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FINANCIAL ACCOUNTING STANDARDS BOARD (FASB)/CANADIAN INSTITUTE OF CHARTERED ACCOUNTANTS (CICA) -- CURRENT TOPICS

Moderator: AILEY BAILIN

Panelists: BERNARD R. DOYLE*

J. ALEX MILBURN**

CHARLES BARRY H. WATSON

Recorder: AILEY BAILIN

- o Assessment of experience to date and prospects for the future
- o Viewpoints of actuary, accountant and plan sponsor

MR. AILEY BAILIN: In December 1985, after several years of intensive work, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 87 and No. 88. Shortly thereafter, in April 1986 the Canadian Institute of Chartered Accountants published a revised version of Section 3460 of the *CICA Handbook.*

Both these national bodies perceived that there were some significant shortcomings in the way pension expense had been accounted for, and they set out to overcome those shortcomings. One of the goals I have for this Panel Discussion today is to gain some insight into how well the net rules for financial accounting are working out vis-à-vis the original goals.

Mandatory compliance with the new financial accounting rules applies to fiscal years commencing on or after December 15, 1986 in the U.S. and on or after December 1, 1986 in Canada. That means that for the vast majority of affected

* Mr. Doyle, not a member of the Society, is Manager-Corporate Accounting Service, General Electric Company in Fairfield, Connecticut.

** Mr. Milburn, not a member of the Society, is a Partner with Clarkson Gordon Chartered Accountants in Toronto, Ontario.

enterprises, we are currently into the first year of mandatory compliance. Earlier compliance was encouraged. It is not surprising then that there are firms that decided to comply earlier than required and other firms that investigated early compliance but decided not to proceed until required.

We hope to share with you some of the insights that have been gained through the experience to date with the new rules. We shall be doing this by looking at the subject through the eyes of three different players in the pension accounting game: the plan sponsor, the auditor, and the actuary. I am very pleased that we have two non-actuarial guests with us to direct our attention to some of the non-actuarial concerns that we should be aware of. Each of our three panelists will bring perspectives that differentiate them: one will focus on the U.S. experience, one on Canadian experience, and one will share an international outlook.

MR. BERNARD R. DOYLE: Today I'm going to offer some observations about the effects we have seen in the first year or two or adopting Financial Accounting Standards Board Statement 87, and how the actual results compare with the objectives of the Standard. My comments are based in part on our experience at General Electric from having adopted Statement 87 in 1986, and in part on what I see and hear about others' observations and experience.

I will comment on the effects on annual pension cost; balance sheets; comparability year-to-year and among companies; and investment strategy impacts.

ANNUAL PENSION COST

While not universally the case, the effect of adopting Statement 87 has generally been a significant decrease in annual pension cost. *Pensions and Investment Age* reported that the aggregate pension cost of the Fortune 100 companies decreased 51% in 1986, primarily because of Statement 87 adoption, from $10.8 billion in 1985, to $5.3 billion in 1986. Only 6 of the 100 largest industrial and manufacturing companies reported a higher pension expenses in 1986 than in 1985.

There are three principal causes for the decrease: transition gain amortization; higher discount rates; and valuation method.

FASB/CICA -- CURRENT TOPICS

Thanks in large part to the bull market of the 1980s, many pension plans are overfunded on a current market basis, at least until the last few days. Under the Statement 87 transition rules, that surplus is amortized over the lesser of the remaining service lives of the employees or 15 years. That brings a healthy credit into the pension cost for many companies.

Secondly, Statement 87 generally leads to higher discount rate assumptions, tied to the PBGC rates or market rates of return -- higher than the more conservative actuarial discount rates most of us used previously.

Finally, Statement 87's requirement to use the projected unit credit method for expense calculation purposes produces a lower pension cost in the earlier years than some of the other methods commonly used. However, as an accountant, I won't presume to speak further to you experts on that subject.

As to how lower pension cost compares with expectations, that is most difficult to say since the view from the FASB generally would be that the lower pension cost reflects the reality of what is happening. There were members of the FASB who would have recognized experience gains and losses currently, and would have recognized current market values, rather than the smoothed "market related value," for asset measurement, producing greater volatility of expense, but also probably lower expense given the current market condition, at least until the last few days. A concern is that during market downturns, the reverse effect will be seen.

A concern expressed by many during the FASB's deliberative process which has proven warranted is the divergence of pension expense and funding. Statement 87 concerns itself only with expense, taking the view, as did the previous APB Opinion, that funding is a cash management function rather than an accounting function. Because the application of Statement 87 can produce annual pension cost outside the range of allowable tax deduction, and tax deduction is predicated on funding, we are seeing a divergence. This divergence is an education challenge for management and financial statement users, since it has been customary to fund the amount expensed. This divergence is creating new balance sheet items in the form of prepaid or accrued pension expense (prepaid being more common currently). It also is raising significant government cost recovery issues for companies with governmental business.

PANEL DISCUSSION

Pension cost volatility has proven, as expected, to be a source of concern. Under Statement 87, sources of year-to-year pension expense volatility, present to a greater extent that under previous accounting practice, generally include:

- o The effect of annual discount rate changes which are much more likely under the guidance of Statement 87 than previously.

- o There is also more rapid recognition of the effect of market value changes.

- o Another contributor to expense volatility is amortization methods, most importantly shorter amortization periods and faster amortization of the principal (excluding interest) than under the "mortgage method" commonly used in previous periods.

