TRANSACTIONS OF SOCIETY OF ACTUARIES
1972 VOL. 24 PT. 2D NO. 68

DIGEST OF DISCUSSION AT CONCURRENT SESSIONS

ASSET MANAGEMENT

Sponsors of pension, profit-sharing, and other tax-exempt trust funds are giving increasing attention to the investment management of these funds, in a dual attempt to improve investment results and to discharge more effectively their stewardship responsibilities for these assets.

1. What are the current practices and trends in trust fund asset management?
2. In what ways are relationships between plan sponsors and investment managers becoming more dynamic?
3. How do these developments relate to the restated or invigorated objectives of plan sponsors?
4. How might current trends be influenced by proposed federal legislation affecting retirement programs?
5. What role, if any, should actuaries play in the investment management process, including
   a) Setting investment policy and performance goals?
   b) Selecting investment managers?
   c) Measuring, comparing, and interpreting investment results?
   d) Managing investment portfolios?
6. Should the actuary's role be seen as a natural consequence of his professional education and experiences? Or does this type of service require techniques and knowledge that are not uniquely the province of the actuary?
7. What are the current practices of actuaries in response to the investment management services being sought by plan sponsors?

MR. GEORGE M. LINGUA:* Your program tells you that the first three questions relate to current practices and trends in asset management of employee benefit trust funds, to the increasingly "dynamic" relationships between benefit plan sponsors and their investment managers, and to the "restated or invigorated" objectives of plan sponsors.

I will start by telling you that the terms "dynamic" and "invigorated" as employed in the questions are euphemisms for the ready willingness of many plan sponsors today to fire investment managers rather expeditiously when they feel that the relationship is not sufficiently satisfactory or that investment objectives are not being effectively achieved.

I believe that this form of "invigoration" has been felt by many more

* Mr. Lingua, not a member of the Society, is senior vice-president, First National City Bank, New York.

investment managers than actuaries. Perhaps that is because techniques of investment management performance measurement have been developed to such an extent that comparisons of a manager's performance with those of many other managers is not merely made possible but encouraged and made inevitable. The actuarial science may not yield so readily to performance comparisons. I would hasten to advise you, however, that your having been relatively untouched to date by this new dynamism is no cause for complacency. Instead, it should be viewed as a challenge and a stimulus to achieving and maintaining ever higher standards of service to plan sponsors.

Reverting to the investment management function, we certainly regard today's dynamism and invigoration with respect. While they are occasionally carried to excess, I personally find them a welcome contrast to the apathy and disinterest that prevailed among plan sponsors in an earlier era of pension trust funding.

The most important current practices and trends in asset management are really continuations and extensions of practices and trends that began to develop several years ago. I will comment on three which I believe are the most significant.

One is the rationalization of assets, by categories or components, that is, addressing and answering in a rational way the questions: What kinds of assets are best suited to fulfill the plan's requirements and objectives? What proportions of each kind of assets should there be in the funding of a particular pension or profit-sharing plan?

Before these questions were addressed in a rational way by plan sponsors and their trustees, answers were obtained to such questions by seizing upon some ratio formula that seemed or sounded conservative, like 30-70, or well balanced, like 50-50. Another way was to look at what a few big companies were doing or what the Securities and Exchange Commission pension fund composite figures showed and assume that this was the right answer.

It seems obvious to all now that this rationalization of the assets of a pension plan must be preceded by, and based upon, a rational analysis of the plan's liabilities. This requires going beyond the recognition that the preponderant portion of liabilities is long term. It also requires recognition of the extent to which those liabilities are likely to be inflated by a force essentially beyond the control of the plan sponsor or his actuary or the trustee investment manager. That force is, we all recognize now, secular inflation in the cost of living and in the preretirement salary levels upon which pension benefits typically are based.

Following the recognition that common stocks and related types of equity investments formed the most practical and suitable category of assets for funding these long-term liabilities, the next rational step was to determine the maximum prudent exposure *for a particular fund*, not as a "general rule." This has been done usually by quantifying the maximum potential payout liabilities for the pension plan over the next five or more years and setting up a "contingency reserve" in high-quality, cash-certain fixed-income securities to equal these potential liabilities. The balance of the plan's assets then can be dedicated to variable return securities. This policy effectively neutralizes greater price volatility as an element of risk, since the contingency reserve assets protect against ever having to sell variable return assets at depressed market levels.

This "contingency reserve" method has gained firm acceptance by an increasing number of the sponsors of pension plans which we serve as trustee and investment manager. We have advocated it at every appropriate opportunity and have urged the corporate sponsor to turn to his actuary for quantification of the intermediate term potential liabilities which the reserve must cover.

Profit-sharing plans also are becoming more rational about the types of assets which they make available to their participants. Instead of the single-choice, balanced fund which was typical of the earlier plans, the typical plan today allows its participants to choose from among three or more funds, such as a short-term bond fund having stability of principal as the primary objective, a diversified common stock fund with a long-term capital growth objective, and a company stock fund. Limitations in the plan on the freedom of participants to move their beneficial interest from one fund to another are being liberalized in some cases, as plan sponsors have come to recognize that tolerance of market value volatility is itself variable and highly personal to individual participants in a profit-sharing or thrift plan.

The second important trend is to division or diversification of a plan's assets among two or more investment managers. These may be of several types:

1. Bank trustee-managers continue to handle by far the largest amount of assets of the private pension system.

2. Insurance companies, through special contracts and "separate accounts," have improved their competitive status significantly in recent years.

3. Investment advisory/management firms, some of which are affiliated with stock exchange brokerage firms and some of which are entirely independent, are now gaining increasing attention and publicity as "money managers." Typically they seek to manage only a relatively small portion of a plan's assets and advo-

cate investment return objectives substantially higher than any which could be sustained for very large asset totals.

While the employment of different types of asset managers is basically a healthy trend, it is sometimes carried to extremes and often undertaken by plan sponsors for the wrong reasons. One wrong reason is to make a "horse race" of the asset management job. This is wrong not merely because fiduciary investment should not be equated with racetrack odds and tactics, but, more importantly, because this type of quarter-to-quarter pressure often causes investment managers to perform less capably than they would otherwise. For a manager who is in last place for as long as two consecutive quarters, the temptation to play "catch-up ball" may induce him to take speculative action quite similar to doubling up on the long shot in the last race at the track. The temptation is hard to resist because, in contrast to the situation at the track, if he loses, it's somebody else's money.

Another wrong reason is to "compare performance." Well-developed alternative means are available for comparing a fund's results with a much larger universe of similar-type funds. To confine performance comparisons to a plan's own managers is absurd, even if there are five or more. Unless a relevant and credible relationship to a much larger sample of managers is employed, this incestuous, "in-house" type of comparison can produce "outhouse" conclusions—the most obvious being that it would not reveal whether *all* managers were doing poorly, or doing very well, in relation to the larger outside world.

There are two major "right" reasons for the multiple-manager approach:

1. To employ managers with a particular competence, well demonstrated, with certain types of assets, such as bonds or real estate or growth stocks or convertibles.
2. To extend a plan's access to certain types of special asset categories, such as smaller companies and "special situation" types of stocks.

The third major trend is to more active and more productive management of all asset categories or components:

1. Cash-equivalent assets, held as "buying opportunity" reserves or to meet near-term disbursements, are kept working in demand notes and commingled fund "liquidity pools" which combine the "next-day" cash availability of Treasury bills with a return better than that of bills.
2. Contingency reserves and other bond components are more actively managed, with an opportunistic attention to "swap" trading for other bonds offering small but worthwhile value increments, in terms of better yield, marketability, sinking funds, and so on.

3. Convertible debentures and convertible preferred stocks of well-regarded companies are alertly purchased when they are trading at, or very close to, conversion parity with the common and with 2 or 3 per cent income advantage over the common.

4. Common stock "turnover" ratios are calculated to measure portfolio management activity. Extremes of overdiversification are avoided by such disciplines as eliminating the least-favored holding whenever a new name is added. There is now almost universal willingness to "realize" a market loss even in a "good company" if the portfolio manager's judgment is that the proceeds will be better employed elsewhere.

The "more dynamic relationships between plan sponsors and investment managers" were initially manifested through more frequent meetings to review and discuss investment policy, performance (relative as well as absolute), and objectives. These attentions naturally nourished a greater disposition to change managers whenever the plan sponsor came to the conclusion that the relationship and/or investment performance was not satisfactory and not likely to improve.

The more frequent and intensive involvement of plan sponsors, together with the development of an essentially uniform methodology for measuring investment results, has brought about what your program appropriately describes as "restated or invigorated" investment objectives.

Probably the most positive and constructive restatement is of the now generally accepted definition of investment return. Instead of the old "yield" concept, which recognized only cash income from dividends and interest and related this to the total "book" or cost value of the securities making up the fund, investment results are now almost universally defined as the *total* "rate of return," consisting of change in market value as well as dividend and interest income, annualized and compounded annually.

Measurements of investment results on this basis, especially for funds with liberal common stock proportions, led to a widespread escalation of investment expectations or "objectives" in the 1960's. The heights of this "invigoration" were reached in late 1968 and early 1969, when an ever increasing multitude of plan sponsors and "money managers" closed in on a single figure, 15 per cent, and embraced it with almost religious fervor, as a valid objective, long term as well as near term.

Not surprisingly, this proved to be merely the opposite extreme from the 2½ per cent prevailing rate of twenty years earlier, when trusteed funded pension plans were just beginning to proliferate and United

States Treasury Bonds were the most favored asset. The irony of the 15 per cent extreme, as a long-term objective, is that it was reached at almost precisely the time when its achievement was impossible even over the near term.

Conversely, after the bear market of 1969–70 had made this fact painfully apparent, some plan sponsors again overreacted and began to view the $9\frac{1}{4}$ per cent returns then obtainable on high-grade long-term bonds as being a "competitive" alternative to continued accumulation of equities. The irony of this overreaction, of course, was that it occurred at one of those infrequent but recurring depressed market levels from which funds then invested at those values could indeed be expected to return 15 per cent or more per annum over at least an intermediate term period of three to five years.

The most relevant lesson that plan sponsors, and perhaps even some "money managers," may learn from this experience is that investment return "objectives" cannot be set once and for all, for all seasons and all markets. Instead, they must be related intelligently to market values then prevailing and to the time horizons during which their achievement is considered to be probable rather than just remotely possible.

MR. ROBERT C. PHILLIPS: I think you will find that I will ask more questions than I am able to answer. This is partly because answers must depend on what role actuaries want to play and what skills they should prepare to acquire in order to play different roles in the future as far as asset management is concerned. I shall address myself to two specific topics that have been assigned to me, namely, questions 4 and 5.

It is clear to me that, when we do get legislation, pension plans are going to cost more, and the increased cost of plans will put further pressure on companies to hold the line on their pension costs by means of improved investment performance and possible delays in plan improvements when they are not called for by legislation. What all this means, I think, is that companies will become even more concerned about what investment performance is and what creates it.

Does investment performance accrue automatically over a long period of time as a result of exposing a large section of the portfolio to the equity market, or is a deeper analysis required of what an equity really is? Is an equity an investment which provides a reasonable expectation of protection against inflation? I would say probably not, because, if so, an indexed bond would be a perfect equity. Is an equity an investment which provides for ultimate ownership of a business or

property? Quite possibly. But does this exclude all leasehold arrangements from the equity category? Is a warrant to acquire stock at twice today's price but ten years from now an equity? Does whether it is an equity depend on the relative exercise price? Generally, then, is an option an equity? If so, does it differ from an indexed bond? My comment on that is that in my view the option or warrant itself is not an equity, although it might lead to the acquisition of one. (An actuary should be able to give good advice regarding the statistical evaluation of options, since the value of an option depends on a combination of assumptions and probability ranges and the relative impact that these varying assumptions can have on present value.) My own position is that an equity is a future variable cash flow, which may or may not be finite in duration and may or may not be positive, particularly in the initial years. Variations will be caused by economic conditions, and, if wisely chosen, the variations will show an upward trend and their present value, allowing for the probabilities of receipt, will be greater than the present value of fixed or increasing fixed cash flows (such as that provided by guaranteed rent increases).

So, in my view, equities should eventually create a cash flow, dividends, and I think one should be on guard against equity investment situations which over a long period of time are not producing a cash return to the holder—that is, they look like perpetual internal reinvestment in the corporate enterprise. In fact, reliance should not be placed on selling the paper to another investor prior to the time that cash dividends commence; otherwise, I would claim that the investment was more of a stock market lunge than an equity. To sum up that point, I think that there is plenty of room for pension funds to define more cautiously what they expect and need from an equity and for the capital markets to respond with appropriate new financial instruments and tools.

I think that another aspect of federal legislation which has impact on asset management of pension plans is the social security automatic escalator, whether it is an escalator by big leaps and bounds at political intervals or by automatic annual cost-of-living increases. I think that this is already producing pressure for private plans to provide some inflation protection for pensioners, either contractually or periodically. What might this mean in terms of the cash-payout requirements of pension funds in the future? I think that actuaries have a significant role to play in advising their clients as to what this might mean, even though a client at this particular point of time is in no mood to brook such change.

What types of investments are best suited to cope with this particular problem? Is it valid to consider retired life reserves as having different investment objectives, or is the proportion such reserves bear to the total plan liability largely a matter of indifference? My own views in that area seem to have changed over the last couple of years. I think that my response earlier would have been that the fund is the fund and should be regarded as a whole and not as belonging to any particular part of the beneficiaries. But I am now not so sure, in view of the turbulent changes in the expectations of various classes of investments. I am referring particularly to the fact of very high fixed interest yields that were available and still are available on a historical basis as against the really inept performance of the standard equity product in the stock market (if we take it over the period of the last six or seven years). I am not sure, if the retired life reserves have been accumulated over a certain group of people's working lifetime, whether we should not say that high fixed interest yields would be more appropriate for their particular section of the fund (and I suppose I am thinking in terms of something reasonably fully funded). If by the acquisition of those high fixed interest yields the company might be better able to face improving those pensioners' benefits with the increase in cost of living, then I think that the corporation should consider it. I think that actuaries have a role not necessarily in urging that step but at least in putting that possibility in proper perspective for their clients.

To move on to a third point, what role, if any, should actuaries play in the investment management process, including setting investment policy, selecting the manager, and actually managing portfolios themselves? First of all, I think we have to say what setting investment policy and performance goals really means. At least it has to include the distribution of the assets over the various categories, which, according to my previous comments, are not that well defined. From there on, the choices lie in the types of securities within those categories, bonds or mortgages, stocks, or real estate—a much neglected field for pension plan investment. Generally, I do not think that actuaries have a significant role to play here, other than to inform the investment manager of the various characteristics of the particular plan or fund that he is dealing with. I certainly think that the actuary should be responsible for providing his client and the investment manager with a forecast of disbursements both on an actual plan, an existing-employee-group basis, and a likely-change basis (reflecting back to my point that I think that it cannot be long before most plans incorporate some adjustment for pensioners).

I think that the actuary is responsible for incorporating in the forecast of disbursements a well-thought-out forecast of company cash contributions to the plan. Very often what has happened in practice is that the actuaries have proceeded down both those roads, but the actual cash contribution that the company is projected to be making to the plan turns out to be based on a world which is quite different from the world which the investment manager is assuming as far as *his* performance is concerned. It may well be that, in the particular circumstances of any plan, the investment manager does in fact succeed in making 15 per cent (and that will have significant impact on the cash contribution that the company might be paying on even a short-term basis, not next year but three or four years from now). If the plan is fairly fully funded right now and you have four or five years of that type of investment performance, the company could well be put into the position where it would be unable to make a contribution on an immediate tax-deductible basis. That is not a bad thing. What I am saying is that the two sides should come together, and the actuary should ask, if the investment manager does perform like this, then what might the company have to put in four or five years from now? I also think that the actuary has a significant responsibility in advising his client as to what might happen if equity, or fixed interest security for that matter, failed to attain the estimated return. In other words, the actuary still has a role to play as a prophet of doom—no one else is going to play it. I think that the actuary should advise the client of the implications of the type of benefit formula he has—I am referring to the blank-check nature of a final-pay-related plan and what this means from the point of view of the risk that he has already assumed in underwriting that plan and, therefore, the corresponding investment risk that he will probably have to take in order to match, within the resources of his business, the risk that he is taking on the liability side.

I would like to refer to a point that George brought up: I think that the actuary certainly has a responsibility to his client in the area of compound interest. I think that we are qualified here. People who go around saying that they can make 15 per cent interest in perpetuity should have a quiet little actuarial voice saying on the side that, if they do, then they will multiply the fund eight times in fifteen years and sixty-four times in thirty years, and, while that might be done for some people, it is unlikely to be done for all the pension assets now currently exposed in the equity market in the United States without severe currency depreciation. I am not saying that the one will cause the other; I am saying

that such returns might occur because of severe currency depreciation, but they will not normally occur for everybody, because there just is not that amount of equity to go around.

I think that the actuary has a role as a scorekeeper. I think that as a statistician he should be aware that just quoting a number does not prove anything—he has to go on and explain where the number came from and qualify its reliability. I think that if he backs out of that scorekeeping role, it will be filled by people who are even less qualified. I think that he has a role in urging the company to put down in writing or to clarify in its own mind what its investment objectives really are and how it is trying to attain them.

As far as selecting investment managers is concerned, I think that this is a task which you have to put right back on the client's shoulders. I do not really think it is something to which most actuaries have had enough exposure to represent themselves as experts, and I think that the credibility of our profession is enhanced only when we step forward as experts; this does not mean that we have to stay fixed in the same little box all the time, but, as we move out, let us move out with some real assurance that we know what we are talking about. I think that most actuaries would be capable of prompting their clients in the area of setting up some criteria by which to determine a short list of investment managers that they might look at in order to make their own subjective choice—just as the choice of an actuary for a client is a subjective choice. Will the client really be satisfied with the individual he is going to be working with in the investment manager's shop? It is a future pursuit. Anything that has happened in the past is history. People move around in the investment business probably more than in most businesses, and there is no assurance, no matter how carefully you investigate a person's past record, that that record is necessarily going to be reflected next year. I think, however, that you can sort out the really bad ones. I think that scorekeeping plays a role there. You can put scorekeeping on pooled funds on the assumption that the client always has 100 per cent exposure in a pooled equity fund, which is sort of an unrealistic thing from the start. Assuming that he has $1,000 there all along or that he put $1,000 in every month, you come up with a number and you show that Trust Company A, out of a group of twenty-five on that basis, is at the bottom of the list for every start date and every end date for the last decade. I could say there that you might advise your client that there is some risk in placing your money with him. On the other hand, I do not think that you should make a strong statement in favor of the man who has come up near the top of the

list in the last decade as someone who is necessarily going to do it in the next decade, but he is somebody to talk to. If he still impresses you as knowing his business and is changing inside his business, and you feel you can work with him on a day-to-day basis, I think that is the way to go.

Should actuaries manage investment portfolios? No—generally it is a specialized thing. Some actuaries have done it in other countries, but, again, when they do it, they do it on a full-time basis. It is not something you can take up on Friday afternoon because you missed a golf outing. However, I do think that perhaps some actuaries as a group are temperamentally suited to investment work, because you really have to play it cool—take a long view—and at least a large number of us start off with those abilities.

MR. BLACKBURN H. HAZLEHURST: Should the actuary's role be a natural consequence of his education and experiences, or does this type of service require techniques and knowledge that are not uniquely the province of the actuary? My quick answer is yes to both parts.

The actuary probably is fairly well equipped by his experience and know-how to deal with investments from a "fundamental" standpoint; he also is supposedly trained and experienced in reviewing a variety of information and in trying to come up with some orderly array of logic out of this variety of information, as suggested by the motto of the Society. Further, that the actuary is not too far afield and not necessarily ill at ease in investments is evidenced by the extent to which actuaries in some other countries, such as Great Britain, are actively involved in asset management per se, the actual guiding of the portfolio.

There are, however, other aspects that not only are not unique to actuaries but are probably outside the actuary's normal thinking and that he probably should become acquainted with if he is going to assist in that general area of asset management at all. For example, the actuary is probably not particularly well trained in "technical" aspects (so called) of the investment process. Inasmuch as the investment results, particularly in the short term, often seem to be the result of almost self-fulfilling predictions of active investors relying on currently popular "technical" notions or schemes, it behooves the actuary to become familiar with these ideas currently at work in the market.

Further, the actuary should probably rise to the task, and I hope that actuaries will rise to the task, of analyzing and, to the extent that perhaps may be necessary, exposing the characteristics of the currently

popular term "beta." There seems to be a notion afoot that risk is somehow proportional to volatility and that yield should be proportional to risk. Of course, this is delightful for the mathematician, because you can start with that and build mathematical palaces around it. The question is whether these two underlying assumptions have much validity. I think that there is some considerable doubt. It is very much within the province of the actuary to try to ferret out the truth and debate that issue and I think that he should. The actuary also, if he is going to assist in this area, needs to develop some practical understanding and awareness of the types of investment agencies and their characteristics, such as the types of organizational structures that have tended to promote investment success, and to become aware of the many other factors which seem to bear on investment performance.

Obviously, also, the actuary has to become familiar with various ways in which investment performance can be measured and be prepared to express an opinion. Some of these things are outside his basic training, but certainly not very far outside. Mr. Phillips has already pointed out that one place an actuary could try to help out is in valuing options. In fact, sometimes money managers seem to have more of a belly feeling of qualitative valuation than they have skill mathematically to develop and fully evaluate the quantitative measure of what they think they want to do.

The actuary might value bonds for actuarial purposes by discounting the maturity value and the interest, at the valuation interest rate, which may not be at all the basis on which it is being carried in the trust records. If he does this, it begs the question of how to apply this type of philosophy to evaluating stocks. In fact, how would you carry stocks as an actuarial asset?

Some measurement ideas are simple and also abused. Hopefully, it is immediately obvious to everybody that if you have a portfolio that gains 100 per cent the first year and loses 60 per cent the second, you have lost 20 per cent on balance. If that is not clear, think about it, because there seem to be some people to whom it is not so clear. In fact, an article I was reading last night seems to be based on an arithmetic-mean averaging of the rates of return over a number of equal intervals. I think that can be a little scary. The actuary is well trained and should rise to the task of evaluating this sort of thing.

As to question 7, current practices vary all the way from a more or less deliberate determination not to get involved to a full involvement even to the extent of commenting on specific investments. It is very common practice to analyze investment performance of one type or

another in response to inquiries and to project cash-flow needs. Less frequently, actuaries get involved in selecting money managers, discuss the pros and cons of allocating funds among major types of investments, and assist in selecting and in continuing contact with the money managers and in other phases of money management administration.

"Administration" can include checking the asset inventory to make sure that it is really there, seeing that the dividends get credited to the proper account (sometimes they do not), reviewing the fees assessed by the money manager and the custodian, and probing into float (which is an elusive asset sometimes hard for the plan sponsors to keep track of). Further, the actuary may want to probe into the effective use of soft dollars. Commission scales are generally redundant for institutional-size tradings, and this is another asset of the plan sponsor, if you will, often overlooked and not well managed.

Some actuaries are reluctant to involve themselves in selecting money managers. No doubt part of that reluctance is a simple fear that if something goes wrong with the money manager the plan sponsor will change actuaries as well as the money manager. The trouble is that many plan sponsors simply are not well equipped or experienced enough to select a "money manager," and they could use some outside help. Now there are lots of people ready to offer outside help and for a very decent price. For example, a number of stock brokerage firms are quite capable and offer this type of assistance for a hard-dollar fee or for a soft-dollar fee. By a soft-dollar fee I mean doing this in exchange for stock brokerage executions, so that there appear to be no out-of-pocket costs. However, whether they get involved in this on a hard-dollar basis or on a soft-dollar basis, there is obviously some possible conflict of interest, since a money manager who has been selected by a stock brokerage firm may favor that firm for a number of directed executions. In fact, some managers use directed executives as a primary marketing tool. While there may be some danger to the actuary of making a mistake or assisting the plan sponsor in making a mistake (or of being associated with poor performance even though it may be temporary), danger or no, the plan sponsor has so much at stake that it seems to me the actuary should try to help.

At the very least, the actuary should go out of his way to establish some kind of rapport with the money manager, so that the money manager understands how the actuary reviews performance, as he probably does in his report. For example, hopefully the actuary looks at total performance and not just realized gains and book value performance. Otherwise, the money manager may be inclined to take some

action so that he will look good in the actuary's review, which action may or may not be helpful to the portfolio.

In short, the actuary should review the assets of the portfolio with some care and ask questions and make comments where the statement of assets that come to him may not seem to be entirely realistic. An example is improved property—real estate which is often carried at depreciated value that may bear little resemblance to its fair market value. Perhaps most important of all, I think the actuary should go out of his way to point out to the money manager that, while the actuary's report today typically shows an interest assumption of somewhere between 4 and 5 per cent, this is not what the actuary really expects (or I assume it is not what the actuary expects), because of a noninflationary salary scale that is also typically assumed in the actuarial report. In fact, more probably the actuary is implicitly assuming something nearer double the 4 or 5 per cent, if the costs he is nominating are going to hold steady as a percentage of pay and if inflation continues as in the past.

There are some real, earnest, dedicated money managers who are not aware of this fact and so may first try to cover the explicit actuarial interest assumption and then take less risk above that point. The plan sponsor also is likely to be delighted with a 7 per cent return as compared with his actuary's explicit assumption of 4.5 per cent, whereas, in reality, he is sinking into trouble because the interest gain is not enough to cover the salary-scale losses.

In summary, I think that the actuary should be just as inquisitive, experienced, thoughtful, and enlightening in his discussion of assets as he is in the inventory of liabilities and determination of contribution rates.

Conscientious efforts in this direction inevitably prompt discussion of types of funding agency, specific funding agencies, and types of investment. On occasion there is no way out of reviewing some specific investments, such as some real estate, certain options, or other more elusive things.

By involving himself thoroughly in the asset review, and probably also in asset management, the actuary is able to bring into perspective all the financial aspects of the program. Consulting actuaries unhesitatingly assist in the design of benefits. To design benefits without participating to a similar extent in the design of the entire financial system to support these benefits would seem to me to be providing incomplete and potentially inconsistent advice.

MR. ARTHUR W. ANDERSON: This question is for Mr. Phillips, who says something which seems rather simple. He says that an equity should be looked at and valued as a stream, a cash-flow stream, and, if that is so, how can anyone pay 30 times earnings for a stock? If you do pay 30 times earnings for a stock, you are doing so because you imagine that, although you are an idiot to buy at that price, there is another idiot who will buy at a higher price tomorrow. That makes you a trader. Do you believe in trading, and, if you don't believe in trading, then what stocks do you buy?

MR. PHILLIPS: That is a very good question. I think I said in my comments that the purchase of an equity in order to pass it on to somebody else before a demonstrated cash flow occurred was, in my view, nothing but stock market lunge. That is trading, a perfectly valid business for a pension fund portfolio to indulge in to some extent. However, I think that the investment manager is not taking a sufficiently long view if he is totally concerned with getting in and out on a short-term basis of stocks on a sort of musical-chairs basis. I think he has a much bigger and longer-term responsibility than that. To get back to your question, which is how you can pay 30 times if you look at the cash flow, we as actuaries have very valid credentials for doing the arithmetic to show what the assumptions are when you pay 30 times. There has to be an increase in the cash flow, and the rate of increase of the cash flow over the long haul determines whether there is any hope of that becoming a practical reality or whether your only hope is to dispose of the stock to another individual. If you look at the *Chartered Financial Analysts' Journal*, you will see quite a bit of work on this. We are a long way from where we were ten years ago, when 30 times earnings was on grounds such as "if you double the earnings five years from now you're probably going to be all right." You can now have sophisticated charts so that you can see what range of increases in future earnings, real earnings, is involved in these price earnings assumptions. I think that most actuaries have let that field go by the boards. This is a piece of mathematics that actuaries should be more involved in than they have been. One last point: I think that earnings have to come out in dividends at the end of the day. In other words, I think you should be wary of investments involving perpetual internal reinvestment.

