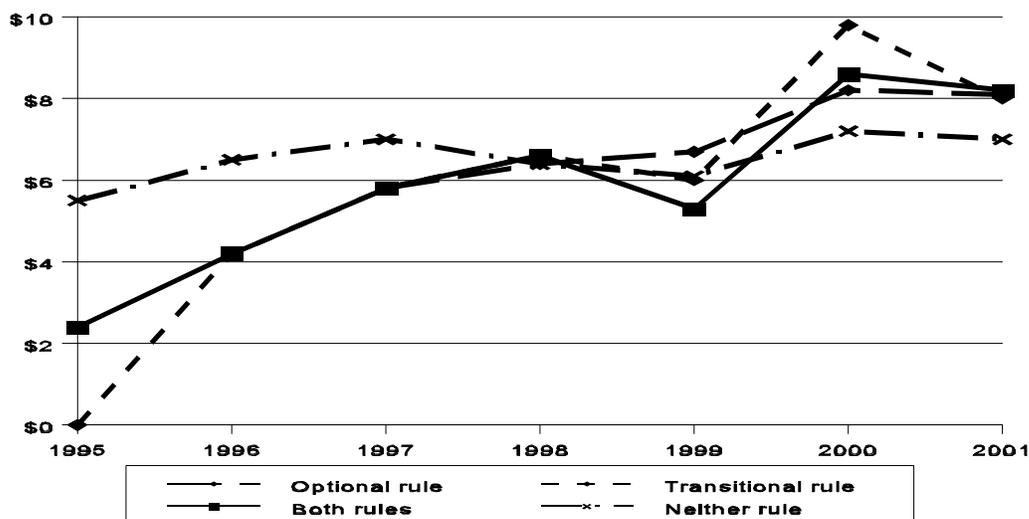
the lowest contribution today is likely to give you the highest contribution at some point in the future.

From the Floor: Did you take a look then at what the cumulative contributions would have been over the projection period?

Ms. Dexter: Yes. For each alternative, I calculated the accumulated value of contributions at December 31, 2001, using my 9% valuation interest assumption. Assume 1995 current liability rates of 6.55% and 6.8% produced substantially lower accumulated values than the other rates and were almost the same. If we change the valuation mortality table as well, the 6.8% assumption is a little better over this period.

So now let's shift gears and see what happens when we change the valuation mortality table in 1996 from 1971 GAM to 1983 GAM. First, let's focus on the optional and transition rule elections, using a 7.93% 1995 current liability interest rate (Chart 11).

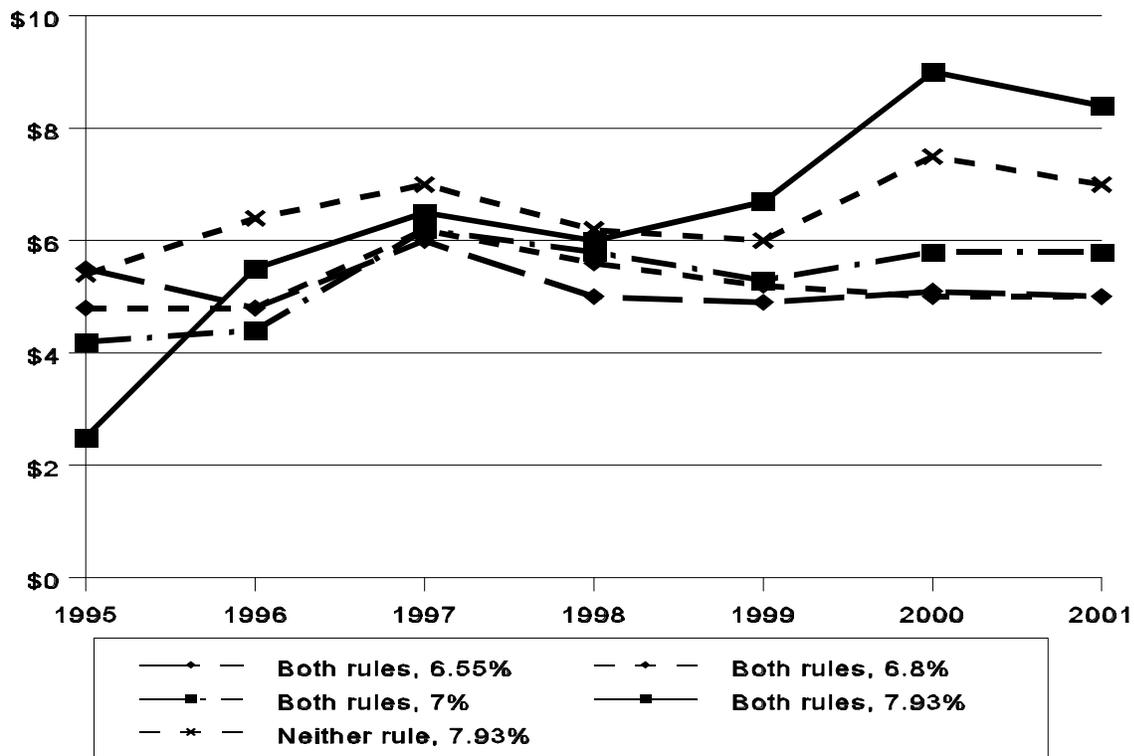
CHART 11
ADOPT 83 GAM MORTALITY IN 1996 7.93%;
OPTIONAL AND TRANSITION RULE ELECTIONS
MINIMUM CONTRIBUTION (MILLIONS)