To attempt to mitigate the volatile effect on pension cost of the factors I have just mentioned, there is inducement to revise salary scale assumptions more frequently. Additional mitigation opportunities include the permissive use of a five-year asset value smoothing technique, deferral of experience gains and losses over no longer than average remaining service lives, so long as they remain within the 10% corridor -- that is, 10% of the greater of PBO or market-related value of plan assets, and inclusion in assumptions of recognition of future benefit improvements. Any or all of these devices afford opportunities to smooth year to year expense.

BALANCE SHEET

The recognition of a liability on the company balance sheet, in the case where the accumulated benefit obligation exceeds fund assets, is required in years beginning after December 15, 1988, with earlier adoption encouraged. This is, or will be, a dramatic impact of Statement 87 for some companies. Even though this liability is probably offset by an intangible asset, many financial statement analysts eliminate intangible assets for analysis purposes. This liability, and its volatility, inevitably will lead to consideration of increased funding, merger of pension plans (to combine overfunded plans to reduce or offset the book liability for unfunded plans), and consideration of plan termination.

In the business acquisition situation, Statement 87 requires putting on the balance sheet the pension asset or liability of the acquired company, based on the projected benefit obligation. While this can be a significant item in a large business acquisition, it probably only reflects the economic reality that the acquiring company contemplated, or should have contemplated, in acquiring a company with a pension plan. Nonetheless, this Statement 87 requirement is a source of noncomparability among companies.

COMPARABILITY

An objective of the FASB in developing Statement 87 was to improve comparability of annual pension cost, as well as of disclosures. I think it is safe to say that comparability has been improved and will probably be improved more as time goes on. However, there are significant areas of noncomparability.

A major lack of year-to-year comparability is the significant change in cost and balance sheet recognition which occurs upon adoption of the new Standard. While this is only a one year phenomenon, it will impact review of earnings' trends for years to come.

Most of us applaud the FASB for not prescribing discount and earnings rates, and yet not doing so does perpetuate noncomparability because some companies focus primarily on annuity rates, others on the PBGC rates, and others on long-term bond rates. As I mentioned before, the rates will change much more frequently than in the past.

Another area of flexibility in the Standard which leads to noncomparability is the variety of methods to smooth asset values, with only the constraint of recognition over no more than five years. Some companies are recognizing those value changes currently.

Another noncomparability exists in the balance sheet where the company with underfunded pension plans, measured by accumulated benefit obligation, will portray a liability, which will be volatile year-to-year and may even appear and disappear year-to-year, whereas a company with an overfunded plan, unless it arose in a business acquisition, will not portray a corresponding asset.

The increased footnote disclosure requirements of Statement 87 mitigate but do not eliminate some of those noncomparabilities. I think the disclosures will also tend over time to reduce noncomparabilities among companies as we observe what our peer companies do and make our judgments accordingly.

INVESTMENT STRATEGIES

The new standard is having some significant effects on investment strategy as fund managers attempt to balance risks and returns with a somewhat different perspective, perhaps, than in the past.

Funding policy is affected because, by virtue of divorcing accounting from funding, the decision to fund the maximum or minimum allowable or something in between is more purely a financial decision, including consideration of alternative uses of corporate funds.

The nature of the required disclosures, the impact on annual pension cost, and balance sheet recognition, seem to be enticing more attention on the part of funds managers to the *net* of fund assets and pension liabilities than was the case in the past when fund managers were more apt to concern themselves solely with maximizing returns on pension fund assets.

The impact on corporate costs and financial position can be driven as much by liability volatility as by asset volatility, and liability volatility has not perhaps received as much attention in the past. The effect of interest rate changes is more pronounced on liabilities. This focus is leading to at least more discussion, and literature, on the subject of controlling the volatility of cost and balance sheet liability. A pension fund invested primarily in equities will typically have a much shorter duration than the pension liability with the result that interest rate swings can have a significant effect on the *difference* between assets and liabilities. The fund in surplus position, as many are today (or were until Black Monday), therefore is enticed to consider ways to protect that surplus by such techniques as duration matching by portfolio mix and portfolio insurance.

These investment strategy impacts are receiving ever increasing attention in the financial and pension investment literature. While one can argue that the long-term best interest of the employer and the pension plan are served by maximizing returns, the stock market's focus on short-term corporate performance means that company management cannot ignore the volatility which can result from attempting to cover long duration liabilities and short duration assets.

CONCLUSION

These pension cost, balance sheet, and comparability and investment strategy implication issues are the ones I have seen receive the most attention as the result of implementing Statement 87. Others will likely emerge as more companies adopt and as markets and pension plans themselves evolve.

MR. J. ALEX MILBURN: I should emphasize my perspective and areas of non-expertise. I am a Canadian public accountant and will. therefore, discuss pension accounting from a Canadian accountant's viewpoint. The new CICA pension accounting requirements are in basic terms very similar to FAS 87, but there are some potentially significant differences. I will point out some of these to the extent that they affect the discussion.

I have worked with a number of actuaries in connection with the implementation of the CICA requirements over the past year or so, and I am coming to understand a little better the actuarial perspective and funding requirements here in Canada. However, I know very little of U.S. actuarial practices and funding requirements. So my remarks should be taken within the Canadian context.

Mr. Bailin has asked that I comment on how the new accounting requirements are working out vis-a-vis the original goals of the accounting standard setters. It should be recognized that it is still pretty early going, so I cannot be definitive. There is however, some experience that I can use as a basis for a preliminary assessment. I think it useful to begin by reviewing what the goals of accounting standard setters may have been. I'd like to do so by drawing some comparisons between funding and accounting objectives, because I think such companies help to provide a context for understanding the things accountants are trying to do.

