

**TRANSACTIONS OF SOCIETY OF ACTUARIES  
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**EMPLOYEE BENEFIT PLANS**

*Pension Plans*

- A. What effect will the standards of *Accounting for the Cost of Pension Plans*, issued by the Accounting Principles Board of the American Institute of Certified Public Accountants, have on the preparation of actuarial valuations of pension plans?
- B. Is there a need for an analogous guide to assist actuaries in making proper choices of actuarial cost methods and assumptions in valuing pension plans?
- C. Should an actuary include or be required to include in his report on the valuation of a pension plan an opinion or certification as to the adequacy or appropriateness of the funding of that plan?
- D. What problems are involved in comparing the investment performance of different pension funds, and how have these problems been resolved?
- E. What practices are followed in furnishing information to covered employees concerning the amount of their accrued pension benefits? What would be the advantages and disadvantages of including an indication of the extent of funding of the individual employee's benefits? How should it be done?

*New York Regional Meeting*

MR. WILLIAM A. DREHER: *Opinion No. 8* of the Accounting Principles Board, titled *Accounting for the Cost of Pension Plans*, offers a galaxy of opportunities for exercise of the actuary's judgment. These include the effects of pension plans covering the employees of foreign subsidiaries; the complications involved in informal arrangements that constitute a pension program; and problems related to companies which sponsor several pension plans. The central problem is, quite naturally, the cost accounting for the employer's formal pension plan (or plans) for United States employees. The resolution of these matters will depend on the answers to six questions, each of which requires an interpretation by the actuary in the light of his client's accounting policies. (The actuary must also assist his client in answering the same questions with respect to the funding policy for these pension plans.)

The questions are:

1. What actuarial assumptions are appropriate for measurement of the pension cost accrual?
2. What actuarial cost method is most suitable to the stated purpose?
3. Over what period should prior-service costs be amortized?
4. How should actuarial gains and losses be reflected in the cost accounting?

5. What method of recognizing unrealized appreciation or depreciation on common stocks is preferred?
6. How should the unaccrued actuarial value of vested benefits be computed?

Let me indicate the range of alternatives among which management must select:

1. There are half a dozen actuarial assumptions that are necessary in even the simplest pension program. With the increasing importance of widows' benefits, early retirement benefits that exceed the actuarially discounted benefit, and special forms of disability income benefits, one adds another five or six actuarial assumptions. Probably the clearest statement on the effect of those assumptions is included in the Part 9E *Study Notes*. These notes indicate a variance in initial cost estimates that may go from  $x$  to  $5x$  for a particular pension formula and employee age distribution, depending on the choice of actuarial assumptions.

2. Five basic actuarial cost methods are approved by *Opinion No. 8*. Variations of these are in use. There are also a few other methods which some actuaries consider a proper reflection of the principles described in *Opinion No. 8*.

3. On amortization of pension costs, we have the basic question, "Do you fund at all, or do you accrue at all?" If you decide to provide more than the current cost of the plan, where are you going to fall within the natural range of the forty-year funding, on one extreme, and 10 per cent, on the other?

4. Six different families of solutions can be adopted with respect to actuarial gains and losses—three variations of a spreading technique; averaging, which draws on the historical accumulation of gains and losses with some influence given to expected future gains and losses; and adjusting of past-service costs, which leads to one conclusion if interest only is used and to a different conclusion if an amortization policy is used.

5. There are probably four different families of solution with respect to recognition of unrealized appreciation or depreciation. Two of these might be called objective approaches, dealing with recognized facts available from among the pension fund assets. The first would be market value or one of its variations; the second would be a technique which some authors have called the retained-earnings method, whereby the growth of the book value reflects the amount of a company's earnings which is not paid out in dividends. The two other types could be called theoretical methods—one looks to the long-term yield potential on a common stock and the other looks to the long-term appreciation potential on common stocks.

6. With respect to the determination of the unaccrued value of vested benefits, there are at least two interpretations of the way in which the value of vested benefits should be determined. Then there is the question of valuing the assets which are offset against the actuarial value. Should market value or some variation of it be used, or is it preferable to use the same asset value that is used to determine the basic pension cost accrual?

Within this range of alternatives, I am sure that each of us will be able to satisfy the objectives of our clients and the conscience of the accountant.

MR. JAY C. RIPPS: I will set forth three questions and two answers. Hopefully, an answer to the third will be provided by some of you.

1. This question occurred to us in establishing our new procedures to correspond with the material required by *Opinion No. 8*. Should termination benefits for nonvested employees (that is, employees who had not reached the vesting age) be included in the actuarially computed value of vested benefits? These benefits are usually in the form of accumulated employee contributions for nonvested employees, but there are also cases in which a flat termination benefit is payable to nonvested employees.

We decided that these benefits to nonvested employees should be included in the actuarial value of vested benefits, since they "are not contingent on the employee's continuing in the service of the employer."

2. Should the entire escrow portion of the deposit fund under a DA contract which was formerly a deferred annuity contract be used to offset the actuarially computed value of vested benefits? Since some of this money is being held to repurchase deferred annuities in case the contract terminates, we asked whether the portion of the fund attributable to nonvested employees should be used to offset the value of the benefits for vested employees.

Since the escrow fund is a temporary phenomenon and has no effect if the contract does not terminate, we decided that the entire deposit fund, including the escrow portion, would be used to offset the actuarially computed value of vested benefits.

3. How much accounting information should be presented in the actuarial valuation report? One school of thought holds that the pieces necessary should be set forth in sufficient detail to enable an accountant to arrive at a proper accounting charge for a given year. The other school holds that the pieces should be put together in the report to develop a minimum, a maximum, and a recommended accrual for the year. Further, if the amount paid into the annuity purchase fund during the year is between the minimum and the maximum, this school holds that the recommended accrual should equal the amount paid.

There has been a solution but no agreement reached on this question.

MR. DREHER: I would agree with the conclusion that all the assets that are deemed to be part of the contract are an appropriate offset to the value of vested benefits, because under either method of defining and

valuing vested benefits we must assume the continuation of the pension plan.

It may be interesting to describe briefly these two methods.

One definition of the actuarially computed value of vested benefits, which Fred Sloat endorsed at the American Pension Conference meeting a few weeks ago, presumes a complete voluntary termination of all employees, as of the valuation date, and would generally value only a deferred annuity payable at normal retirement in an amount equal to the vested pension for currently vested employees.

The other view that could be adopted is concerned with the same group of covered employees but seeks to measure the value of all future benefits to be provided by the plan for these employees which are ratably assignable to service before the date of the valuation. In other words, all types of benefits from the plan, including disability, widows', and early retirement benefits, are included in the calculation. This method requires actuarial assumptions relating to future dates of retirement, future increases in salary, future disabilities from employment, and so forth. After applying the assumptions to the total value of all benefits to be paid at some future date to currently vested employees, this total value is then prorated between service up to the valuation date and future service.

**MR. MARVIN L. KORNHAUSER:** The effect of *APB Opinion No. 8* will undoubtedly be the introduction of more figures and the modification of others. Several items in the *Opinion* lend themselves to different interpretations. The answers will probably evolve gradually as accountants and actuaries work with them. Greater co-ordination of actuarial and accounting activities may be expected.

The actuarial value of vested benefits involves the most extensive additional calculations but fortunately can be readily obtained by a computerized valuation program.

**MR. DONALD R. ANDERSON:** I would like to discuss the question of the treatment of foreign pension plans in the accounting practices of United States corporations. When this accounting bulletin was promulgated last December, one of our clients asked, "What will this mean to us?" My first impression was that the bulletin implied that, where a foreign subsidiary is a substantial part of the over-all operation of an American company, the accounting principle followed by the subsidiary in the pension field must conform to the principles of the accounting bulletin in substance. The bulletin seemed to imply that the territorial

jurisdiction of this standard of accounting exceeds United States borders. However, it is sometimes difficult to achieve this conformity in conflict with accounting principles and perhaps laws of other countries.