MR. ROBERT F. LINK: Perhaps one possible answer which amplifies what has just been said is forgetting about random price variations due

to changes in economic conditions or appraisals. I was just thinking about the significance of the 30 times earnings or $3\frac{1}{3}$ per cent dividend, whatever it is—if you also assume that the dividend is going to increase, let us say at 8 per cent per year, next year's dividend will be 108 per cent of this year's and so on—compounded. Now the rule of thumb says that the real yield on that investment is the $3\frac{1}{3}$ per cent plus the 8 per cent, or $11\frac{1}{3}$ per cent approximately, so that is a slightly more concrete calculation, if you like, of the yield on certain assumptions, and I agree with what has been said—that it is the assumption that it will do something like that, the real appraisal of the capital growth, that has to guide you if you are going for the long term.

MR. JOHN W. WOOD, JR.: This is addressed to all the panel members: Do the size of the case and the amount of money involved influence the degree to which you feel you can discuss asset management with the client? Is there any size at which you would cut if off—do you actually in practice have a point which determines whether you would or would not discuss it with a client?

MR HAZLEHURST: I suppose you are driving at the fact that the smaller bundle of assets reflects a plan sponsor who cannot afford too much advice, and therefore you plan to ignore him. Of course, he probably needs more advice than anybody else. Probably both of you need to spend less time reviewing a lot of alternatives that you might otherwise have given him and concentrate on a very short list. I think that the plan sponsor needs help, and the less equipped he is to provide that help himself the more you need to give him from the outside. It is just that there are fewer alternatives available, the smaller the size of the assets.

CHAIRMAN DREHER: I say to that, I think that we must deal with real-world problems. We are dealing with a long-term undertaking in the investment of pension funds and we have to try to apply sound principles within the real limits of the individual client's circumstances. It would be nice if we could be continually doing the research and development which is financed by client fees, but we can not always enjoy that luxury. But we still have to, and I think can, contribute to the client's understanding of his options and of the practical significance of some of the choices that are presented to him as glowing promises which our experience can help him understand to be quite unattainable.

MR. MURRAY L. BECKER: I would like to address this question to Mr. Lingua. Let us take a corporate situation such as you were describing before. I want to know whether this would overcome your aversion. Suppose a client with two or three investment managers felt that he did not intend, unless something perfectly awful happened, to fire whoever was in the third place at any point in time but simply increase the allocation to No. 1, perhaps, and decrease it to No. 3; then, if you were the consultant who chose No. 3 and found yourself behind after two or three or four years—let us assume even longer horizons than that—as long as the performance was above average, wouldn't you feel that, if you gambled in order to be valued No. 1 or No. 2, you would lose the client if you were wrong, whereas as long as you continued to do what you were doing well perhaps you would stay in the game no matter what? Meanwhile the client, I think, would tend to get somewhat better results by rewarding success to a certain extent and bargaining failure to a certain extent.

MR. LINGUA: Yes, I think it can work that way and probably often does. I was addressing, or cautioning against, the extremes of the attitude which I have also seen observed in degrees. I think it is a matter of perspective and communication. Whoever is in last place for the year should have his performance judged in relation to a larger universe of managers. Then the performance monitor may say, "Well, last place really wasn't all that bad, but what happened?" and the investment manager is given an opportunity to explain. In real life you often have an excellent year right after you have had a poor year. Your management style may be poor for one market, but the market changes and it is great for the next one, so this policy of the automatic formulistic rewarding of the first-place manager last year is often just the wrong thing to do. It should be done over a little longer cycle period, and it then could work quite well. The main thing is to have your investment manager feel concerned and highly motivated without feeling anxiety. Anxiety, worry, and fear tend to make portfolio managers perform below their capabilities.

CHAIRMAN DREHER: I would like to ask Bob Phillips to expand on one aspect of that question. It seems to me that we were asking whether, assuming that there is a clearly defined investment policy and a mutually acceptable performance objective over a set time period, a responsible judgment could be made that one manager had more fully achieved those objectives than another. Have you any views on the way in which that decision would be approached?

MR. PHILLIPS: You are envisioning, say, a large fund which has, say, at least five or six investment managers, and each one's assets are comparable to the assets of the others.

CHAIRMAN DREHER: Let us presume that there is comparability in policy, cash flow, and other operating conditions.

MR. PHILLIPS: I do not think it is simple to put a single number on it. I might say five years. There are many measurements that can be applied other than just the rate of return, however. I think that is just one item—particularly, say, in the areas which involved him in exposing our portfolio to significant risk. What type of thing is he buying? Dig underneath a bit. You *know* two years after a very bad stock has come out—a very bad stock. Well, you didn't know at the time, and neither did he, but you don't want to have him striking out 100 per cent on that, even though he might be credible from the investment return point of view.

MR. HAZLEHURST: I think that there is a qualitative characteristic we need to add. In one real-life experience, the money managers recommended to me had only been in existence a short time, in fact one year. They had a track record of 100 per cent gain in that year and were at the top of the heap, although the record did not hold up too well. Shortly thereafter, they were going down rapidly and fell to the lowest decile. That does not necessarily prove that anything is wrong; they might have had securities that were highly volatile (perhaps "beta" would have provided some comfort at that time). However, if you also know that, in addition to failing relative to similar managers, they are turning over the portfolio four times a year and that they are collecting brokerage, you begin to lose confidence.

MR. RANDALL M. LUZADER: In listening to this discussion in regard to having more than one fund manager, I am concerned about the level of sophistication of the corporate officers and also of the actuaries at some levels. The fund manager, of necessity, has to have a great deal of esoteric information, and I would think that, if he is vying with one or two or more others for the favor of the person responsible for his direction, he is going to expend vast quantities of energy trying to educate someone who has not the tools or background to understand. I would like, if I may, to take a large naval background: if I were to set off my engineering officer, my operations officer, and my gunnery officer aboard a ship into a competition with one another, I think I would be quite remiss in responsibility

as commanding officer of the ship whose ultimate purpose is quite clear but whose component objectives are quite diverse, and I think we are losing sight of the ultimate of providing an exemplary performance for the corporate fee.

MR. PHILLIPS: In my view you should not go running out to get five or six investment managers for a small fund. I think (at least when I talk about several investment managers) that you are talking about probably the largest one hundred industrial corporations. Perhaps when the assets are sufficient to provide $20,000,000 per investment adviser, you should diversify advice.

CHAIRMAN DREHER: I interpreted your question a little differently. I thought you were suggesting that, if there were multiple managers and each had certain special characteristics or different approaches to investment policy, the process of comparing them and evaluating their success would be very complex; on that level I think we would all agree that the process of comparison has to factor in investment policy, investment performance goal, the cash flow, and other attributes of the portfolio. One of our responsibilities as actuaries providing this type of advice is to avoid the simplistic comparison, to take the number *A* compared to the number *B* and to make it a you-win-and-I-lose proposition. Clearly that has to be avoided. I believe George Lingua was addressing that point in his objections to a multiple management horse race.

MR. PHILLIPS: This is not meant to be funny, but it has its humorous side. It happens very often in the smaller case where the fund is being handled by the trust department of a bank, and the bank is giving other financial services that the client is looking to for its financing. If you observe, as I frequently have, appalling investment performance, what do you do?

MR. LINGUA: If the investment performance is that appalling, the company has to remove the trust fund and put it somewhere else. If the company is not strong enough to get its financing at another bank, then it is in real trouble. I think, too, that we have to stay separate, independent; that is the way we have it and are going to keep it. There is no reason to use the bank relationship as an excuse not to take action. I think it is a cop-out by a company that can't stand on its own feet.

CHAIRMAN DREHER: I think it is pretty clear that pension reform legislation, whoever eventually offers it, will clarify the need to separate commercial banking from fiduciary pension fund money management.

MR. PHILLIPS: The situation I mentioned previously is interesting because it illustrates another role in which actuaries can replace emotions with facts. I think that, due to our arithmetic skills, we can often put a number on the cost of decisions of corporations. Clearly, if a company has nowhere to go for its corporate money, it is in bad shape. If, however, it has some other alternatives which might be at a higher cost, we can put a dollar value on them, and we can certainly put a dollar value on the investment performance. In fact, the client may be borrowing so much money that the bad investment performance on his small pension fund is inconsequential, but I think we can give him an arithmetic answer to help him make a decision.

MR. THOMAS P. BLEAKNEY: Mr. Lingua, you were talking about liquidity, and I have seen a theory evolve fairly recently that all funds are liquid. All you have to do is rank the securities according to which you want the most and which you want the least, and any time you wish to raise cash you simply draw off what you need from the bottom. I would like a comment from you on that relative to your concept of having funds to cover five years' annuity payments.

MR. LINGUA: At certain times in the market a common stock can be the most liquid asset you have. That same common stock at other times may be much less liquid, and you would not want to sell it because the price is depressed and by selling a few thousand shares you would depress it further. I think that what I am talking about in terms of liquidity should be put opposite the potential liability, for pension payments, assuming that the worst happened. You would have to liquidate part of your trust fund, and you should know that that part—that contingency reserve or cash-certain reserve—is unquestionably liquid during the period you are reserving for. Now there are other times when you may *choose* to provide more liquidity and buy something else by exchanging common stock at an attractive price. Conversely, in the middle of 1970, when some mutual funds were increasing their liquidity without much choice, the only place they could get it was by selling stocks like IBM, Xerox, and Avon Products. Liquidity is where you find it in the market at the time; it is up to the fund manager to be able to choose what to sell and not have it selected for him because there is nothing else he can sell at a decent price.

MR. V. CLARK BEAIRD: I would like to ask whether any of the panel members would like to express an opinion as to what is a "good" yield on an equity portfolio over a period of years in relationship to, let us say, the Standard and Poor index.

MR. HAZLEHURST: It is not my place to venture an opinion, but the money managers that we talk to seem to feel that they can come up with something in the area of 10–50 per cent more than the standard index or, say, the Standard and Poor 500. The standard phrase is that in an up market they would do considerably better and in a down market they will not do any worse. It doesn't always work out that way. Mr. Phillips was pointing out that surely not everybody can beat the index, and that may be true. I do not know whether that is sufficient reason to stop trying. For example, presumably every employer seeks better than average employees, and some probably succeed fairly regularly, despite the competition. I think it is reasonable to set what you think is a goal that can be achieved and go after it. A lot of money managers feel that they can produce the results indicated.

MR. PHILLIPS: In the investment management business, the price you charge bears little direct relation to the service you render. Most people are still on the basis of scheduled fees. If you take a large sample of funds, many of them did not do as well as the Standard and Poor 500. This is equivalent to saying that somebody took a fee to perform something which Merrill Lynch would do for you automatically with a computer for nothing. I think that everyone has to try to beat the index, whatever the index is, and I think that one should be inclined to prod the manager in that direction a little more by gearing his compensation somehow over a long term, not a short term, in that direction.

MR. LINGUA: First I will give you our own vote. We think we should do between 10 and 20 per cent better than the index. By that I mean that if the index were to go up 10 per cent over the long period, we would hope to do 12 per cent. I would like to suggest that you stop using the expression "the average unmanaged index." The market averages are entirely unmanaged. Actually, the averages are influenced in a very large way by the buy-and-sell decisions, the price judgments of thousands of professional investors as well as millions of individual investors. So it is not just a random happening, and the only reason the random walk theory works is that in fact many people of intelligence in the investment world are determining values over a longer period of time and these values tend to follow inherent value. The fellow who takes a random walk is just

tagging along on the coattails of those who are trying to make intelligent value judgments. If everybody were behaving randomly, you would have chaos.

CHAIRMAN DREHER: My own response to that question derives from our studies of institutional money management over fairly long time periods. The range of results will vary from 4 or 5 percentage points below a broad market average up to 5 or 6 percentage points above it. Now that suggests that a small fraction of managers will be able over a very extended time period to have performance which is 75 or 100 per cent above the general market but that only a tiny fraction will meet the goal and that a quite optimistic assumption is to outperform the market by 30–50 per cent over an extended time interval. I think that the lesser goals which George identified are quite prudent expectations for professionally managed fiduciary capital. I think, however, that this market-relative goal should also have an additional element: there should be an absolute degree of performance in excess of the agreed-upon market index. Your goal might be to be 25 percent above the general market but always at least one absolute percentage point above that average; then, if we look back to periods such as 1966–70, where the Standard and Poor 500 including dividends was only about 3½ per cent for the entire five years, you could expect at least 4½ per cent under those assumptions.

MR. H. EDMUND WHITE: Mr. Lingua, you commented that if Standard and Poor did 10 per cent, then you would expect to do 11 or 12 per cent. I am curious. How reasonable is it to expect that Standard and Poor will do 10 per cent?

MR. LINGUA: I wish I knew. That has to be based on some economic assumptions. It might go like this. Most probably the economy will grow in the future, say 4 per cent in real terms; increased by the 3 per cent inflation factor (economists hope it will not be that much), let us say 4 and 3, then your dividend return on growth stocks will be another 2 per cent on market, and this gets you up to something like 9 per cent. I would pick that figure rather than any other if I had to put a pin anywhere. I think if we do manage, with large amounts of money over a really long-term period such as fifteen to twenty years, to achieve 10–11 per cent, we will have pretty satisfied customers. If we do better than that, we will have delighted customers.

CURRENT TOPICS IN INDIVIDUAL POLICY PENSION PLANS

1. Newer-type plans:
   a) What techniques and IRS restrictions are involved in computing contributions for assumed or target benefit plans?
   b) On tax-deferred salary reduction plans, how does the salary reduction affect other items of compensation?
2. Services provided for smaller cases:
   a) What actuarial services are performed?
   b) What use is made of computers to administer plans?
3. What types of auxiliary fund facilities are offered?
4. What has been the experience with prototypes?
5. What steps, including guaranteed issue, have been taken to simplify writing renewal business?
6. How do companies deal with converting "overgrown" individual plans to group?
7. Special problems with professional corporations:
   a) Underwriting problems.
   b) Pre-existing H.R. 10 or personal policies.

MR. PAUL D. HALLIWELL: Target plans, also known as assumed benefit plans, have emerged as the "new plan of the seventies." The target plan today offers perhaps the most consistent answer to the search for a qualified retirement plan for the smaller employer, especially the professional corporation.

For the smaller employer, conventional plans have limited advantages. As we all know, conventional fixed benefit plans typically result in larger contribution allocations for the older and usually more important employees. In these plans, gains are used to reduce future plan costs. On the other hand, conventional money-purchase plans favor the younger employees and include substantial contribution limits that appeal to young, key employees of a small company. Profit-sharing plans are similar to the money-purchase plans in that they also favor the younger employee, but their strongest point is their appeal to companies with cyclical profits. In addition, profit-sharing is often not too appealing to smaller companies (especially professional corporations) because of the 15 per cent limitation.

In general, the target plan appeals to professional corporations. It is a blend, combining the principal advantages of the conventional plans. With a target plan, older employees get greater allocations and contributions are specified but are not directly limited to any fixed maximum per-

centage of pay. Investment gains increase a participant's ultimate results, and the plan is easy to administer, once properly established.

It is not surprising that the traditional fixed benefit pension plan has little appeal for the professional corporation. Normally, the principals are not interested in the reduction of future costs resulting from good investment performance. And, if death benefits are provided, it makes little sense to the key employee for his side-fund account to be left behind for others' benefit.

With a target plan, a doctor or a lawyer can have a defined benefit, coupled with a specific contribution actuarially determined to produce the projected benefit. Ultimately, the professional man can realize a benefit based upon actual performance results, whatever they may be. Here the investment risk is on the employee. Revenue Ruling 185 (1953-2 C.B. 202) established the basis for this type of plan. It states that pension benefits can vary with the market value of assets held or with a recognized cost-of-living index and still the benefits generated will be considered as being definitely determinable.

Target plans offer death benefits on either a voluntary or a mandatory basis (depending upon the objectives of the plan's sponsor). Some plans contain provisions for payments at death before retirement similar to provisions associated with pension trust plans, that is, the beneficiary receives 100 times or 50 times the prospective monthly pension. In these plans, side funds are not paid to the deceased's beneficiary but remain in trust.

Other plans provide that a certain percentage of an individual's contribution be applied to the purchase of insurance. With these plans, the full proceeds of the insurance plus the side fund are paid on behalf of the deceased. This type of plan is the type usually sponsored by mutual funds and is generally more acceptable to the key man or doctor in a small corporation.

The target plan is not without design problems, and great care must be taken if Internal Revenue Service approval is to be obtained quickly. Most problems center around the determination of reasonable benefits, which is, of course, a function of the assumed investment factor and the actual yield.

Congress did not intend a pension benefit for a participant to exceed the highest average salary the participant earned during any reasonable period of service with an employer. Revenue Ruling 72-3 reflects this by providing, in effect, that 100 per cent pensions are the outside limit for a defined benefit pension plan. I have it from reliable Washington sources that the 100 per cent figure will be elaborated upon in a future revenue

ruling, and 100 per cent will be defined as the limit without any ancillary benefits. For instance, if a preretirement death benefit and a ten-year-certain provision are part of the plan, then 80 per cent would be the appropriate maximum.

Eighty per cent is the most common maximum found in present IRS-approved prototype target plans. Since the actual benefit is directly related to the going-in assumptions, it is unlikely that the IRS would approve an assumed benefit much greater than 80 per cent when contributions are determined by a $3\frac{1}{2}$ per cent investment interest assumption and young employees are involved. The reason for disapproval is the high probability that the actual benefit would be far in excess of 100 per cent. To date, there is no general guideline that can be applied, but an interest rate should be selected consistent with the 100 per cent objective and the ages of the covered employees.

The following guidelines should be kept in mind:

1. For a nonintegrated plan using generally accepted mortality tables, a $3\frac{1}{2}$ per cent assumption is probably the lowest the IRS will approve. The basis for this guideline is Revenue Ruling 63-11.
2. For an integrated plan, the maximum level of integration is directly related to the interest assumption: for an interest rate of $3\frac{1}{2}$ per cent the integration level is $\frac{11}{15}$; at 4 per cent, $\frac{12}{15}$; at $4\frac{1}{2}$ per cent, $\frac{13}{15}$; at 5 per cent, $\frac{14}{15}$; and an interest rate of $5\frac{1}{2}$ per cent or greater means a full-integration level.

Salary reduction plans are perhaps the newest of the new, with the more aggressive sponsors jumping into the pool without checking the water temperature. These plans sell well at a time when the profit squeeze has become a crunch and when employee benefit costs are at an all-time high.

Under a salary reduction plan, an employee enters into a binding agreement with his employer to reduce his salary by not more than 6 per cent, according to Revenue Ruling 69-421. The employer then contributes at least a like amount into a tax-exempt trust. Beautiful! Marvelous! At last, a tax shelter for the common man! But beware—problems abound.

One problem results from Revenue Ruling 56-497. This ruling imposes eligibility restrictions that are difficult to secure initially and even more difficult to maintain. Fifty-one per cent of the employees participating in the plan must fall in the same compensation range as the lower two-thirds of all employees of the company. This lower two-thirds must include all employees—even those in classes excluded from the plan by definition. This eligibility status must be maintained for at least one day in each calendar quarter. A decrease within the lower-paid group will cause a like

decrease in the higher-paid group, with the forced decrease applied on a descending order of salary basis.

Problem No. 2 is one of constructive receipt for income tax purposes. To avoid a constructive-receipt problem, the employee must waive all rights to the money until retirement, death, or termination of employment. Until one of these occurs, the money actually belongs to the company. So, in a sense, the security of the employee's interest is at stake.

Solving problem No. 2 may create problem No. 3. If the waived compensation is truly forfeitable, it will not show up on the employee's W-2 form and he will avoid federal and state income tax. But his reduced salary may also reduce his social security benefits, his workmen's compensation benefits, and other company-provided benefits geared to his compensation. The company can amend the programs to compensate for this loss, but this can be expensive in legal fees alone. A further complication is that some doubt exists as to whether waived compensation is truly forfeitable—virtually all plans provide for immediate vesting in the employee's reduced share.

All things considered, if there are no obstacles other than those I have already mentioned, a compensation adjustment plan is a very attractive plan for the right group of employees, when the plan is not designed as the ideal tax shelter for the number one man himself.

I have good reason to believe that the IRS will, unfortunately, publish a ruling in the near future to the effect that such contributions are taxable income to the employee. The Treasury Department is dead set against these salary reduction plans, and, in my opinion, their time is limited.

Perhaps, if there is indeed a plan for the seventies, it is the thrift-savings plan or the profit-sharing thrift plan. These plans have great appeal and are often the best way to get the most from a company's fringe benefit dollar. If the Nixon administration's proposals on personal savings incentives are adopted, these plans will become popular because they can be easily maintained with little, if any, amendment. The record-keeping and administration systems necessary to handle them properly are immense.

MR. WILLIAM A. FARQUHAR: New England Life has a target benefit plan prototype which was sponsored by one of our mutual funds. This prototype will not permit a contribution table based on an interest assumption of less than $4\frac{1}{2}$ per cent. Recently, a plan using this prototype was refused approval by the local IRS office because of an 80 per cent benefit formula and a $4\frac{1}{2}$ per cent interest assumption. The company was informed that it should use either a $5\frac{1}{2}$ per cent interest assumption

or a lower benefit formula. Since we introduced our target benefit plan prototype last September, only a few plans have been established, perhaps four or five per month.

MR. DOUGLAS S. MAGNUSSON: I would concur with Paul that the best method of defining insurance benefits in a prototype plan which is designed for the professional corporation market is to allocate a percentage of the contribution to provide insurance—that is, the "money-purchase" approach.

My experience in filing prototype plans confirms that $3\frac{1}{2}$ per cent is the minimum interest rate acceptable to the IRS. I have tried to file a prototype plan on an integrated basis, including the reduction factors based on the interest rate. At the time, however, the IRS flatly refused to consider an integrated target benefit prototype. I would be interested in finding out whether this experience is general.

At Great-West we have been advising our people to stay clear of tax-deductible salary reduction plans. Our analysis was that it is simply too difficult to be sure of IRS approval both initially and on a continuing basis, because of the participation limitations. The problems that Paul has mentioned cannot but produce high lapses under an insured plan and dissatisfaction among the agents who have written such plans. This type of plan seems to be one on which a company can spend a great deal of time and effort, to wind up with a few plans being administered on a very unsatisfactory basis. During 1971 the *Prototype Planner* contained two excellent articles outlining both the pitfalls and the uncertainties of salary reduction plans.

MR. FARQUHAR: It is difficult for us at New England Life to distinguish between strictly actuarial services and the other administrative services which are provided as part of our Unified Pension Service. However, I will discuss three services which may be considered traditionally actuarial: proposals, annual valuations, and individual case consulting.

We have developed a fully computerized service for preparing defined benefit pension plan proposals. This system was developed in house, as were all of our systems. Our agents code information for plan parameters —for example, eligibility, benefit formula, and the like (a great deal of flexibility is permitted here)—and census data—dates, salaries, and so on. These forms can then be used to directly keypunch input to the computer program. The input is reviewed both manually and by computer. If the funding assumptions requested are outside our published guidelines, a proposal will be prepared for comparative purposes only, and this is

indicated on the proposal. A second proposal based on appropriate assumptions is also prepared and sent out. The output includes a variety of summaries as well as a listing of the emerging liabilities. We mail out 90 per cent of the requests within three days of receipt. During the two and a half years that this sytem has been in operation, it has been extremely well received. We also have a proposal program for money-purchase and profit-sharing plans. These proposals project the income available at retirement based on contributions, interest assumptions, and so on. The procedures are quite similar to those of the defined benefit service. We process approximately ten thousand of these two types of proposals per year.

We also prepare proposals to change fully insured plans (retirement income or retirement annuity contracts) to combination funding. The input for this system is coded in the home office, and the output is less sales-oriented than the two previously described proposal services.

Our annual auxiliary fund valuation system is fully computerized. Valuations are prepared upon request whether or not the New England Life holds the auxiliary fund. The home office prepares approximately three thousand valuations per year. Several of our larger pension-writing agencies have pension departments which are able to provide their own actuarial support. Over the past several years the home office has been increasing the quality of its valuations. Assumptions must be within our guidelines, or we will refuse to prepare a valuation. The computer system makes eleven separate tests of the funding status and assumptions and prints out appropriate comments. Valuations which fail one or more tests are referred to an actuary for review. You may be aware that the American Academy of Actuaries has set up a special committee to study certification problems for small pension plans. New England Life believes that it can meet any reasonable requirements.

The third area of actuarial services that we provide is actuarial consulting on specific cases. In addition to providing general actuarial support, we give actuarial advice on individual cases, including guidance in preparing forms in support of deductions. With the increased activity of the IRS in the area of pension plan funding, with particular regard to Revenue Ruling 69-255, we have provided additional actuarial information when requested. On several occasions a member of our staff has appeared before the IRS.

As a result of the company's commitment to our Unified Pension Service and its desire to offer quality service, the actuarial staff in the pension services department has increased from only one Fellow to two Fellows and four Associates during the last three years.

I will give you just a brief overview of our Unified Pension Service. Ninety days prior to the plan anniversary, we automatically send out a preliminary review. This review is used to verify and correct the information on our file, to update the file, and to request the various services available. At the present time the system is designed to administer defined benefit pension plans only.

The following services are available:

1. New-business calculations—This service determines eligibility, determines the automatic issue limit, calculates the new policies to be issued, assigns policy numbers, and completes most items on the application form (until we re-format the application for computer use, we are printing this information on a blank page).
2. Auxiliary fund valuation—I described this service above.
3. Employer annual report—This service provides a list of participants, together with contribution information such as pension and insurance amounts. A supplemental page includes the cash value of policies and the tabular reserve.
4. Employee statements—This service prepares a statement for each employee, showing his projected pension benefit at retirement.
5. Taxable insurance costs—This service prepares Form 1099.
6. Preretirement quotes—This service will prepare upon request a quotation of benefits at either early or normal retirement, based on various settlement options.

We are developing a system to administer money-purchase and profit-sharing plans. Currently, we have a subaccounting system which maintains allocations for each participant for plans that invest in our mutual funds.

MR. MAGNUSSON: I think that there are only two courses of action that an insurance company can adopt in deciding on the level of service to provide pension trust plans. The first is an approach under which the insurance company provides very minimal service—only what is required to administer the policies. In practice this has to be expanded somewhat to supervise the agents' activities to make sure that policies are dated properly and so on. However, under this approach very minimal actuarial services are rendered, usually level premium reserve figures for those cases in which the insurer holds the auxiliary fund.

The other approach is to provide full administrative and actuarial services. If you really want to be in the pension trust market, I think that this is the only way to do it. Only by providing full service can you get a reasonable cross-section of your field force involved. Anything less

leaves the market to the few agents who happened to have become experts in the subject.

One other topic I would like to touch on briefly is the charging of fees for this service. Almost any firm which provides actuarial or administrative services for pension plans charges substantial fees, even though they may have other involvement in the plan.

My personal philosophy is that an insurer should also be charging for services rendered in conjunction with individual plans, recognizing that, because it holds the insurance policies, it can provide administrative and actuarial services at rates which are usually much lower than those that would be charged by an outside firm.

A great deal of the plan administration being carried on by insurance companies and consultants of one type or another is done with the use of computers. However, with the relatively small plans involved in individual policy pensions, the administration of such plans without the use of computers is by no means a rarity. I can speak only for the experience of Great-West Life with any authority. We have been moving toward full computerization of our pension trust operation.

In October, 1970, we introduced the beginning of a quotation service which we have been developing and modifying over the last year, to the point where it is now highly sophisticated and is producing very good quality proposals. The program produces a finished proposal in a very readable form, listing plan design features and providing a cost summary as well as a listing of employee benefits and costs. Instead of developing the program in our own computer research department, we purchased the program from National Associates in Los Angeles. National Associates is an insurance brokerage operation specializing in individual policy plans, and this allowed us to depend very heavily on them for pension expertise as well as computer expertise. Although the development took somewhat longer than it might have taken with a concentrated in-shop effort, this method allowed us to begin the programming work much earlier than our own computer priorities would have allowed and required much less development time on the part of Great-West Life people. We feel that the cost was certainly well within reason and the results outstanding, although the amount of time taken exceeded our initial expectations.