At the beginning, accountants view pensions as deferred wages. In other words, instead of paying an employee solely in cash, employers are perceived to be paying employees for services rendered to the company in part with a promise to pay a pension when the employee retires. The objective of accounting is to expense the cost of that future pension on a reasonable basis during the working life of the employee, because this is the period in which the company benefits from the employee's services. This accords with the fundamental "matching" objective in accounting, under which the goal is to record an expense in the period(s) in which the benefit is received.

All this may not sound very different from the purposes of funding, in that pension benefit authorities, here in Canada anyway, generally require funding over employees' working lives as well. Prior to the coming into force of the new accounting requirements, pension accounting had, of course, tended to follow the funding. With some exceptions companies had simply expensed whatever amounts had been contributed to the fund in the reporting period. We have long recognized, however, that funded amounts may not be appropriate for accounting purposes. To understand this, one needs to understand two additional basic accounting objectives:

1. The accountant defines liabilities/obligations in general as *probable* future economic sacrifices to result from past events or transactions. In the case of a defined benefit pension plan, the past event is the provision of services by the employee. This is what gives rise to the obligation. But note the word *probable*. The accounting objective is to estimate future "economic sacrifices" that are most probable or "best estimates." While accountants prefer to err on the conservative side when there is doubt, in order to fit this "probability" concept, future estimates should be within a tolerable range of what is most likely to occur. There has been a tendency in accounting, particularly in the United States, to move more toward attempting to reflect assets and liabilities on the basis of best (most probable) expectations of future effects.

2. Another preoccupation of accountants is achieving reasonable consistency of measurement and allocation methods. The reason for this is that companies' reported earnings' figures tend to be assessed by investors and others in comparison with those of other companies in order to evaluate growth and trends. The use of different methods to determine items of revenue or expense from period to period or as between companies inhibits meaningful comparisons wherein the differences are not warranted by different circumstances. As well, accounting standard setters are anxious to reduce the ability of company managements to artificially manipulate reported earnings or financial position by the strategic use of alternative methods at particular times.

We might compare these accounting objectives with reasonable pension funding objectives. Actuarial funding determinations have had more complex objectives than those noted above for accounting. The funding of a pension obligation is presumably motivated in large part by the need to ensure that the employees' future pensions are secure. As a result, at least here in Canada, there has been a degree of conservatism in actuarial estimates for funding determinations. As one actuary put it, such assumptions are not really meant to be "best estimates," but are likely to contain some cushions or margins for safety. Further the degree of conservatism may vary in order to fit, to the extent reasonable within pension benefit, the requirement of authorities and income tax requirements, a particular company's cash flow situation, taxable income, and so on.

Consistency is not an overriding consideration in determining reasonable funding plans for a company; in fact, funding approaches may need to have some degree of flexibility to fit a particular company's changing situation.

It is not surprising then that the CICA, and FASB, pension accounting requirements include the following basic thrusts:

1. They call for "best estimate" assumptions.

2. They call for an increased degree of uniformity and consistency of measurement and allocation methods, in particular in the following areas:

   -- One actuarial cost method must be used and that is the accrued benefit method with projection of future salary levels for salary-based plans.

   -- Adjustments (with respect to past service, experience gains and losses, and any transitional surplus or deficit) are to be carried forward and normally amortized over the estimated average remaining service life of the employee group. In the United States, no amortization is required of experience gains and losses as long as the adjustments are within a corridor equal to 10% of the lesser of the accrued pension obligation (without projection) and investment asset values.

   -- Fund assets are to be valued at market related values.

-- Rules have been developed for determining, and immediately recognizing, gains or losses on "settlements" and "curtailments."

3. The new CICA and FASB standards is one of disclosure for the purpose of helping employer company financial statement readers understand the impact of pensions on a company's financial position and results of operations. As Mr. Doyle has noted, disclosure can be a significant factor in facilitating comparability. The FASB requires much more extensive disclosures than the CICA.

How well are these new requirements working out? It is to be noted that these requirements were effective in both Canada and the United States for financial years beginning on or after December 1, and December 15, 1986 respectively. Thus we have yet to see the first audited financial statements for most companies. However, a number of companies in both countries elected to adopt the new requirements in 1986, so that we do have some information.

Mr. Doyle has indicated some general effects in the United States -- namely, that pension expense is generally significantly decreased for most companies. Experience in Canada is the same. This is to be expected if general funding determinations are more conservative than "best estimate" determinations. This effect has been abetted, of course, by economic conditions (which, at least up until a couple of days ago, have produced surpluses on a funding basis as well).

BEST ESTIMATE ASSUMPTIONS

In Canada, the CICA has provided virtually no guidance on making "best estimate assumptions," apart from stating that:

- o Assumptions should reflect management's judgment of the most likely set of conditions affecting future events, and

- o Should recognize "the long-term nature of the plan, [and] expected long term future events, without giving undue weight to recent experience" (*CICA Handbook* Section 3460.16).

I'm afraid that without some standards here, particularly with respect to general economic assumptions, there will be a lot of variability, such that similar situations may have quite different accounting numbers. If this is the case, we will fall short of the objective of meaningful consistent and comparable "best estimates." Since FAS 87 is more specific as to what "best estimates" means, this might not be as major a problem in the United States.