I next checked this out with a member of the corresponding committee of the Canadian Institute of Chartered Accountants. He advised me that, in Canada, it was considered undesirable to follow accounting principles adopted by the American Institute in preference to the Canadian Institute. This issue has been raised a number of times in the past (e.g., depreciation rules). The United States rules may be quite sound and realistic, but the Canadian Institute of Chartered Accountants must be the authority to whom the Canadian accountants look for guidance on these questions.

In August, 1965, the Canadian Institute issued a corresponding bulletin on accounting principles (*Bulletin No. 21* of the Committee on Accounting and Auditing Research) in Canada. It is substantially the same as the American bulletin, covering the same ground and strongly favoring the accrual system of accounting for the cost of pensions. It does not ask for reporting of the unfunded liability for vested benefits.

MR. JAMES A. ATTWOOD: I would like to direct your attention to the last sentence of the Notes to the *Opinion*. It states that the principles of the *Opinion* "are not intended to be applicable to immaterial items." This may be the most important sentence in the *Opinion*. What is material? There will not be too many problems in complying with the *Opinion* in the areas of assumptions, actuarial cost method, and the amortization of past-service costs. Our problems are going to be in the areas of actuarial gains and losses, capital appreciation, depreciation, and the unfunded value of vested benefits. Many plans currently deviate in these areas. Are these deviations material enough to require a change in our method of accrual? Do we have to disclose the nature of deviations?

We are finding that several accountants take the position that these are not material to the ultimate profit results of the company and that therefore no change in current practice is necessary. It may be that many accounting firms will take this position.

One item causing us concern is the excess of the value of the vested benefits over the assets of the plan. If we know that the assets cover the vested liabilities, can we just certify that there is no excess and not support the certification with any figures? There is a further problem in the group deferred annuity area, when we have unfunded past-service benefits on vested lives. Does this have to be reported even when the case is in an over-all good position financially?

The thing which bothers us the most about the *Opinion* is the sheer mechanical problems that it creates. The amount of work involved in talking to over 1,500 customers this year about the implications of the *Opinion* is overwhelming. I hope that the accountants will bear with us for a number of years until these problems can be managed.

CHAIRMAN WILLIAM K. WHITE: Your problems are similar to ours, and we are not alone. We have been getting a number of questions asking for information in such a form that it is clear that some accountants themselves do not understand the ruling at this time. We may have to work together for a period of years before all problems are fully resolved.

MR. DREHER: I would suggest that materiality is a defense and not a solution. All of us will rely on this concept to temporarily bridge the problem until there has been more time to consult and to resolve the issues, but we have a responsibility to ourselves and to our clients to identify the cost effect and implications of each alternative so that we will be in a position to make a positive response rather than to argue that differences can be swept under the rug.

MR. JOHN HANSON: It appears to me that a calculation of vested benefits, in the manner suggested by a previous speaker, whereby the benefits would be projected to retirement and then in some way prorated, is inappropriate under the definition of vested benefits, which says that they are not contingent on the employee's continuing in service because obviously the employee must continue in service in order to accrue future benefits. The definition is less confusing if the first sentence is considered to define the benefits and the rest to define how the value of such benefits is to be computed. For example, when the definition refers to the assumed retirement age, it means that you have the right to assume that the person retired at age 65, although you would determine the accrued benefits based on present pay and past service, and the employee might, in fact, be eligible for early retirement.

As I understand the question raised earlier on the foreign subsidiary, *Opinion No. 8* applies only to companies which report the results of the operations of their subsidiaries in a consolidated statement in this country. It would be an auditor in this country who would be insisting that the parent comply with *Opinion No. 8* rather than a foreign auditor trying to get the subsidiary to comply.

One of the earlier speakers stated that his company was thinking of having enough information so that the accountants could determine the

pension costs. I would change the emphasis and state that what we should do is to have enough information so that the employer can determine the pension costs. The auditor then has the problem of auditing. Viewed in this way, if the actuary knew, based on last year's valuation, that the vested benefits were all funded, he obviously would not compute the value of vested benefits because the employer would not want to incur the cost of such computations. If the auditor asked for such computations, the employer would probably refuse, and that would be the end of it, as far as I can see.

MR. GEORGE BRUMMER: Our experience has been a bit different. Our clients, particularly the large, corporate, publicly owned clients, took quite a different view. The reaction of one treasurer typifies the reaction I have had from several clients. He said, "You've got to feed me all this information. I have to follow the accounting opinion no matter what you think of it." I said, "Why do you have to do that? It really isn't binding, as far as I can see." He said, "Well, if it isn't followed, then I'm going to have notes in my financial statement, and the last thing I would like to see in my financial statement is a lot of notes that a lot of people can question." It strikes me that we will have to do some more work and will have to calculate the present value of vested benefits and do something about asset valuation.

I think that it will also fall on the corporate client himself to make some decisions as to how he wants these things done and how he wants assets valued. It will call for decisions on his part more than on the part of the actuaries, because I do not think that we are qualified to value assets, not being in the securities business.

MR. DREHER: I would hope that actuaries, in approaching this *Opinion*, would not confine themselves to the technical questions that it poses, because I believe that the *Opinion* is going to have a significant effect on management's thinking. We first must answer the technical questions that are required of us; then we must move on to answer or advise about many broader questions: Are the pension funds being well invested? Do the benefits reflect the needs of people? Do employees understand and appreciate their importance? What are the practices of other employers in the labor market?

Foreign subsidiaries offer an example that highlights the issues of broader significance in the foreign area. Some companies base their financial plans and judgments on rate of return on invested capital. If it is found that a realistic pension cost accrual is far greater than had been

previously reported or anticipated, the rate of return will change. This could lead to major changes in management's thinking about the desirability of staying in a particular foreign country or investing additional capital in foreign operations.

Actuaries will serve their clients best by looking through the technical problems posed by the *Opinion* and emphasizing the management decisions in all related areas, not just those affecting accounting but financial and employee relations matters as well.

MR. SHEPHERD M. HOLCOMBE: I would like to comment on the matter of assumptions in regard to the calculation of liability for vested benefits. In the regular valuation we may be using a retirement age assumption of 66 or 67 when the normal retirement age is 65. In this situation, we normally calculate the liability for vested benefits for terminated employees assuming that they will start to receive the benefits at age 65. While calculating the liability for vested benefits for still-active employees is not exactly the same, I feel that a case can be made for basing this calculation on an age 65 retirement assumption.

A similar area is the turnover assumption. Here we may be using an aggregate turnover rate which normally would be applied to people who have met the vesting conditions, as well as those who have not, in the same age bracket. In calculating the liability for vested benefits, I believe that no turnover assumption should be used.

In a final salary plan, where we are using a salary scale, we can run into practical problems. If the actual vested benefit is to be based on salaries over the five years preceding termination, is this information available as of each valuation date and should we calculate the liability on this basis?

It was implied earlier that, where the assets in one year were more than enough to cover the liability for vested benefits, there would be no need to do this type of calculation in following years. This will probably be true in most cases; however, we should recognize, especially with a relatively young company, that there may be a large group of employees coming into the vesting area in any one year.

MR. DORRANCE C. BRONSON: Previous speakers have recited actuarial components or alternatives suitable for use in actuarial valuations from which they derived a vast number of permutations and combinations available for the purpose, with none of said valuations landing out of the *APB Opinion No. 8* ball park. The actuarial-accounting milieu of all this freedom might, through its very variety of choices,



create "confusion syndromes" among the three participating parties, that is, the representatives from each of the two professions and the employer in his usual role of principal (or, when a union is closely involved, a four-party riddle). I would ask, in view of so many possible actuarial valuation end products, who assumes prime responsibility in "trying for" the optimum under any of the then set of circumstances?