We are currently working on an anniversary review system as a follow-up to the proposal system. This program will be able to administer any of the prototype plans that we offer, as well as a wide variety of other plans. We initially expected to handle only prototype plans under the

two systems but found that the modifications necessary to give us greater flexibility were not too great, and the flexibility seems to have paid off so far.

We have designed the proposal system, and hope to design the review system, in such a way that participation by an actuary is kept to a very minimum. The system itself can be handled by a good clerk, although some expertise is required in the proposal system in making recommendations on plan design. Since we limit ourselves to a very few mortality and interest assumptions, and to fairly small plans, actuarial advice is not normally required, except to set broad guidelines, in the selection of assumptions.

MR. FARQUHAR: New England Life has available for use as an auxiliary fund a separate investment account which is invested along with the general assets of the company. This account guarantees principal and interest at 3 per cent. Currently, we are crediting interest at 5 per cent on a portfolio average basis. Several companies credit interest on the investment-year method; we have considered this approach several times and rejected it for a number of reasons. We pay no commissions on money going into this account. Although some companies put a special load on money coming in from outside to convert policies at retirement, we do not treat outside money differently.

New England Life Equity Services Corporation (NELESCO) was set up as our mutual fund distributor in late 1963 to distribute two of our funds; a third fund was started in July, 1970, for investments by qualified plans only. This latter fund now has over $11.5 million in assets, which include defined benefit plan side funds, money-purchase and profit-sharing accounts, and H.R. 10 moneys.

Just to complete the investment possibilities at New England Life, I should mention our three group accounts. There is an equity account, a bond account, and a mortgage and real estate account. The minimum investments for these accounts are normally too high to be considered by individual policy pension trust (IPPT) plans.

MR. HALLIWELL: If we look beyond the problems of vesting, portability, reinsurance, and fiduciary responsibility, we can find one main area where, perhaps, the private sector has not come through as many critics feel it should have. That area is scope of coverage: over 80 per cent of corporations in the United States do not have qualified retirement plans. This fact means that less than 20 per cent of the corporations in the United States do have plans--but these plans cover more than 60

per cent of the country's nongovernment work force. Reaching the 40 per cent of employees who are not covered presents a challenge to us actuaries because, although fewer than those who are covered, these employees are spread among a larger number of corporations. Until recently there existed no efficient or economical means for us to reach this group. However, with the enactment of Revenue Ruling 68-45 the federal government gave us the necessary tool—prototypes. These model plans were encouraged by the federal government to simplify IRS approval procedures and to simplify the decision-making process for smaller employers. They may be sponsored by banks, insurance companies, regulated investment companies, and associations.

To be sure, prototypes are not a panacea, and their use imposes a very serious obligation on the sponsors to guide their client toward the proper choice. Many organizations seized the sales opportunity offered by Revenue Ruling 68-45 as eagerly as ducks take to water, and, as of the end of last month, more than 2,200 prototypes had received IRS approval. Unfortunately, the potential advantages offered by prototypes were lost when many ill-equipped sponsors entered into this contest with the gusto of freshmen in their first week among college bars.

As a result, we have all too often been faced with the task of straightening out a mess. A prototype should provide a client with proper design, simplified installation, and efficient administration. The same ingredients necessary for a good custom plan are still required for a prototype client, at least at the inception of the prototype scheme. A qualified plan requires extensive use of specialized talent—legal, accounting, actuarial, and administrative. In far too many cases these essential services were missing.

Many sponsors who are ill equipped to handle the necessary complex services have attempted to flood the marketplace with their products through a sales force that more often than not cannot tell the difference between a pension plan and a profit-sharing plan.

The banks came on strongest in the sheer number of plans filed, offering for the most part money-purchase and profit-sharing plans. By virtue of their past trust experience, the banks could offer fair design and technical advice, but their recommendations were often slanted toward use of the plans they filed—namely, money-purchase and profit-sharing plans.

The banks' strong suit was in the investment area and the record-keeping technique for their investment transactions. But most could not offer the follow-up administration necessary to operate a plan effectively. Because few banks employ actuaries, they had to seek outside service to assist with the administrative loads they were creating.

Mutual funds were also very aggressive in moving into this new area of easy prospecting. Some excellent plans were filed, but these also were slanted toward the money-purchase and profit-sharing plans and, more recently, the thrift savings plans and the target plans. Mutual funds are very quick to act upon new ideas, and in some instances they have acted without thoroughly investigating short-term outcomes. They are experts in merchandising and have built up very aggressive field forces. In general, however, the field forces have proved to be poorly equipped to provide good retirement plan design and technical advice. Because mutual funds are relative newcomers to this field, they have few if any actuarial services, and they provide only fair administrative services. But they do have excellent investment results to commend them. More and more mutual fund firms are joining forces with outside administrators to complete their services for package plans.

Before I go further, let me be sure one thing is perfectly clear: I am speaking in broad generalities based on my own personal experiences. There are bound to be exceptions to what I say—as a matter of fact, I know of several extremely competent and conscientious practitioners among sponsors of all types.

Insurance companies offer well-designed plans through generally well-trained field forces and excellent actuarial and administrative services. But they, too, have their negative side: they have slanted their approach to defined benefit plans; sometimes they have sold qualified retirement plans with the sale of insurance as the primary objective; and, on the average, they have exhibited poor investment performance. I hasten to add that the insurance industry on the whole has improved in investment performance, and today insurance companies offer some of the most attractive investment media available through an institutional house. Unfortunately, the best of these are often not available to the customer who needs or wants a prototype plan.

In summary, the last two years have seen the development of an idea that should have brought economical qualified plans to the overlooked groups. The advantages are clear, but so too are the disadvantages. On the plus side, prototypes

1. Are better written than many custom plans.
2. Can fit virtually every problem because of the wide choice of plans available.
3. Offer lower cost.
4. Simplify the choice of a plan.

On the negative side, however,

1. Prototype plans are usually less flexible in design: after being prepared under the sponsor's guidance, the plans are probed and kneaded by the IRS, which imposes limitations, and, finally, plans are scrutinized by the local IRS office before final approval.
2. Prototypes often limit investment or administrative choice, which is natural enough because no one would expect a sponsor to invest the thousands of dollars necessary to prepare a package without building into the product a guaranteed profit return.
3. Prototypes are often backed up by poorly conceived administrative and sales support.
4. Frequently, many prototype advantages are nullified by the purchaser's legal counsel, who views the prototype as a monster designed to drastically reduce his own income.

I personally feel that prototypes have an extremely bright future if sponsors seek to correct the negative features I have just enumerated. New markets are opening up that are "naturals" for the prototype approach. Professional corporations, fused by Revenue Ruling 70-101, are ideal prospects for properly designed and managed prototype plans.

Most prototypes were filed subsequent to Revenue Rulings 69-4 and 69-5 and were designed to comply with these rulings at great expense to their sponsors (incidentally, there is no guarantee that they will not have to be refiled to remain in the good graces of Revenue Ruling 71-446). For all practical purposes, there are only two problem areas where compliance with Revenue Rulings 69-4 and 69-5 would not also satisfy Revenue Ruling 71-446:

First, under Revenue Ruling 69-4, male and female retirement ages could be different, but under section 4.03 of Revenue Ruling 71-446 male and female retirement ages must be the same.

The second area concerns integrated plans when the disability benefits are greater than early retirement benefits. Section 3.01 of Revenue Ruling 69-5 required that eligibility for disability benefits must be contingent upon eligibility for a disability benefit from social security; now, under section 12.01(1)(b) of Revenue Ruling 71-446, the employee must also be *receiving* disability benefits from social security.

Finally, here are a few miscellaneous points I should mention before closing this part of the discussion:

1. It is normally permissible to file a combination defined benefit pension plan with a money-purchase plan. Target plans, because of their complexity, should be filed as separate instruments. Profit-sharing plans, or thrift plans filed as profit-sharing-type plans, must also be filed as separate plans.
2. Because present rules limit the over-all profit-sharing-pension plan combina-

tion contribution to 25 per cent, it is very likely that a future revenue ruling will be issued setting the maximum money-purchase limit at 25 per cent. Many sponsors have put too much faith in Mr. Goodman's 60 per cent hypothetical situation, discussed in mid-1970.

3. Perhaps the simplest plan to understand is the thrift savings plan. It is easy to sell and gives a client a long run for his benefit dollar. However, the proper administration of one of these plans is perhaps more difficult and complex than that of any other qualified plan. Many sponsors have filed thrift plans, and all but a few are totally incapable of administering them.

MR. FARQUHAR: New England Life has several prototypes available—a corporate pension prototype for defined benefit and money-purchase plans, a corporate profit-sharing prototype, a corporate variable benefit (target benefit) prototype, and several H.R. 10 prototypes. We also have specimen plans which can be used by the client's attorney in drafting a tailor-made plan. Of the approximately 1,600 new plans that New England Life writes each year, 1,200 are corporate plans, of which about one-third, or 400, use our prototypes.

MR. MAGNUSSON: I would like to comment on the effects of prototype plans from another point of view, that of an insurance company. Since the introduction of prototype plans, our individual policy pension business has shown very substantial increases. I do not think that prototype plans alone will do this. They are certainly necessary to broaden the base of pension operations to a wider group of agents, but a proposal service and some form of administration and actuarial service are required as well. The whole point is to simplify things for an agent who really does not know too much about pension plans to the point where he can find a client and answer some basic questions about the client's situation and desires, so that a more experienced head office employee can design a plan, or a choice of plans, and provide quotations on them. I admit that this may not provide the client with the level of actuarial advice that would come from a consulting actuary who could sit down with him and analyze his situation, but, on the other hand, in small plans the employer may balk at the price of professional counseling and therefore get no advice at all. In many cases the thought of a pension plan would not even occur to him if the idea were not planted by an insurance agent or some other type of salesman.

MR. FARQUHAR: We believe that New England Life's automatic issue rules, in the aggregate, are more liberal than those of any other major insurer. Specifically, for a 2–4-life case we will allow up to $5,000 of auto-

matic issue annually, provided that the business is written by a full-time New England Life agent. For a 5–9-life plan the annual limit is $12,000. For plans with 10 or more lives we have an annual limit up to $40,000, depending upon the volume of insurance and the number of lives. We will permit an accumulation of automatic issue policies up to twice the annual limit for each participant. After the aggregate limit has been reached, the next policy must be underwritten. If this policy is medically underwritten standard, the automatic issue limit for that participant is reinstated. All pension business must be written on an automatic issue basis, provided that it is qualified.

To simplify the writing of renewal business, we use a single application and issue one policy, which is a blend of automatic issue and underwritten. We issue new policies for all increases in insurance (although some companies write the renewal as a rider to the existing policy). The new business calculation system of our Unified Pension Service greatly simplifies the writing of renewal business.

As an experiment in underwriting, we have recently extended automatic issue privileges to a limited number of plans which do not meet our usual automatic issue rules. We are watching the results of this experiment very closely.

MR. MAGNUSSON: In the 1940's and 1950's we wrote a considerable number of fairly large pension trust plans. In some of these we now have in excess of 500 policies. While this may have been acceptable at one time, we now find that, along with all the other problems that such size creates, we are getting real headaches from complaints about policy fees on each renewal issue and the sheer volume of policies being held by the trustees.

In the past few years we have lost a considerable number of these large plans, some through transfer to our own group department, others going to other insurance companies or being self-administered. In most cases I think the business could be retained if we were to initiate as a company a move to group funding. However, in many cases this meets with stern resistance from the agents and brokers concerned. There is room here for some conflict of interest on the agent's part. The resolution of the problem to date has been unsatisfactory, to say the least.

The best cure for this problem is prevention by limiting the size of the individual policy plans at inception. We are trying to maintain a rule that we will not take a fully insured plan with more than 5 lives or a split-funded plan with more than 25 lives. This has worked well on the 5-life rule because many of our agents seem to be shying away from a

fully insured plan in the light of high investment returns elsewhere. In most cases we are not having too much trouble on the 25-life rule, although it has been broken a few times. Even 25 lives may be too many if the business is growing rapidly, when one considers both new employees and the number of policies issued as the result of increased salaries.

MR. FARQUHAR: We have had a reasonable degree of success in converting overgrown plans to group. We have a separate department which has been set up to work specifically in this area. We intend to commit an Associate to work full-time in this department beginning this summer.

We have already begun studying the problem of when a plan should be converted to group. A study was made recently for a specific plan, using model-office techniques to project the costs of the plan over the next twenty years utilizing both IPPT and group funding. Naturally this study used assumptions and parameters applicable only to this plan. We intend to develop this approach further, so that we can input a variety of assumptions, formulas, and other parameters.

MR. MAGNUSSON: The most significant underwriting problem in regard to professional corporations results from the fact that the pension plan is normally set up very soon after incorporation. At the latest, it will be set up at the end of the first year, since incorporation usually results from a desire to establish benefit programs. Unless it is controlled, this situation can lead to very high early lapse rates by covering short-term employees, resulting in losses to the insurance company and excessive administrative costs to the employer. We have attempted to reduce this problem as much as possible by refusing to issue insurance at the very young ages (under 20) even if the plan calls for these people to be included. As much as possible, we try to eliminate all employees under age 25 from participation, but this is not always possible in smaller groups. Where it is possible, I think the major source of lapses is eliminated.

A second problem is the relatively rapid vesting that is desired by stockholder employees. Of course, this increases the cost of the plan, but it presents another, more subtle problem. Since contributions are usually large in relation to salary, substantial amounts accumulate in a relatively short period of time. For even the lowest-paid employees, it is not unusual to have a year's salary built up within four or five years of participation. This can present a very strong incentive for the employee to terminate service. The only method of satisfactorily preventing this problem is to include a safeguard in the plan which gives the trustees the option

of holding the vested interest for future payout. Of course, this option must be applied in a nondiscriminatory manner.

A third problem concerns the amount of insurance coverage under a professional corporation plan. Especially for single female employees, the normal type of plan formula will throw up excessive amounts of insurance coverage. The same is true for shareholder employees, where very large amounts of insurance can be generated under the normal rules. In many cases this results in a difference of opinion among members of the group relating to insurance benefits. For the older employees particularly, it is unwise to terminate a strong personal life insurance program as a result of insurance benefits in a pension plan. There is also the problem of small policies being purchased to complement very large insurance benefits on the shareholder employees. A policy of $1,000 or $2,500 is really indefensible in a plan which already provides an employee with $100,000 of coverage. These problems make it highly desirable for life insurance to be elective in professional corporation qualified plans, a situation that fits well in a target benefit plan. The January, 1972, *CLU Journal* contains an excellent article by Charles C. Hinckley, outlining many of the considerations I have mentioned and a number of others that should govern the design of a pension plan for professional corporations.

I would like to comment further on two interesting points we have found at Great-West. A considerable number of our sales to professional corporations have been of a combination of a formula benefit pension plan and a profit-sharing plan. This provides something for everyone in the shareholder group and seems to prevent a lot of dissatisfaction that can otherwise arise and give the agent real problems in setting up any plan at all. It should be noted, however, that the use of a money-purchase plan or a profit-sharing plan can in many instances limit the total contributions that might otherwise be available. Some of these groups have very substantial amounts of money to put into a pension plan, and this can be handled only on a formula benefit approach.

One other interesting problem that has arisen is in regard to corporations of doctors. In most cases it is very difficult to have medical examinations done outside the doctor group. You can appreciate that this is not the most satisfactory arrangement for obtaining evidence.

The amount of insurance that can be purchased on the life of a pension plan participant is, of course, restricted by IRS limitations. If the employee in question realizes a need for new life insurance at least as great as the amount that can be provided under the plan, there is no advantage at all in transferring existing insurance into the plan. In many cases, however, the individual does not need new insurance, has lost his in-

surability, or finds that it would be more advantageous to have his current insurance in the plan. If he is willing to sell his present insurance to the trustee, he can get his cash value out first by making a loan. In this way he moves the proceeds of the policy out of his taxable estate and causes future premiums and loan repayments to be paid from before-tax income. On the negative side of the ledger, he does cause the cash value portion of the proceeds to become taxable income at his death, whereas, before, they were income tax exempt. He also has to pay income tax on the portion of the premium representing the current economic benefit, but, on balance, the gain is enormous.

Among insurance companies there has been a wide division of opinion on the legality and advisability of making such transfers. An analysis of the legal situation might be that such a transfer is a transfer for value, but the term has no meaning when the transfer is to a qualified trust, since the law spells out clearly the tax treatment to the insured and to the beneficiary under a qualified plan. The law refers to policies applied for by the trustee, which is the normal method of acquisition, but the manner of acquisition should not affect the treatment of the policy.

On the other hand, there are obviously some legal questions that have not been absolutely determined. An insurer should be hesitant to suggest a course of action to a policyholder or prospective policyholder if he is not sure of its tax effects. On the other hand, a consultant can make such a recommendation because he is in a better position to point out that there are some questions involved. The case for making such transfers is strongly made in an article which appeared in the January, 1972, *CLU Journal*, entitled "Maximum Trusts in the Professional Corporation: A Study in Critical Mass," by John Mulock of Mutual Benefit Life.

MR. FARQUHAR: About 25 per cent of our corporate pensions are for professional corporations, about 75 per cent of these being doctors' corporations. Our pension legal department prepared a bulletin outlining the problems that arise when an employer with an H.R. 10 plan decides to incorporate. Briefly, three approaches were outlined:

1. Terminate the H.R. 10 trust and distribute the assets, being careful to avoid premature distribution for owner-employees.
2. Freeze the H.R. 10 plan.
3. Amend the H.R. 10 plan to a corporate trust. The administrative problems involved with this approach are quite substantial.

No one of the above available alternatives is best suited to all situations.

THE NEW ECONOMIC POLICY—IMPACT OF PHASE 2 ON PENSION PLANS

1. How has Phase 2 affected private pension plans in the following areas?
   a) Establishment of new plans.
   b) Increases in benefit formulas for existing plans.
   c) Other improvements in existing plans.
2. Have actuarial assumptions and costs methods been changed for the purpose of improving plan benefits without an associated increase in funding or accrual expense?
3. Have the results for large employers been different from those for small employers? Have negotiated plans been affected differently from unilaterally established plans? Does the experience of corporate plans differ from that of plans covering the self-employed or state and municipal employees?
4. Are employers diverting wage increases from direct pay into improved benefit plans as a means of avoiding the guidelines on direct pay adjustments?
5. What problems have arisen from interpretation of the following words from the Economic Stabilization Act Amendments of 1971: "unless the President determines that the contributions made by any such employer are unreasonably inconsistent with the standards for wage, salary and price increases issued under subsection (b)"?
6. If Phase 2 continues beyond 1972, what effects will it have on the long-term development of pension plans?

MR. EDWIN F. BOYNTON: The wording of question 5 illustrates the problem of trying to draft questions a few months in advance of a meeting in connection with currently active topics. I am really not prepared to give much of a response to the question of "what problems *have* arisen," inasmuch as the resolution of the Pay Board which provides the first interpretation of this section of the law was not released until a few weeks ago. No one really understood what the words "unreasonably inconsistent" in the law meant, but the Pay Board seems to have taken it upon itself to redefine the word "unreasonably" in a departure from the usual dictionary definition.

Since only a few weeks have passed since the resolution was published, and actual regulations are still to come, my discussion will be directed toward explaining what the resolution seems to say rather than what the effects have been.

It is helpful to review briefly the background of the resolution, since its development has been guided as much by political considerations as by

economic ones. First of all, of course, we had the "freeze" period when no increases in benefits were supposed to be made. During the freeze period the Pay Board was set up with its tripartite representation from management, labor, and the public. During this period benefit increases were deemed to be subject to the same restrictions as wages, which meant essentially no increases.

Despite the efforts of a number of organizations lobbying in favor of removal or reduction of limitations on improvements in employee benefits, the administration bill to extend economic controls would have made employee benefits subject to the same controls as wages and salaries. However, once the bill was introduced in Congress, representatives of various labor and trade organizations apparently succeeded in convincing key members of the congressional committees that fringe benefits were different and therefore should be exempted in whole or in part from the regular wage controls. I understand that the life insurance trade organizations played a major role in this. The bill which passed the Senate on December 1 would have exempted increases in employee benefit costs for all plans covering less than 1,000 employees, and applied to all types of employee benefits—pension, profit-sharing, annuity, and savings plans and group life and health and disability insurance. The version which passed the House on December 10 would have exempted only pension plans from wage and price controls, but without limit as to size of plans.

The administration, however, was not happy with the exemption of employee benefits in either version of the bill, and, while the Conference Committee was meeting, the administration forces went to work to modify the language. Thus, rather unusually, what came out of the joint House-Senate Conference Committee was not a compromise between the two but rather language which was more stringent than either version. The key language itself is quoted in the program. It exempts from controls any cost increases for pension, profit-sharing, annuity, and savings plans and group insurance and group health and disability plans, unless such increases are "unreasonably inconsistent" with the standards for wage and salary increases. The language is admittedly very hazy, but it clearly gives the president, or the Pay Board acting on his behalf, rather broad discretion in establishing guidelines for cost increases for the specified employee benefits. It is rather interesting that much of the insurance and employee benefit press reported passage of this bill with stories to the effect that employee benefits were entirely exempted from wage and price controls. How one can draw this conclusion from the language quoted somehow escapes me, but in any event much publicity was given to the supposed exemption of benefits from the wage and price controls.

A majority of the Pay Board, however, had no intention of exempting benefits from the rules completely, and for the next couple of months the staff wrestled with the problem of how to put separate controls on benefits which would be acceptable to both management and labor representatives. Several successive drafts of the proposed resolution circulated around, and their provisions ranged from being somewhat more restrictive than those of the final resolution to exempting benefits altogether. Certain of the management representatives had indicated during the freeze period that benefits should be directly included in wage and price controls, with an allowance only for the so-called roll-on costs that are associated with a given pay increase. That is, certain benefits such as pension, profit-sharing, and group life insurance are often a function of pay, particularly for salaried employees, so that a given pay increase generates increases in the cost of these benefits, which are the roll-on costs associated with a pay increase. Some of the labor members, on the other hand, expressed themselves in favor of having a complete exemption from the guidelines for all employee benefits.

If I might editorialize for a minute, it does seem hard to rationalize a complete exemption from the wage guidelines if the purposes of the economic controls are to be realized. While it is true that pension benefit payments are deferred, and that life insurance and medical benefits go to deserving beneficiaries, the fact is that these employee benefit costs directly increase the cost of a product in the same fashion as wages. Borrowing a few phrases from our economist friends, this is a "cost-push" type of inflation rather than a "demand-pull" inflation such as we experienced following World War II. Inflation can be controlled only if costs are controlled, and very clearly employee benefits are costs.

In any event, the final resolution passed the Pay Board on February 23. Interestingly, the vote was 8-0, with five management and three public members voting in favor and the chairman and one other public member abstaining along with five union members. The abstinence of the union members has been taken as an indication of a lack of agreement with the resolution.

The resolution itself has still not been published officially as a regulation in the *Federal Register*, but we must assume that it is reasonably close to being final. We understand that the final regulation will be much more detailed but is still apparently several weeks away from publication.

The Internal Revenue Service in the past has often been accused of rewriting the law through its power to issue regulations. The Pay Board resolution suggests that the IRS is not the only government agency which rewrites laws through its regulations. From reading the statute, one would

gather that a fairly wide degree of latitude would be permitted in adopting or enlarging upon employee benefit programs, but the effect of the Pay Board resolution has almost eliminated the word "unreasonably" from the statute.

Further compounding the confusion is the wording of the resolution itself. In our office we happened to receive an advance copy of the resolution without the accompanying press release, and we were horrified because it seemed to say that the entire cost of the roll-on benefits would have to be included in the 0.7 per cent basic limitation. The press release, however, indicates that the 0.7 per cent limitation is in addition to the 5.5 per cent basic limit on wage increases, and we understand that the press release does express the intent of the board. Hopefully the final regulation will clarify this language.

In any event, the Pay Board has coined a new phrase, "exempted benefit standard" (EBS), and in so doing has redefined the word "exempted" to about the same extent that it has also redefined "unreasonably inconsistent." To begin with, "exempted benefits" include those categories of benefits which are mentioned in the statute: pension, profit-sharing, savings, group life insurance, medical, and disability plans. The only problem is that "exempted benefits" are not really exempted at all but instead are subject to rather rigid controls.

The basic EBS itself is equal to 0.7 per cent of covered payroll, but this is in addition to the 5.5 per cent allowance for increases in wages and salaries. In effect, there is an allowance for a 6.2 per cent increase in any one year in employee benefit costs. However, it is important to note that the application of this 6.2 per cent is a little complicated. The net allowance for increases in employee benefit costs is calculated as 6.2 per cent of the total cost of wages and fringe benefits less the amount of the wage increase, which is limited to 5.5 per cent of wages only. Thus the 6.2 per cent applies to the total wage package (except for the statutory elements), including not only the costs of vacations, holidays, overtime, and so on, but also the costs of the exempted benefits themselves. On the other hand, the 5.5 per cent wage increase applies only to direct wages and does not include the costs of benefits, so the higher the cost of fringe benefits the greater the percentage allowance for benefit cost increases.

I have prepared Table 1, which illustrates for various levels of fringe benefit packages the allowance for exempted benefits, on the basis of my understanding of the resolution. For illustrative purposes I have assumed that the employee benefits add 10, 15, or 20 per cent to the wage package, in order to illustrate that the value of the benefits themselves has a direct effect on the allowance.

Table 1 is based upon a $1,000,000 payroll (including vacation, holidays, etc.). If, for example, the employee benefit package costs 15 per cent of such payroll, then the total allowance for compensation and employee benefit increases would be 6.2 per cent of $1,150,000, or $71,300 (line II[B]). On the other hand, pay increases would be limited to 5.5 per cent

TABLE 1

EXAMPLES OF EFFECT OF PAY BOARD RESOLUTION ON EXEMPTED BENEFITS COST

	If Wage Increase Is 5.5% and Fringe Cost as a Percentage of Pay Is		
	10%	15%	20%
I. Wage and benefit structure			
A. Wages (incl. vacations, holidays, etc.)	$1,000,000	$1,000,000	$1,000,000
B. Fringe cost	$ 100,000	$ 150,000	$ 200,000
C. Total	$1,100,000	$1,150,000	$1,200,000
II. Maximum allowable increase assuming no direct roll-on*			
A. Wages (0.055×I[A])	$ 55,000	$ 55,000	$ 55,000
B. Total (0.062×I[C])	$ 68,200	$ 71,300	$ 74,400
C. Fringes (B−A)	$ 13,200	$ 16,300	$ 19,400
D. Allowance for benefit increases as a percentage of wages (II[C]÷I[A])	1.32%	1.63%	1.94%
III. Effect of fringe roll-on costs assuming 66⅔% roll-on*			
A. Illustrative roll-on cost (wage increase percentage times 66⅔% of I[B])	$ 3,667	$ 5,500	$ 7,333
B. Exempted benefit standard (II[C])	$ 13,200	$ 16,300	$ 19,400
C. Excess of excess of EBS over portion of EBS required for roll-on cost (B−A)	$ 9,533	$ 10,800	$ 12,067
D. Item III(C) as a percentage of base compensation	0.95%	1.08%	1.21%

* The roll-on cost is the cost of benefit improvement that is generated directly by a pay increase (e.g., pay-related pension benefits).

of $1,000,000, or $55,000, leaving $16,300 available for increases in the cost of benefits (line II[C]). However, as will be indicated later, this allowance of $16,300 includes the roll-on costs of benefits arising because of the $55,000 pay increase. If we assume, for example, that a salaried group might have a 66⅔ per cent roll-on effect (i.e., for every 3 per cent increase in pay, the employee benefit cost increases 2 per cent), then approximately $5,500 would be absorbed by the roll-on, leaving $10,800 (line III[C]),

or 1.08 per cent of payroll (line [IIID]), as the allowance for other increases in the cost of benefits. If, however, there were no direct roll-on costs, as might be true for an hourly group with non-pay-related benefits, then the full $16,300, or 1.63 per cent of payroll, is available as an allowance for benefit improvements.