The key assumption that is giving rise to most difficulties here in Canada is the interest (discount) rate used to determine the present value of accrued pension obligations. In the United States, the FASB requires a "settlement" rate approach. Under this approach, the objective is to use the rate(s) at which a company's accrued benefit obligations could be expected to be settled as at the reporting date. On this basis the interest rate would reflect current interest rate conditions. However, the above CICA wording (particularly the reference to not giving undue weight to recent experience) may be interpreted as meaning that accounting should be based on some average rate that may be expected to prevail over the long term. Such an average rate may not be significantly affected by current interest rate levels. The difference between this long run rate and a settlement rate could be quite substantial in periods in which interest rates are higher or lower by reference to historical averages. In fact, in Canada the *CICA Handbook* wording is sufficiently general that either philosophy is accepted. We will have to see how practice evolves. Current rates being used by companies in Canada would seem to be generally in the range of 7% - 10%, although there may be some instances outside this range.

In summary, it would seem to me that additional standards are necessary here, and I would think that such standards should be developed in close consultation with the actuarial profession.

INCREASED UNIFORMITY OF MEASUREMENT METHODS
(The Consistency-Comparability Goal)

This may be the main effect of the new rules, because the CICA and FASB requirements do move significantly toward greater standardization of methods. However, there is still some room for policy selection in some areas. In Canada these include:

- o The basis for amortizing adjustments, and some room for judgment in whether to amortize past service over the estimated average remaining service life of the employee group or some shorter period.

- o Whether to value pension fund assets at current market values or market related values ("market related values" meaning values that are adjusted to market over a period not to exceed five years).

- o In regard to the basic substance of a pension plan, the definition allows some interpretation with respect to whether periodic updates should or should not be anticipated as part of the basic plan.

- o Actuarial assumptions (the interest rate approach, discussed above).

Company managements should be careful in initially choosing policies in these areas, because once policy decisions are made it will be more difficult for them to make material changes than has been the case in the past, except as is appropriate to fit real changes in economic circumstances.

DISCLOSURE

Mr. Doyle has noted that the increased footnote disclosures of FAS 87 enable more meaningful comparisons between companies and over time. He noted, for example, that one of the things that interferes with comparability is the amortization, over future years, of the surplus or deficit upon adopting the new requirements. However, if the amounts being amortized and the methods of amortization are disclosed, then readers can see the effects and make adjustments so as to afford a reasonable basis for comparisons.

Unfortunately, as noted, the CICA disclosure requirements are very much less than FAS 87, so that key incomparabilities -- namely, different interest rates, amortization effects, and so on, may not be apparent. The only absolute requirement is the value of pension fund assets and the accrued pension obligation as at the company's financial statement year-end.

Early experience with respect to early adopters in Canada has indicated more extensive disclosures than that required by the *CICA Handbook*, but these may not be indicative because the early adopters have tended to be large Canadian companies that are also SEC registrants, and thereby have incentives to meet FAS 87 disclosure requirements.

In summary, to return to Mr. Bailin's question -- "How well are the new accounting requirements working out in accomplishing the objectives of the accounting profession in Canada?" -- it is my view that the new requirements represent a very significant step forward from what has been. However, I suggest that there are still major unresolved issues, in particular a need for additional standards related to what may constitute "best estimate" assumptions, and a need for better footnote disclosures here in Canada. As the introduction to FAS 87 notes, "*Pension Accounting . . . is still in a transitional state.*"

In closing, it is clear that reasonable accounting for pensions in employer financial statements and elsewhere, requires bringing to bear the expertise of both the accounting and actuarial disciplines. This in turn requires greater understanding and closer cooperation between accountants and actuaries than in the past. As accountants and auditors, we have been guilty of accepting actuarial figures for funding purposes, without much consideration or understanding as to their appropriateness for accounting purposes. The auditors relying on actuarial information will now have to be much better informed. On the actuary's side, assistance to companies in the development of figures for accounting purposes will be most helpful if actuaries understand not only the accounting requirements, but also understand the basic accounting objectives that underlie these requirements. I have been impressed with the degree of knowledge of the accounting requirements on the part of most actuaries that I have come in contact with thus far.

In summary, I believe that the new pension accounting requirements represent a significant step forward from an accounting measurement perspective, but it is unlikely to be the last step. How successful these requirements will ultimately be in meeting the basic accounting objectives that I have mentioned here today, will depend in no small part on the cooperative efforts of the two professions.

MR. CHARLES BARRY H. WATSON: I must admit that, when we began to hear the news of Black Monday from the stock market, I thought that I might have to adjust some of my remarks today.

What we have seen in Canada and in the United States is an effort on the part of the accountants to seek greater comprehensibility, consistency and comparability in the treatment of pension results. Accountants have been doing this for the advantage of users of financial statements, such as stockholders, management, employees and analysts. Now these, as I understand them, are the goals that the accountants have had and they are very laudable goals. What we as actuaries, or at least the actuaries that I have talked to, feared was some dangers of volatility, some dangers of being unable to achieve the true consistency and comparability that was being sought, and I must admit, some dangers of having our turf invaded by another profession. I think that all of these dangers have appeared to some degree or other. The purpose of this session is to try to evaluate, on the basis of the limited experience that exists, whether the efforts of FASB and CICA have been reasonably successful in achieving their goals and what that means for the future.

Now I might say that this is only part of a trend which is appearing around the world. You know about FASB Statements 87 and 88 and we know about the CICA Section 3460. What many of you may not be aware of is the fact that in the United Kingdom the chartered accountants are making distinct efforts to achieve similar goals of regularity of pension accounting. It's true in Australia, it's true in New Zealand and even when you go beyond the English-speaking world, you find in countries as diverse as Germany and Sweden that efforts are being made to bring pension benefits into greater prominence on company statements. Now you might ask why. Well the effort toward regularity of pension accounting is not just a longing for greater regularity that seizes the souls of both accountants and actuaries from time to time. The accountants really want to have pensions conform to accounting principles as the accountants understand those principles, and I think it's also because pension costs have become ever more important in recent years.