As I understand the accountants' objectives, they want the annual "provision" for pension plan operating expense charges to be stabilized, homogenized, and disjunctivized (from current funding), both for purposes of having annual or periodic indices of such charges *within* a given company and of making single or multiple date comparisons *among* companies. I doubt that the proposed procedures will attain these objectives or, despite temporary success, that there would be maintained as meaningful a body of information as heretofore over the long periods of time involved. Reasons for my doubts are as follows:

1. Enough flexibility appears to exist in or between each of the two computational areas of actuarial costs and accounting expense provisions so that *normally*, no difficulty should prevent the determination of suitable amounts, respectively, to ascribe to a given year.

2. This happy condition of parallelism appears to be easily arranged, but for only one year's operations. I feel that there has been insufficient thought given to the potentials of what may lie beyond the said year's operations and beyond a considerable span of years and on into the decades of future time, through which decades a pension system, as a very long-term program, must pass as a viable payout mechanism (as well as an alert collector of contributions). Complete euphoria in regard to the future years is a sort of psychedelic state which may well be violently broken, and this "trauma" could be augmented by reason of the easy, involuntary assumption that life as then being experienced was assured of perpetuation and of "living happily ever after."

3. Think back over the last forty years. Consider the intervening economic episodes and other "times of trouble"—the great bull market; the great crash; the great depression lasting for years; the times when money was almost uninvestable, when interest rate assumptions of insurance companies fell below 2 per cent, and when many of the said companies were refusing to take new money (if not required by the contract); the fairly long period when wage and salary stabilization rules were in effect, including certain lids placed on employee fringe benefits; then the postwar relaxations and the gradual approach to a kind of inflationary stability. During some of these times, employers interrupted, or radically amended, their funding programs, while in other periods the funding of pension plans was heavy (e.g., in the "excess profits tax" years, employers poured in all the pension money they could pour, short of establishing an obvious overfunding in perpetuity).

4. I cannot believe that the agreements, arrangements, and confluences of

actuarial and accounting figures could have prevailed during many of these past abnormal periods. I feel that things went better in said periods, under the traditional accounting methods geared to the employer's actual funding, than they would have if the now proposed accrual accounting theories and their yet-to-be-perfected operational devices had been followed. I would also feel greater confidence

- a) in the traditional use of actuarial assumptions as postulated via decisions made by the actuary on his own responsibility;
- b) in the actuary's own methodology for valuation and costs (as well as for such charges to operations as the accountant's side of the fence might request with approval and discussion, if need be, by the actuary);
- c) in the actuary's own tables, demonstrations, and discussions in respect to the actuarial soundness or accomplished funded ratio revealed by his valuation of the plan; and
- d) in, for now at least, the actuary's own prescription for both costs and charges in the area of ancillary benefits; there is a considerable gamut of marginal or ancillary benefits linked to pensions (and living in the "same tent"). The principles and assumptions establishing costs for these and *incidence of cost* are matters so numerous that adequate discussion with, and study by, the accountants do not seem possible yet.

5. The movement to effectuate currently the accrual accounting techniques seems to have chosen a risky period in private pension field developments for its launching. Flying storm signals are up generally and gales blowing from causes of potential basic changes, both in private plans and in social security. Several of the recommendations of the President's Report could alter funding procedures, vesting and tax positions of pension costs and benefits; the report could, though I hope not, introduce such new features as portability, so-called reinsurance, and so forth. IRS Announcement 66-58 could derange benefits, costs, and liabilities greatly. The hardly "free-society" expressions of pension philosophy by a staff report of the Joint Economic Committee, as well as several bills now introduced (particularly President Johnson's program as enunciated through the drastic changes contained in the Mills bill, H.R. 5710), could replace a lot of employer-employee social security taxes by general revenue subventions or thinner tax collections.

6. Time and space forbid the listing of the proposals and bills aimed at all kinds of tinkering with private pension plans. Even less possible here would be an examination of where and/or how the various proposed changes would affect, and surely "ball up," the proposed accounting rules enunciated by *APB Opinion No. 8*.

7. This may seem like a capitulation to the voice of doom in respect to private pension plans. The truth is, I am inclined to see ahead a considerably smaller specter of doom than do a lot of insurance company men and a relatively sizable portion of pension actuaries. I have a sense of reliance on Congress, that they will not proceed blithely, as some want them to do. I feel that they will not

throw the private pension baby (pretty big now) out with the bath. I still have a large measure of faith, which is bolstered up by the paucity of bills on private pension plans clearly seeking action in 1967; most of the bills are merely current "conversation pieces."

8. I now wish to bring the subject of survivors' benefits into the discussion within the purview of pension plans. Two questions arise when a widow or other survivor becomes entitled to a benefit after the employee or retired employee has died under the terms of the pension plan. The first is whether the prior actuarial valuation and annual costs for the survivor component of the benefit followed the methodology and incidence of such determinations made applicable to the pension benefit proper or whether another tack was pursued by the actuary. If a different tack was followed for the actuarial costs of the survivors' benefits, it seems to be rather a moot point as to whether the same type of variation would be admitted as an acceptable accrual accounting allocation under *APB Opinion No. 8*.

The second question implied above will arise when a group life term cost (presumably) is the method used, since the survivors' benefits were not comprehended within the pension plan proper. Of course, *APB Opinion No. 8* appears to bring within its focus only pensions at disability, retirement, and in respect of such ancillary benefits as were built into the plan. However, I have never quite understood why the inherent increasing cost by age for a pension unit excites the accountant while many other increasing costs scheduled in various areas of a company's operations seem to cause no flurry of concern among them. Why is this?

9. Last, I re-emphasize the matter alluded to in 4,d, regarding the expected treatment of other forms of ancillary benefits and special potential payouts, many of which are wholly different in nature from the basic lifetime pensions of the plan (for example, temporary social security "make-up" benefits; the allied "supplemental allowances"; supplementary unemployment benefits; lump-sum severance benefits; prefunding for after-retirement health coverage of one kind or another; variability in size of pension, not always indexed to a "self-supporting" portfolio; and an option either on a free or controlled basis for commutation at time of retirement of an employee's pension benefit). The essence of my point is whether these other-than-the-normal pension types of benefits are comprehended, either by the proposed general rule for accrual accounting or by the criterion governing the accounting for "vested" situations. The *Opinion* gives scant recognition, as I mentioned, earlier, to "death and disability payments" in paragraph 8, which *can* be interpreted to mean that such benefits are excludable as an "expense provision." Thus one could infer even less attention given to the more "far out" types.

Snapshots are currently being taken, and the resulting picture is deemed to be a complete examination of the matter. I feel that much more thought, weight, and discussion should be given to the potential difficulties under *APB Opinion No. 8* over future years when faced by

more turbulent times. Such cogitations should include considerations in depth of the effect of operating the *Opinion* under the numerous proposals and bills, taken one at a time, which are being put forward to “cure” or “kill” private pension plans.

Earlier I expressed certain doubts as to the true long-term advantages under, and as to the enduring ability of, the *Opinion* to serve constructively, meaningfully, and permanently. Now my conclusion is that it is a complicated, confusing, and time-consuming promulgation. Someone called it a milestone in the private pension plan field, but I am rather fearful that, instead, it will prove to be a millstone.

CHAIRMAN WHITE: With regard to Questions B and C a similar topic was discussed at considerable length last fall at the Annual Meeting. The Society’s Committee To Study Pension Plan Problems is working on something along the lines indicated. I had the feeling during last fall’s session that there was considerable misunderstanding of the intent of the Committee, and I hope that reference in this question to “an analogous guide” does not engender more misunderstanding.

The pension accounting opinion appears to me to be quite restrictive without allowing too much scope for latitude of action. Maybe I say this because I am not an accountant, but I know that others feel the same way. Whatever the pension plan committee comes up with, I am very confident from our discussions that restrictiveness will not be one of its characteristics. None of us desire to tell you how you should evaluate pension plans. We are well aware that such an approach is completely impractical, for reasons that should be obvious. Personally, I do not even like to think of it as a guide, although we certainly would hope that we could develop something that might be helpful to some of you on occasion.