If you compare Chart 11 to Chart 9 the lines really don't look much different. The numbers have moved a little bit, but the relationships between the lines haven't changed. So this scenario doesn't give me any additional information that's going to affect my 1995 decisions one way or the other.

In Chart 12 we look at alternative 1995 current liability interest rates, assuming that the mortality table will change in 1996. The differences among the three lower rates are much more subtle than in Chart 10. In fact, the 6.55% and the 6.8% are almost indistinguishable after 1995. Based on this analysis, I would select the 6.8% interest rate and make both elections. In general, this does a better job of stabilizing the contribution. The key point is, you have to look at a variety of different interest rates. The best rate is not going to be obvious, and it's not necessarily going to be one end of the range or the other. It could be somewhere in between.

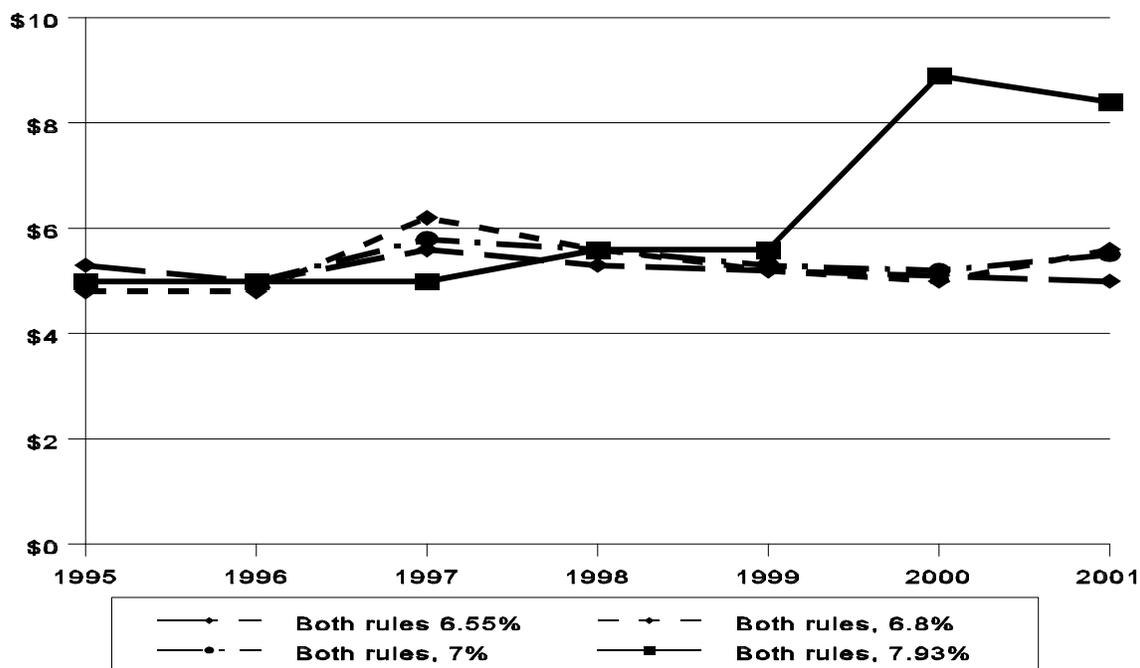
CHART 12
ADOPT 83GAM MORTALITY IN 1996
ALTERNATIVE 1995 CURRENT LIABILITY INTEREST RATES