The beans associated with pension plans have finally made up so large a pile that the bean counters want to count them. This may mean we may see an extension of this attempt to introduce regular accounting principles into other areas of employee benefits. Although we have not yet mentioned it here, in the United States FASB is making a distinct and determined effort to bring postretirement life and medical benefits into a similar situation of regularity. That is something we can all look forward to with either pleasure or displeasure.

The goals were to achieve comprehension, consistency and comparability. As Mr. Doyle pointed out earlier, this has led to efforts to achieve regularity in the net periodic pension cost, in the balance sheet items, and in disclosure, and basically an effect to improve the general reporting of the financial position of the company. Now, as actuaries, we had a number of concerns about this process, and I'm going to outline these because I think these are of interest in terms of evaluating what has been achieved so far.

We were afraid that the efforts to achieve comparability would not be completely successful. As has been stated, there is a certain degree of imprecision in the instructions given for the process of choosing assumptions and this has led, as many of us have seen, to what you might call managed FASB costs, at least in the first year or so. In other words, companies have examined the possibility of using different assumptions, different methods of asset recognition, and so forth to achieve the level of FASB pension cost that they wanted to have.

We were certainly worried about the effect on pension costs. Here our greatest concern was whether pension costs and funding contributions would be comparable. Ideally one would like them to be equal but this is just not possible in some situations. In Canada, for example, the period for amortization of gains and losses appears to lie outside what is required under the CICA, although I suspect that there is enough flexibility in CICA to accommodate it. In any event, we have definitely seen in the United States that the pension costs as developed under Statement of Financial Accounting Standards (SFAS) 87 can lie outside the tax deductibility ranges. To the extent this occurs the contributions made will not equal the pension costs as determined by SFAS 87 if we were worried about the actual expense of compliance. Clearly there is a need for multiple valuations, not only when you are considering the adoption of SFAS 87 and examining the implications of using different sets of assumptions, but also when you are exploring funding and a different funding contribution. You have to comply with the tax deductibility limits. You have to set your costs at the beginning of the year and then adjust to the end of the year situation. It certainly means a great deal more expense for the employer and, even though this means more work for the actuary, it is not necessarily the kind of work we would always want to have.

We were concerned about the recognition period for pension costs. To the extent that the recognition of pension costs would occur over the future service period of the employees, the recognition would be fine. However, what about the case of a negotiated arrangement where there may be an amendment which must, under the FASB rules at least, be amortized over the period of the union agreement? Also what about early retirement windows?

We were basically concerned about volatility. We were afraid of the extent to which the increased recognition of market values and the concept that the discount rate, as mandated by FASB, could change from year to year, and could lead to fluctuating cost levels from year to year and what this would generally do to what the employer was reporting.

As an international actuary, I'm also concerned about differences around the world. I see that the CICA and the FASB are not entirely on the same wave length. In Canada, there is only one interest rate to be considered. There is no discount rate and rate of return which can differ. There is a small but significant difference in the definition of the expected period of future service for employees. There is a difference in disclosure. In the United States you must disclose any differences between the Accumulated Benefit Obligation (ABO) and the market value of assets, but not in Canada. You are expected to value the treatment of gains and losses, with the possibility of a corridor in the United States which is not allowed in Canada, and the treatment of expected plan improvements, which in the United States you can have a career average plan with regular updates, as a final average plan. Similarly in the United States you are to recognize cost of living increases in pensions if they are granted regularly. There are possible differences in determining asset value at least. In the United States you are to use the fair value of the assets for certain purposes, whereas in Canada you can always use an adjusted or smoothed value.

Actuaries were also perhaps afraid of what the future would hold. In other words, will we see a movement toward a greater regularity in assumptions? The actuarial cost method has been defined for us. Are the accountants, when they see that the comparability achieved is not as great as they want, going to lay down more detailed rules for the selection of assumptions? And what's going to happen to the other post-retirement benefits, like life insurance and medical benefits?

Mr. Milburn mentioned that he would be very interested in U.S. experience. It is true that we don't have much experience, but I would like to report on a study that my company, The Wyatt Company, has made which reveals to some degree what U.S. firms which have chosen to adopt SFAS 87 early have done. Adoption is mandatory for 1987, 1989 for plans located outside the United States, but it could be adopted early and FASB did try to encourage early adoption. Wyatt surveyed the top 500 Fortune Industrials, and the top 160 Fortune Service companies. We received responses from about 80% of each group. Basically, our results focused on defined benefit plans, but we do have limited information with regard to other types of pension plans as well.

We asked questions in four different areas. One was the time of adoption of FASB. Was it adopted early and, if so, when? Another was the choice of key assumptions, how they varied among the companies, and this included the discount rate, the compensation increase rate, and the rate of return. The third was funded status, the market value of assets against the ABO, against the Protected Benefit Obligation (PBO), and against the Vested Benefit Obligation (VBO), and the last was how pension expense varied in relationship to certain key parameters (percentage of net sales for the industrials and percentage of net income for the service companies).

Well, what were the results?

We found that 57% of the respondents have adopted FAS 87 early. Of those, 5% adopted it in 1985, and 52% in 1986. So by 1986, over 40% of the top companies in the U.S. are already using SFAS 87 for the U.S. results. From the personal experience of our clients, the companies that adopted it early were the companies that saw an advantage in adopting it; in other words, pension cost went down.