I do not know that the Committee agrees with me completely, but I feel that the principal value of what we are trying to produce will result from education of people outside actuarial circles. There is a need for something that will make it easier for the layman to understand the nature of the actuarial judgments required in valuing pension plans and why the results can never be anything but estimates. I firmly believe that in public opinion there is too much mystery about the function of the pension actuary and that there certainly is very widespread misunderstanding of the significance of his pension valuations. How else can one account for government officials’ asking such a question as, “What does a five-year vesting provision cost?” and fully expecting to receive an answer from insurance company actuaries who attended a meeting last

year with a number of members of the government's Interagency Task Force To Study Pension Plans? They had the same expectation from another group of Society Members whom they requested to attend a separate meeting.

It should be obvious to everyone that the whole private pension field faces a hazardous future. There is no question that there will be further government regulation, and there is equally no question that some is needed. If it is to be intelligent regulation, however, it falls squarely on our shoulders to see that government officials and others who have interests for or against private pension plans have a far better understanding of the actuarial concepts involved than most of them do now. The preparation of a guide, document, or what have you, on the choices of actuarial cost methods and assumptions for valuing a pension can be a very important step in this direction, in my opinion.

MR. FRANK L. GRIFFIN, JR.: Actuaries experienced in the pension field are aware of the limitations to which any valuation guidelines or recommended procedures would be subject. These limitations arise primarily from two circumstances: (1) the diversity of purposes which a pension valuation may legitimately be designed to serve, which may require different actuarial cost methods and assumptions in order properly to serve them; and (2) the fact that, even when the purpose has been defined, no valuation "standard" could come close to fitting all plans at a given moment of time or even one plan at different moments of time.

To bring out all the important relationships about which an employer (or his employees) should be informed, more than one cost method and more than one set of assumptions may be involved. To imply a correctness about one particular method for a given type of plan may itself involve serious error. In short, I do not believe there is a need or place for a specific actuarial guide analogous to *APB Opinion No. 8*.

MR. HANSON: *Opinion No. 8* was adopted because the Accounting Principles Board felt that it would narrow the range of accounting practices followed by employers with respect to pension costs, and, in view of the backing of the government through the SEC, it undoubtedly will. An analogous guide intended to narrow the range of actuarial valuation methods and assumptions that may be followed is, in my opinion, inappropriate and impractical—inappropriate because I do not believe such a narrowing would be in the best interests of employers for whom actuarial services are rendered and impractical because the range could in fact be narrowed only by an arm of the government and not by members of the actuarial profession.

Experienced actuaries in full-time pension practice recognize the need to adapt to the problems of the client and are not surprised at the resulting differences among clients. I do not understand the desire for a set of rules unless some may feel that this will simplify their work. If this is the case, I wonder whether this is the appropriate outlook for a professional person. A doctor can simplify his work by prescribing penicillin for all illnesses, but this does not mean that he is a good doctor. I presume that we are all interested in advancing the standards of the actuarial profession, and I believe that a set of rules would be a step backward.

Let me indicate what I feel would be a step forward. My impression is that the managements of some insurance companies view the determination of pension costs as a sort of necessary evil that must be undertaken to sell pension plans and that a set of rules is therefore desirable to simplify this task and keep down expenses. A more professional approach, in my view, would be for insurance company actuaries to assume responsibility for actuarial calculations completed by clerks and agents, to recognize the need for intelligent choice of methods and assumptions according to the preferences and objectives of the employer, and to quote charges for actuarial services at a level commensurate with work performed and salaries paid to actuaries rather than on the basis that actuarial services are a "loss leader" (with stated charges for actuarial work lumped in with the cost of printing certificates and drawing up contracts).

Although I work full time as a pension actuary, I have yet to meet an experienced practicing pension actuary in favor of a set of rules. One of my associates asked me who is in favor. In response, I expressed my sentiments by saying:

I fear there may be some big brothers  
Who would like to make rules for the others.  
Their intentions are fine,  
But I find they're not mine;  
I propose to retain all my druthers.

I believe that actuaries should indicate to the employer the relationship between the fund and the value of accrued benefits as of the valuation date. In my judgment, the actuary should also indicate to the employer the anticipated future relationship of the fund to the value of benefits accrued at a future date, assuming one or more alternative contribution levels in future years before that date. This should be done in terms understood by the employer. I see no point in a formal opinion or certificate which might have the effect of obscuring the facts. As to the question of whether or not such an opinion or certificate should be "required," I feel that, as in the case of a set of rules, this can be required only by an arm

of the government. Some actuaries, because of their sincere desire to increase the prestige of the actuarial profession—a desire which I share—have been engaged in what seems to me to be a rather unseemly search for something to which actuaries could certify. I am opposed to certifications that are unnecessary, and I do not feel that our profession would be advanced by a certificate that is in effect meaningless. For example, one actuary has suggested a certification regarding appropriate fund level, which in substance is a certification that the present value of anticipated contributions is equal to the present value of future benefit payments, a test met of course by all plans, including those on a pay-as-you-go basis.

MR. JOHN K. DYER, JR.: To the extent that I have any influence on any guides that may be developed, they will not be very closely analogous to the guides established for the accounting profession in *Opinion No. 8*.

I understand that, while *Opinion No. 8* was started some years ago as a purely voluntary project on the part of the accounting profession, it was completed under considerable pressure from the SEC, who said, in effect, "If you don't complete it, we will."

The accountants' *Opinion* leaves, as you know, a number of important questions open for the actuaries to provide the answers. So the question with which we are faced is simply this: How long can we go along without any guides to follow in completing the job the accountants have left for us? Do not we, also, need some statement of the actuarial principles which, in the words of the Accounting Principles Board, "have substantial authoritative support"?

We do not need to take as strict a route as the accountants, requiring, for example, footnotes in the financial statements indicating deviations from the principles. However, it seems to me that something in the nature of a guide, which we have tentatively titled "Actuarial Principles and Practices in Relation to Private Pension Plans," is quite essential. Such a guide would give us a concrete basis with which to fulfill the responsibilities the accountants have left for us and may enable us to mitigate or even avoid the kind of pressures with which the accountants have recently been confronted.

MR. ANDERSON: The impression that I have of this topic is that it is one that could have originated in an ivory tower.

My concept of actuarial assumptions is one of the over-all package. If the over-all package produced the right level of costs, it really does not matter too much if one of the methods or assumptions is out of line and counterbalanced by something else that is out of line in another direc-

tion. This over-all package concept is beginning to lose ground, I suspect, because of the influence of the computer.

In relying, however, upon the computer to produce exactly the combination of assumptions and methods that you want, I do not think that the over-all package concept has lost any of its essential validity because it says that it really does not matter what the individual assumptions are. The question remains, Is the recommended contribution at the appropriate level in order to assume the right balance between adequacy of funding on the one hand and stability of funding on the other? These concepts have always been at war with one another, but the actuary must stand between them and say that this is the place where he thinks the balance should be struck. However, the actuary may not have the last word on it. Other factors are the client, applicable laws, accounting principles, and so on.

Assumptions and methods are only a means to an end. We must not lose sight of the principle that the actuary must have due regard to the end result of his calculations, which is the establishment of a recommended contribution.

MR. DREHER: It should not be presumed that someone who favors a guide or set of standards is trying to dictate the conclusions reached by other actuaries. I believe that most of us are seeking wisdom that we do not presently possess and knowledge that is not yet available to us.

I am a member of a firm with offices in many locations, each having substantial local autonomy. These offices advise many clients with basically similar problems. To my mind this highlights the need for some reasonable form of reference to guide the actuary in interpreting the needs of his clients. Admittedly, there is not a single or unique solution to these similar problems, but the solutions should be sought within the framework of consistent criteria for evaluating their funding and cost effects.

Perhaps the specter that is raised by the concept of a guide stems from concern that a set of statements would not fairly reflect minority views. The procedure used by the Accounting Principles Board copes with this matter quite well. Each opinion of the APB includes a presentation of alternative views, and members of the Board who do not agree with the majority are permitted to express their opposing views as part of the published opinion.