Finally, I'll show a little different approach using the funding policy and funding standard account credit balance to manage contribution volatility. In Chart 13 I'm assuming that the valuation mortality assumption will change in 1996 and show four alternative 1995 current liability interest rates, selecting both the optional and transition rules. But here, instead of just paying the minimum automatically, the sponsor pays \$5 million or the minimum, whichever is higher. You will recall that some of these interest rates gave us contribution amounts below \$5 million, so for three of the four interest rates, the 1995 contribution is \$5 million and in 1996 all rates generate a \$5 million contribution. Then, going forward, we use the credit balance that we built up in those two years to help smooth out some of the peaks.

(Note the scale is different from previous graphs to help distinguish the lines.)
 Again, our lower interest rates are all performing much better than 7.93%. But many actuaries seem to automatically go to the ceiling of the current liability range. I think the 1995 interest rate is very important for actuaries to address.

CHART 13
 ADOPT 83GAM MORTALITY IN 1996
 \$5 MILLION FUNDING POLICY
 MINIMUM CONTRIBUTION (MILLIONS)



From the Floor: Does that essentially mean you use your credit balance in 1999 instead of 1995?

Ms. Dexter: That depends on which interest rate you select. At the lower rates you use the credit balance in 1997. At the 7.93% interest rate (the solid line) you don't fully use the credit balance until 1998. If you look back at Chart 12 (and remember the scale is different) there was a significant contribution increase in 1997 followed by a drop in 1998 under all interest rates. Waiting until 1997 to use the credit balance helps smooth the contribution pattern.

From the Floor: Did you look at one benefit improvement again?

Ms. Dexter: No. In Case Study No. 2 we have assumed annual improvements for various bargaining groups, so there's some benefit increase effective every year. The increases are larger in the year that the biggest group bargains, but then in between you have smaller bargaining groups getting increases.

From the Floor: What's the magnitude of the liability increase you assumed from the new mortality table in 2000?

Ms. Dexter: I assumed the current liability would go up 5% and the normal cost 7%.

From the Floor: How much is that in real dollars?

Ms. Dexter: The RPA 94 liability is approximately \$80 million in the year 2000. So the mortality increase is about \$4 million.

From the Floor: So you're paying almost the full mortality increase immediately. The contribution increased almost by the amount of the quantification of that increase in assumption changes.

Ms. Dexter: Yes, looking at the 7.93% results the additional funding charge increases \$3.5 million from several sources: you have a new amortization component that accounts for \$0.5 million, the unfunded new liability amount goes up \$0.9 million, the current liability normal cost increases \$0.4 million, and the transition rule no longer applies (in 1999, the transition rule reduced the additional funding charge \$1.4 million). That mortality increase really hits you! You don't just get a ten-year amortization.

I'll talk about making the elections for a minute, and answer a question that came up before the session about when you make these elections and who makes them. The optional rule and the transition rule are plan sponsor elections. Those are made on the Form 5500. The current liability interest rate is the actuary's election, which is made on the Schedule B. The plan sponsor elections are made on the first Form 5500 filed timely for the 1995 plan year. If you've already filed a 5500, you cannot go back and amend it to change your elections. You have to coordinate with the plan sponsor to make sure what you're showing on the Schedule B matches the elections that it's making on the Form 5500. If they don't match, it's the plan sponsor elections on the 5500 that govern, and you'll have to go back and file an amended Schedule B.