The table demonstates the leverage effect of existing employee benefit packages: the greater the relative cost of existing benefits, the greater the allowance for increases in employee benefit costs. It also indicates the impact of direct roll-on costs. That is, if the benefits are generally non-pay-related, there is a greater allowance to improve such plans to keep pace with the pay increases (i.e., a roll-on by amendment).

There is also a special catch-up provision, so that, if benefit increases have cost less than 1.5 per cent of payroll in the two preceding years, the employer is allowed to use a total of 2.2 per cent (1.5 per cent plus 0.7 per cent), minus the actual cost of employee benefit increases in the preceding two years. Thus, if the cost of employee benefit improvements in the prior two years was 1 per cent, a total of 1.2 per cent could be used instead of the basic 0.7 per cent (0.7 per cent plus 1.5 per cent minus 1 per cent).

In addition, there is a special provision for those employers who have relatively low-cost employee benefit packages. If the total cost of employee benefits is less than 10 per cent of compensation, then an employer may increase the cost of his benefits up to 10 per cent of compensation but not more than 5 per cent additional cost in any year, in order to improve the employee benefit package. This is a special compromise provision hammered out by the Pay Board in order to avoid discouraging the growth of employee benefit plans where they are most needed.

Although we are grateful for all such favors, it seems doubtful whether this provision will have a very great impact on the development of new employee benefit programs, except for young and growing companies that are just getting into a position to afford more liberal fringe benefits. The reason that most companies would have such low fringe benefit costs is that they have been unable to afford anything more generous, and adoption of wage and price controls is not likely to change this situation. Further, under the three-year catch-up rule they could get a 2.2 per cent allowance anyway, so that it really affects primarily those companies where the employee benefit cost is less than 8 per cent of payroll.

Another leverage factor would seem available if any of the plans have eligibility requirements. The various limits mentioned are applicable to the total compensation of a defined employee group, such as all salaried employees. If only a portion of the employees are eligible, the limit based

on the payroll of the entire group could probably be applied to eligible groups only.

An important question, of course, is, What is an "exempted benefit" and what is not? In the resolution there are two major items which are not counted in calculating exempted benefit costs subject to the limits:

1. Increases in fringe benefit costs necessary to maintain existing plans and provisions are excluded from the exempted benefit costs. For example, if there were increases in the cost of hospital insurance or in the group life insurance because of experience rating, such increases would not be counted against the exempted benefit costs subject to the standard. Similarly, certain types of actuarial losses in pension plan funding might not count against the standard. It is not completely clear, but it would appear that, for example, if the plan were using market value of assets for establishing contribution levels, and the market value dropped, the resulting increase in the contribution requirement would not be counted against the EBS. In general, it would appear that most actuarial losses in pension funding would fall into this category, except those arising from salary losses as will be described later.

2. A most important element of the resolution provides that the cost of increased benefits which does not exceed cost savings attributable to favorable plan experience or changes in the plan is not charged against the EBS. It would appear, therefore, that if the cost of a pension plan benefit improvement were offset by the cost reduction created by an increase in the valuation rate of interest, then the cost increase of the amendment would not be included in testing the EBS.

It does not take too much imagination to recognize the implications of this particular provision. It seems likely that actuaries are going to be under considerable pressure during the period of wage controls to stretch assumptions as far as possible so as to permit a savings to be generated and used to increase plan benefits. Of particular significance here, of course, would be increases in the valuation rates of interest, greater recognition of unrealized appreciation (or even potential future appreciation), and perhaps withdrawal rates.

Those are the two major exclusions from exempted benefits, but the resolution also describes certain items which must be included in the EBS. Those enumerated in the resolution are as follows:

1. The so-called roll-on cost of employee benefits is included. Thus pay increases which generate increases in group life insurance benefits, prospective pension plan benefits, savings plan contributions, and the like are all included in the exempted benefit costs.

2. Cost increases resulting from changes in the actuarial assumptions in pension plans or changes in the amortization of past service which are "inconsistent with those permitted by the Internal Revenue Service" are included in

the exempted benefit cost. It would appear from this provision that the cost of making the actuarial assumption more conservative, for example, by changes in the early retirement assumptions, would have to be included in testing the exempted benefit cost limitations.

There is perhaps some conflict with the exclusion previously stated which provides that increases in costs required to maintain current benefit levels would not be included in the EBS. Thus, if a plan were suffering actuarial losses because of inadequate early retirement decrements, apparently the annual losses being experienced could be picked up without being charged against the EBS; if, however, the actuarial assumptions were changed to reflect the unfavorable experience, this would be included as an adjustment in the exempted benefit cost. Thus it would seem possible to adopt changes which are funded through actuarial losses rather than by advance funding.

The rule limiting changes in the amortization of past service inconsistent with those permitted by the IRS is somewhat puzzling. It presumably would permit an employer to go from, say, minimum funding to maximum funding, without charging such increase against the exempted benefit costs. Since very few employers exceed the 10 per cent funding limitation anyway, this particular provision would not seem to have much application, at least on the basis of this interpretation.

Other specific items mentioned which are included in the exempted benefit costs are the following:

3. A discretionary payment, not based upon a formula, to a deferred profit-sharing plan is the next item mentioned. Since the resolution is concerned with increases in contributions, presumably if an employer could demonstrate that he had consistently been contributing, say, 15 per cent to a profit-sharing plan, he would be permitted to continue to do so. However, taken literally, the resolution states that *any* increase in employer contributions due to such discretionary payments is included in the exempted benefit costs. If "increase" means "dollar increase," this would seem to create a problem in maintaining a 15 per cent contribution rate to a plan with respect to new entrants, since this would be an increase in the costs of the plan, even though consistent with the prior percentage of pay. Increased contributions due to pay increases for presently covered employees would presumably be a roll-on cost.

4. Any cost increase resulting from reduction in employee contributions to a plan is also charged against exempted benefit costs. This seems self-explanatory.

Then there is a still further complication in the resolution for so-called tandem relationships. I will not go into detail, but, where an employer can demonstrate that he has consistently followed a pattern of benefits established by an industry or by another major employer, he is permitted to amend his benefits to maintain such tandem relationships.

It is still too early to attempt to judge the likely impact of the Phase 2 controls on benefits, since the resolution leaves many questions unanswered. However, a few general comments might be in order.

1. For the companies for which the cost of the exempted benefits is at present greater than 10 per cent of compensation, the allowance for benefit improvements is fairly modest and would seem to permit only relatively minor changes in plans from year to year. Companies which, for example, were in the process of changing from a career average pay plan to a final pay plan may have to postpone such action. Such a change might be accomplished by using the three-year rule, whereby no changes are made for a period of two years, and then the 2.2 per cent catch-up provision could be used.

2. Plans covering hourly employees, particularly the Taft-Hartley type of plan, may have somewhat more flexibility, inasmuch as their direct roll-on costs are relatively small, and hence the entire allowance for benefit cost increases can be allocated to one plan or another rather than spread among the various plans. In total, however, these plans will still only have an allowance for rather modest increases in plan benefits, far less than we have seen in the past few years.

3. We can expect considerable pressure to liberalize actuarial assumptions in order to get around the limitations. That is, actuaries will be requested to change assumptions enough to generate cost savings which can be used to improve benefits. This may raise some serious questions for the actuary in deciding whether or not to agree to make certain changes.

4. In addition to pressure for liberalizing actuarial assumptions, the actuary also will be faced with pressure not to recognize fully the prospective cost of potential changes or even existing provisions which are developing losses. The resolution allows an employer to maintain present benefit levels and presumably, therefore, to pick up the cost of actuarial losses, for example, on early retirements, as an additional cost which does not fall into the exempted benefit cost category. Similarly, in final pay plans, there may be pressure to use minimal or no salary scales and take the loss as it occurs rather than use realistic salary scales. I would like to emphasize that I am not endorsing these approaches but merely suggesting that in certain cases the actuary will be under pressure to follow such procedures.

5. The special 5 per cent allowance for employers with below-average benefit packages will be helpful for those small but growing companies who are just getting into a financial position to be able to afford better benefit programs. For a large number of companies in this category, however, the extra allowance will probably not be utilized, since, as noted earlier, such companies are usually not in a financial position to afford substantial benefit increases. In this connection, it is interesting to note the breakdown in the cost of benefits as revealed by the most recent United States Chamber of Commerce survey. The 1969 survey indicated that the total cost of all employee benefits was 27.9 per cent of direct payroll. On the face of it, this would seem to make the 10 per cent figure look pretty small. However, after reducing the 27.9 per cent figure for

statutory benefits, such as social security (6.4 per cent), which are not included in the pay base for exempted benefits, payments for not working, such as vacations and holidays (8.3 per cent), and other miscellaneous direct payments from the employer (4.2 per cent), we are left with benefit costs for the exempted benefit package of only 9.0 per cent of the base payroll. In fact, if we add to the base the cost of other direct payments from the employer which are included in the compensation base for the purpose of the guidelines, the average fringe benefit cost actually reduces to about 8 per cent of payroll. Although there may be flaws in these statistics for the purpose at hand, they at least indicate that a large number of employers could conceivably be affected by the special 5 per cent provision.

In conclusion, then, I would say that the allowances set forth in the Pay Board resolution should allow for modest improvements in employee benefit plans from year to year and still encourage employers with relatively weak programs to improve them. Bearing in mind the purpose of the whole system of wage and price controls, I would say that we cannot complain too much about the additional allowances given to employee benefits, even though the Pay Board seems to have taken unusual liberties in defining "unreasonably inconsistent."

MR. A. CHARLES HOWELL: How have the new Phase 2 guidelines affected the establishment of new plans and the improvement of old ones?

Before general guidelines can become effective, they must be translated into detailed regulations and then printed in the *Federal Register*. Since neither of these events has yet taken place, it is clear that Phase 2 cannot yet have affected the development of pension plans in any measurably concrete way.

It is possible, however, to estimate the extent to which the amendment of old plans and the development of new ones may be affected in the future by the 0.7 per cent, the 1.5 per cent, the 5 per cent, and the 10 per cent guidelines described by Mr. Boynton. We tried to do so in two ways: first retrospectively and statistically and then prospectively and actuarially.

STATISTICAL SURVEY

Considerable information about the composition of employee benefit costs may be found in the research study *Employee Benefits, 1969* prepared by the Economic Analysis and Study Group of the Chamber of Commerce of the United States. This detailed study of the practices of 1,115 reporting companies showed the following:

1. As a percentage of payroll, employee benefit payments in 1969 averaged 27.9 per cent, with 10 per cent of firms paying more than 38 per cent and 10

per cent paying less than 19 per cent. It should be kept in mind that these and later percentages derived from the Chamber of Commerce study relate costs to base payroll. PB-51 and other wage-price guidelines, on the other hand, are typically expressed as percentages of a defined wage base which includes not only base pay for all employees (whether eligible or ineligible for fringe benefits) but also the costs of the fringes themselves.

2. The 27.9 per cent was broken down as follows:

Legally required payments (OASDHI, unemployment compensation, etc.)	6.4%
Pension and insurance costs and other agreed-upon payments	8.3
Paid rest period, lunch periods, etc.	2.9
Payments for time not worked	8.3
Profit-sharing payments, bonuses, etc.	2.0
Total	27.9%

3. Benefits in the "exempted benefit" category of PB-51 constitute about one-third of total payments:

Pension averages	4.2%
Life and accident and health insurance, etc.	3.5
Profit-sharing and savings	1.3
Total	9.0%

4. Over the last three years covered by the study (1966–69), pension plan costs as a percentage of payroll appear to have increased by about 0.8 per cent. Since the trend of funding levels during this period of increasing financial stringency has been generally downward, most of this increased cost is undoubtedly attributable to benefit increases. Thus we may probably accept 0.8 per cent as a reasonable lower limit for the average rate of benefit increase cost for this period. For a plan with these average characteristics, the catch-up provisions of PB-51 would appear to permit an additional 0.7 per cent (1.5–0.8 per cent) increase beyond the basic 0.7 per cent.

ACTUARIAL ESTIMATES

Costs as a percentage of the PB-51 "wage base" were estimated for the typical plans and plan improvements listed in Tables 2 and 3, using the assumptions indicated in Table 1. We may conclude the following from the computations shown:

1. That many typical pension plans could not be newly adopted under the new regulations because their cost exceeds 5 per cent of payroll.
2. The cost of most of the typical pension plan improvements described in Table 3 exceeds the 0.7 per cent guideline. In order to adopt them, an employer would have to have available some margin from the 1.5 per cent catch-up provision.

TABLE 1

ASSUMPTIONS

Funding method: entry age normal

Normal retirement age: 65
Mortality: Ga-1959 (−1) (i.e., Group Annuity Table for 1951 projected to 1959 by Scale C and rated back one year)
Interest: 5 per cent per annum
Turnover: Sarason T-1
Salary scale: 3 per cent per year
Salary distribution model: that of a large financial institution
Death benefits: none, except as explicitly noted

Value of nonpension fringe benefits: 20 per cent of base payroll*
Compensation of employees ineligible for pension benefits: 10 per cent of base payroll*

* These two assumptions are needed to compute the PB-51 "wage base."

TABLE 2

NEW PENSION PLANS

Plan	Cost (30-Year Amortization of Accrued Liabilities) as Percentage of PB-51 "Wage Base"
1. Career average; 1%/2% split at $7,800	10.9%
2. 50% of final 5-year average salary (FFAS) less 50% of social security benefit (one-fifteenth reduction for each year of service less than 15 years)	10.5
3. 0.1 times (FFAS less social security benefit) times years of service	8.0

TABLE 3

PENSION PLAN IMPROVEMENTS

Change	Cost (30-Year Amortization of Accrued Liabilities) as Percentage of PB-51 "Wage Base"
a) Add 10-year certain and continuous death benefit to Plan 1	0.8%
b) Change Plan 2 to 55% of FFAS less 0.50% of social security	1.2
c) Change *future accruals only* under Plan 1 to 1.25%–2.25% split at $7,800	1.1
d) Change Plan 3's 1% of FFAS to 1.1% of FFAS; social security offset to remain the same	1.1
e) Add the following spouse's benefit to Plan 1: eligibility: age 50 or more with 20 or more years of service; benefit: 50% of accrued annuity	0.6

These difficulties are, of course, compounded by the need to allow for the effects of other exempted benefits both as previously existing or as they may be amended. Allowance must also be made for roll-up effects from increases in basic wage schedules. Since benefit package makeup differs widely from employer to employer, in reviewing an individual plan it is handy to have in mind some rules of thumb about the costs of typical nonpension benefits. One such set of rules that we have found useful is shown in the accompanying tabulation.

Coverage and Benefit	Cost as Percentage of Wage Base (Depends on Age/Sex Distribution)
Group life—100% of salary	0.4–0.8%
Survivors' income—50% of salary	1.6–3.2
Long-term disability—40% of salary	0.8–1.2
Accident and health—common varieties	1.6–6.5

The effect of the new guidelines may differ from plan to plan for other, less tangible, reasons than those referred to above:

a) Small employers may be more affected than large ones because of a lack of experienced staff to develop plans which fit the regulations. Their plans may also be more difficult to contain within guidelines because of abnormal fluctuations in payroll resulting from changes in compensation of a few key individuals. On the other hand, small employers may sooner be exempted entirely from regulation.

b) To the extent that a union has above-average negotiating power or is in a critical industry, guidelines may be pushed closer to their limits—perhaps beyond them—than in unilateral plans. On the other hand, union plans in critical industries may be more tightly constrained just because they *are* critical.

c) Small companies which have pattern plans related to those of other larger companies or industries may be more or less limited, depending on the industry or plan to which they are related, than they would be if the employer could revise his plan on a unilateral basis.

d) Regulations might not be expected to reach down as far as the plans of the self-employed.

e) It might be expected by some that municipal and government plans would be exempted from regulation. Because they now cover such a large segment of the working population, and because of growing taxpayer resistance to increased government costs, it is unlikely that they will in fact be free of regulation.

MR. ROBIN G. HOLLOWAY: My crystal ball is broken. It became cloudy when President Nixon, a long-time advocate of balanced budgets, espoused deficit financing. It developed its first crack last August 14 when President Nixon imposed the price-wage freeze. And it disintegrated when President Nixon went to China.

Deprived of my crystal ball, I feel unequal to the task of answering question 6: "If Phase 2 continues beyond 1972, what effects will it have on the long-term development of pension plans?" But because in a moment of weakness I agreed to participate on this panel, I feel compelled to make a few observations.

First of all, I find it hard to believe that Phase 2 *will* continue beyond 1972. Phase 3, probably. Phase 4, maybe. But Phase 2, no. Even if Phase 2 survives 1972, however, I doubt whether PB-51, without significant clarification or modification, will. I hope not, because I find it difficult to conceive of a year of the chaos which would be created by PB-51.

In order to prepare for this panel, I studied PB-51 very closely. This was not a pleasant task, and I do not recommend it to you. As I reviewed PB-51, I was struck with four emotions. First of all, I was confused. Then, as I began to understand PB-51 better, I became severely depressed. My next emotion was one of annoyance at what I considered to be its inequities. Finally, I ended up with a feeling of guarded optimism. I think it might be instructive if I explain why I experienced these emotions.

First of all, I said I was confused. PB-51 states that you can add to the wage base the contributions made to exempted benefit plans. But I am not quite sure what this means. Suppose that your plan is in surplus, and you therefore made no contribution. Can you add anything to the base? Or suppose that you had a large gain in the prior year, and this served to severely reduce or eliminate your contribution. What can you add to the base? And what if you simply skipped a contribution because your plan was well funded and you felt that the money could be better used within your business at that particular time? In summary, PB-51 does not make it clear whether the contribution or the accrual (e.g., as developed for *Accounting Principles Board Opinion No. 8* purposes) should be added to the wage base.

With regard to the catch-up provision, after studying PB-51 I am not sure what should be done if the plan was improved within the prior three years but there was no increase in cost because assumptions were changed simultaneously. It is also unclear to me what effect flow-through benefit improvements (i.e., those benefit improvements which are a direct result

of salary increases) during the prior three years have on the catch-up provision.

Most of all, I am confused by the following words: "the cost of an increased benefit level shall not be included to the extent that it does not exceed cost savings attributable to favorable plan experience." Does this mean that an actuarial gain of $500,000 during a single year can be used to improve the plan to the extent of an additional contribution of $500,000 during the next year and annually thereafter? Or does this mean that the *present value* of any improvement in benefits can equal $500,000? If the latter is meant, what method and assumptions can be used to determine the present value?

What if the $500,000 gain is due to the fact that the employer laid off a large portion of his work force? For this significant contribution to President Nixon's economic "game plan," is the employer to be given an opportunity to improve this plan?

Again, suppose that an employer who is valuing his assets at cost experiences an investment loss during the year. If at the end of the year the market value of his portfolio still exceeds the book value, can this employer take advantage of past gains, change his asset valuation method from cost to market, and improve his plan to the extent of the unrealized appreciation? Can you improve a plan but defer the additional cost for such improvements by not recognizing them immediately in your valuation? To carry this question to its ultimate absurdity, can you improve some of your benefit plans and skip payments on others, so that the total payments for the new plans are within the guidelines?

Finally, most actuaries are apparently assuming that the words which I quoted above mean that the actuarial assumptions can be changed to produce a lower cost and hence enable the employer to improve his plan without increasing the cost. I do not feel that this is sufficiently explicit in PB-51 to assure me that this was really the intent of the Pay Board.

I said that the second emotion which I experienced was one of severe depression. That was brought about by the fact that my next reaction to the guidelines was that they would preclude the establishment of new plans and severely hinder the improvement of old. To understand why I came to this conclusion, I think it is important that you understand how the 0.7 per cent guideline was developed.

You will note that 0.7 per cent is the product of 10 per cent and 7 per cent, or, more correctly, the product of 7 per cent and 10 per cent. I am not being facetious. These percentages both have meanings. As has been previously indicated, 10 per cent of payroll is the amount which the Pay Board has found to be the average employer contribution to exempted

benefit plans. The amount by which an employer may increase wages, according to the Pay Board guidelines, is 7 per cent. (Actually, the guideline is 5.5 per cent, but in certain circumstances 7 per cent is permissible.) Therefore, the Pay Board apparently reasoned that this 10 per cent of compensation could be increased by 7 per cent, and this would be consistent with the treatment accorded wages.

But if all the exempted benefit plans of an employer provide benefits which are directly related to salary, then a 7 per cent increase in pay automatically increases benefits by 7 per cent. At first glance, this would also seem to increase the cost of these benefits by 0.7 per cent, but this is not necessarily true. First of all, if you have an integrated pension plan, salary increases produce a disproportionate increase in pension benefits and hence in cost. Next, if your plans are funded, benefit improvements increase costs by a higher percentage than the increase in benefits themselves. Finally, many employers already contribute more than 10 per cent to their benefit plan. Therefore, one's initial impression may be that the 0.7 per cent could be used up without any plan improvements. Actually, as Ed Boynton has already shown you with his illustration, there is some leverage in the way in which the 0.7 per cent is determined. However, while this may help to alleviate the problems I cite above, it will not give the employer with pay-related benefits much room to actually improve plans.

I was further depressed when I came to the conclusion that the catch-up provision was of little value, especially if flow-through benefit improvements during the last three years are counted against the 1.5 per cent. I doubt whether there are many employers who have not used up most of this catch-up allowance.

Even if an employer has the full 0.7 per cent with which to improve his pension plan, I find it difficult to conceive of major plan changes, such as going from a career average formula to a final pay formula, updating past service, adding a spouse's benefit, or significantly improving benefits payable at early retirement, which would not cost more than that 0.7 per cent.

Finally, I was depressed because I saw no provision for "saving up" the unused portion of the 0.7 per cent so as to "budget" for a major benefit improvement in the future. It is possible that the 1.5 per cent catch-up provision may carry over into future years, and, if so, there could be a certain amount of "save-up" from that. But I do not believe that the guidelines are completely clear on this point.

As I said at the beginning of my talk, I progressed from depression to annoyance. I became annoyed when I began to see the numerous in-

equities in PB-51 which result from the fact that these guidelines are cost-related, not benefit-related. For example:

1. The amount of the contribution to an exempted benefit is affected by the method used to determine that contribution. This, in turn, affects the size of the total wage base against which the cost of improvements is measured. Therefore, if a plan is valued by a cost method which produces a higher cost than would be obtained by using another method, the contribution to the wage base is larger, and this permits greater benefit improvements. But, insofar as those benefit improvements are valued on the same more conservative cost basis, they will cost more and hence smaller improvements will be permitted. As a result, the cost method, not the benefits themselves, may determine what improvements can be made under the guidelines.
2. The same is true of the amortization period. Two identical plans can have different costs simply because the amortization period is different. This can affect the contribution to the wage base, the amount by which plans can be improved, and the cost of such improvements.
3. The method of asset valuation can produce similar cost differences which are unrelated to benefits.
4. The eligibility provision of a plan, or the funding entry age for a valuation, can also affect costs. Yet benefits ultimately payable at retirement may be the same.
5. An interesting anomaly occurs if a plan is valued using a salary scale. If, for example, the plan is valued using a 4 per cent salary scale and if salaries increase by exactly 4 per cent, there will be no flow-through cost as a result of the higher salaries. On the other hand, the same plan valued without a salary scale will have flow-through costs.
6. The choice of funding vehicles is also important. For example, if two employers have the same plan, and one funds the plan through a deferred annuity or pension trust and the other through an unallocated fund, the employer with the unallocated fund has much more flexibility in determining his contribution. Therefore, for reasons unrelated to the benefits being provided, it may be possible for the employer using a trust fund to improve benefits, while the employer who uses deferred annuities cannot.
7. The employer with more liberal benefits is favored because, to the extent that better benefits cost more, he has made a larger contribution to the wage base and therefore can make greater benefit improvements.
8. The past level of funding can also have an effect. To the extent that a plan is funded, current contributions may be lower than the contributions to the same plan which is less well funded. Therefore, the employer who has not done as good a job of funding can make greater plan improvements than the employer who has made greater past contributions.
9. The type of benefit can also have a significant effect. As indicated before, plans which are integrated with social security tend to produce larger

benefit increases per dollar of salary increase than nonintegrated plans. On the other hand, when social security is improved, these plans may have large gains (if improvements in social security have not been assumed in the valuation) which can be used to make plan improvements. Therefore, in the very year in which social security is improved, plan benefits can also be improved.

10. Past experience under the plan of course affects the benefit improvements which can be made. If two employers have the same plan but one has actuarial gains and the other does not, the one with gains can improve his plan.

In summary, my annoyance stemmed from the fact that the employer with better plans is favored over the employer with less adequate plans; the employer with plans that are not well funded is favored over the employer with better-funded plans; the employer with an unallocated funding vehicle is favored over the employer with an allocated funding vehicle; the employer with favorable past experience is favored over the employer with less favorable past experience; and the employer who is willing to fund his plans less conservatively in the future is favored over the employer who is not willing to do so.

As I said before, the emotion which I now feel with regard to PB-51 is one of uneasy optimism. Although I find it hard to believe that PB-51 will remain unchanged for any period of time, I think that if it does there are techniques (and some might call them loopholes) which can be used by employers who want to improve their pension plans without exceeding these guidelines. Some of these techniques are the following:

1. Emphasis can be put on improving benefits for employees who have already retired. The Pay Board has already decided that payments to retired employees are not wages and hence are not subject to controls.
2. If actual contributions and not accrual costs determine the "cost" of improvements in exempted benefits, employers can use temporarily unfunded supplements to their plan (e.g., an unfunded final pay minimum) to avoid large immediate cost increases.
3. Employers can alter their assumptions and methods to produce lower costs (e.g., from entry age to single premium, from short amortization periods to long, from low interest rates and turnover assumptions to more liberal assumptions, and from high salary scales to lower).
4. Employers can value assets at market, especially if there is now an excess of market over book. The additional future costs which might result if the market value declines can then be met without reference to the guidelines because they will be necessary costs to maintain the current benefit level.

I also feel optimistic because actuaries are clever Fellows, if you will excuse the pun. When necessary, actuaries have nearly always been able

to demonstrate that a predetermined result was inevitable. But will this present ethical problems for actuaries? If an employer wants to improve his plan beyond that which the actuary believes is permitted under the guidelines, should the actuary help him prepare an argument for the Pay Board, or should he refuse to do so? In other words, are we lawyers or are we of some higher calling, with a responsibility to both the client *and* the public? I do not have the answer to this question.

In summary, then, I do not really believe that the growth of pension plans will be materially affected by Phase 2. First of all, I doubt whether Phase 2, as embodied in PB-51 at any rate, will last very long. Second, if it does, I think that there are ways to work within it. If forced to assume that PB-51 will continue, however, I would answer question 6 of the discussion outline regarding the effect of Phase 2 on long-term pension plan development by listing the following probable trends:

1. A temporary emphasis on improving benefits other than those payable at retirement.
2. A trend toward retired life updates rather than active life updates.
3. A trend toward temporarily unfunded supplemental benefits.
4. A temporary increase in the use of employee contributions.
5. A trend away from integrated plans.
6. An acceleration of the trend away from unallocated funding instruments.
7. A trend toward methods that produce lower costs, such as the single premium cost method, a long amortization period, the use of market value of assets, and the use of actuarial assumptions that are less conservative than those currently employed.

ACTUARIAL PRINCIPLES AND PRACTICES FOR PENSION PLANS

MR. FENTON R. ISAACSON: I rise to express strong support for the comments made by Mr. Gene Smith at the General Sessions this morning. I think that Mr. Smith has expressed a very practical set of ideas on a very sticky problem. Personal freedom means as much to me as to anyone in this room, including Bill Marples, but I also think that serving the public interest as professionals should take precedence over exercising personal freedom.