With respect to the assumptions, we looked only at those companies that elected FAS 87 early. Mr. Milburn said he thought that the discount rate would show a somewhat lesser degree of variability than the interest rate in Canada would. It is extremely interesting that the discount rates as reported ranged from 5.7% to 10.35%. Now over 80% of the responses lay in a range of 7.55 to 9% with a mean of 8.4%, so the situation is not as startling as it looks at first glance, but you do wonder about the differences between a company which will use a 5.7% discount rate as compared to one that believes the discount or settlement rate is

10.3%. Considering that this is not supposed to be based upon the company's own assets or own experience, but what can be obtained in the market to settle the plan liabilities, the degree of variability does seem surprising.

Now it is interesting to compare the discount rate with the valuation interest rate used by those companies that did not choose to elect SFAS 87 early. The mean rate oddly enough was almost exactly the same for the two, very close to 8.4%. However, probably not surprisingly there was a wider spread, from 4% to 14%. Again there was a heaping, but only 60% of the rates lay in the range of 7.5% to 9%. In other words, the valuation rates were more widely distributed.

We also explored the question of how many companies had changed their discount rate. This is one of the concerns of volatility. In answer to the question: "Have you changed your discount rate from the rate you used at a prior measurement date?" about a third of the companies that had adopted SFAS 87 early and could have changed the discount rate had done so. Nearly all the changes were to decrease the discount rate, about 1% on average. Well we all know what the rules of thumb say about a 1% change in the valuation interest rate, which is essentially what the discount rate is. This does seem to indicate a significant degree of volatility in a period of time that hasn't perhaps been subject to as much yield rate disruption as is possible within the relatively near future.

Compensation increase rates, another key assumption, lay in a range of 3.5% to 10%. Again 90% of them were heaped between 4.5% and 7% with a mean of 65. Of course the key task is to compare the discount rate with the compensation increase rate which gives us our old friend, the yield gap. Not surprising, the yield gap was positive, with almost no examples of a negative yield gap. In other words, in almost no cases was the compensation increase rate greater than the discount rate. In almost 5% of the cases, the difference lay in the range of 1.5% to 3.5%, with a mean value of between 2.25% and 2.5%.

Now let's turn to the rate of return, the third key assumption. It had been thought that this should be a less volatile rate, although it could in theory display a wider spread since it is based upon the company's own assets and what it expects to earn on its own assets over the long run. The reported rates lay in a range of 7% to 14%, with 80% of them clustered in the range of 7.5% to 10%, and a mean just over 9%. Notice that the mean is higher than that for the discount rate. You would hope it to be higher than the discount rate because, if you don't expect to earn more on your assets than by settling right now, why don't you settle right now? There are certain special circumstances under which you might not want to settle now, but in general you'd expect that. So when we compared the rate of return with the discount rate, we found that in very few cases was the rate of return less than the discount rate. However, and this is not surprising, in a quarter of the cases, they were equal. There is a certain incentive to select your rate of return equal to your discount rate if you can justify it. In a half of the cases the rate of return was between 0.5% to 2% greater. Generally speaking the mean difference was between 0.75% and 1%.

Funded status was measured by comparing market value of assets with the PBO, the VBO, and the ABO for defined benefit plans. We found that in 75% of the cases the assets exceeded the PBO, in 90% of the cases they exceeded the ABO, and in 93% they exceeded the VBO, which you would hope for. One wonders what will be the situation on December 31, 1987, but that's another story. Obviously, since this comparison is made on the basis of fair market value, you can get quite a fluctuation.

The last thing that Wyatt looked at was pension expense. It displayed very interesting characteristics. For industrial companies, the pension expense was compared to the percentage of sales. For defined benefit plans, 44% of the respondents had a negative pension expense. As a percentage of sales, the range was from -1.8% to +2.1%, with a mean of 0.06%. In the case of the service companies, where we compared expense to net income, 32% reported a negative pension expense. The range was from -8.4% of net income, to +34.8% of net income with a mean of 1.8% of net income. Now I might add that when you add in other types of plans, particularly defined contribution plans, the expenses do go up. For example, with service plans the mean value of expense was 9.2% of net income when you looked at all of the plans. However, reporting of plans other than defined benefit plans was only fragmentary.

We certainly have dispersion of results; we have variability. Some of the variability comes from the plan designs. Obviously, some plans are more expensive than others. Some of the variability comes about because of the prior funded status and some comes about because of the choice of assumptions. It has to.

We've heard that pension expense in the United States is generally down. This has been our experience at least. In my office, we have found that almost every company which has adopted SFAS 87 had a decrease in the pension expense. Mercer reported a study of 307 large corporations which found, and this is interesting, that 85% of those corporations had SFAS 87 pension expenses that lay outside the tax deduction range. Mercer also reported that 71% had SFAS 87 pension expenses less than the minimum, including 55% with negative costs, and 14% had pension expenses greater than the maximum.

Now for just a general review of other problems. The first FASB year for most companies that adopted it early was 1986. The first year that the FASB was mandatory was 1987. The first year is the easiest; closing out the first year and bridging to future years will produce more problems.

In the United States, you're supposed to measure assets and liabilities using data as of the end of the year, doing the calculation as of the end of the year or no more than three months earlier. We have found that in nearly every case we're doing it as of October 1, and then projecting forward to allow for it. However, that basically means that we are getting data even earlier than October 1 and adjusting it. You can't do it as of the end of the year and get your figures ready in the first two weeks of January. It's just physically impossible.