MR. FREDERICK P. SLOAT: I would like to speak in relation to my activity in the Professional Conduct Committee rather than my interest in pensions. I refer to Guides 7 and 8. Guide 7 says that a Member will



submit unqualifiedly an actuarial calculation certificate or report only if he knows it to be based on sufficiently reliable data and the actuarial assumptions and methods in his judgment are consistent with sound principles. In the absence of such knowledge or if the Member believes other expert review is also desirable, his submission will include appropriate qualification of his findings.

Guide 8 says that the Member will recommend for the use of his client or employer premium contribution rates, standards of valuation, and other actuarial functions only if, in his opinion, they are based on adequate and appropriate assumptions and methods. If other assumptions or methods are specified by the client or employer, the Member will include the qualification thereon in any applicable certification, communication, or report which he may be called upon to issue over his name.

It is interesting to note that the question refers to "adequacy and appropriateness," both of which are in Guide 8. In answer to the question "Should an actuary include an opinion as to the adequacy or appropriateness of the funding of a plan?" I would say that maybe he is not required to include this in his report, but, if the funding is not adequate and appropriate, he is required to say that it is not, under the existing guides.

**MR. KORNHAUSER:** The choice of methods and assumptions appears often to involve considerable judgment based on the particular circumstances. There seems to be no adequate substitute for knowledge and experience.

If, in the actuary's judgment, the funding is inadequate or inappropriate, this should not be kept a secret. However, the setting of specific rules to determine this appears to be akin to expecting unanimous decisions of the Supreme Court.

**CHAIRMAN WHITE:** Not very long ago, if one asked an employer about the investment performance of his pension fund, he might well indicate satisfaction as the result of the fact that he had net capital gains of, say, 20 or 30 per cent of the fund. The somewhat more sophisticated employer, with a significant portion of his funds invested in stocks, might indicate that he was well pleased with the fact that the yield, including appreciation, last year had been perhaps 8 or 10 per cent. Generally speaking, it is my impression that whatever the figures were in either case the employer was usually content because the number seemed satisfactory. If anything might disturb his composure, it would be to learn that another company with a different trustee or insurance carrier had earned 2 or 3 per cent more.

With rare exceptions companies were seldom asking the questions that now seem rather obvious: Was the investment performance of my pension plan as good as it should have been? If not, why not? or, perhaps, How can I know that just because I am earning 2 per cent more on my funds than the company across the street I am having a better job done? Today more and more companies and welfare funds are asking these questions and are frequently very surprised to find that the answer is disconcerting in each case. For example, they may find that despite a return of, say, 10 per cent, which they had been quite satisfied with, all their funding agent had to do was invest the stock portion of his portfolio in the market averages to increase the return by, perhaps, 4 or 5 per cent. Obviously even this is not exhibiting any unusual investment skill. It is also becoming more generally understood that such things as timing, degree of diversification, allocation between fixed investments and equities, and facility for shifting can be just as important as skill of selection on results.

On the other side of the coin, insurance companies and trustees, and maybe investment consultants too, have become increasingly aware of the potency of more sophisticated investment-performance measurements as sales tools.

In this atmosphere it is not surprising that we have this question on the agenda or that several groups have been making studies of investment-performance measurement techniques in the hope of developing more refined and meaningful measures. The one that I happen to be slightly familiar with is the special committee appointed by the National Foundation of Health, Welfare, and Pension Plans in 1965. The committee published its first report, of a planned series of at least four, slightly over a year ago, and I believe that they plan to come out with their second report, which will be entitled "Comparing and Appraising Investment Performance," in the not-too-distant future. Two of the eight-man committee, incidentally, are Fellows of the Society—Meyer Melnikoff and Bill Prouty.

**MR. WILLIAM H. CROSSON:** The question as stated is, What are the problems and how have they been resolved? By stating that I do not think the problems have been resolved, I can thus dispose of half the question.

In the debate on Senator Douglas' "Truth in Lending Bill" a few years ago, the statement was made that there was a specific problem involving an installment loan which was presented to a number of mathematicians. There were as many different answers as there were answers submitted.

There are many difficulties:

1. How long is a year; is it 360 days, 365 days, or  $365\frac{1}{4}$  days?
2. What about transactions that occur on a date that is not counted as part of the year?
3. How long is a month—30 days? one-twelfth of a year? what do we do with February?
4. For periods less than a year should we use simple interest or compound interest?
5. What is the mid-point of the year?

The usual formula for determining yield rates,  $2I/(A + B - I)$ , suffers from a number of defects:

1. The formula produces an effective rate only for the time interval between the measurements of  $A$  and  $B$ , so that, if  $A$  and  $B$  are a month apart, then you have a monthly rate.
2. The formula assumes that the contributions to or withdrawals from the fund occur uniformly throughout the period of a year, and this has the effect of artificially changing the resultant rate of return if contributions actually follow some different pattern.
3. The formula does not produce the correct result even if the net contributions should actually occur uniformly throughout the year, since the theoretically correct answer involves an infinite series in  $i$ . The formula ignores  $i^2$  and higher powers of  $i$ .

We are often asked to compute yield rates on a portion of an investment portfolio. Difficulties arise when the contributions are not allocated between the portion being considered and the other portion. A typical difficult question is, How has the common stock portion of an insurance company's separate account or general account done? Often the problem posed does not specify the dates of the transactions.

Various other difficulties in comparing yield rates are the following:

1. If you have to withdraw investment expense, is this a decrease in yield rate or is it a net withdrawal from the fund? Different actuaries or mathematicians will give different answers.
2. One fund may use market value in the denominator, while another fund uses the book value.
3. Investment objectives among the funds are quite different, and thus results that differ should not be too surprising.
4. Different restrictions on investments imposed by the creator of the trust (or by a third party) as to the quality or type of investments will affect performance.

An excellent book on the comparison of investment performance is *Pension Funds: Measuring Investment Performance*, by Peter O. Dietz (published by the Graduate School of Business of Columbia University

and the Free Press, 1966). The author provides a number of ways to eliminate differences in timing of investments and differences in cash flow in comparing one fund with another.

Insurance companies are often asked to answer a question like the following: How would your company have done with the money that we actually gave to the XYZ trust company? This is oblivious to the fact that the insurance company guarantees annuities and annuity rates, for which guarantees a charge must be made. It also fails to recognize that trustees' fees may be paid by a side contribution outside the trust fund.

MR. JOHN C. ANTLIFF: One problem in making investment comparisons between two or more funds valued at market is the need to neutralize the effect of different timing of net deposits into the respective funds, especially if investments in common stocks are of significant proportions, since the timing of deposits is usually outside the control of the investment manager. For this discussion I will assume that the funds being compared are intended to be invested primarily in equities or that we are comparing only the equity segments of the funds.

The many possible approaches to solving the timing problem can be divided first into two groups. Under Method 1 the amounts and dates of the deposits and withdrawals to one or more of the actual funds are used in the comparison. Under Method 2 only a hypothetical single deposit or a hypothetical series of equal deposits is used, ignoring the actual pattern of deposits of all the funds.

As an example of one variation of Method 1, if just one of the funds to be compared is operated without unit values, the actual pattern of net deposits into that fund may conveniently be used for all the other funds to calculate hypothetical accumulations based on their unit values. The actual fund on hand at the beginning of the period under study (in the first fund) should also be treated as a deposit into each of the hypothetical funds. Then a comparison, in which the effect of different timing of actual net deposits has been neutralized, can readily be made, simply by comparing the accumulation in the first fund at the end of the period under study with the accumulations in each of the hypothetical funds on the same date.