The situation we are facing as a Society with regard to "actuarial principles and practices for pension plans" is similar in one respect to the adjusted earnings argument before the Society last year. On the adjusted earnings issue there was a "tell them to go to hell" group which fortunately, in my opinion, has become a very small minority. It appears that in the matter of "actuarial principles and practices for pension plans" we also have a "tell them to go to hell" group, which I believe will also be a small minority of Society members.

The time has long since passed when each of us could go his intellectual way as an individual professional, deciding for himself the best way to serve his clients and feeling that because of his high educational standards his individual approach to a problem would be automatically accepted. I think it behooves us to move rapidly in the direction of developing "actuarial principles and practices for pension plans" on a required basis that will serve the public interest, because otherwise I believe we will end up with requirements being forced upon us that are far less palatable than those which we may develop for ourselves. We all seem to have long since learned how to live with requirements for qualified pension plans placed upon us by the Internal Revenue Service, and it does not seem to get us warped out of shape to comply with these requirements.

I see no reason why we should not be willing to give up some of our freedom as professionals in favor of serving the public interest in a better way, which I think is the basic issue here. So let us conclude right now that we have to proceed with this matter and simply find out the best way to develop a set of "actuarial principles and practices for pension plans" which will be obligatory upon all of us to follow.

MR. RICHARD DASKAIS: I have reread the discussion paper prepared by the Committee on Pensions in a vain search for a statement of the specific objectives for which the committee offers alternatives B and C.

If the objective is to make pensions more secure, it seems to me that the answer is legislation in the areas of funding, vesting, and "reinsurance," which we discussed yesterday. If the objective, in publicly held companies, is a level pension cost, then the accountants should require this. If the objective is greater disclosure to plan participants, and greater fiduciary responsibility of plan sponsors, again the indicated action is legislation. I would hope that employees and employers would not look to us to indirectly regulate their behavior.

However, the objective may be to keep actuaries from misleading plan sponsors and others directly employing actuaries or indirectly affected by actuaries' work. In my own fifteen years of pension experience I have seen very few instances of anyone's being misled by actuaries, directly or indirectly. Those instances that I can recall were all the result of an actuary's business association with a nonactuary who was providing actuarial advice. The associations have been in life insurance companies, in insurance brokerages and agencies, or in fee-basis consulting firms with consultants and salesmen who are not actuaries.

This seems to indicate that we should follow the lead of other professions—lawyers, accountants, and doctors—and prohibit actuaries from giving actuarial advice except where the actuarial firm is owned entirely by actuaries and all the actuarial advice is given by actuaries. I really do not expect our Society to adopt any such prohibition, since it would probably force 90 per cent of the pension actuaries to change their business affiliations or the conduct of their business or to leave the Society. But this indicates that we are really not interested in giving highest priority to keeping the public from being misled by actuarial advice given by nonactuaries.

All this leads me to favor alternative A of the committee, which is to continue to rely on professional education. I certainly have no objection to anyone's writing a textbook or his own statement of actuarial principles (and it would not make much difference if I did). But I do not like the idea that I, through my membership in the Society, will give some advance commitment to follow the ideas set forth in some official Society statement or textbook.

Draft Opinion X seems to include an incredible lack of understanding of the differences between contributions and costs. Actuarial valuations are used to determine costs, while contributions are determined by a plan

sponsor, through a labor agreement, or through some other nonactuarial entity—usually with some relationship to the costs determined by the current or some previous actuarial valuation.

I firmly endorse the "advocate" rather than the "auditor" approach to actuarial valuations. With the exception of the public accounting function in the accounting profession, most professionals work for their clients, not for third parties. I see no reason why, in the absence of any law or contract, any employer or employees should have any particular actuarial standards imposed upon them.

I see no reason to make our clients pay the cost of long reports that might help them disclose their business to others if they chose to. In response to the argument that these reports can be made less costly through simplification and automation, my observation is that such approaches lead to a standardized and poor quality of actuarial work, done largely by low-level nonactuaries who have neither the innate intellectual capability nor the training to apply actuarial principles to different circumstances.

CHAIRMAN JAMES A. ATTWOOD: I might mention here—in order to stimulate further discussion—that the Committee on Professional Development recently recommended to the Society's Board of Governors that "practical, accepted actuarial principles must be defined in a number of areas, such as pension valuations and financial statements," and that "the Society must stand ready to support the adherence to such principles by actuaries dealing with employers and clients." The committee believed that the active practice of these principles would "improve the professionalism of actuaries, improve credibility of actuarial reports, and support the education process."

MR. DONALD S. GRUBBS, JR.: We should do whatever we can to eliminate unnecessary reports which add to the expense of the client, whether these reports are required by governmental agencies, by accountants, or by an actuarial body.

Reports which might be appropriate for a large pension plan are completely inappropriate for a small one. Consider the typical small employer with ten employees covered under a trusteed pension plan. All he wants to know is how much to contribute each year to finance his plan soundly. He relies on the actuary to give him that information and does not want to get involved with the details. I provide him a report that summarizes the valuation and states the actuarial method and assumptions. If the costs are significantly different from those of the prior year, it gives a general

explanation of the reasons why. It does not give him a distribution of employees by age, sex, and service; it does not tell him how the assets of the plan would be distributed if the plan were terminated; it does not tell him how the costs might vary in future years under a wide variety of possible contingencies. These additional items which might be required by Opinion X definitely add to the actuary's cost and the fees he charges to the client, with no advantage to be gained by anyone.

One of the problems in operating a pension plan for a small employer is to keep the cost of administering the plan a reasonable proportion of the total pension cost. If any standards are adopted concerning actuarial reports, I hope that they will be such that they do not significantly add to the cost for a ten-member pension plan.

MR. JOHN HANSON: The discussion paper starts with a reference to the 1966 request made by the Board of Governors of the Society of Actuaries that the Society Committee to Study Pension Problems develop a guide for pension actuaries "somewhat analogous to that used by accountants and other professional groups."

The paper refers to the possibility of "an actuarial counterpart" to *Accounting Principles Board Opinion No. 8*. It indicates that there was "little dissent as to its potential need or usefulness" during the discussion of the subject at the 1966 annual meeting. At the 1967 New York spring meeting, in contrast, the discussion was almost completely negative. This request by the Board of Governors has stimulated much thinking and discussion which hopefully will be beneficial to the actuarial profession.

There do indeed appear to be similarities between the accounting and the actuarial professions, in that both professions deal with costs and with numbers. However, the similarities appear to me to be almost completely on a superficial level, and in order to come to grips with the Board's request for a guide analogous to that of the accounting profession, I believe it is necessary to probe the following questions in some depth:

1. What are the problems facing the accounting profession?
2. What are the purposes and nature of the accounting "principles"?
3. What are the functions of the accountant as auditor?

Fortunately, the Accounting Principles Board has described its intentions, as well as the problems facing the accounting profession, with depth and clarity in its 219-page statement entitled *Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises*. The first chapter of this statement indicates that the accountants are engaged in a program of advancing the written expression of financial

accounting problems "for the purpose of increasing the usefulness of financial statements." A later chapter describes the many users of financial statements (owners, shareholders, directors, creditors, suppliers, potential owners, financial analysts, customers, stock exchanges).

Another chapter describes in great detail both the general objectives and the qualitative objectives of financial statements. Such objectives as consistency from year to year and comparability between business enterprises are included. The statement then reviews the accounting principles that were generally accepted when the statement was written, which were not all consistent with the accounting objectives noted in the statement. The Accounting Principles Board intends to increase the usefulness of financial statements by narrowing the differences in accounting practices in order that financial statements will come closer to meeting the accounting objectives.

In brief, the accountants are narrowing the permissible differences in financial reports which are prepared by employers for many users with conflicting interests. I understand the problem and the reason for the narrowing of differences.

Let us now turn to our own dilemma. I believe that the numerous solutions proposed for pension actuaries are diverse and confusing because there is no agreement on the problem. I suspect that different actuaries see different problems, which I think should be considered one at a time.

I believe that the importance of some problems has been greatly exaggerated. I also believe that some of the alleged problems are highly imaginary. Further, some of the proposals before us do not seem to be motivated by real problems. I believe that some are suggested by actuaries who wish that actuaries and the function of actuaries were something other than what they are. For example:

1. Some actuaries appear to wish that the pension actuaries rather than the accountants could establish the accounting rules.
2. Some wish that the pension actuaries rather than the employers or the government could establish the minimum funding rules.
3. Some wish that the function of the pension actuary were different from that of an adviser to the employer. I suspect that some actuaries may wish, perhaps subconsciously, that they were business executives or preachers rather than actuaries.
4. Others seem to wish that the employer worked for them rather than they for the employer.

We should recognize that the pension actuary plays an essential and important but nevertheless limited role.

I believe that our discussions should be organized around an agenda of possible problems. Mr. Dyer indicated that some approaches were "too little and too late." Too late for what? Mr. Hazlehurst indicated that we should have "standards." But we already have standards. Why do we need more standards? Mr. Marples indicated that we should "rely on professional education and accreditation." Rely on these to accomplish what? What precisely are we talking about?

It is difficult on an intellectual level to reject a proposal without hearing an intelligent statement of the problem the proposal is intended to solve. However, because of the differing roles of the accountant and the actuary, I am confident that the solution proposed by the Board of the Society—that we have a guide analogous to *Opinion No. 8*—cannot be matched up with a problem.

As already noted, the financial statements of the employer are relied upon by many users and are in the public domain. In contrast, the report of the pension actuary is provided exclusively for the use of the employer, and it is not a public document. Guide 2(*b*) of the Guides to Professional Conduct makes this clear. The employer must of course report to the Labor Department, the Internal Revenue Service, and other government agencies, and he may or may not choose to make all or part of the report public.

The actuarial profession is unique. However, the relationship between pension actuary and client more closely resembles the relationship between doctor and patient or lawyer and client than the relationship between auditor and employer. Doctors and lawyers, like actuaries, develop findings and recommendations for their client that are confidential and are not in the public domain. In sharp contrast, the accountant as auditor is responsible for indicating whether the employer's financial report to the public is acceptable or unacceptable.

Although uniformity may be required by the government in connection with a test of solvency, for example, or for some other special purpose, an actuarial report is in essence a private document for a single user, and there is in my opinion no basis for narrowing the differences between actuaries who must exercise their best judgment to solve the financial problems posed by the client. Let me be explicit. This is not a vague abstract question. Professional judgment is exercised by the actuary only in the choice of actuarial method, the choice of assumptions, and the choice of a basis for valuing assets—that is, in the measurement of uncertainties. In my opinion, no narrowing of the available choices is in the best interests of the clients for whom actuarial services are rendered. Even the terminal funding and pay-as-you-go methods, which are unacceptable

for accounting purposes, are and must be used by the actuary as tools to solve some problems.

I am convinced that a "cookbook" approach, which Fred Sloat has referred to as a "do-it-yourself" approach, would not be in the best interests of the actuarial profession. With such an official cookbook available, unqualified persons might well be able to function on an ostensibly competent basis by "looking up" the "recipe" in the cookbook. These persons might or might not be members of the Academy, the Conference, or the Society. I frankly do not wish to make beginners or unqualified persons appear to be competent when in fact they are not. Competency and expertise can be achieved only by study and experience, and it is welcome news to hear this morning that the Study Notes are to be revised. More important, such a "cookbook" approach would narrow the choices available to the actuary and would eliminate or reduce the exercise of individual judgment in the choice of actuarial approaches, leading in my opinion to an inevitable deterioration in the quality of actuarial services rendered.

Can the Board of Governors of the Society or any others who recommend or request a guide analogous to that of the accounting profession stipulate an actuarial method or assumption which they feel should no longer be acceptable? I doubt it. Do they feel that the judgment of a professional person grounded in a scientific discipline should be exercised on the basis of so-called principles established by vote of a committee or on the basis of principles established by the force of logic? I wonder.

We might all reflect on the January, 1972, editorial in *The Actuary* by Andy Webster, which reads in part as follows:

> Somehow or other we have been under the impression for many years that one of the objects of the examinations was to teach the student actuarial principles and how to apply them. In their application there is a considerable degree of judgment to be exercised by the individual actuary and obviously other actuaries may not always agree with his judgment. Where then does the "accepted" part come in? A profession must require from its practitioners a high degree of competence and adherence to a code of professional conduct. These are not merely "accepted"; they are essential and these the Society already possesses.

The discussion paper calls for the discussion of more solutions than can intelligently be considered at one time. To simplify the discussion, my own view is that the Society Committee on Pensions should at this juncture report back to the Board of Governors that a guide for pension actuaries analogous to that followed by the accountants is inappropriate for our profession. The Board could then withdraw its request for such

a guide. Intelligent consideration might then be given to problems facing the profession. Perhaps the Board could articulate what precisely it views the problems to be. Apparent problems could then be examined. Proposals could then be made to solve agreed-upon problems. Some of the proposals we are now discussing have been made not to solve problems but to please the Board of Governors.

MR. CHARLES F. B. RICHARDSON: The excellent discussion paper brings together a number of very important questions which must concern any consulting actuary dealing with pension plans. It will undoubtedly give rise to a great many differences of opinion, but, despite this, I find that I agree with a great deal of what is said. There are, however, several matters included in the draft opinion which do, I feel, call for comment.

I agree with the statement made in Section II to the effect that we have, perhaps, almost what we need now, provided that it is generally accepted and that enforcement mechanisms can be devised.

There are several references to inflation and the effect upon future costs of inflation and other factors, such as increase or shrinkage in plan participation, rate of growth of the company, and the like. It does seem to me that these are so totally unpredictable that they have been very much overemphasized in the draft opinion.

There is a quotation taken from Opinion S-3 which seems to me to be out of context, since it refers to situations in which the actuary is advising an insurance company. The suggestion that the member should satisfy himself that those who requested his report are fully cognizant of the significance of his findings is utterly impractical when you are dealing with comparatively small companies and usually unsophisticated employers. On the contrary, I am quite satisfied that in many cases the person who received the report is totally incapable of understanding the significance of the findings.

There are a number of suggestions in draft Opinion X that would be practical only in the case of a very large plan, because the cost of producing much of this information would in most cases be prohibitive and the client simply would not be willing to pay the high fees that would be required to meet the costs. As an example of this, the section headed "Solvency Test" mentions that the comparison should recognize the priorities of various employee groups in the event of termination. It also mentions expected future contribution levels under various assumptions as to possible future events, including the inflation factor, growth or shrinkage in the size of the company, and even future social security benefit changes. It seems to me that this is going entirely too far, and,

in fact, some of these items involve such a high degree of stargazing that they do not belong in an actuarial report.

The discussion of actuarial cost method and assumptions in draft Opinion X, I think, goes much too far in suggesting that a complete discussion of the implications of the assumptions made, both explicit and implicit assumptions, should be included in the report.

The same comment applies to the section on contributions, which refers to projected levels of contributions broken down into those arising from current benefit accruals and prior service. It seems most unlikely that the employer would understand this. In our reports at H. W. Black and Associates, Inc., we do show routinely a thirty-five-year projection of pension payout and future pension liabilities broken down between active and retired lives, and we find this quite useful in educating employers.

On the subject of investments there will undoubtedly be very wide differences of opinion, although I happen to think that most consulting actuaries in this country do not do nearly enough in this area. However, in order to gain acceptance of whatever opinion may be considered for adoption, there should be a reference to the matter of investments and at least a requirement that the actuary's report should draw attention to an investment performance which is obviously far below the interest rate assumed in the valuation.

The opinion does well to stress the need for covering certain items in the valuation report. We include the following information in all reports:

1. Summary of plan provisions.
2. The range of contributions called for by current costs.
3. Statistics analyzing active and retired employees by age, service, and earnings.
4. A comparison of the key figures, including costs, with prior valuations for several years back.
5. A description and nontechnical explanation of the actuarial valuation method used and the effect of differences between the emerging experience and the assumptions.
6. A list of the actuarial assumptions, including any changes.
7. The facts called for by *APB Opinion No. 8.*
8. A statement of the basis of valuation of assets.
9. A projection of future pensions.
10. Tables of current social security benefits.

We also give comments on *APB Opinion No. 8* and the latest revenue ruling on integration with social security. On smaller cases we include an individual listing of employees, giving key information regarding age, service, salary, and benefits.

Whatever form Opinion X may eventually take, it would seem to me to be wise to make it clear that many aspects of an actuarial valuation that should be included in a report on a very large case would be totally impractical on a small case and that the actuary should use his judgment in determining what degree of detail and of sophisticated information would be appropriate for a given case, depending upon its size.

Since the accountants have been so successful in promoting and making us aware of the "GAAP" from which they seem to suffer, I am glad to see that our profession is beginning to see the need to close the "gap" and make it known that we have recognized and accepted actuarial principles and that we intend to make this known as widely as possible.

MR. WILLIAM A. DREHER: I would like to compliment Jim Attwood and his Committee on Pensions for the report they gave us this morning. It is apparent that their decision to not proceed with the development of a statement of actuarial principles and practices was sound. Before a consensus can be reached, there is need for further discussion in forums such as this. In our deliberations we should maintain a healthy awareness of the imperfectibility of man.

The men who have described their views this morning deserve our respect. However, I disagree with the accent on personal freedom that characterizes most of the remarks we have heard. My own view is that the greater need is to protect the profession. The discussion this morning gives undue weight to the concept of individualism. Individualism is a virtuous principle, but, when carried to extremes, it ceases to ennoble men or encourage disciplined progress and becomes anarchy and a petty display of egoism.

We must be accountable not only to ourselves but to our profession and its standards. In today's complex society—which we must recognize is becoming increasingly complex—organizations take on an importance that transcends the individual personal preferences of their members. An organization must be responsive to its constituency, but it has an existence of its own and must be concerned with its own vitality. In addition, a profession has a special duty to project a visible and consistent image to the public it serves. If individual members of a profession are not subordinate to a consistent set of standards and principles, the public is confused and the power and dignity of the profession are undermined.

In my opinion, there is sometimes not sufficient mutual respect among actuaries. Too often I have observed our tendency to take a contrary view, almost as a stubborn assertion of our right to do so. One very encouraging aspect of this meeting is the evident enthusiasm for the goals

of the Committee on Continuing Education. Each of us will be more valuable to the profession and the public if we come to a better understanding of one another's ideas and experiences, not with the intention of docilely accepting other points of view but prepared to have our views modified in response to the thinking of other professional colleagues.

Any solution to the questions posed by the Committee on Pensions must stress peer review while at the same time permitting innovation. I do not believe that it would be an undue restriction upon our individual freedom to establish a requirement that an actuary seek the opinions of professional peers if he is contemplating the use of an unusual actuarial principle, method, or assumption. There are very few situations which in actual practice would not allow time for some form of consultation. It should be seen as a responsible professional action for an actuary, after considered examination of the entire problem and appropriate consultation, to apply a practice or principle which is not widely accepted as long as two requirements are satisfied:

1. Disclosure to the users of his work that the practice or principle is an exception to prevailing usage.
2. Submission of the practice or principle for peer review and possible modification following their comment.

Having spent ten years grading actuarial examinations, I do not share Bill Marples' views about the virtues of focusing our efforts to inculcate knowledge of generally accepted actuarial principles at the student level. The examinations are a valuable learning experience, but they are a beginning, not an end. The very fact that we are here today in response to the invitation of the Committee on Continuing Education shows that a true professional is constantly seeking to expand and refresh his skills. Also, the complex problems which give rise to this debate are related to practical problems of the real world. Only after an actuary has had years of exposure to them can he adequately appraise the subtleties which confront each of us in our daily work. Experienced actuaries must be continuously involved in the process of defining, reviewing, and revising actuarial principles and practices. And experienced actuaries—even the old warhorses—must be influenced by new developments.

Even if the Marples approach were conceptually sound, it is not practical. The pressure to establish and enforce a workable and consistent set of professional standards is building. If we do not do it ourselves, some government bureaucracy will do it for us. And any resolution of these tough questions must be enforced upon us all, not just upon new candidates for Fellowship.

We should also recognize that the public often sees us as representatives of firms, not as individuals. This is appropriate, since opinions are rendered on a firm's letterhead and carry the weight of its reputation. The public and the law consider the firm accountable for the actions of individual actuaries who practice under its umbrella. Yet within many of the larger firms there are great variations of practice in comparable circumstances. If any of these firms were planning to go public, it would be quite accurate to describe them as an extension of the franchise industry but lacking even rudimentary standards of quality control.

We must also recognize that many capable men who are not actuaries are principals in firms providing services to benefit plan sponsors. We need a more effective means of holding such firms accountable that all work done in their names satisfies the standards of the actuarial profession. I have no neat solutions to this problem, but it is not being given sufficient attention now.

On the broader issue of this morning's discussion, I believe that we need guides to generally accepted actuarial practices and principles and that we also need requirements for disclosure and presentation of results. We should recognize, however, that a single set of reporting requirements is neither practical nor necessary. We might adopt the approach of the accounting profession. We could require a limited-scope formal report with an actuarial opinion on costs and liabilities and an abbreviated actuarial balance sheet, including a summary of data assumptions and plan provisions. This report would be intended for government agencies, beneficiaries, and other parties at interest. Separately, the actuary could prepare a report giving consulting advice for the sole eyes of the client who had commissioned the report.

It should also be recognized that an annual actuarial valuation is often not essential. My associate Neil Cronquist and I have written a paper suggesting that triennial valuations are frequently quite satisfactory, subject to an interim annual actuarial review. In such circumstances a triennial actuarial report would provide more comprehensive detail on all elements entering into the valuation and would deal with longer-term influences on the plan. In interim years a shorter report would be confined to a certification of current costs, after confirming that circumstances had not adversely affected the reasonableness of applying parameters from the last complete actuarial valuation to current payroll and asset data.

MR. HOWARD H. HENNINGTON: I think that our discussion today can be clarified considerably by recognizing that there are different types of actuarial work. This was alluded to just now by Mr. Dreher and before

that by Mr. Hanson. There is much actuarial work that is completely private and is work by an actuary solely for his client; it is an advocate situation in many instances. I think, however, that what we are really talking about here is another kind of actuarial work that is work by an actuary for his client but is also work for the public (e.g., employees, stockholders, management. accountants, and taxing authorities). I think that this can be related to the present situation in the accounting field. The generally accepted accounting principles are principles relating to accounting statements that are public statements. I think that the time will come when every pension plan covering a large number of people is required to have regularly what I would like to refer to as a public actuarial report. Then, generally accepted actuarial principles would be used for the public actuarial reports for such pension plans, and the report would state that it was prepared in accordance with such generally accepted actuarial principles.

We have been talking today about alternatives—education, disclosure, generally accepted actuarial principles, and textbooks. It seems to me that we ought not to consider them as alternatives but ought to do, to the best of our ability, some of all of these things. We all know that we need education and training of actuaries and we need textbooks. When it comes to these public actuarial reports, however, I think that we need disclosure and also some really restrictive guidelines or principles with teeth in them. The principles, to be worthwhile, need to make us uncomfortable from time to time and need to make us change something from time to time. I am not too pleased with some of the material that has been distributed in preparation for the discussion at this meeting. Much of this material has been written in terms that permit interpretations that are all things to all people.

There has been a good deal of feeling that actuaries have generally been doing an excellent job. I personally do not think that the job has always been that good. I have seen instances in which I believe that the actuary has been subservient to some client interests or some other business interests and has not really done the fully professional job that we would like to see. We have to invoke some self-discipline here, or we are going to have others put this discipline upon us.

I will cite two examples in which guidelines should be restrictive. It has often been accepted that it is satisfactory to use offsetting actuarial assumptions where one is quite conservative from a cost standard and the other is optimistic—for example, an interest rate that is low offset by a salary scale that is low. I think that such offsetting assumptions should not be permitted in a public actuarial report using generally accepted

actuarial principles. Each of the assumptions ought to be a self-sufficient assumption, so that the public can appraise each one independently. Again, I think that, other things being equal, the public actuarial report ought to strive for a level cost rather than to accept significantly decreasing costs or rising costs.

In closing, I just want to mention that it is natural for all of us to reject restrictions and to seek freedom of action. Many of us have hoped that we would have private pension plans operating without restrictive legislation. Many of us are now beginning to recognize, however, that private pension plans are going to thrive in the future only if they are restricted by some of the pending proposed pension legislation. In my opinion, the actuarial profession is going to thrive in the future only if it also submits to restrictions—hopefully self-imposed rather than legislated.

CHAIRMAN ATTWOOD: You can now begin to see why the Committee on Pensions is having trouble coming up with something meaningful. The group that prepared the discussion paper includes members of both the Society of Actuaries and the Conference of Actuaries in Public Practice. Its members come from just about every major consulting organization and most of the large insurance companies. They represent a broad cross-section of the pension business, and there is quite a divergence of views in the committee. As a result—like any large organization when it has to settle divergent views—we have come up with compromises. This is a problem common to any committee document, and as a result we have come up with "mush" in some areas. What you see in some areas is the least common denominator of all views.

The question that the Committee on Pensions now faces is whether we should continue to struggle to develop something that is down the middle between these divergent views, whether there is sufficient consensus to drop the whole project, or whether we should keep on trying to get something with teeth in it.

MR. HOWARD YOUNG: I shall try not to repeat what other people have said, but I certainly agree with Howard Hennington's concept that we should distinguish between public and private documents. Obviously, anyone who hires an actuary is entitled to get some confidential advice. However, the valuation of an existing program is analogous to a life insurance company's statement: the beneficiaries of the program are entitled to be fully informed of its status. This does not mean that we should attempt to formulate rules which nonactuaries could apply to an actuarial report. I think that we are entitled to start with the basic

assumption that it takes an actuary to appraise an actuarial analysis intelligently. While nonactuaries are entitled to an explanation from the actuary of his assumptions, procedures, and results, if they then have serious questions, let them get another actuary to review the situation. That is not as strange as it sounds—it is what people do when they get lawyers' or doctors' opinions: if you don't agree with your doctor, you go to another doctor. You do not make your own diagnosis.

Similarly, I do not favor the idea of having guides for actuarial technique which would be binding on actuaries. The question of advocacy is implicit in what we do, so that I am concerned that binding guides could be one-sided or could restrict innovation. Many times we sit around in Society meetings and hear about actuaries' obligations to employers. What about all the employees who are protected by the plans? Would guides for actuarial technique adequately recognize the employees' interests?

I do not think that the idea of relying on examination-related education will do the job, because the pension field has been too dynamic and hopefully will continue that way. If we simply rely on what we learned before becoming Fellows, we will never get anywhere in moving along. For this reason, a compendium of actuarial techniques would be very useful as a reference source but should not be binding.

This really brings me to agree almost fully with Mr. Hazlehurst's position that our reliance should be on disclosure. Disclosure should include two concepts: first, that adequate disclosure means sufficient information so that another actuary can verify or analyze the results intelligently; second, that as actuaries we should have the freedom to make available the "public documents" to which I referred earlier. That is, whether or not the client authorizes it, upon request from another actuary who has a legitimate interest in the plan—say that he represents the plan's beneficiaries—we should have the freedom to make adequate disclosure to him. On this basis, the routine filing of "public documents" should be minimized; there is no point in making reports which are going to sit in a file which no one is going to use. I would be satisfied with this procedure of providing reports on request and would favor a reasonable charge to whoever wants the report, so that people are not put to unnecessary expense.

MR. KIRAN N. DESAI: It seems clear from the preceding discussions that the panel has overlooked the basic objectives of the pension valuation. I seriously doubt that "peer review" is among the many objectives of a pension valuation. We should not bury our heads in the sand. We

should look at the problem from the point of view of the objective of the valuation.

Inundating the public with a lengthy report seems analogous to having the accountant append all the data. Our certification should disclose the basic facts like an actuarial balance sheet and a cost table—basically similar to the output produced by an accountant. The actuary should certify, and be able to back up his certification, that the report was prepared according to a specified set of guidelines, or be prepared to justify any deviations therefrom, barring which he should be prepared to be censured.