Also remember, it's the first filed timely Form 5500. If the sponsor misses the filing deadline, then it automatically loses its elections.

Finally, I'll summarize our conclusions from the case studies. Of course, don't just look at 1995; you have to take a look into the future. Don't just focus on the optional and transition rule. The 1995 interest rate selection is also very important and many people overlook it as a tool for managing their contributions down the road. It's important to know how your future contributions are likely to change. It

may not affect your elections, but you should know what's going to happen when you have a bargained increase, when you change your valuation methods or assumptions, or when actuarial losses occur. If you make the optional rule election, you still have the OBRA 87 double-counting problem with respect to the OBRA 87 minimum additional funding charge. Establishing a big charge base for a change in assumptions, a change in method, or an actuarial loss is going to have double the impact on your OBRA 87 minimum additional funding charge.

Anticipate changes in the mandated current liability mortality table and interest rates. The maximum rate comes down as a percentage of the four-year weighted average from 109% to 108% in 1996, 107% in 1997, and so forth. If 30-year Treasury rates stay constant from May forward, the four-year average rate will also come down. The combined impact on the maximum rate is dramatic from 1995 to 1996 and from 1996 to 1997.

If you're not already using an asset smoothing method, you may want to consider that. In Case Study No. 2, I modeled what happened if I had some big actuarial gains or losses. For example, I put in a 30% return on market value in 1995 and 15% in 1996. Because of my asset smoothing method, it had very little impact. But if you're not smoothing investment returns, big gains or losses certainly could cause big changes in the additional funding charge.

As Bruce mentioned, be aware of the participant notice requirement. If your gateway funded percentage is more than 70%, you may not want to drop your interest rate so low that you trigger the notification requirements. You also have the participant notice requirement regarding the PBGC guarantee, if you have both an additional funding charge and a variable rate premium. For poorly funded plans—plans that are not going to get up to the 90% funded level within the next four or five years—you have to fund now or fund later. Going for the lowest 1995 contribution tends to produce a sharply escalating contribution pattern as you get out past 1999, and the transition rule has less effect.

For 1995, 1996, and going forward, be aware that there are some key trigger points. Revenue Ruling 96-20 says that if your gateway funded percentage goes over 90%, you eliminate all old liability bases. You do not want to be in a situation where you pop up over 90% for a year and then drop back below 90% with everything going into new liability. If you have a plan that, because of an actuarial gain or something similar, is facing that situation, you might want to rethink your demographic assumptions to keep the gateway funded status below 90%.

Don't forget about the RPA 94 full-funding override. It affects many career average and flat-dollar plans that thought they were fully funded using fairly aggressive

assumptions and the unit credit cost method. Now your full-funding limit can't be less than 90% of the RPA 94 current liability. Some plans have had some nasty surprises there, and it doesn't just increase the contribution. If the plan was previously avoiding PBGC variable-rate premiums because it was at full funding, it may now owe huge variable-rate premiums because the PBGC mandated interest rate is so low. A plan sponsor that hasn't made a contribution in a few years may be in for a real shock.

You may need IRS approval for assumption changes that reduce current liability. This only applies to plans that are severely underfunded—with at least \$50 million in unfunded liability, aggregating all plans in the control group. You need to get IRS approval for changes in assumptions that would reduce your current liability below certain trigger points.

Mr. Joshua David Bank: If I have a horribly funded plan, is there any obvious combination of choices that I should make?

Ms. Dexter: Is it a horribly funded plan that is going to have benefit increases in the future?

Mr. Bank: It's a horribly funded plan that had a benefit increase under a five-year collective bargaining agreement and probably will have a similar change in the year 2000.