If two or more of the funds under comparison are operated without unit values, it becomes necessary to introduce a refinement into Method 1. The refinement consists of calculating a hypothetical fund corresponding to each of the actual funds, assuming that the actual net deposits had been made into a portfolio consisting of the stocks in one of the published market average indices, such as Standard & Poor's 500. (The Dow-

Jones 30 Industrials consist of too few stocks to be a broad enough average.) An effective annual rate of total investment result, including dividends and market value changes, can then be determined for both the hypothetical Standard & Poor 500 accumulation and the actual accumulation. Then these two effective annual rates can be compared. The performance of each fund would be judged (in part) on the basis of the difference between its result and the market average result. In this situation, where two or more of the actual funds have no unit values, Method 1 is not practical without a computer. (If the periodic rates of return are known, these are just as useful as unit values.)

Under Method 2 the actual histories of net deposits into all the funds are ignored. Instead, all the funds are compared on the basis of either a hypothetical single deposit at the beginning of the period under study, which we shall call Method 2A, or, alternatively, a hypothetical series of periodic equal deposits during the period under study, which we may call Method 2B. In both variations of Method 2 it is necessary as a preliminary to determine the rate-of-investment result by analyzing the transactions of each quarter of each of the funds being compared. Using the resulting quarterly rates, it is possible to "chain them together" and to derive an effective annual rate, which is essentially a geometric mean. This geometric mean is implicitly based on the hypothesis of a single deposit for each fund at the beginning of the period under study.

Method 2B is not quite as simple as Method 2A. It is necessary to accumulate an equal amount from the beginning of each quarter (assuming that the rate-of-investment result for each fund is available by calendar quarter) to the end of the period under study. Then the effective annual rate for each fund, based on the hypothetical series of equal quarterly deposits, should be determined. Comparison of the performance of the funds on the basis of these effective annual rates would then be considered appropriate—at least to the extent that the timing of entry into the stock market has been neutralized. Note that in Method 2B, as compared with 2A, there is much more weight given to the later quarters of the period under study, with added weight each quarter due to the new deposit.

In order to evaluate the relative appropriateness of Method 2A, as opposed to Method 2B, I would start by saying that I consider Method 1 to be the best of the three methods theoretically. With this premise, subjective as it may be, I would then go on to say that Method 2A seems to me to be theoretically a better method than Method 2B whenever we are comparing, say, two funds, both of which were relatively well established at the beginning of the period under study. In other words, the

assets in each of the two funds at the beginning of the period were large in relation to the assets at the end of the period. On the other hand, if the period under study is very long or if one or both of the funds were very small at the beginning of the period, then I would feel that Method 2B is superior theoretically to Method 2A. What I am really saying, in each instance, is that either Method 2A or Method 2B has come closer to Method 1. Both 2A and 2B have the advantage that they do not require a market average bench mark. But Method 1 is superior not only theoretically (in my opinion) but also in its practical feasibility, whenever all the funds except one are operated with unit values, because a fair comparison is then possible without the necessity of processing raw transactions to calculate the actual results for the one fund for each quarter.

We have received two questionnaires in which we have been asked to furnish our unit values as of the fifteenth day of each month (or the mid-point of each calendar quarter). If the purpose of the questionnaire is to compare the investment performance of our separate account against the performance of a single bank trust operated without unit values, then we would expect the consultant to group the purchases less sales of the trust by month, so as to accumulate these net purchases in a hypothetical fund invested in our separate account, assuming that each month's net purchases took the form of a deposit into our separate account on the fifteenth of the month. Then a comparison could be made between the hypothetical accumulation and the actual accumulation in the trust, following Method 1 already described, provided the consultant also knows our unit value at the end of the period under study. He also needs to know our unit value at the end of the quarter prior to the period under study, in order to treat the fund on hand at that time as an initial deposit into our separate account.

On the other hand, where the consultant wishes to compare our performance against several pension trust funds operated without unit values, the first step is to calculate quarterly rates of return for each of the trusts, in order to apply Method 2A or 2B. With luck, the fiscal quarters of all the trusts will be calendar quarters, so that Method 2B can be used efficiently. But the point is that quarterly rates of return for our equity account should be for exactly the same quarters as they are for the trust funds. Therefore, the questionnaire should ask us for our unit values at the end of each calendar quarter, if Method 2A or 2B is to be used, and not in the middle of each quarter (or month).

The Smith, Barney Company has developed a standard method for investment-performance comparisons in which they introduce a refine-

ment to eliminate the effect of timing of deposits and withdrawals within each quarter. Before they calculate the rate-of-investment return for the quarter, they multiply each purchase or sale of common stock during the quarter by the ratio of the Standard & Poor 500 price index at the end of the *preceding* quarter to the index on the date of the transaction. (This ratio could be reduced by an average rate of dividend per quarter.) Then they assume that the transaction occurred at the start of the quarter, so that the *adjusted* purchase price or sale price should affect the denominator of the final rate for the *entire* quarter. For the bond segment of the trust they make similar adjustments, based on Moody's A price indices (converted from the published yields).

Finally, one other problem related to the timing problem is the fact that under all three of the methods described (1, 2A, and 2B) everything depends on the prices of the securities in the fund on one day—at the end of the period under study. In Method 2A this problem is doubly acute because it also applies to the single deposit on one day at the start of the period. It would seem that theoretically the closing valuation under Method 1 or Method 2B should be based on an average of, say, five successive valuations (weekly, monthly, or quarterly). However, I have not seen this idea followed in practice.

MR. ROBERT L. BARNES: A purely mathematical comparison of the performance of different funds can be quite misleading without due consideration to the following factors.

1. *Investment management.*—Most funds in existence over any length of time will have had several investment managers. Any comparison of funds' performances is really intended to be a comparison of the skill of the funds' managers. To be indicative of possible future performance, the comparison should be made only over the term of the current investment management, assuming that the current management will continue indefinitely.

2. *Outside influences.*—Any conditions in the trust agreement, and so forth, restricting the investment managers' freedom of choice would, of course, have to be considered. However, it is much more difficult to assess the effect of more subtle influences, if any, of an employer on a fund's performance (e.g., holding an associated company's stock or bonds; an employer's wish for a defensive portfolio, a higher yield, and so on).

3. *Timing of payments to fund.*—The timing of payments may be of little influence in relative performance over a long period but can have a

significant effect in short-term comparisons where current contributions are a higher percentage of the total fund. This can more readily be seen by considering the difference in market value at the end of one year of two stock portfolios, the first of which has received contributions monthly throughout the year and the second of which has received a lump sum at the end of the year.

4. *Period of comparison.*—The choice of starting and end points of a comparison period will have a bearing on the outcome; for example, if the peak of a rising market is selected as the starting point and the low point of a falling market is selected as the end of the study, the more defensive portfolio will probably indicate a better performance. To appreciate both the defensive and aggressive features of a portfolio, the study should not be static but rather continuous, with starting and end points both in rising and falling market periods.

5. *Chance.*—A precise determination of what portion of a fund's growth (or shrinkage) is due to chance is impossible. However, if a portfolio contains securities with a history of erratic performance, which performance was wrought by circumstances unforeseeable at the time of investment, some doubt would be cast on the validity of a comparison. The longer the period of study, the less likely there is to be an element of chance in the growth of a fund, but chance may very well be a factor in a short-term comparison.

MR. KORNHAUSER: The most reliable conclusions would be reached by comparing fixed income results separately from equity results and using a period of at least ten years for the equity portion. Given sufficient detail, the actual effective annual yield rate could be determined and compared with the effective annual yield rate that would have been produced had the same net amounts been invested at the same time intervals in one of the published "averages" of a cross-section of such investments. Different pension funds could then be compared by their relative performance to the hypothetical result that would have been achieved by the "averages."

MR. DREHER: Many employers give no information about either the amount of accrued benefits or the extent of their funding. Increasingly, there is an interest in seeing that employees are informed of their accumulation of rights under all types of benefit programs.

Some employers give employees a brief statement identifying how much benefit is accrued. Under many insured pension programs and a good



many of the trustee funds, this statement may include a comment that accrued benefits are met by available assets. Other employers get into very complicated procedures, some of which require computer programming to be performed by their own staffs or purchased from some outside supplier. Some of the more employee-relations-conscious employers have group meetings at which this type of information is presented. In some cases individual discussions are held with employees to show them just what benefits have been accrued to their credit. Another variation of this technique is to include a worksheet in the employee booklets so the employee can take his own age, length of service, and salary history and calculate how much benefit has been accumulated for him.