We have seen a great deal of creativity on the part of both actuaries and plan sponsors in choosing the assumptions and asset smoothing methods, and in the use of gain and loss corridors, and so forth. Even now we find that asset gains and losses are the biggest source of volatility in pension expense. That was before the stock market crisis a few days ago.

We found that most clients are disinclined to recognize anticipated improvements. What this means is that clients often don't want to value career average plans as a final average, and they don't particularly want to recognize cost of living indexing if their auditors will let them. There are clearly problems with negotiated plan improvements, with early retirement windows, with plan curtailments, with benefit cut-backs, and so forth.

When you compare the U.S. and Canada, Canadians probably will be able to use FASB figures in the first year because of the greater degree of flexibility under the Canadian requirements. However, in the United States, some of the FASB rules are so strict, that companies may have to use different approaches for the FASB figures, which is unfortunate. As a general matter, I would say that as you look around the world at foreign plans, and FASB and CICA both apply to plans outside the United States and Canada, requirements have been drafted with no real recognition of what happens out there. They certainly don't pay any attention to hyperinflation. They don't really pay enough attention to lump sum plans and termination indemnity programs. Life is a constant exercise of creativity to try to fit the situations existing in other countries to what you think was intended under the FASB and under the CICA.

Having said all this, I will close on a more optimistic note. I think that the introduction of the FASB and CICA requirements has served to concentrate the attention of management on pension costs. In addition it has given them the ability to achieve a better comparability, at least within the company itself. I am not so sure the comparability from company to company is as good as it might be. However, within a company you can lay down enough rules and requirements such that you see comparable figures for your plans around the world. I think that's a great advantage. It has also made management recognize the existence of liabilities under certain types of plans that were largely ignored such as termination indemnity programs in Latin America and other countries and of course, it has led to a lot more work.

MR. DANIEL M. ARNOLD: I have two questions of the panelists. First, if I may ask Mr. Doyle and Mr. Watson, on the international front, General Electric has facilities all over the world. I deal with plans of about 200 lives up to 10,000 lives and most of the plans that I handle which have subsidiaries overseas are relatively small plans. We're talking about less than 1,000 lives, typically 100 to 300 lives, and they are located in countries all over the world, and what we're struggling with is materiality, something the actuaries don't know anything about, but the accountants seem to have a great love for. We're struggling now with the question of what is material in terms of this international reporting.

Second, I have a question for Mr. Milburn on the CICA. In the United States one of the big reasons for early reporting was the negative numbers, that is the income items. Is that permitted under CICA or is there a zero where you can not have an income item under CICA? Let me toss out that Mr. Watson mentioned the negotiated question, the problem in the U.S. where three year negotiations have to be amortized over three years. It is my understanding that the accounting profession has a committee, which I think is called the SEC Advisory Committee made up of the big 8 accounting firms and I've been told that they got together and they disagreed with what was stated at the Enrolled Actuaries Meeting. The big 8 accounting firms, it is my understanding, are saying that clients may spread that cost as the result of negotiated changes over a period longer than the three years which some would suggest is what FASB intended.

MR. DOYLE: I can speak to that last point. The group you referred to is the Emerging Issues Task Force of which I am a member. The question that was posed to that group was: "Should negotiated plan changes be amortized over the contract period?" and the Emerging Issues Task Force did not reach consensus on that point, in fact declined to attempt to reach consensus on the basis that FASB had not, so it's still an open issue.

MR. WATSON: I would agree with Mr. Doyle on that. What I was trying to do is to indicate that there is at least some fear that this is the case. It would depend very much on what the individual accounting firm had to say about it.

MR. DOYLE: On your first question on materiality, in our own situation although we do operate worldwide, we are in the situation that you alluded to where the U.S. pension plan is so predominant in terms of its material impact on the company that we really don't have any single plan overseas. This is one possible exception, that would have a material effect. You know FAS 87 is not mandatory for foreign plans until years ending after December 15, 1988. So we have sidestepped so far the issue on one plan. So if implicit in your question is how do we judge materiality, materiality is one of those elusive concepts in accounting where you know it then you see it. We have looked at it here in this situation by judging it with respect to the impact of FAS 87 versus another standard on pension cost in relation to consolidated corporate earnings. That's not the only way you can look at it, but that's the way we looked at it. If we had the situation, which we don't, of having an underfunded plan where the liability recognition issue arose, then you would have to make your materiality judgment somehow with respect to the balance sheet, net assets or whatever.

MR. WATSON: Also relative to that question, I certainly agree that materiality is in the eye of the beholder, but I think that what you see is materiality from two different aspects. First of all, is it material within the conception of the local subsidiary, and second is the subsidiary material? I mean for the financial results of the sub, it may be very important for that sub, but it may have no bearing whatsoever on the company as a whole. Then of course it would depend on how you measure materiality because if, for example, you are talking about percentage of pension expenditure and you end up with a negative or zero cost for the United States, I suppose that in theory that could be said to make foreign plans more material. However, I doubt that will hold up.

What we've tried to do for clients, is to look at their foreign plans somewhat separately from the United States, at least as a start, and to look at those plans which make up the bulk of the pension expense outside. Now this usually focuses down on a very small number of plans and countries, and those are the only ones about which we would say you even need to worry. Also it is a question of discussing with your auditor whether they feel that the results there are material or not. One of the troubles is that you can't judge whether the results are material, or at least some accountants may say you can't make that judgment, until you have done the calculations, which isn't exactly the result you would want.