Ms. Dexter: Every case is unique, and you have to look at projections. But in general, for that sort of plan, you are not going to want to be at the ceiling of the 1995 current liability interest rate range. The interest rate is coming down, and you also have the potential for benefit increases in the future. You would really rather put some of the anticipated current liability increase into your old liability and amortize it over 12 years. Otherwise it all goes into new liability, which amounts to a three- to seven-year amortization. If you're gateway funded percentage is below 70%, you've stuck with the participant notices, so you may want to go all the way to the floor.

Mr. Bank: Optional rule is an obvious choice?

Ms. Dexter: Yes. The optional rule is also an obvious choice.

Mr. Bank: And the transition rule?

Ms. Dexter: The transition rule election will depend on the cost pattern you want. The transition rule does suppress funding quite a bit in the first few years, but you make up for it in the later years. It gets back to what the plan sponsor wants.

Would it rather pay more later or pay more now? Does it want smoothness and not much volatility or is volatility fine if it can minimize contributions today?

Mr. Bank: It wants to pay less now and later.

Ms. Dexter: That's not going to be an option in the future. Plan sponsors have to pay for the benefits they promise at some point. And if you are relying on the transition rule, it is important to take a look ahead and see when that point occurs. In projecting, it is important to know the approximate magnitude of future bargained increases. Case Study No. 2 was an example of a more mature plan. The plan wasn't really that big in terms of the total liability. The largest increases were only 6% of current liability, and the smaller ones were 2%. So the transition rule helped me until the mandated mortality table changed. If you have a case like Bruce's where you expect a 20% increase in current liability because of a bargained change, that's probably going to wipe out your transition rule from that point forward.

Mr. Bruce Anthony Cadenhead: It would seem that it's not necessarily the transition rule election itself that hurts you. It's using the transition rule to lower the contribution and then actually making that lower contribution.

Ms. Dexter: Right.

Mr. Cadenhead: Incorporating your strategy of using the credit balance to help manage in combination with the transitional rule is probably your best bet, I would think.

Ms. Dexter: That is exactly what we were doing in Chart 13. We elected both the transition rule and optional rule, but contributed \$5 million, using the excess to build up the funding standard account balance. Then as contribution requirements increased, we used the credit balance to dampen the increases. So I fully agree it's not the transition rule itself; it's the fact that you're contributing less today, which hurts your funded status in the future and makes that unfunded new liability amount very painful.

This strategy also gives you more flexibility if you have that one bad year when you really want to minimize your contribution.

Mr. David P. Rigby: We've seen tremendous asset growth in 1995. If you are late doing your 1995 valuations, and you really haven't been forced to make your decision yet, you now know something about your 1996 assets. Does that help you in any way?

Ms. Dexter: More information always helps you. What effect the 1995 return has is going to depend on your asset smoothing and funded status. Is the 1995 return enough to push you over the 90% funded level in 1996? In that case, your 1995 elections may not matter at all because your amortization bases are going to be wiped out. And if you don't make the optional rule election, you don't have to worry about tracking OBRA 87 amounts in the future.

From the Floor: Do you have any creative asset valuation methods that would link with current liability?

Ms. Dexter: I haven't seen any methods that would directly link valuation assets to current liability. In this case, we're fully recognizing the expected return and spreading anything over or under that over three years.

From the Floor: Valuation interest rate assumption?

Ms. Dexter: Yes. The expected return is determined using our valuation interest assumption. Here we had a 9% valuation interest rate, so we're expecting a 9% return. If it were actually 12%, we'd fully recognize 9% and then recognize a third of the difference between the expected 9% and the 12% that was realized. I like this method because it does a good job of smoothing without having a bias above or below market value. The IRS-approved method—the only method you can now automatically switch to—has a definite bias below market.

Does anybody have any experiences they want to share? Are there any unique case situations or decisions you've made?