If a plan is well funded, there may be advantages to a display of the extent of funding. This gives an evidence of the good faith of the employer and the independence of the employee's ultimate benefit security from the future fortunes of the sponsoring company.

There are obvious disadvantages to showing the amount of funding in a plan that has minimal funding. It could well be that well-intentioned employers are using a book-reserve technique, whether or not it is explicitly identified in their financial statements; in this circumstance the employees' pensions could be quite secure, even though they are not presently supported by assets in a segregated trust fund or a group annuity contract.

Another disadvantage to including this information is that it could be quite misleading. In the event of plan termination, the order of priorities assigned to different classes of employee could mean that assets were not being distributed uniformly among all classes of employee; one group might be fully protected and another only partially. To include this refinement in an annual report to employees might require a prohibitive cost and also could introduce much confusion.

Another important aspect of this question is the measurement of assets. Are they to be related to the actuarial basis of the pension fund, the cost of commercially purchased annuities, or long-range expectations for pension fund performance?

**MR. BRUMMER:** We generally give our clients a list of all the people who are participants in the pension program. This list will show either their accrued benefits or something that will give them the accrued benefits if it is just a monthly income per year of service. In some cases they will want a certificate that will show either their accrued benefits or some sort of projected benefits, assuming that the current earnings continue or that they continue to be employed until their normal retirement dates. We

do not have any situations in which the client has asked us to give an employee the present value of whatever has been built up for him by employer contributions. Of course, it is done for employee contributions.

I would be hesitant to even try to tell an employee how much of a specific fund belongs to him. How can you carve it up in light of varying contribution levels from time to time? An employer can contribute the maximum one year and the minimum under the law the next year. How can you, with any confidence, give a figure to each individual employee?

MR. KORNHAUSER: In a small minority of the pension plans with which I am familiar, a statement or "certificate" is given to each participant indicating the accrued benefit and/or the projected benefit at normal retirement age. "Extent of funding," were it indicated, would no doubt be based on the provisions effective upon termination of the plan. Telling some employees that their benefits are fully funded and others that their benefits have no funding is bound to lead to misunderstanding and possible pressure for quicker past-service funding. Quicker funding would probably create a slow-down in benefit improvements. If so, then in the overwhelming majority of cases (in which funding will continue indefinitely) the employees closer to retirement would be harmed in favor of employees who are young now but would become the group close to retirement at some time in the future when more contributions can be again applied to benefit improvements after completion of past-service funding.

MR. JOHN A. MACDOUGALL, JR.: The stress or pressure for federal regulation or any form of regulation is not coming from the actuary. It is coming from the employee or his representatives, even though he may not know the facts and may not understand. In the Studebaker situation, for example, it came about because of the misunderstanding of the people involved—the covered employee. It mattered little that the union and management in that case both agreed that the contractual agreements had been met.

I do not profess to know the answer; I think, however, that merely to say that the employee will not understand is to beg the question. We have to find a way in which the inherent mechanics of pension funding, guarantees, and so forth, will be of interest to the employee and understood by him.

MR. BRONSON: I wonder whether the pressure cited by John MacDougall for more information is really coming from covered employees or from the rash of new pension "experts," social objectivists, and certain

members of Congress as a means of engendering interest among their constituents. In short, is it a real interest or a manufactured interest?

*New Orleans Regional Meeting*

MR. GILBERT E. KERNS: Many actuaries had misgivings about the publication of *Opinion No. 8*. Some viewed this as an unwarranted invasion of the field that was properly the concern of the actuary. Further, some actuaries favored the flexibility permitted employers in funding the obligations under a pension program and expressed concern that the accounting *Opinion*, by the imposition of a certain amount of rigidity, would predispose an employer toward minimum funding, inadequate plans, nonqualified plans, and in some cases no plans at all.

I do not share this rather pessimistic outlook. The Introduction to *Opinion No. 8* contains the following sentence: "The Board has concluded that this Opinion is needed to clarify the accounting principles and to narrow the practices applicable to accounting for the cost of pension plans."

The *Opinion* should eliminate much of the freewheeling that has taken place in the past in accounting for pension costs, such as the extreme variations in deposits occasioned by bringing on substantial capital gains in a particular year or the permissible, from the Internal Revenue Service point of view, omission of deposits following systematic reduction of the initial unfunded past-service liability. The elimination of such practices will provide stockholders and the public with more meaningful information.

*Opinion No. 8* becomes effective with respect to accounting years beginning after December 31, 1966. We are now revising actuarial valuations for clients to accommodate the *Opinion*. Some obvious changes are required. In order to determine the minimum annual provision for pension costs as a matter of routine, we will compute the value of vested benefits at the beginning and end of each plan year and test whether the excess of the value of such vested benefits over the pension fund has decreased by at least 5 per cent. Incidentally, in making this test, an adjustment is required if pension accruals in the past have differed from amounts actually contributed to the pension fund. If the decrease is less than 5 per cent, the minimum contribution otherwise determined—normal cost plus interest on the unfunded prior-service cost—is to be increased by an amount sufficient to bring the decrease in the value of vested benefits over assets to 5 per cent. An alternative definition of minimum cost can be used if this results in a lower figure. This is an amount covering the total normal cost plus the amortization of the past-service liability over a forty-year period.

The Board believes that actuarial gains and losses should be spread over the current year and future years unless such gains and losses arise from a single occurrence not directly related to the operation of the plan, for instance, a plant closing. This will usually be accomplished directly if the actuary is using a projected benefit method, either by spreading gains and losses over current and future normal-cost payments or by adjustments to the past-service base. The *Opinion* states that gains and losses should not be used to adjust the amortization period.

Under the accrued benefit cost method, that is, the unit credit method, the actuary who has been using gains to decrease current-year required contributions will have to change this procedure and spread such gains or average them if he is to conform with *Opinion No. 8*. The Board suggests that a period of ten to twenty years for spreading is reasonable. The Board also believes that unrealized appreciation and depreciation in equities should be recognized in the determination of the pension cost provision. This will certainly give rise to changes in valuation procedures or in choice of interest assumption, since most actuaries, I believe, are using book value for cost purposes although a trend exists, particularly on negotiated plans, to use market value rather than book value.

The wording of the *Opinion* regarding unrealized gains is moderate. A system that does not give undue weight to short-term market fluctuations would be proper. Presumably the actuary could write up the carrying (or book) value of assets by a percentage varying by the ratio of market value to book value and could establish a ratio between market value and book value so that the write-ups would cease when the total book value equaled a predetermined percentage of market value. If this or some similar system is followed, the actuary may be influenced toward the use of more conservative offsetting valuation assumptions.

In some cases two valuations may be required, one to meet the requirements of *Opinion No. 8* and the other one to determine the contributions which are deductible for tax purposes. As of now, the Internal Revenue Service will accept costs based on either market or book value and will permit changes in the valuation of assets so long as such changes are not presumed to be for the sole purpose of effecting tax advantages.

The *Opinion* contains the following statement regarding employees to be included in cost calculations:

The Board believes that all employees who may reasonably be expected to receive benefits under a pension plan should be included in the cost calculations, giving appropriate recognition to anticipated turn over. As a practical matter, however, when the effect of exclusion is not material it is appropriate to omit certain employees from the calculations.

The last sentence opens the door for the accountant's acceptance of the actuary's exclusion of employees who have not satisfied the plan's eligibility requirements, particularly if the waiting period is only two or three years and the turnover among short-service employees is high. Hopefully, the accountant will rely upon the actuary's judgment regarding the materiality or immateriality of omitting ineligible employees from cost calculations and will not impose unnecessary expense upon the plan by insisting on a double valuation.

The possibility of two valuations will present itself for plans having strict age and/or service requirements for admission, such as age 30 or 35, combined with five years of employment. This part of the *Opinion* may bring pressure for the adoption of more liberal eligibility requirements in some plans.