I do not agree with Mr. Marples that the censure would be taken lightly; I do not believe that we are prepared to lose our membership in the organization. All of us have undergone rigorous training to achieve our membership, which is a fact sufficient to establish that we hold it dear to our hearts. The threat of censureship would be sufficient for us to follow the basic guidelines, unless we could justify the deviation on some sound grounds.

A full disclosure for "peer review" is one thing, but making the details available to the public, who will surely be confused with a plethora of data, is another matter.

Professional education is a basic necessity. This need not end at the Fellowship level. The attendance of 663 members (presumably over 300 Fellows) at this meeting seems to signify that we do not want it to end when the formal examinations end. Perhaps the Society should make it a rule that in order to retain membership we must attend one symposium a year and write one paper every seven years. We should, however, conform to uniformity of methods and terminology. Individualists have brought us confusing terms with which we are still struggling. Let us not foster confusion in the name of individualism.

MR. GEORGE W. POZNANSKI: I am an individualist. I will not name my employer, because I believe that I am a member of this Society in my own personal capacity and not because I happen to work for someone. However, for those of you who might be interested, I believe that the views of my employer, who will become obvious as I make my remarks, are not much different from mine.

As an individual who is charged with the responsibility of reviewing and evaluating actuarial reports prepared by many different actuaries in connection with various types of pension plans, from the smallest to those having 100,000 members or more, where the sponsoring employers are of all kinds and descriptions, I would like to say that the option of dis-

closure is one that is particularly appealing to me. I would be the last person to suggest that governments should legislate methods or assumptions that actuaries must use in valuing pension plans.

We look upon ourselves as professionals. We have spent years learning how to evaluate pension plans. We know from experience that each case is an individual case, and we have to adapt our methods and our assumptions to that case. In addition, our valuations may be performed on one and the same case to serve different purposes. Each such valuation must use appropriate methods and bases to serve its purpose best. Consequently, any legislation prescribing the methods and bases that must be used by actuaries would, of necessity, be rigid and, in my view, would take away from actuaries their professional status.

I am sure that I do not have to remind you that at least in Canada there is on the statute books of several provinces and of the federal government legislation dealing with pension plans, and in particular with the matter of funding. The vast majority of all employer-established pension plans are subject to that legislation. This legislation does give the power to the governments concerned to prescribe methods and bases for the valuation of pension plans. I am not sure that such power would necessarily be restricted to valuations to test the solvency of the plans for purposes of the legislation. It seems to me that it is possible that bases and methods could be prescribed under the legislation to apply to valuations with the purpose of determining the amount of contributions that the employer would be required to make to satisfy the funding requirements of the legislation.

The day that any rigid regulations are promulgated in connection with the methods and bases that must be used in the valuation of pension plans will be a sad one for the actuarial profession in general and the pension actuaries in particular. Although the legislation in Canada prescribes, among others, the standards for the funding of pension plans, I am happy to report that so far neither the provincial nor the federal government in Canada has prescribed, by regulation, the bases or methods of funding that may be used in connection with pension plans. I must, at the same time, caution you that certain individuals on the staffs of certain of the supervising authorities in Canada suggest that the time has come to give serious consideration to prescribing methods and bases for the valuation of pension plans. No professional actuary would want this suggestion to materialize.

I believe that we as professionals can do something positive to prevent such suggestions from being carried out. We must establish and enforce professional guides and standards and recognize that our responsibilities

are not only to what are defined as clients in the current Opinions, but also to the persons for whose benefit the plans are established and perhaps also, in a sense, to the public in general. In my view, guides along the lines of Opinion X may do the trick and at the same time give us the flexibility we need to discharge our professional obligations. Reports prepared in accordance with the principles of the adopted opinion could be described as reports prepared in accordance with the generally recognized and accepted actuarial principles and practices. Hopefully, such reports should be acceptable to governmental authorities and other interested parties, who, because of the completeness of the information contained in the reports, would be in a position to satisfy themselves that the requirements of the law and of sound actuarial practice have been adhered to.

The text of Opinion X that we all received is only a draft. Certain speakers before me drew our attention to the shortcomings of that document, as if that document was the final word on the subject, with what appeared to me to be a suggestion that because the draft has shortcomings the idea should be dropped. Obviously a draft is never perfect, and even the final document, that I hope the Society will eventually adopt, will not be perfect. But I suggest to you that if we wish to preserve our professional status and the flexibility that we need to exercise our profession and to satisfy the needs of others, including governments, something along the lines of Opinion X may be the best alternative that we have. This does not mean that I exclude the possibility of textbooks on the subject to further our technical knowledge. Such books, frequently updated, are of course necessary. But from my point of view, actuarial valuations and reports, to be meaningful, should conform to the type of principles proposed in draft Opinion X. As I said, I would hope that reports so prepared could be considered by all interested parties as prepared in accordance with professional actuarial standards. Such reports would make it possible for other actuaries and other knowledgeable and interested people to understand what the results of the actuary's valuation are and what he is recommending.

CHAIRMAN ATTWOOD: I think I should mention that the Society's Committee on Professional Conduct has not reviewed this discussion paper, nor are they responsible for it. If any of the members of that committee have comments they want to make, it would be particularly appropriate to hear them.

MR. EDWIN F. BOYNTON: Despite Jim Attwood's introduction, I am not speaking for the Committee on Professional Conduct or the Accreditation Committee. I have an idea, in fact, that other members of these committees may tend to disagree with my viewpoint.

There is a story that appeared in the recent issue of the *Washingtonian* magazine which may be pertinent to this question of how much information need be supplied in connection with rendering professional advice. The story concerns a very well-known attorney in Washington, a former member of the president's cabinet, in fact, who has a very prestigious law practice. By all standards I think he would have to be considered professional. The counsel for a midwestern industrial company sought the advice of this attorney as to what position his company should take with respect to some pending tax legislation. The Washington attorney sent back a letter saying, "Do nothing," along with a bill for $20,000. The counsel for the company thought that he was entitled to a little more background information for that kind of fee and wrote back requesting further information, asking why the company should do nothing. A letter came back promptly which stated, "Because I said so," along with another bill for $5,000. Since this attorney's fee income is reputed to be in excess of $1,000,000 per year, I wish I could be that professional.

In a more serious vein, I would like to support Don Grubbs's comments to the effect that the proposed reporting and disclosure requirements would impose an unnecessary cost burden on some employers. I think, in fact, that it may be unprofessional to prepare a report of this type for a twenty-five-life case, since in my view it represents a waste of someone's time and talent. It will obviously cost a lot more money to prepare a comprehensive report of the type suggested. If you automate the job, it simply turns out to be a boilerplate report, of questionable value for any particular client. It has been stated that these reports could be prepared by computers, on an economical basis, but this overlooks a major expense of programming and systems work which must be paid for by someone. The question could also be raised as to whether a computer-prepared report is completely professional without being personally reviewed by a qualified actuary.

In the guidelines themselves there are a number of areas that are subject to challenge. One, for example, is the discussion which implies that it is essential to use separate mortality tables for males and females. It so happens that some of the largest pension funds in the country are being valued without using separate mortality tables for males and females. When a small minority of the group is female, mortality differences be-

come insignificant as a cost factor, and the effect of the over-all mortality experience of the combined group can be produced by a single table. I have seen other large cases where differences in mortality between hourly and salaried employees are almost as great as the differences between male and female. In addition, the continuation of the male-female separation of actuarial equivalence factors could raise considerable problems under the Equal Employment Opportunity Act.

In general, I think that there are several proposals included in the report which need to be reviewed rather carefully. In its present form, I do not think the report is flexible enough to fit the varying circumstances which can arise. I believe that as a professional actuary I am in a much better position to judge what is best for my clients than is a committee writing guidelines.

John Hanson has raised several excellent questions concerning the objectives of the committee and of these guidelines. Until now, at least, in work on the accreditation problems in Washington, very little interest has been expressed in the idea that the actuaries should have a set of generally accepted actuarial guidelines in the form suggested. There is a danger, of course, that if we do get federal legislation and have not adopted a set of actuarial principles, a government agency or Congress will write the guidelines for us. At the moment, however, we do have a code of ethics and a series of Opinions which are tantamount to guidelines. These are rather broad in scope and in my opinion should be sufficient.

MR. EDWARD H. FRIEND: It seems to me that the subject matter which has been discussed here all morning is of such importance and of such urgency that I would recommend that the Board of Governors give serious consideration to the convening of—the mandating of—a convention for action on this subject, and I pass that on for tomorrow's meeting for consideration.

MR. WILLARD A. HARTMAN: The Part 9E Education and Examination Committee continually updates and revises the Study Notes included on the examination syllabus. From time to time the committee finds that it needs outside assistance in the preparation of Study Notes pertaining to specialized topics in the employee benefit field. When a specialized Study Note needs to be written, the committee is hopeful that it will be able to call on those of us here who are experts in that particular topic for their assistance.

MR. ROBERT C. OCHSNER: I think clients *are* misled by actuarial reports, but generally when they want to be misled. When they are misled, they are misled more by incomplete information than by inaccurate information. If the Society were to move in any way toward suggesting or disapproving delivery of a report by an actuary to a client, as Mr. Daskais suggested, I think that the first area to explore is probably the case in which an actuarial valuation is delivered by an actuary to a client when the actuary or his employer is interested in the amount of contribution being made under the plan or in the assets in the pension fund. I say that, although I do not know of any real abuses even when the actuary is employed by the funding agent, except possibly in the case of individual policy pension plans.

I think that it would be desirable to include the funded ratio in actuarial reports much oftener than has generally been done. I think this would help to make a distinction that Congress is having a lot of trouble with. That is the difference between the "goodness" of an ongoing plan, with respect to whether it has vesting and other desirable kinds of benefits, as against the "soundness" of the same plan if it were to terminate today. The funded ratio illuminates one aspect of that.

Otherwise, I think that the guides that have been proposed here, to the extent that they go beyond the current Guides to Professional Conduct, are basically an educational undertaking. I am not aware that such an undertaking is generally necessary for the major firms. Perhaps it is, for the smaller ones—I do not know. I think that what we are talking about today is one of many roads that may very well be leading us sometime in the future to a government deferred annuity corporation. I am not sure whether that is good or bad.

Some of us have been trying to suggest that the government ought to restrict its activities in this area to the first $9,000 of earnings and let that increase only when social security increases in terms of its earnings coverage.

Once we get into standardized reports and into anything "with teeth in it," however, I think that we are talking about mandated valuation standards. And once you do that and you talk about the standards, the section on "Longer-Term Outlook" in draft Opinion X (in which they ask you to project how bad your assumptions are going to be in the future and take your gains and losses in advance) is going to expose to the public at large the fact that actuarial costs are estimates.

Somebody is going to say, "Well, the employees (or the public) really bear the risk of these estimates' not working out. Let's go in and insure

it." I think that, if the government goes in and insures it, we are going to have a repeat of the last twenty-five years, when private plans were insured under deferred annuities, with the question of who gets the gains and that kind of thing. We may very well be going that way.

MR. MURRAY L. BECKER: It seems to me that we have a dilemma, and we are hearing arguments in favor of each horn of the dilemma. On the one hand, we have people saying that we need standards and they have to be rigid and have teeth in them. Any generalized language would allow actuaries to depart from the standards, and nothing would be accomplished.

On the other hand, we have heard arguments that actuaries need flexibility and that we come across many different situations, not all of which can possibly be anticipated. For example, even some of the very elementary situations, like the fact that there are large plans and small plans, have not really been taken into account in the written material prepared for this meeting.

If we buy this argument that the need for flexibility is paramount and that this outweighs all other considerations, then we will fail to meet what I think is a reasonable objective. The objective is to have guidelines to protect the actuary's position and to prevent our role from being usurped.

Jim Attwood stated that the Committee on Pensions compromised between the two views and came up with a "mushy middle ground." I would like to argue in favor of this mushy middle ground. It seems to me that there should be some standards and that these should be comprehensive enough to fit most of the situations we come across but that the actuary should have freedom to use his judgment to depart from these standards whenever they become absurd, unrealistic, or impractical. In that case we would have to rely on the professional judgment that we are all supposed to have.

I think that a disclosure of any departures from standards is something that sometimes we can do and other times we cannot. For example, if we took draft Opinion X as it now stands and if we bought the argument that all departures must be disclosed, then in small-client situations we would end up with pages and pages of explanations of why we didn't show what we didn't show. This is obviously impractical.

MR. LAWRENCE MITCHELL: My public expression of opinion does not necessarily reflect the opinions of the other members of my firm. The general discussion has been on what, if any, guidelines should be established for use by the actuary. It seems as if we have been trying to define

what an actuary is. Who is he? What does he stand for? If you will, how do we legitimize the bastard? We seem to be trying to protect our role in society, and at the same time we do not know quite what it is.

Beyond this philosophical point, however, I raise a question which has been ignored so far. If the Society does establish guidelines, what are you going to do to me if I choose to ignore them? Are you going to make me resign from the Society? Or, if our roles are reversed, will you allow me to force you to resign from the Society? Without enforcement, the guidelines are meaningless.

CHAIRMAN ATTWOOD: That is an interesting question to close on; I really expected that one to come on very early in the discussion.

As far as future plans are concerned, we will be discussing this same topic at both the Atlantic City and the Chicago meetings of the Society to get further exposure. We had thought of having a questionnaire and of taking a straw vote now on several of these issues. We decided, however, to allow time for more considered thoughts rather than to get an immediate reaction.

The questions for consideration, I think, are something like these: Do you believe that there is need for additional guidelines to actuarial principles and practices for pension plans? If the answer is no, we do not need to go any further. If yes, then who is the audience for these guidelines? The actuaries already in the pension field? Newly entering actuaries? Government and regulatory authorities, accountants, lawyers, consultants—our public, as somebody has said? What is the purpose of the guidelines? What do you emphasize in the codification of whatever is written—disclosure, certification, presentation of results, amplification of guides? Do we come up with a statement of generally recognized and accepted actuarial principles and practices? Do we go as far as having standards for actuarial valuations, or do we concentrate on just a compendium of current actuarial practices? Should any codification include actuarial principles and practices for public employee pension plans? What about the problems of the multiemployer, defined-contribution, joint trust plan? How far should we go relative to Canada versus the United States? Should we include a role for actuaries in investments? How far do the guidelines go in the way of actuarial assumptions and actuarial cost methods, the multiple uses of valuations, the frequency of valuations, the levels of funding, cash-flow projections, and so on?

These are the types of questions that have been mentioned today and many times before. The solution that we come up with may well be some combination of all these alternatives.

BENEFIT DESIGN

"Benefit design" is perhaps the most important step in establishing and maintaining a pension plan. The panel will present a discussion of current trends in benefit design.

1. Early retirement—What early retirement factors are in use? How prevalent is subsidized early retirement, and what techniques are or might be used?
2. Retiree benefits—How can benefits for retirees best be improved? Through cost-of-living or variable annuities? Through periodic adjustment of benefits?
3. Preretirement death benefits—What types of preretirement death benefit formulas are being provided?
4. Disability benefits—What are the current trends for disability benefits—eligibility, benefit amount, co-ordination?
5. Social security—How have recent changes in social security affected benefits? Is the importance of integration with social security changing? What approaches are being used for selection of the integration level? Are offset plans becoming more attractive?

MR. RALPH J. HEALEY, JR.: The subjects assigned to me are labeled "early retirement" and "retiree benefits." An anonymous quotation that I read recently said, "Many people have plenty to live on during their retirement but nothing to live for." With the recent siege of inflation that we have just had, this could probably be appropriately rearranged to say, "Many people have nothing to live on during retirement but plenty to live for." This revised statement rather nicely summarizes why the areas of early retirement and increased benefits for those already retired are proper subjects for today's session on benefit design.

I suspect that one of the reasons we are talking about early retirement and increased postretirement benefits today is the force of custom that age 65 has today. The precedent established by social security creates a certain magic about age 65. It is possible that our current discussion on early retirement and benefit increases for those already retired is merely a way of putting into words the idea that there really is nothing magic about age 65; rather, the real retirement age should vary according to the needs and wishes of each individual.

I am finding out that, in addition to being interested in better benefits, employers today are interested in using the pension plan to help reduce the current work force. The recent economic downturn has created a large problem for some employers, since they now have too many workers on the payroll for the work that needs to be done. It seems

to be quite natural for employers to use the pension plan as a means to reduce the size of the work force without undue strain on current cash flow. I wonder whether it is desirable to use the pension plan for *just* this purpose. I can think of many reasons for and against establishing favorable early retirement provisions and developing additional benefits for those already retired, but I shall leave these subjects open for comments by you, since the reasons pro and con are basic to the question of what we should do.

Turning back to early retirement, I find that there are three general categories of eligibility and four classifications of benefit types that are provided. I have grouped the eligibility conditions in the following categories:

1. Conditional eligibility.
2. Absolute eligibility for a specified class of employees.
3. Universal eligibility rights to all employees as a right without conditions.

The first category can be stated as a special benefit that is paid to employees who terminate early at the request (or option) of the company. This is analogous to the special benefits that are paid in the event of layoff or shutdown under the steel formula. The second category can also be thought of in terms of the steel formula, because these benefits would be available to any employee who meets certain age and/or service requirements. The third category would be an eligibility condition that applies to all employees as long as they can meet usual early retirement eligibility conditions. I have found that, once the eligibility desires of the client are known, the benefit design question can be handled much more easily. For example, if our friend the client has only a temporary need to alleviate a current work force problem, you might want to use the first option, restricting eligibility to those terminated from employment by reason of shutdown or layoff. On the opposite side of the coin, if the employer honestly feels that the nature of his business warrants earlier than normal retirement for everybody, we should resort to the third eligibility condition, where it is available as a right for all employees. The second eligibility provision mentioned above obviously represents the gray area in between the extremes set by the first and third conditions.

Assuming that we have the employer's views on what his objective is, we can then turn our thoughts to the amount of benefits. The amount of benefits paid to early retirees can fit into one of the following categories.

The first category is what I have called the "minimum benefit provision." The second category is one that I have seen used most often in recent months; this is what I call the "favorable early retirement factor

method." The third type is often called the "social security supplement." A fourth category is what I have called a "split benefit plan."

The first type (minimum benefit plan) is a provision in the plan that overrides the basic plan benefit provisions, so that any employee who retires early does not have his benefits reduced to a level below what the client deems to be a reasonable level of adequacy, and also meets the needs of the individual. One simplified version of this minimum benefit that could be paid is a provision that a benefit of, let us say, $5 or $6 per month for each year of credited service would be the minimum benefit. In other words, the basic plan provisions could be benefits related to earnings, reduced for early retirement, but in no event would the benefits be less than a specified dollar amount.

The second form (favorable early retirement), instead of reducing the benefits by the full actuarial equivalent, reduces the benefits by something less than full actuarial equivalency. A sample plan might provide that an employee who retires early shall have his normal retirement benefits reduced by the following percentages: 3 per cent for each of the first three years the actual retirement date precedes the normal retirement date, and 5 per cent thereafter.

In the third type (social security supplement), the actuarial reduction is made, or perhaps the favorable early retirement provisions of the second method that I just described are used. But an additional benefit is paid in an amount equal to the social security offset or perhaps the full social security benefit that is used as the basis for the offset in calculating the plan benefits. As a result, the individual who retires early will receive his regular early retirement plus an amount equal to, say, 50, 60, or 70 per cent or even 100 per cent of his social security benefits, until either age 62, when he is first eligible for social security, or else age 65, at which time he is eligible for unreduced social security benefits. We can think of this as our friend the social security adjustment option without the additional actuarial reduction on plan benefit.

The fourth way is one that I earlier called the "split benefit program." Let us assume that you have a benefit, not integrated with social security, that is available as a right at age 60, and placed on top of that is another benefit, integrated with social security, that is payable at age 65. The net effect of combining these benefits is to grant a total benefit with a total actuarial reduction, for somebody who retires between the ages of 60 and 65, that is less than the reduction that would take place if all the benefits were available at age 65. For example, split the benefits 50-50, with half the benefits paid on the age 60 normal retirement basis and the other half on the age 65 normal retirement basis. The net effect is to reduce

the actuarial adjustment factors in half over the reductions that would take place if all the benefits were payable at age 65.

I have purposely omitted any mention of the New York City retirement plans and the great mass of programs that are handled on an unfunded basis outside the pension plan. The New York City programs are hard for me to mention on an objective basis, since, being an actuary, I can at least guess the potential impact of these programs on my tax bill. Therefore, I shall leave these to somebody who can approach them on a more dispassionate basis.

I turn now to the second specific category that I have been asked to talk about. There are three classes or categories of increased benefits for those already retired. The first two I will not go into in much detail, because they have been thoroughly discussed in prior meetings of the Society. These are the cost-of-living and variable annuities. I will not comment on them, except to state that the performance of the stock market over the last five years has not kept pace with the cost-of-living index. This has created some problems with the variable annuity approach, and, similarly, those plans that provide for cost-of-living adjustments developed some funding cost problems because the stock market did not do its job to pay for the cost-of-living effects that actually took place over the last five years.

A third broad category is what I refer to as "periodic updating." This is a program in which employers periodically increase the benefits for employees after they retire on a systematic basis, but restricted to the amount that the employers can afford to handle on their current level of corporate profits. This method is also used in negotiated plans. We know it has been done, for example, in the United Auto Workers settlement with the auto makers. The ways of increasing benefits vary all over the ball park, and I for one would be interested in hearing ways that you have found to be particularly good. I know of one plan that provides, in the plan, that the benefits will be increased by 5 per cent five years after an employee retires and an additional 5 per cent of the original amount ten years after the employee retires.

If you are dealing with a negotiated plan, it is important to keep in mind that there are certain legal considerations here. An example of this is the recent problem discussed on page 34 of the February issue of the *Employee Benefit Plan Review*, referred to as "The Pittsburgh Plate Glass Company vs. the National Labor Relations Board."

It has bothered me somewhat to talk about early retirement and post-retirement increases as two separate items. I believe that these topics

are really the same problem. The real problem is that a properly designed pension plan, in order to produce reasonable, adequate, and necessary benefits, should also reflect the needs and desires of the individual. No longer is age 65 a reasonable real retirement age. In certain jobs retirement age should be 60 or even 55. The job could be one that is very boring and dull. It is not advantageous to the company to have an employee remaining on the job doing bad work because he is bored. Nor is it reasonable to ask the individual to continue in such a job. Of course, there is also the other side of the coin—no employee should be forced to retire at age 65. If the employee is still getting his kicks out of his work, why not find some way to let him work past 65? Let us try to design pension plans that recognize needs and productivity that do not become inflexible personnel rules.

MR. RODGER R. PATRICK: The current practice in this area is such that many different types of preretirement death benefits are provided under pension plans. There are three principal purposes of these preretirement death benefits. One is to provide equity of treatment or to prevent the employees from feeling some form of loss of value in case of death just before retirement; a second is to provide some form of income to the dependent spouse until social security becomes available; and a third is to attempt to provide adequate income to a dependent spouse for the rest of her life. In the first area of protecting the pension value there are three commonly used approaches. Perhaps the one that is the most used is an arrangement that provides income to a spouse for the rest of her life or until she remarries. This benefit is usually determined as a portion of the deceased employee's accrued benefits. It commonly is available only if death occurs after the early retirement age. It frequently is limited to a dependent spouse rather than available to any spouse. The benefits provided are usually about 50 per cent of actuarially reduced retirement benefits determined as if the employee had retired on his early retirement date. There is commonly some minimum period of marriage required before the employee's death, such as two years.

Another method that is frequently used to ensure equity of treatment is a preretirement contingent annuitant option. Under such arrangements the employee elects to take less when he ultimately retires in exchange for protection should his death occur while he is still an employee. These arrangements usually require him to elect a comparable postretirement option. Obviously there is considerable administrative detail involved in a company's making options of this type available. The big advantage

over the automatic providing of the benefits is that, if the death benefits are provided as an option, those employees who make the election pay for the cost instead of its being paid for by the company.

A third method that is intended to provide equity among employees or prevent the employees from feeling that a potential loss of great value could occur in the event of death before retirement is the provision of a lump-sum benefit related to the employee's period of participation in the plan. For example, this could be 3 per cent of pay for each year of participation in the plan. Arrangements of this sort are quite common for airline pilots, inasmuch as companies in this industry have assumed contributions that were previously made by the employees. Obviously this could have other applications—in fact, as we look at savings plans and profit-sharing plans, this is the common type of death benefit provided.

I would like to mention two other types of commonly used death benefit arrangements in industry, although they are not provided as pension benefits. These are called transition benefits and bridge benefits, and they are used to provide income until social security begins. As many of you know, these are prevalent in the automotive industry, and the transition benefit provides $175 for 24 months to eligible classes of survivors: a class A survivor is a widow who has been married to the employee for one year; a class B dependent is a widower to whom the employee has been married for at least one year; a class C survivor is an unmarried child under 21 or a dependent child under age 25; class D survivors are dependent parents.

Bridge benefits are provided certain widows or widowers and are also equal to $175 per month. These benefits are paid until age 62 or until the survivor becomes eligible for social security benefits. Such benefits are not paid if the surviving spouse qualifies for a mother's benefit under the social security system. These benefits stop at remarriage or death.

In the third area, providing adequate funds for retirement income for the spouse, not very much is being done in pension plans. This may be because such benefits would not meet the test of being incidental that I will mention later. One form of this that has been common in the past but is not frequently available at this time is one that is equal to 100 times the expected normal monthly retirement benefits.

One example in industry of a preretirement survivor's benefit in which you may be interested is that provided by General Motors to its UAW employees. Under this plan the employees are eligible after age 55 and the attainment of 80 points, where a point is credited for each year of age and each year of service, or after age 55 and ten years of service. The benefit that is payable to the widow or widower is 55 per cent of 95 per

cent of the early retirement benefit the employee would get if he retired on his date of death. The employee must have been married at least one year. The 95 per cent is adjusted by 0.5 per cent for each year of difference in the ages of the employee and the spouse. This benefit is not paid for any month that the surviving spouse is getting the $175 survivor's benefit. Similar benefits are provided in the steel industry, the can industry, and the electrical equipment industry.

A common question by an employer is, "What is reasonable?" Fifty per cent of earned benefits may be reasonable to an actuary, but is it to an employee or an employer? There are many modifications of this theme, such as paying 90 per cent of the benefit for ten years. This can be explained by comparison with a ten-year certain postretirement option.

The major criticism that I have of current practices is that the primary impetus toward furnishing the preretirement death benefits is the desire to overcome a feeling on the part of the employees of potential loss of value or to keep key employees from retiring to get death benefit protection. Need is not very often a major factor in determining these benefits.

A second criticism that I have pertains to the lack of co-ordination with other benefit programs such as group term life insurance and social security.

One last criticism is of the failure to look ahead to the implications that providing preretirement death benefits can have for the postretirement period. It is not at all unlikely that the concepts of preretirement death benefits will be extended into the postretirement period. Of course, if this is done, the cost implications will be very great. This is an area requiring some form of tapering if company-paid postretirement benefits are not to be provided. To a degree, a comparison can be made with the past practice of providing quite large amounts of group term life insurance during the retirement years.

The results of the current practice are such that values very close to the actuarial values of the employee's earned pension are frequently being paid from the company's retirement plan. Taken in combination with thrift plans, profit-sharing plans, and group term life, very large benefits are available. Although very large benefits are being paid, the cost for them is not great, due to the relatively few deaths that occur among active employees.

In an attempt to crystal-ball the future, I would hope that there will be better co-ordination of preretirement death benefits from all sources and that attempts will be made to adapt to a need that relates to total death benefits rather than to react to questions of employee equity.

I am very much afraid that we will feel the impact on postretirement

benefits in the form of greater concern about assurance of income to the employee and his spouse. The likely result of this is that the cost of pension plans will be significantly increased.

I also visualize greater utilization of pension plans to provide the first $5,000 of death benefits because of the relative tax advantages of doing so compared with utilizing group term life insurance.