Ms. Carolyn E. Zimmerman: We had an interesting situation where a company went public for the first time and actually ended up getting more out of the initial public offering (IPO) than it thought it would. It came to us and said, "we'd like to spend this extra money on our pension plan; where can we get the best bargain for our bucks?" You mentioned that trigger point of the 90% gateway funded status and that's one thing that we found was very important. If we put that extra money into the plan, it puts them over the 90% threshold. That actually increased its funding requirements over the next few years because we got rid of the unfunded old liability amortization bases. Future liability increases went into new liability, so despite the extra money, we ended up with much higher contributions. And once you get into that situation, there's a limit to what you can do to get out of it. Your gateway current liability interest rate and mortality assumptions are mandated, and there wasn't that much we could do by changing valuation assumptions. It was an interesting conclusion. Spending more was actually worse.

From the Floor: I do have a fun situation that I haven't fully digested yet. One of my clients did an IPO last year and had this horribly funded pension plan, so the PBGC negotiated higher contributions over the next several years. The fun part of it is that now the client has to keep two sets of books. It can't use any of the money from those additional contributions to affect what minimum funding would have been over the next seven years. It's mind boggling. The contributions are generating credit balances, but how do I sign a Schedule B showing the credit balance, but not take it into account in my next year's valuation? Does that mean two sets of Schedule Bs? I'll let you know.

Ms. Dexter: That sounds like something that should go into your reconciliation account. You need an untouchable credit balance.

From the Floor: This is a part of a negotiated agreement with the PBGC. They will terminate the plan if we do otherwise. We haven't dealt with the IRS yet. The PBGC said we shouldn't worry about the IRS—they'll understand.

Ms. Dexter: We haven't gone over the mechanics of the additional funding charge calculation. But I would like to make a couple points on the latest IRS guidance that came out back in March. The OBRA 87 and RPA 94 interest rates are linked. So when you're starting to look at alternative RPA 94 interest rates, keep in mind that your OBRA 87 rate has to be equal to the RPA 94 rate, unless your RPA 94 rate is at the ceiling of the range and the OBRA 87 rate is higher. If you select a 7.5% rate, you use that for both RPA 94 and OBRA 87.

If you're more than 90% funded on the gateway basis in 1995, you don't get to make an optional rule or transition rule election. We had hoped to have some leeway there, so a plan that subsequently dropped below 90% funded could take advantage of the optional rule. But the IRS did not give that to us. Once you cross 90%, all those old bases are gone, and from that point forward you're in new liability country, except for mandated mortality changes.

Also the transition rule calculation is a year-end calculation. There had been some question a year ago, when we were first grappling with this about whether it was beginning or end of year. The main difference between the two is that with the year-end calculation, you have to pay all of your expected benefit and expense payments during the year, plus whatever it takes to get up to the RPA 94 target percentage under your transition rules. If you were doing it at the beginning of the year, you'd only have to pay a portion of those expected benefit and expense payments, based on your target percentage. So if you have a plan with a large group of people in pay status, that could have made a big difference to you.

From the Floor: Is the optional rule election a one-time election?

Ms. Dexter: Yes. That is a one-time irrevocable election. Once you make that election, you've triggered the OBRA 87 minimum additional funding charge for the next seven years. But if your gateway funded percentage goes over 90%, you have to wipe out the base established by the optional rule election. Presumably, from that point forward, you would not have to continue calculating the OBRA 87 minimum. We asked IRS representatives about that at the EA meeting. They hadn't thought that far ahead, but they assumed you would not have to continue calculating the OBRA 87 minimum.

From the Floor: I think you discussed this briefly, but maybe you can go over it again because you have so much time. Did you consider the interplay of changing your regular funding actuarial assumptions and what would happen with significant actuarial gains and losses in the future? How important are the regular funding assumptions and the fact that there is five-year amortization of gains and losses?

Ms. Dexter: In these case studies, we did not look at any liability gains or losses. In my particular case, retirement and turnover assumptions are based on their actual experience, and we haven't been getting any big gains or losses on the liability side. I did look at asset gains and losses. But with my smoothing method, it was not affecting my decisions at all. It was moving all the lines a bit, but it wasn't changing their relationships. The only valuation assumption we looked at changing was the mortality table. In my case study, that didn't change any decisions, but in Bruce's case study, it did because of the OBRA 87 double-counting problem.