MR. MILBURN: On the Canadian question as to whether you can have negative numbers, yes you can and a number of Canadian companies that have reported so far, have had negative numbers. One interesting implication of that is that it gives rise to assets on company balance sheets and there has been some question within the Canadian environment as it now exists as to whether those are valid kinds of things, given the fact that there is a moratorium in Quebec, Ontario, and some other provinces with respect to withdrawing surpluses. So that has given rise to some questions as to whether these assets, if they get to be too big, are going to be recoverable, whether there is a benefit to the company, and whether they should be recorded. So there are some questions there, but the general answer to your question is yes there can be negative numbers in Canada.

MR. CHARLES V. SCHALLER-KELLY: Perhaps on that very last point it might be noted by the American participants that many Canadian pension plans are in fact contributory pension plans. When you combine that with relatively higher interest rates, or discount rates as the accountants now like to call it, the result is inevitably that there are likely to be negative costs and certainly that applies to Alcan. That will lead to a great deal of additional volatility if interest rates change.

I had one technical question. In trying to come up with an appropriate discount rate, we are having to deal with another company which also owns a part of a sort of joint venture. They want to use a system of matching bonds to the benefit stream, and it happens that this operation is very new so that all the benefits will be paid a long way into the future. Now the question is: "What benefit stream do you match?" Do you match the benefit stream of the Accumulated Benefit Obligation or do you match the benefit stream of the Protected Benefit Obligation? Because of this very new operation, the two are quite different. The one lot, the Protected Benefit Obligation stream puts even more benefits proportionately into the long distant future. And our auditors are saying that you can use, in fact that you should use the Protected Benefit stream for working out costs. We haven't yet persuaded the auditors of the joint venture to go and say the same thing and I wondered whether anybody had any suggestions on how one might handle that.

MR. WATSON: Are you talking about the discount rate or the rate of return?

MR. SCHALLER-KELLY: The discount rate. The assets are so low that the rate of return is relatively immaterial.

MR. WATSON: Yes, but the discount rate is supposed to be based on a current settlement rate.

MR. SCHALLER-KELLY: Right. But what are you settling, the benefit stream of the Accumulated Benefit Obligations or the benefit stream of the Projected Benefit Obligations?

MR. WATSON: I would think that you are talking about a situation in which it is highly questionable whether you can really interpret a settlement rate for that kind of obligation. I mean you haven't got an insurance company that, say if these people are all 25 years old, that they are going to be very cheerful to sell you a 40-year deferred annuity with anything like a satisfactory rate of return. So I would think you would be looking more at some of the other indices such as long-term bond rates, and so on. I think that the concept of trying to choose the settlement rate by doing that kind of matching is at this point in time almost a non-starter.

MR. SCHALLER-KELLY: You mean this most recent week or do you mean because of the fact it is so far in the future?

MR. WATSON: I think because of the fact that, from what you have said you've got almost no obligations that will become payable until sometime a long way into the future. I don't think that you have really got a situation that is very good for matching, because you have reinvestment long before then.

MR. SCHALLER-KELLY: Of course that basically was our problem. However, what our partners are saying is while the zero bond rates at 30 years are (they were at one point) 9% and we want to say it's possible, well it's darn difficult. All we can do is to say, "Think in terms of reinvestment rates and what kind of reinvestment rate are we going to use." By pressing them to go and say we need a low reinvestment rate for all those bonds that are going to mature between now and 50 years from now, by that time we can try and push them down. That's what we are trying to do, and I wondered if anybody had any brilliant ideas on the subject.

MR. MILBURN: It would seem to me that if you are using a settlement rate approach, that you divorce the determination of the rate and the liability side from your asset/investment side so that you should be looking at a current based rate that is appropriate to the liability side which is a projected obligation rate because those are the benefits that you are trying to bring back. So it seems to me that's the approach.

However, in reference to what Mr. Watson had said in his remarks and that is that you couldn't have a different rate on the asset side than on the liability side in Canada, you can have it and we have allowed that. So you could have different rates.

PANEL DISCUSSION

MR. WILLIAM B. SOLOMON: A question for Mr. Watson. In Canada, as you've pointed out, the calculations are all done as at the end of the year. You indicated that under the FASB the requirement is that valuations be done within 3 months of the end of the year. Could you indicate under what circumstances you would do it, and if you would do it prospectively for the coming year, or retrospectively for the year that is then ending?

MR. WATSON: Basically, you have to have your asset and liability figures as of the end of the year. We would tend to begin this as of October 1 using October 1 as a date, taking the valuation data that had most recently been supplied to us and updating it to that point in time, and then making whatever projections you have to get to a year-end value to the extent it's appropriate. Now that's the year-end asset and liability one. You are going to have another valuation for next year using new employee data. However, you don't want to make employers furnish you with data twice a year, and since most plans, in the United States at least, have a January 1 valuation date, that is the date at which historically it has been collected, and that's what we've usually been getting. So we try to update that at least in an informant sense to October 1, and value it then to produce the comparison of year-end assets and liabilities.

MR. BAILIN: I thought that I would add something to what Mr. Watson had to say about The Wyatt survey on results in the U.S. by letting you in on some of the numbers in a Mercer survey of assumptions being used in Canada. Unfortunately I was not well prepared for this so we are going to have to go by my rather dim memory. In terms of discount rate, the survey showed a volatility that has a spread somewhere between 6, or 6.5% and 10%. The average was 8% and there was quite a narrow band for the majority. So I would say that probably between 7% and 9% was where it was concentrated and quite a lot right on the average of 8%. For the salary scale we had a similar sort of variation although we had a narrower differential than the results in the U.S. The average worked out to be 6% and the 2% differential was pretty well common throughout the survey. Unfortunately, I don't have any of the other results with me so I can't report them.