I would like to comment briefly on problems relating to integration with social security. We all know about the various reduction factors that are required by Revenue Ruling 71-446 if death benefits are provided in an integrated pension plan. You must be careful to apply these reduction factors in such a way as to properly determine the maximum permissible benefits under the normal retirement formula. I think that the only instances in which reduction factors are required are those in which the death benefit itself is integrated with social security. With this in mind, I visualize the possibility that we may see nonintegrated preretirement death benefits under pension plans in order to attempt to avoid some of the problems of integration with social security.

I would also like to caution you about the problems of assuring the Internal Revenue Service that the death benefits are incidental. There have been some specific rulings on this point, among which there are indications that a plan that provides death benefits equal to 100 times the expected monthly pension benefit will be satisfactory. They also indicate that a death benefit equal to the actuarial reserves will be satisfactory. Beyond this, it may be necessary to demonstrate that the cost of the benefits provided for any employee is not greater than 10 per cent of the total cost of the plan for death benefits and the other benefits provided by the plan.

A last comment on preretirement death benefits concerns how they should be handled for an employee who leaves with vesting and how they should be handled on plan termination. As long as they are limited to employees eligible for early retirement, vesting may not be a problem, but in both of these areas arguments can be made for keeping the death benefits.

In the area of disability benefits in pension plans, it would appear that the objective is pretty thoroughly established and that the major intent is to provide a reasonable amount of retirement income to the employee for the rest of his life. The current practice in this area is to provide benefits after an eligibility period of five to ten years of employment. The amount of the benefit usually is directly related to the normal retirement benefit formula. Frequently twice the amount of the formula is payable until the employee qualifies for social security benefits, the amount pay-

able after that being equal to the normal retirement formula. In other instances a flat supplemental benefit is payable until social security begins. Occasionally all or part of the service remaining to the normal retirement date is included in determining the benefits, and it also is not uncommon to have some form of minimum benefits.

The definition of disability usually is quite rigid, and frequently a six-month waiting period is required. As a means of simplifying administration, many plans tie the definition of disability to social security. With liberalizations by social security in determinations of disability, a higher-than-anticipated incidence of disability can result. This might be a good place to mention the particular problems that relate to integration with social security under pension plans that provide disability benefits. If the rules for determining disability under the pension plan are not the same as those used by social security, it is necessary to treat the disability retirement as an early retirement for purposes of testing the plan for integration with social security. Even if the plan does use a similar definition, the maximum offset for social security before age 65 is 64 per cent of the employee's actual disability benefit under social security at the time of his retirement. Furthermore, if disability benefits are provided, the maximum limitation available for normal retirement is reduced by 10 per cent.

Although there has been more purpose in the disability area than in the preretirement death benefit area, I believe that there is a serious lack of evaluation of disability benefits that will be payable from other benefit plans, such as long-term disability, social security, and group term life.

The eligibility requirements of at least five years of service are arbitrary at best and may eliminate some employees for whom there is a great need for coverage. On the other hand, payment of benefits for life may be inappropriate for many employees because of the unlikelihood that certain types of employees would have continued in the work force for more than a few years.

The results of the current practice are such that for industrial employees of large corporations a reasonably high level of income is replaced from pension plans and social security for long-service employees. For employees with relatively short periods of service the amount of benefit is not likely to be adequate. For salaried employees there has been a noticeable movement away from providing benefits from pension plans, due to the prevalence of long-term disability plans.

Looking into the future, I anticipate that there will be continued replacement of disability benefits and pension plans with long-term disability plans. On the other hand, if the current significant increases in

long-term disability premiums continue, I anticipate that many companies will discontinue the long-term disability plans in favor of providing disability benefits from their pension plan or on a self-insured basis.

Since I have this opportunity, I would like to mention several more general topics that some of you may wish to discuss:

Is there really such a great tax advantage to employers under qualified pension plans, and is what there is worth the agony of designing plans within the present structure? Are we not likely to see separate unqualified plans as supplements to or umbrellas over qualified plans?

What is the significance of team audits by the IRS and of the use of the pension specialist?

Is there any movement toward employee involvement in designing pension plans?

Is it not likely that pension actuaries will have to be concerned with questions of design of total compensation programs in the near future?

What good methods (short of refunds) have been established for handling past employer contributions when future contributions are discontinued?

Are money-purchase or profit-sharing plans viable as a means of providing both adequate and reasonable pension benefits?

How should supplemental early retirement, disability, and preretirement death benefits be handled on plan termination?

Is a new attitude developing in the IRS pertaining to high-paid union groups? If so, is it valid?

How can consistency of treatment be developed in our tax laws? Why should group term death benefits be taxed one way and pension death benefits another?

I would like to express the hope that, during the many deliberations now going on in Congress and elsewhere, some consideration will be given to aspects other than apparent weaknesses in the private pension system. For example, highly desirable simplification could be achieved in such items as minimum and maximum contributions, the relationship of combination profit-sharing and pension plans, integration with the social security definition of an acceptable group, permissibility of salaried-only plans, use of discretionary compensation, and the conflict between the IRS attitude on maximum deductible contributions and the expressed social need for more adequate pension funding. My own view is that federal pension legislation now on the books needs considerable change and that these changes should be part of any new legislation.

MR. RICHARD A. WINKENWERDER: I emphasize to my clients, both at the time a plan is initially established and on subsequent dates when amendments are being considered, that the design of the plan is among the most important considerations. Certainly the design of the

benefits themselves should receive top priority. An employer's entire fringe benefit program should be reviewed in detail so that there will be no unnecessary overlaps or gaps in the benefits being provided. One of the more important aspects of co-ordination or integration of benefits relates to the social security system.

Many of the benefits currently included under the social security system were included when the Social Security Act was initially established in 1935. However, there have been periodic additions to and expansion of the benefit structure, including the addition of minimum and maximum family benefits, disability benefits, and hospital and supplementary medical benefits.

The benefit amounts for the various types of benefits provided and the various categories of eligible recipients have, for the most part, been increased and broadened since the act was first established. The primary insurance amount, for example, payable to a retired worker who was eligible for the maximum amount of benefits has increased from $85 to $295 per month. Since most other benefits are directly related to the primary insurance amount, these have increased accordingly. The minimum and maximum benefits have also been increased from time to time, and, in addition to specific benefit increases for future eligible recipients, there has been a trend toward increasing benefits across the board for persons receiving benefits at the time of amendment of the act.

Eligibility requirements for benefits, that is, the requirements relative to insurability and other governing aspects, have been generally liberalized. The initial combined contribution rate for both the employer and the employee was 2 per cent of the first $3,000 of earnings. That rate has now been increased to 9.2 per cent of earnings up to $9,000, excluding contributions required for the hospital and supplemental medical benefits. The dramatic changes in the Social Security Act in recent years obviously causes one some concern when he is designing the benefit structure of a plan. A review of historical trends will show that the primary insurance amount has averaged around 35 per cent of the taxable wage base. A study of the more recent changes in the taxable wage base indicates that the base has been increasing at the rate of approximately 4 per cent per year, which obviously means that the primary insurance amount has been increasing at approximately 4 per cent a year.

The various changes in social security should have had an effect on the design of a plan and the amount of benefits to be payable from the plan. If the Social Security Act is amended infrequently, plans can be reviewed with the same frequency to see whether or not any modifications should be made, and, if so, the plans amended at that time to account

for the necessary changes. However, because the Social Security Act, at least in recent years, has been amended with ever increasing frequency, it would appear appropriate, to the extent possible, to design plans in contemplation of, or to account for, future changes in order to decrease the frequency with which plans must be modified.

If a plan is of the unit benefit excess type and if the basic formula has been so designed that the plan benefits plus those payable from social security are providing benefit amounts which are deemed reasonable, then it would appear appropriate to have the integration level of the plan maintain a reasonable relationship to the social security taxable wage base. If the plan has an integration level which is in some fashion related to the current Social Security Act, then an amendment of the plan to change that integration level must be accomplished. Perhaps a better way would be to provide for an integration level which will automatically change as the social security taxable wage base changes.

The continued increase in the contribution rates and the amount of earnings which are subject to those contribution rates has resulted in significant increases in both the employee's and the employer's costs. This should serve to emphasize the importance of integrating a plan's benefits with those provided by social security on a current basis.

Increasing cost to the employee of providing for his share of social security benefits combined with other increasing taxes and increased cost of living should be considered when discussing or reviewing the requirement for mandatory employee contributions. This may be an underlying factor in the apparent trend to produce plans which are paid for totally by the employer.

Social security has certainly had an impact on plan design relative to disability benefits, in terms of both the amount of benefits payable and the conditions under which an employee will qualify for the benefits. Since the eligibility requirements for a disability benefit under social security are not overly strict, it would probably be an unusual case where an employee qualified for a disability benefit from a private plan and was not entitled to one from social security. Thus the integration of the amount of disability benefit should be considered as important as the integration of the service retirement benefit. Revenue Ruling 71-446 provides that, if the plan benefit is to be considered a health benefit and not an early retirement benefit, the employee must be eligible to receive a social security disability benefit. Some employers might not wish to require that social security benefits be payable. In this case, the rules for early retirement would apply. The advantage of the former method is that larger disability benefits may be paid.

Increases in the amount of benefits payable under the Social Security Act can have an impact on changes in benefit amounts under a private plan. Obviously, if the private plan is of the offset variety, the amount of benefits payable under the plan will automatically decrease as social security benefits increase if the amount of the offset is related to a person's social security benefits when he retires. Under the unit benefit excess approach, if the integration level provides for automatic changes as the social security taxable wage base changes, the benefits payable under the private plan will automatically decrease as this phase of the Social Security Act is altered. Significant changes in social security could also have an effect on the amount of benefits available under a private plan, by causing delays in plan amendments which might otherwise have been adopted to improve plan benefits.

It would appear that the importance of integrating private plan benefits with social security is changing and that integration is becoming more important. Part of this importance is governed by the employer's philosophy relative to plan benefits. His goal may be to provide adequate, but not excessive, benefits which will make an employee's retirement years relatively financially secure. For employers whose retirement goal is defined as above, frequent liberalizations in social security simply serve to emphasize the need to integrate and to keep the integration requirements current. This is further emphasized by the current profit squeeze and by an employer's concern over cost control. There are two basic ways to accomplish his desires. One is by periodic amendment of the plan to compensate directly for social security changes; the other is to provide for automatic changes to the extent permitted by law. The recent return of the 37.5 per cent rule is also significant in the continued importance of integration with social security.

Revenue Ruling 71-446 specifically enables a plan to provide for automatic changes in the integration level for an excess plan and to provide for immediate recognition of an employee's social security benefit at the time of his retirement in an offset plan. It provides for several distinctive methods of establishing a plan's integration level.

For a flat benefit excess plan, the integration level for an active employee must be his covered compensation as determined either by Revenue Ruling 71-446 or by any future change in the Social Security Act up to the date his benefits commence. This approach produces different integration levels for participants under the program. In order to standardize the integration level, a single level which is not larger than the covered compensation of any current or future participant could be used. This may simplify the administrative problems, but it will result in higher

costs to the employer if all other factors remain unchanged. For a retired employee the integration level must not be more than his covered compensation. An integration level selected in accordance with the descriptions above will enable the plan to integrate at the maximum benefit level. An integration level larger than those indicated above can be used, but the excess benefit rate will have to be reduced accordingly.

The plan can use a stated integration level as determined by one of the above approaches and then periodically amend that integration level as changes in the Social Security Act result in changes in the amount of covered compensation. In lieu of that, however, the plan may provide that the covered compensation may be based on the Social Security Act as in effect at any time up to commencement of benefits. Thus, as the act is changed and revised tables of covered compensation are provided by the IRS, such changes may be automatically included in the plan.

On the assumption that one wishes to integrate his plan under the flat benefit excess approach at the maximum level, the choices of integration level are obviously quite restricted. The selection of the approach will undoubtedly be governed by administrative matters, by the possibility of simplifying the explanation of the plan to participants, and by the amount of resulting benefits and the cost to the employer of providing those benefits.

Revenue Ruling 71-446 provides more flexibility in selecting the integration level under a unit benefit excess plan. Some of the methods provide that the integration level will be the same for both past service and future service benefits, whereas other methods permit a selection of a different integration level for past service benefits and future service benefits. One of the choices available is to select an integration level which is equal to each employee's covered compensation. This would apply to both past and future service. As with the flat benefit excess plan, the selection of an integration level based on covered compensation may unduly complicate the administrative aspects and the explanation of the plan to employees. On the other hand, the selection of a single integration level applicable to all employees which is no larger than the smallest amount of covered compensation may increase the cost unduly or provide for a spread of benefits among participants which does not satisfy the goal of the employer.

Another approach for selection of an integration level which would be the same for past service and future service would be to designate, as the integration level for each employee, his wages which will be used in a determination of his primary insurance amount at the time of retirement. Although this approach is probably more theoretically correct than any

of the other approaches available, there is no doubt that it complicates the administrative aspects and the actuary's cost and liability determinations.

Another alternative for selection of an integration level which would apply to both past service and future service would be to select a flat dollar amount which is not larger than the covered compensation of any current or future participant.

If separate integration levels are desired for past service and future service, several approaches are available. For past service one could use the actual social security taxable wage base for each year; as a modification of this, one could use the same approach but use a flat $4,800 for each year prior to January 1, 1959. Another alternative would be to use the covered compensation of each participant for all years prior to the effective date of the plan.

There are also specific approaches for selecting an integration level for future service that could be different from the integration level for past service. One of these is simply to provide that the integration level for each year will be equal to the social security taxable wage base for that year. The second approach is to select a flat dollar amount, which is equal to or less than the social security taxable wage base in each year of future service. For example, under this approach a plan established now could provide for an integration level for each and every year of future service of $9,000.

Both past service and future service integration levels may be established at an amount higher than those described above, provided that the excess benefit rate is reduced. If the plan bases the integration level on covered compensation, it may provide that the amount of covered compensation may be altered in future years as the Social Security Act is amended, or it may provide that the integration level may automatically change in future years as the Social Security Act is altered. These automatic changes can apply to the computation of any participant's benefits up to the date of his retirement.

The selection of the approach to be used for the integration level is affected by many factors. Certainly the complexity of maintaining proper administrative records and the feasibility of explaining the benefit structure to participants and of making projections of future benefits are important factors. Too often the basic concept underlying the selection of the integration level is one that makes a great deal of sense, but the administrative nightmares are overlooked. In the selection of the level, one should be cognizant of the frequency with which future changes might be required in order to keep the basic concept of the plan's goal un-

changed. The attitude of the employer relative to his benefit goal for certain groups of employees (for example, low paid or high paid) could have an effect on the integration level selected. Certainly the complications introduced into an actuary's calculations of plan liabilities and annual costs should not be overlooked. Having in mind the employer's goal for benefit levels, the actuary should design a plan which will most nearly satisfy those goals and yet not unduly complicate his calculations.

The unit benefit excess plan approach has probably been the most common one in designing integrated plan benefits. It could well be that the offset approach might become more important. The offset approach is more closely related to the concept of recognizing the amount of social security benefit in the plan design than either the flat benefit or the unit benefit excess formula, since the amount of offset can be related to the actual primary insurance amount payable to an employee when he ultimately commences to receive benefits. One frequently hears the comment that offset plans are difficult to sell because of the negative aspect of determining a plan's benefit and then subtracting from that the benefit to be payable from another source. This can be overcome, at least to some degree, by selling the offset plan as one under which the plan benefit plus the social security benefit will provide benefits at a certain level. One advantage of the offset approach is the ability to provide fairly significant plan benefits for the older, short-term employee.

Both offset plans which provide for the amount of offset to be related to the social security benefit payable at time of retirement and unit benefit and flat benefit excess plans which provide for automatic changes in the integration level can result in complicated problems for the actuary in calculating costs. It would seem reasonable that, to the extent that an actuary recognizes cost of living or inflation in the selection of his salary scales or investment returns, he should accordingly recognize it in the forecasting of integration levels or social security amounts.

Social security integration is not entirely a bed of roses, however. The items to be mentioned are basically negative in tone but, nevertheless, are factors to be taken into account. One of these relates to the actuarial cost estimates for funding. In an integrated excess plan, one must take into account the point in time at which earnings will cross the integration level, which, of course, has an effect on benefits and costs. In an offset plan where the amount of the offset is related to the benefit payable at retirement, one might consider taking into account future increases in social security benefits to determine the cost of benefits payable from the plan. These result in more complicated formulas for valuation purposes.

How about the effect of an integrated plan relative to fees? It is more difficult to draft a plan document that is of the integrated type. Increased fees will result from reviewing the integration requirements and qualifying the plan with the IRS. If benefit projections are prepared annually for participants in the plan, there could be some increase in fee. One will probably spend more time in plan design in the area of achieving benefit goals if the plan is integrated.

Integrated plans have an impact upon administration. The actual computation of benefits upon termination or retirement is a little more complicated and perhaps takes more time. It certainly complicates the record-keeping relative to accrual of benefits under a plan.

What about the effect upon employees themselves? If one is concerned about the employee's readily understanding what benefits he is actually going to be entitled to under the plan, then it is going to take more time and consideration to draft the booklet itself. It is much more difficult for an employee to read and understand an integrated plan description and to estimate his own benefits. Whether a plan provides for automatic increases in the offset or provides for automatic increases in the integration level, or whether a plan is periodically amended to change them, how does an employer sell this change to his employee? How can the employees have satisfactorily explained to them why their plan benefit is now less than it was last year?

Finally, if the plan is integrated and the IRS changes the integration requirements, as has happened several times, then the plan must be reviewed again to conform to the new requirements and to test the goals and concepts as established or altered. An integrated plan means more restrictions on plan design relative to amounts of early retirement benefits, disability and death benefits, variable benefits, and the form of benefit being paid under the plan.

If we had to draw a basic conclusion from this entire discussion, I believe it is fair to say that in spite of costing problems, fee problems, administrative problems, and employee understanding, social security integration is more important today than it ever has been. More care and time should be taken, in the design of plans and booklets, to simplify the administrative aspects, to reduce the necessity for amending the plan periodically, and to improve employee understanding.

MR. MURRAY PROJECTOR: These remarks are in response to one question included in the session agenda: "Is the importance of integration with social security changing?"

Although the latest IRS testament (Revenue Ruling 71-446) has caused much actuarial exegesis, not enough attention has been paid to the importance of integration itself. One benefit of Revenue Ruling 71-446 is that it makes us re-examine the need or desirability of pension plan integration. This re-examination leads to the conclusion that the importance of integration with social security is changing. More than that, it has been changing, and we have for some time been in the situation where integration has (generally) been unimportant, unnecessary, and undesirable.

The IRS looks at an employee's private pension plus his social security as a total retirement income, and sets its objectives for this total. Since the employer contributes to both his private pension and the federal social security pension, the IRS viewpoint is logical. The next step is to declare a proportionate total benefit as the objective. An employee should thus receive a total retirement income (private plus federal) that is the same percentage of his earnings, no matter what his earnings level is.

The following objections may be made to this rationale. (i) A retirement income that is the same percentage of wages for all retirees, independent of the amount of such wages, is not defensible. Theory and practice now conclude that the "proper" level of retirement income lessens as earnings increase. If 60 per cent is proper for the $9,000-a-year employee, then less than 60 per cent is proper at $19,000 a year, and still less at $49,000. How much less is debatable, but not the fact that it should be less. And a proportionate (nonintegrated) private pension plan added to the social security pension does produce a total that reproduces the proper ratios of retirement income to wages. (ii) The continuing IRS derivations of permissible levels for integrated plans have used arbitrary assumptions for quantifying just how much the "employer" is contributing toward his employees' social security pension. Each new derivation of permissible limits has included its unfair share of arbitrary assumptions. The high probability of fundamental changes in social security funding means that the measurement of the employer's share will become more tortuous, more indefensible.

The importance of social security integration has changed considerably. The new limits make integration less advantageous than before, and it was really less advantageous than had been commonly believed. For new plans the consultant should be more aggressive in promoting proportionate plans.

MR. JOHN W. WOOD, JR.: Benefit design is the most important part of any pension plan design. The objectives of benefit design, as Mr.

Winkenwerder said, can be summarized as the requirements (1) that the benefit formula be adequate, (2) that the benefit design have a reasonable cost for the client, (3) that the design be communicable, and (4) that it be administrable.

It is the essential task of the consulting actuary to be at the center of the benefit design process, and, although nonactuarial consultants have a role in the process, the actuary must not forget his total professional responsibility or let others forget it. Merely accepting a benefit formula from another source does not allow the actuary to discharge his full responsibility as a consulting actuary.

MR. JAMES F. A. BIGGS: The preretirement death benefits can cause some grievous problems in connection with an integrated plan. We were working with one recently in which we designed an offset plan. The employer said, "I'd like to have a preretirement spouse's benefit." We costed the benefit, and its cost came out to an additional 7 or 8 per cent of pay, but the change that we would have to make in the offset provision was going to cost us roughly another 12 per cent of pay. At that price the employer decided he would like to have a preretirement spouse's option instead.

Another point I would like to mention is that Mr. Winkenwerder and I read Revenue Ruling 71-446 a little differently in the disability area, and I would be interested in the clarification of this. I read it to say that you cannot provide employer integrated disability benefits with a more liberal definition of disability than the social security definition.

MR. IRA COHEN: In order for a disability benefit to be treated under the disability provision, the requirement is that the individual be eligible for and receive disability benefits under social security. In addition, you can have any other requirement that you wish, so that you can be considerably more restrictive. The only thing is that, if this requirement is not met, you must treat the situation as an early retirement.

MR. DEAN A. WAHLBERG: There are a number of ways of providing preretirement death benefits through group life insurance or through a type of insured reversionary annuity. Where would you use these types of vehicles, and where would you simply fund these benefits under the plan without any sort of insurance vehicle?

MR. PATRICK: As a consultant I have little concern with most large plans about the insurance risk of providing the preretirement death bene-

fit, so I would see no particular need for using life insurance to protect against the risk of providing these benefits. I think that where you really get into a hassle is in the different tax treatment. Using the reversionary annuity, as you called it, to provide survivors' benefits has so many tax problems related to it. For example, you have to commute the value of the payments and include them in the estate for tax purposes, and you have the question of where the beneficiary is going to get the money to pay the taxes on that commuted value. This has in some instances resulted in companies actually saying, "Now we've got to have some more life insurance in order to give the beneficiary the money to pay the estate taxes"! I am somewhat more inclined to stretch a point and try to provide these benefits from a pension plan. There is taxable income, but at least as you get it you pay the tax instead of having this question of paying estate tax on it. I think we are on the horns of a real dilemma here. You cannot provide what most people would consider to be an adequate survivor's benefit out of a qualified pension plan because of the incidental benefits test. So, if the true purpose is to provide a reasonable type of benefit wrapped around group insurance, then I am critical of the tax laws that we have to work under.

MR. CARL DUNCAN: Ever increasing levels of social security benefits have been sold to us poor taxpayers as necessary for the poor senior citizen to keep his income in some relationship with the cost of living. I suggest that, of all the areas of plan design that we in the private sector are going to have to address ourselves to in the next ten years, it is this area of how a private pension system solves this problem or at least attempts to keep pace with inflation that is going to require the most attention. Would it be possible or desirable to have a plan design which increases the retiree's benefit on some kind of cost-of-living–adjusted basis but provides for an offset for future social security increases which might come along in excess of the cost-of-living increase?

MR. HEALEY: I have many reservations, as others do, about a cost-of-living index. Larry Coward from Toronto has expressed reservations about the propriety of using cost-of-living indexes for retired lives. But your offset suggestion is a great idea.

MR. MURRAY L. BECKER: Getting back to the offset method of integration, we have already heard that there are problems in figuring out what to do at early retirement. I wonder about the practicality at normal retirement. When someone reaches age 65, what is the amount of

offset, bearing in mind that the social security wage base is creeping up and up? There is now a substantial category of employees who have not made the maximum taxable wage base for their working career. Social security is dependent on earnings with other employers and moonlighting that the employee may have done—the employer often does not have his own salary history for the employee, let alone that of other employers. When the employee reaches age 65, I understand that he can write to the Social Security Administration. What happens if he doesn't choose to write? Is it a good idea to underpay the employee initially until you find out later what the ultimate social security benefit is?

MR. WINKENWERDER: If you relate the offset amount to the social security benefit payable at retirement, then I think you automatically dispense with any problems during the working period. The only problem is how you get the amount of social security benefit in time to determine the amount of the plan benefit when he retires. The social security benefit is going to be related to earnings with all employers. One thing you might do is to review the employee's level of earnings with your client to come up with what you consider to be a reasonable estimate of what his social security benefit might be. It might be appropriate to make a request of social security, perhaps a year or so in advance of the employee's normal retirement date, to have on hand his earnings history so that you can estimate more accurately what his benefit would be. If you want to make sure that he is getting enough, pay him a benefit which you know is high and reduce future benefits by the amount of the excess paid when his social security benefit is definitely determined.

MR. THOMAS MITCHELL: One interesting thing is that social security recomputes benefits including earnings for the final year, in which the employee retires. We had to change one plan to avoid double calculations, before and after retirement.

MR. KIRAN N. DESAI: One of the major problems of an offset plan is the employee who has had service with other employers. If he has had a vested pension from three plans and each plan takes the offset of social security, he is going to end up with no pension. I think that offset design should consider the fact, even though Revenue Ruling 71-446 has not, that the offset should be based on the individual's working lifetime. It should be something divided by 40 times the offset, and the same approach applied to early retirement could lead to a benefit design which would not give a higher benefit under offset plans for a person who retires early.

MR. JAMES J. CRYAN: Our office uses a technique which I do not think is unique. We use very commonly 1.5 per cent of social security for each year of service, up to a maximum of 50 per cent, and we spell out in the plan rules that we will use the actual earnings up to the social security base as we have recorded them during employment with the company. We further stipulate that for the years before we will use the maximum taxable earnings unless the employee gives us the actual figures for those years. He can write to social security. The personnel people usually remind him to do this, and this seems to get around a lot of the administrative problems. It gives us an answer which is very close and seems to be practical. It is related to the employee's earnings with this employer and seems to work out quite well.

MR. BOYD S. MAST: I happen to be a real believer in final average offset plans as a medium for satisfying benefit objectives for a typical group of salaried employees, and I want to allay the fears of persons who have a great deal of apprehension about the administrative complications. By defining the social security benefit as the amount determined by the actuary on the basis of the company earnings record of the individual, you avoid dealings with the social security office. There are a couple of alternatives for early retirement that are fairly well spelled out in Revenue Ruling 71-446. Another early retirement alternative is to omit the application of the offset until age 65 or age 62, in the interest of improving early retirement benefits. If you are on a computerized record system, the whole problem of determining the social security benefits annually is very easily accommodated.

THE OUTLOOK FOR PUBLIC EMPLOYEE RETIREMENT SYSTEMS

1. How has the growing fiscal crisis in states and cities affected public retirement plans in the following areas?
   a) Increased union activity among public employees.
   b) Pressures of collective bargaining at a time when benefit levels are already more generous than those available in the private sector.
   c) Legislative attempts to defer funding.
   d) Will the establishment of public pension commissions lead to a return of sound plan design and financing?
2. Investments:
   a) What is the composition of public portfolios?
   b) Who controls them?
   c) What are the ecological stresses?
3. Revenue Ruling 72-14: Must public plans now qualify?
4. What are the current techniques for providing postretirement adjustments? How are these adjustments being funded?

MR. ALBERT ALAZRAKI: New York State has eight retirement systems which cover about one million employees and have assets of $13 billion. Contributions are running approximately $1.2 billion per annum. The largest system is the New York State Employees' Retirement System, which covers the vast majority of state employees. Employees of local governments outside New York City have the option of participating in these plans. Teachers outside New York City are covered under the New York State Teachers' Retirement System, which has approximately 200,000 active members and assets of $3 billion. The remaining upstate system covers policemen and firemen. In New York City there are five separate retirement systems, covering general employees, teachers, firemen, policemen, and noncertified employees of the Board of Education.

The growth of these plans as measured by assets, number of members, or benefit payments has been phenomenal, particularly in recent years. For example, over the last ten years, the assets of the New York State Teachers' Retirement System have almost quadrupled. This incredible growth rate has been due to salary inflation, benefit improvements, an expansion of educational services, and an increase in the population of school-age children. The growth rate may be expected to decline as the demand for teachers continues to subside in response to declining birth rates. This trend will be accelerated if there is a breakthrough in teaching

technology which can substantially reduce the pupil-teacher ratio. The growth patterns in the other retirement systems are quite similar although, perhaps, not so dramatic. They, too, have experienced rapid growth, and their growth rate is declining as both the city and state are cutting back on services or, at least, on the expansion of services in order to avoid budgetary deficits.

When the New York State Teachers' Retirement System was established in 1921, it was a contributory system with the goal of providing a half-pay retirement allowance to a teacher retiring at age 60 with twenty-five years or more of service. Employee contributions were set at 4 per cent of salary, and it was anticipated that the money-purchase annuity provided by these contributions would approximately match the 1 per cent benefit formula which employers were providing. Final average salary was measured over the last five years of service. The half-pay goal was never realized, since inflation dwindled the value of employee contributions in relation to final salary.

A disability retirement benefit was also provided to members with fifteen or more years of service. This benefit, exclusive of employee contributions, was usually equal to 20 per cent of final average salary. There were no benefits for death or withdrawal except for the return of employee contributions with interest.

For many years no truly significant benefit improvements were enacted. Since 1949, however, there has been a sustained trend toward the granting of more generous pension and ancillary benefits. In 1950 teachers were allowed to retire at age 55 with twenty years of service. This early retirement feature was optional and required additional employee contributions. In 1954 a modest death benefit was introduced. The death benefit was geared to service and provided a maximum of 50 per cent of final average salary after twelve years of service. In 1955 and 1956 members were allowed to receive pension credit for service in excess of twenty-five years. In 1959 the death benefit was improved.

In the 1960's the trend toward the payment of more generous pension and ancillary benefits continued. A death gamble benefit was introduced. A vesting provision was also enacted. Originally, vesting was only partial and was available only to members with fifteen years of service. Later the eligibility requirement was reduced to ten years, and, still later, full vesting was provided.

In 1965 the plan was made essentially noncontributory, as employers assumed responsibility for the payment of all or a portion of employee contributions. The final step toward the establishment of a noncontributory system was taken in 1968. In that year benefits for service retirement

were also improved substantially, and the legislature passed a bill providing for supplemental pension payments geared to the cost-of-living index. In 1969 the final average salary period was reduced from five years to three years. In 1970 there was an across-the-board increase in benefit payments of all types.

These benefit improvements have made the New York State plan one of the most generous in the nation and also one of the most expensive, although it is relatively inexpensive compared with the other plans in New York State.

In 1949 the contribution rate was 8.4 per cent. Currently it is 18.8 per cent. Last year newly retiring teachers received a retirement allowance which, on the average, was equal to 60 per cent of final average salary. These teachers had thirty years of service on the average. Moreover, it must be remembered that a portion of their retirement allowance was provided out of their own contributions. Nevertheless, there is no doubt that the plan is one of the finest plans for teachers in the nation. Recently the American Federation of Teachers National Pension Advisory Committee conducted a study in which it rated state teacher retirement systems, and only two states, Georgia and New York, received the highest rating.

The plan also compares favorably to private pension plans, as do the other public pension plans in New York State. In March, 1970, the Syracuse Governmental Research Bureau, Inc., published a report comparing private and public pension benefits in New York State. Included in the study were forty-three of the fifty largest private employers in the state and seven major unions. None of the private plans have a normal retirement age of 55, nor do they have a three-year final average salary. Both of these provisions are common in the public plans. Many of the private plans are contributory, whereas all of the public plans are noncontributory. Most of the private plans are integrated with social security. The public plans are nonintegrated. In addition to receiving more ample benefits, the beneficiaries of public plans receive more favorable tax treatment, in that their benefits are exempt from New York State income tax.

The prolonged trend toward benefit improvements and the resultant increase in costs has led to a growing awareness of and concern about public pension plans. Last year this concern found expression in a bill establishing a permanent commission on pensions in New York State. In signing the bill creating the commission, Governor Rockefeller declared, "Sharply rising costs of retirement, public reports of abuses and excessive benefits, constant pressures to improve available benefits, whipsawing among employee groups and government employees, and the growing gap

between retirement benefits received by public employees in New York and those employed by private industry demonstrate the critical need for this commission."

There has been a long history of pension commissions in New York State. In 1914 the mayor of New York City appointed a pension commission to examine the city pension plans, which, at the time, were floundering because of abuses of the final average salary provision and because of inadequate financing. These plans had no direct source of contribution income, and whatever income they did receive bore no relationship whatsoever to the ultimate cost implications of the benefits being provided. The commission, therefore, recommended the creation of jointly contributory actuarial reserve systems, and their recommendations were implemented by the formation of the New York City systems.

In 1918 a similar commission was appointed to examine the upstate retirement systems, and their work resulted in the creation of the New York State Employees' Retirement System and the New York State Teachers' Retirement System. Other commissions were later appointed, but perhaps none was so important, at least in terms of the scope of its study, as the commission appointed in 1965 by the governor of New York State. This commission came to be known as the Moore Commission, because it was chaired by Dean Moore of the State Industrial and Labor Relations College at Cornell. The commission was appointed in response to a growing concern over the complexity and cost of public pension benefits. The commission recommended the development of a uniform and equitable plan for all future employees. Unfortunately, the commission's recommendations for a single plan were never released, because the Taylor Law opened the benefit structure to collective bargaining negotiations.

The latest pension commission was charged with the responsibility of submitting a report of its findings to the governor and the legislature no later than January 15, 1972. The commission was not appointed until November 22, 1971, and, therefore, it could submit only a preliminary report of its findings, in which it recommended that no new pension and retirement system legislation be enacted until such time as it was able to make additional analyses and recommendations.

What does the future hold for the public pension systems of New York State? Having come through a period of convulsive growth, the systems are now the focal point of a stormy controversy which will continue for several years. The public eye is firmly fixed on the retirement systems, as a result of disclosure by the press of abuses. Abuses do exist; some are minor, others are blatant. Some exist in the plan for state legislators, and

this has aroused public indignation to its highest pitch. Recently an upstate assemblywoman called for correction of abuses. Unfortunately, it is not always a simple matter to close loopholes, because of a constitutional guarantee against the diminution or impairment of benefit rights. Last year the legislature passed a bill which disallowed the use of accumulated vacation pay in the computation of final average salary. This year the court of appeals ruled that the provision is unconstitutional as it applies to present members of the New York State Employees' Retirement System, because in 1957 there was an administrative ruling stating that such compensation is includable in final average salary.

The concern about rising costs will not cease, in particular, if the state is forced to again raise taxes in order to meet its pension and other obligations. This year the state was caught in a fiscal crisis, and it had to raise taxes and defer the payment of state aid apportionments to school districts. Even before this most recent increase, New York State was the most heavily taxed state in the nation. Approximately 11 cents out of every dollar in the state budget is spent on pension and social security benefits. The taxpayer is concerned; he wants to know how his money is being spent, and he is no longer willing to view pension benefits as being a matter for discussion exclusively among actuaries, lawyers, and public administrators.

The controversy over the adequacy or overadequacy of public pension benefits will continue to rage. The unions will readily confess that public pensions compare favorably with private pensions, but they contend that it is the private pensions which are deficient, and the public pensions, which have been in existence a much longer period of time, are serving as a beacon to guide their path. They also note that private pensions have come under close scrutiny in Washington, where this year the leaders of the Senate Labor Panel have pledged to press for reforms to establish minimum vesting standards, minimum funding standards, and additional disclosure requirements.

If the demand for additional benefits continues to collide with the taxpayers' reluctance to assume additional obligations, there will be talk of reducing the funding requirement. Actuaries have an obligation to educate the public about the need for funding. Most of the retirement systems are currently in the process of accumulating additional assets at a substantial rate. The public cannot understand why contribution income and investment income exceed the benefit payout by so wide a margin.

The final say as to the direction of the public systems rests with the legislature. I am hopeful that despite the charged atmosphere their de-

cisions will be consistent with principles of sound design and adequate financing.

MR. THOMAS P. BLEAKNEY: In 1960 assets of all of the state and local retirement systems in the United States amounted to $18.5 billion. Of that amount, 56 per cent was invested in government bonds, 32 per cent in federal bonds, and the balance in state and local bonds. Corporate bonds represented another 32 per cent of the total. The remainder was mostly in mortgages (7 per cent) and corporate stocks (2 per cent).

By 1970, ten years later, the assets about tripled, going up to $54.9 billion. Despite this growth, the actual dollar holding in federal bonds went down, from $6.0 billion to $5.2 billion. The latter amount was only 9 per cent of the 1970 total. State and local bonds showed an even more dramatic reduction, from $4.3 billion to $2.2 billion. The latter represented only 4 per cent of the total, compared to the previous 23 per cent. The 1970 investment shift was mainly to corporate bonds, which went up from 32 per cent to 55 per cent. The share in mortgages nearly doubled, increasing from 7 per cent to 12 per cent.

Probably the most significant change in the ten-year period, however, was in corporate stocks. This portion of the total holdings went from 2 per cent to 13 per cent. This reflects the increasing number of public systems having the opportunity to invest in corporate stocks because of changes in state constitutions, changes in their laws, or just changes in investment strategy. This trend is led by the state-administered systems. The locally administered (those run by the cities, towns, and so on) have shown some of the same growth in common stocks, but much less significantly.

On another topic, the public sector has seen a great deal of activity in the area of postretirement adjustments. Two different types of adjustments are found generally, the ad hoc and the automatic. In the ad hoc postretirement adjustment, the legislature or other governing body responsible for the system authorizes a one-time increase in benefits to recognize changes in the cost of living or standard of living. This is the basis that social security has used. Under the automatic approach, once a basis of adjustment is established in the law, it causes increases to occur again and again on a continuing basis.

Sometimes both approaches are used. For example, several states have an automatic 1.5 or 2 per cent annual increase in benefits. The comparison of that particular growth rate with what has actually happened to the consumer price index or an index of living standards may show that the 1.5 or 2 per cent benefit increase has fallen behind, and an ad hoc adjust-

ment is also necessary if the index is not to get too far ahead. This is a major shortcoming of the flat percentage increase approach.

An integral part of the benefit programs of some states is the equity annuity that goes up or down according to the gains or losses in the particular portfolio of securities, generally common stocks. This concept works out beautifully from a financing standpoint but may present substantial problems in communicating the full impact of the program to the employees. This is particularly true in a period where the stock market is going down but the price of living is going up.

For this reason, an automatic program geared to the consumer price index has a substantial advantage. Any basis of growth will probably be compared with the consumer price index anyway. From the actuary's viewpoint, the major disadvantage of tying pensions to the consumer price index is financing, in that nobody knows what the consumer price index is going to do. Such a program thus adds one very substantial variable that does not exist under an equity-related program, where whatever happens to the equities also happens to the pensions. But that is only our little problem as actuaries. It is not, nor do I think it should be, a problem to those who establish and manage the systems.

That brings me to the subject of funding, a subject dear to the actuary's heart. At the annual meeting of the Society last fall, I presented some remarks about the pension financing crisis in Washington State, as an example of a problem too prevalent in the United States and Canada (*TSA*, XXIII, D465). Rather than repeat most of those remarks, let me give an epilogue which may present a ray of hope, at least in this one state.

State contributions to meet the costs of currently accruing benefits of the Washington Teachers' Retirement System were cut off in 1971, in separate actions by the governor and the legislature. Both actions have been the subject of litigation. The only case finally adjudicated at this point is the one involving the governor's edict, and the decision there is clouded by considerations extraneous to the funding question. Nevertheless, some of the language in the state supreme court decision might be of interest. After citing an earlier case which vests pension benefit rights all but irrevocably in each state or local employee as part of an implicit contract of employment (*Bakenhus* v. *Seattle*, 48 Wash. 2d 695, 296 P. 2d 536, 1956), the 1972 decision goes on to say:

> We conclude, therefore, that where, as here, the legislature has over a span of years indicated a deep concern with the actuarial soundness of the retirement system, and that concern has culminated in the express adoption of a systematic method of funding to ultimately attain the desired soundness, then the principle of systematic funding so adopted becomes one of the vested contractual pension

rights flowing to members of the system. This being so, it follows under *Bakenhus* that such a vested contractual right cannot be unilaterally modified except for the purpose of keeping the retirement system flexible and maintaining its integrity, which modification in turn must be reasonable and bear some material relation to the theory of a pension system and its successful operation, else the vested contractual right becomes unconstitutionally impaired.

This may or may not ultimately mean that future legislatures must appropriate pension contributions concurrently with salaries, just as they do at present for such items as social security taxes. Nevertheless, the outlook is surely more optimistic than before to one believing in current payment for currently accruing benefits.

CHAIRMAN KENNETH ALTMAN: To go a bit further on the subject of investments, I would like to mention that in New York State we use professional money managers for our common stock funds, and professional employees of our own for the bonds and mortgages. In terms of the ecological stresses which face us now, there are naturally pressures for us to invest in such socially desirable and worthwhile projects as urban development, low-cost housing, and so forth. However, with plans having benefits committed to final average salary at levels as liberal as 2 per cent per year of service and available at an age like 55, nonintegrated, it would appear that we must attend to first things first. Consequently, at least in New York State thus far, our primary concern has been yield. Ecological stresses are important, and in the past we have paid attention to such considerations as purchasing municipal tax-free bonds at a time when it was difficult to sell them to the private sector, but we are not doing that at the present time.

MR. HUGH GILLESPIE:* The outlook for a significant proportion of public employee retirement systems does not seem particularly bright at the present time where the Internal Revenue Service is concerned. I say this primarily because of Revenue Ruling 72-14 concerning the qualification of public employee retirement systems and the possibility of the loss of certain tax advantages to beneficiaries.

Revenue Ruling 72-14 was issued by the IRS on January 17, 1972. Although the ruling refers to qualification of state teachers' retirement systems, it would appear to be applicable to all state and municipal retirement systems. The full text of the ruling is as follows:

* Mr. Gillespie, not a member of the Society, is vice-president and consulting actuary, George B. Buck Consulting Actuaries, Inc.

A state teachers' retirement system was established pursuant to a statute of a state for purposes of providing retirement and death benefits to public school teachers of the state out of a retirement trust fund created thereunder.

Held, notwithstanding the fact that the retirement system was established by a state, the trust fund and the beneficiaries thereunder are not entitled to the Federal tax treatment applicable with respect to a trust described in section 401(a) of the Code unless the trust meets the requirements for qualification under that section.

I can imagine that the general reaction to the above ruling might be a shrug of the shoulders, particularly when it comes to a statement of uniform policy under which beneficiaries of public employee retirement systems would be subject to exactly the same rules as beneficiaries of private pension plans. I can appreciate that reaction; however, I would like to describe for you the background of this situation as I see it and make you aware, if you are not already, of the predicaments faced by a number of large state and municipal retirement systems under the ruling.

State and municipal retirement systems are in the nature of public trusts created by statute, ordinance, or resolution of an authorized governmental body. Therefore, since the trusts are instrumentalities of a governmental body, their earnings are immune from federal taxes. However, such immunity does not carry over to the members of public systems, and it is the potential loss of preferential tax treatment afforded to members of qualified plans which creates the current situation.

First it might be appropriate to review very briefly the tax advantages that we are talking about, which might be lost to certain public systems which fail to qualify with the Internal Revenue Service.

Under current federal tax law, the tax treatment with respect to a trust qualified under section 401(a) of the Internal Revenue Code provides the following advantages to covered employees:

1. Exclusion from the employee's current taxable income of the employer's contributions made to the trust on his behalf.
2. Exclusion from the employee's current taxable income of interest credits on past employee contributions.
3. Exclusion of benefits from taxable income until receipt thereof.
4. Favorable income tax treatment of lump-sum distributions from a trust on account of separation from service.
5. Exclusion from gross estate and from gift tax of benefits payable from a trust attributable to employer contributions.

The tax benefits accorded to the beneficiaries of qualified trusts are truly significant, and the loss of such benefits is definitely a serious matter for the administrators and the governing bodies of the affected systems.

How did this predicament arise? In a nutshell, the background of the situation is that public employee retirement systems have generally been treated up to the present time as if they had qualified under the IRS rules. I would imagine that this has grown out of the position that the qualification provisions of the Internal Revenue Code, the Federal Tax Regulations and revenue rulings, were designed primarily for private pension plans. Also, it is impractical and sometimes impossible for public employee systems to meet some of the technical requirements of the code regulations or revenue rulings. Furthermore, many years ago, the chief of staff of the Joint Committee on Internal Revenue Taxation of Congress made the following statement regarding the qualified status of state or local retirement plans:

> I have inquired of the Internal Revenue Service with respect to this matter and I am informed that while there are no published rulings dealing with the tax treatment of state or local government retirement plans, the Service has held in every case referred to it that state and local government retirement plans are "qualified". It is the practice of the Service, when requests for Rulings are submitted, to review the statute creating the plan and if the statute provides for non-discriminatory coverage for employees the plan will qualify.

To some extent, then, the IRS is responsible for the gray area that has existed up to the present time in many states in regard to qualification. In this gray area, the feeling has grown over the years that public systems need not qualify. I have had this feeling expressed to me many times over the past ten or more years by administrators and trustees of large public systems. I am also aware of several situations, some years ago, when qualification was granted with a minimum of information in a perfunctory manner. In at least one instance I can recall that a system's administrator was informed by the IRS that it was not necessary to qualify a public system.

The problems that public systems will have in qualifying are large, many, and varied. They arise in connection with integration, but mainly in the area of meeting the requirements for nondiscriminatory classifications and the requirements that contributions and benefits be free from discrimination in favor of special groups. Examples of the types of problems to be resolved are as follows:

1. Integrated systems that do not meet the integration rules. Consider a large state system that provides a mandatory benefit of 2 per cent of average final compensation for each year of service, with members contributing 5 per cent of compensation. In addition, there is an optional benefit of 2 per cent of career compensation since 1955 in excess of the social security wage base, with

members contributing 5 per cent of such compensation. The eligibility requirement for unreduced benefits is age 60. Upon death in active service after eligibility for early retirement (twenty-five years) or service retirement, the full actuarial reserve on the accrued benefit is paid in a lump sum to the beneficiary. Full accrued benefits are paid upon disability retirement without a requirement for receipt of disability social security benefits. Also, integrated systems that cover employees who do not qualify for social security.

2. Systems that provide much more liberal benefits for elected officials, judges, public service commissioners, department heads, or other special interest groups that are anywhere up to three times those provided for the run-of-the-mill employee or teacher. I find that this practice is fairly common in state governments. Sometimes the various groups, with different benefit levels, are all in one system, at other times they are in separate systems. In some states general employees, other than the special interest groups previously mentioned, will have more liberal benefits than state teachers.

3. Systems that are supported by special taxes or other forms of income and include a provision that the board of trustees can decide what percentage of pension benefits will be paid, depending upon the extent to which the actuarial liabilities are covered by present assets and prospective income.

4. What about systems which have benefit problems, in the area either of integration or of discrimination by class, and which, in order to comply with IRS rules, would need to abridge the contractual or constitutional rights of employees?

5. What about systems that are not funded? Will the IRS require normal contributions and interest on the unfunded liability in order to retain a qualified status?

I think you will agree that the problems are serious, in some cases possibly insurmountable, if the ruling is to be taken at face value. What should be done by public employee systems? Will they actually be required to meet all the technical requirements for qualifications?

I must admit that my first reaction to the ruling was one of disbelief that it would be enforced, and my feeling was that the stage was being set for federal legislation that would exempt public systems from meeting the qualification requirements. I could not understand how the IRS could at this point take away the favorable tax treatment accorded public retirement systems in the past. I rationalized that public systems would be afforded some type of grandfather clause.

However, all the information that I have to date indicates that the IRS means business. The most recent information is a release issued last week by the National Education Association and the National Conference on Teacher Retirement. This release was sent to the administrators of state teacher retirement systems and to numerous local teacher systems. The release states: "It is clear that IRS intends to require public

teacher systems to meet the requirements for qualification regardless of what may have been the case in the past." The release also suggests the following course of action: "Explore the possibility of qualification with your IRS District Office. There may be a chance of meeting the requirements for qualification without actually going through the process of becoming qualified; this possibility is rather unclear and may be interpreted differently from District to District. In short, everyone should make an attempt to meet the requirements for qualification."

Finally, why has the IRS changed its position? I cannot help being drawn to the conclusion that this ruling could be the opening gun in an attempt at the federal level to harness state and municipal retirement systems. Many voices have been raised against the abuses under public systems. Unfortunately, it is difficult for politicians at the local level to stand up against the pressures for liberalizations, and in certain instances they have not been able to throttle their own self-interest. In many instances pressure from the federal level might be welcomed. However, counterforces are stirring, with the objective of exempting public systems from qualification with the IRS.

To sum it all up, it appears that Revenue Ruling 72-14 will create significant problems for many public employee retirement systems if these systems are required to meet the requirements for qualification with the IRS. Early indications are that the IRS intends to enforce the ruling, which could signify a program to gain some degree of control at the federal level of state and municipal retirement systems. At this point it is too early to know what the ruling really signifies for public systems in the long run, but the implications are far reaching.

MR. EDWIN F. BOYNTON: I wonder whether someone on the panel would care to comment on the potential implication of some of the bills currently before Congress, such as the Dent bill. I believe that these bills include public employee retirement plans as well as private plans, and I am curious as to whether any efforts have been made to delete public employee plans from the coverage of these bills.

CHAIRMAN ALTMAN: Yes, I visited with Representative Dent's staff last year in an effort to achieve just that goal. However, I think that my own views are changing somewhat. I agree with the over-all idea of requiring public plans to comply with qualification rules. The only objection which I have to including public plans in the Dent bill is the reinsurance arrangement. Since we have the full faith and credit of the state guaranteeing payment of benefits, I question the desirability of forcing

states to pay a reinsurance premium. This was the position taken by the officers of the State Retirement System Administrators, who made up the group which visited Representative Dent's staff last summer.

MR. A. CHARLES HOWELL: Will one of the implications of Revenue Ruling 72-14 be that public plans must be soundly funded as well?

MR. BLEAKNEY: The reason normally given by the IRS for requiring minimum funding in a qualified plan is the "permanent plan" requirement of the Internal Revenue Code. It seems unlikely that the IRS will invoke this particular objection against public employee retirement systems. However, I do feel that it is important to keep in mind, particularly in relation to the question regarding inclusion of public systems in pending legislation, the fact that the general term "public employee systems" includes a great many local plans which, although smaller in terms of assets and covered participants, make up the great majority of the total number of public employee plans.

MR. STUART M. THOMPSON: With regard to the funding of cost-of-living benefits, the Louisiana State System has a cost-of-living benefit which is "funded" by interest earnings in excess of a rate established by the board, currently at 5 per cent. If the excess earnings are not present in any given year, the board is not required to provide the cost-of-living benefit.

MR. RANDALL M. LUZADER: In that regard, it appears to me that you would run the risk of diluting offsetting effects in the over-all actuarial assumptions, since the interest assumption has now effectively been removed from this actuarial melting pot. Excess interest can no longer be used to offset, for example, the cost of benefits resulting from unanticipated salary increases. I wonder whether we have not unnecessarily excluded the consumer price index from our sacrosanct circle of golden actuarial assumptions. If we were to examine the consumer price index on the basis of credibility, as Allen Arnold did for the Conference, we might very well find that we could include the consumer price index in our actuarial assumptions on some credible basis.

MR. BLEAKNEY: We do have several plans for which we incorporate an assumption regarding the expected rate of growth of the consumer price index, although I always hate to compare the assumption with what has actually happened. Let me also refer to a situation in the state of

Idaho, which uses an approach to cost-of-living benefits slightly different from that described for the Louisiana system. This is an approximation to an equity annuity, in which it is stated that benefits are to increase in proportion to the consumer price index but that the increase shall not occur unless the board finds that assets have increased sufficiently to cover the additional cost. Since the funds are invested approximately 60 per cent in common stocks, the attempt is to provide an equity annuity without the attendant misunderstanding and fluctuations in annuity values.

MR. ARTHUR A. WINDECKER: It is my feeling that the situation of public employee retirement systems is a very serious one, and I would like to ask what we as actuaries can do and what we are doing to attempt to instill some reason and common sense into the developments that we are discussing here today.

MR. ALAZRAKI: I think that our primary obligation is to make sure that any changes which come down the pike are based upon principles of sound design and adequate financing. The suggestion of abandoning full funding as a solution to the state's current fiscal problems is being heard more frequently. One analogy which I have found successful in explaining the need for accumulating substantial reserves is that of an ordinary life insurance policy. Most members of the public are familiar with the concept of life insurance, and they understand the fact that they do not draw benefits during the time in which they are paying premiums.

CHAIRMAN ALTMAN: In New York State we set up an actuarial advisory committee to the state controller. When I left my office to come to this meeting, we had already priced out 195 bills for benefit improvements. This is during a session in which there is a pension commission which has already stated that there will be no more benefit improvements this year. We have now established the requirement that a bill may not be introduced to provide for an increase in benefits without a corresponding cost estimate. This sounds very basic, but before the requirement was established the legislature actually voted on bills without a corresponding cost implication. During the current session the actuarial advisory committee produced a funding statement regarding public employee plans in the state and furnished copies to the governor, the lieutenant governor, the attorney general, and the chairmen of various committees. For the time being, at least, the suggestion of abandoning full funding seems to have quieted down. My naïve philosophy was that we should drive home

the point of cost. However, when you do so and still get plans up to 40 per cent of payroll, such as our present state troopers' plan, or 35–36 per cent for our state legislators and their employees, it becomes obvious that driving home the point of cost has not worked so far.

MR. ROBERT J. MYERS: Until recently, the Civil Service Retirement Act, covering some 2.5 million federal employees, was quite inadequately funded. The employee contribution (currently 7 per cent) was equally matched by the employing agency, but the total resulting contribution rate only approximated the normal cost. Consequently, since not even interest was paid on the unfunded accrued liability, such liability mounted from year to year. In fact, an additional contribution rate of about 8–9 per cent would have been necessary merely to pay the interest on the unfunded accrued liability.

A few years ago a significant amendment was enacted which greatly improves the financing procedures of the civil service retirement program. A contribution from the general fund of the Treasury would be introduced on a gradually increasing basis. Specifically, this contribution would be 10 per cent of the interest on the unfunded accrued liability in the first year of operation (fiscal year 1970–71), 20 per cent in the next year, and so on, until after a decade the entire amount of such interest would be paid. After that time, the program would be financed on the "normal cost plus interest on the unfunded accrued liability" method, and such liability would thereafter be frozen. If some modified financing method had not been provided, the civil service retirement fund would have been exhausted in the early 1980's.

The assets of the civil service retirement fund are invested completely in debt obligations of the federal government, just as is the case with the social security program. In my opinion, this is the only proper method of investment for such funds, and these investments are valid. I believe that the basis for the correctness of my statement is examined in sufficient detail in my book that is used in the examination syllabus.

CHAIRMAN ALTMAN: One of the new pieces of legislation adopted in New York this year requires that any liberalization adopted by an employer has to be prefunded immediately with the retirement system. This requirement did slow things down somewhat, but not materially.

MR. HOWELL: Have there been any benefit security ratio tests made on public employee systems?

CHAIRMAN ALTMAN: Yes. There are, of course, several different ways of obtaining the ratios. On the basis of our current actuarial assumptions in our own system, the ratio of assets to total liabilities is now at about 40 per cent. More important, we have been dropping steadily for several years. Ten years ago, for example, we were over 50 per cent. Two of the reasons for this steady drop are salary and benefit increases resulting from inflation and an incredibly rapid rate of liberalizations.