At this point I would like to cite a few questions raised by the *Opinion*.

1. If an employer is following a funding program which calls for amortization of the past-service liability over a period of forty years or less than forty years, will the actuary be required to make the rather complicated test regarding vested benefits and the decrease in percentage that I referred to before?

2. Another part of the report indicates that appreciation and depreciation need not be recognized for debt securities expected to be held until maturity and redeemed at face value. Does this suggest that, if an investment portfolio contains substantial capital losses in the bond portion of the portfolio, the actuary should use these to offset unrealized gains in the equity portion of the portfolio?

3. I am rather concerned about the valuation problems that may be posed in connection with informal supplemental plans. Particularly when the payment of benefits in the past suggests that the plan is really in effect but the amount of payment is discretionary with the employer, the employer is discriminating, and the benefit patterns are haphazard. This, to me, poses real problems from the actuary's point of view in arriving at the provision for pension costs.

MR. HARRISON GIVENS, JR.: Another question which comes to mind is, If one is doing an entry-age calculation and he is recognizing employee turnover and projected salaries and wants to calculate the value of vested benefits, is it proper to use turnover and salary scales for the vested lives?

MR. KERNS: My thought is that the actuary would probably change the basis for the calculation for vested benefits and not use turnover. He might properly apply a discount for mortality and interest but

would not use turnover factors in such calculations, even though he may have used a turnover assumption in the calculation of liability with respect to the remainder of the group.

MR. HARRY D. MORGAN: It may be late at this stage of the game, but I would like to raise some basic policy considerations in regard to this APB affair. It may still be feasible to have the Board reconsider certain aspects.

I agree with the basic objective of systematic pension cost provisions, but I think that the accountants have gone beyond this when they require a cost that would make provisions for vested benefits. Had the opinion been issued without introducing the vesting concept, the accountants would have remained within their objective of a systematic cost.

They have gone beyond their particular sphere in another area. Consider labor-negotiated plans. The company has negotiated contributions with the union; they may have agreed to contribute so many cents an hour; they may have agreed to an  $n$ -year funding program, or it might merely be the minimum required by the Treasury Department. Yet, the *Opinion*, because of its restrictions on the method of valuing assets, on the treatment of gains, and with this vesting requirement, could very well put an employer in a position where he will have to charge against his profits more than he agreed to contribute. This could have serious implications.

Another point comes to mind. The Internal Revenue Service does have minimum funding requirements. Some companies may have had a plan in force for quite a few years. They have been funding their plan on a conservative basis. In other words, a large margin exists between the initial past-service base and the unfunded liability. The *Opinion* does not permit this company to recapture that margin. Companies which have conservatively funded in the past are, in effect, penalized.

The vesting calculation is truly complicated. We have been talking about using termination scales. Many plans are based upon final (or highest) five- or ten-year average salaries. Are we going to be required to maintain a running record for the last ten or even fifteen years of all people covered by the plan and update this each year? An exact calculation of that type could involve more time and expense than all actuarial services put together.

MR. KEITH H. COOPER: The calculation of vested benefits as required by *Opinion No. 8* creates certain problems. One of these is the varying retirement-age situation. For example, a plan could provide for

a normal retirement age of 65, but employees could retire with unreduced pension benefits if by age 60 they had completed at least thirty years of service. Let us take the position that the valuation of the plan assumed that 80 per cent of the employees would retire at age 65 and the other 20 per cent would retire at the earliest possible age at which unreduced benefits are available. It is my understanding, from people who are in close contact with the committee that prepared *Opinion No. 8*, that the same retirement-age assumptions would be employed in the determination of liabilities for vested benefits. This is true even when on the windup of the plan 100 per cent of the employees that satisfy the age-60-thirty-year-service rule would be entitled to unreduced pensions.

Another problem occurs when benefits are related to the average earnings over a specified period, such as the last ten years preceding retirement. Rather than attempting to obtain from the client the average earnings over the ten years preceding the valuation date, I have been applying the salary-scale assumptions adopted for the regular valuation as a means of determining the vested benefits.

Generally speaking, I use the actuarial assumptions adopted for the regular valuation when determining liabilities for vested benefits.

**MR. RICHARD DASKAIS:** I want to answer one of the questions previously raised. For a large company, the question arose as to whether the 5 per cent vested provision would exceed normal cost plus forty-year charging for past service. It was quite obvious to us that the normal cost plus forty-year charging would be less. Our client's accounting firm accepted our statement to this effect without requiring a calculation of the 5 per cent vested provision, which would have been difficult under the plan.

I would like to get some expressions of opinion. We have received several requests from accounting firms for quotation of the amount of the value of vested benefits at the end of the year. Probably our practice is quite similar to most other firms in that the valuations are typically done early in the year, perhaps at the beginning of the year. We have responded to these requests by saying that we have done no valuation as of the end of the year, and we have made some comparison between the valuation date in the year being considered and the previous valuation date. Has anyone run into any trouble with this approach?

**CHAIRMAN BLACKBURN H. HAZLEHURST:** Our plan is to project the anticipated vested benefits at the end of the current valuation year. If the plan has a valuation base of January 1, we would actually be projecting to the next December 31.

While estimates of liabilities may evidently be based on data used for the most recent valuation, some discussions that I have seen have suggested that the accountants will nevertheless want the comparison of that value to assets to be based on the assets at the end of the year. If some kind of adjusted-asset approach between book and market value is used, I am under the impression that we would need to make that adjustment after the close of the fiscal year and in time to prepare a footnote to the stockholders' statement.

MR. A. CHARLES HOWELL: In view of the number of problems that we seem to be encountering or anticipating in this area, I have a thought to advance. I understand that the accountants are planning to put together a sort of request sheet which would show all the wanted information. Before this is done, I wonder if it would be desirable for our Society, as a group that works on problems of pension plans, to sit down with the accountants and arrive at some agreement on statements of principle.

MR. KERNS: After observing the variation in experience among pension plans, I despair of the feasibility of legislating valuation assumptions. We have seen turnover rates which seem to be independent of age and service, say, a flat 7 or 8 per cent a year. In other plans, the rate of termination is decidedly a function of both age and recency of employment. A grading from 25 to 30 per cent at young ages and short durations to virtually nothing at high ages and long durations is not unusual.

Similarly, a fund with an aggressive investment policy may show a 10 or 12 per cent rate of return over a number of years while another fund is earning, say,  $3\frac{1}{2}$  per cent. Most of you would be able to cite substantial differences in all the other factors underlying pension cost calculations, such as salary progression, retirement patterns, and rates of disability.

In short each pension plan is unique and does not lend itself to the application of specific standards for determining liabilities.

Further, formidable problems would have to be overcome in attempting to establish a uniform basis for evaluating assets. As mentioned previously, the IRS is rather permissive in this area. Furthermore, pension funds may contain a wide variety of specialized assets, such as the stock of closely held corporations and real estate investments involving balloon payments.

Since *Opinion No. 8* will have the effect of reducing the funding flexibility of the employer and curtailing the imagination of the actuary, many of us will prefer to retain discretion in the choice of the actuarial cost method and the valuation assumptions. Instead of legislating as-



sumptions, perhaps we should concentrate on legislating the individual who is responsible for recommending assumptions.

In addition to being opposed to giving professional sanction to standardized valuation procedures, I would encourage resistance to governmental activity along these lines. Although Revenue Ruling 63-11 has been fairly easy to live with so far, further government encouragement could create problems.

Despite my opposition to specific valuations standards, I feel that some degree of uniformity in our communications with policyholders, prospects, and clients is desirable. We should be able to reach agreement regarding the terms used in the pension field. The glossary contained in *Opinion No. 8* is a start. I suggest also that we give consideration to defining the actuary's responsibility as a pension consultant. I think that we do a disservice to the public and act as an impediment to the bargaining process when we represent one party in negotiations without full disclosure to the other.

You are all familiar with the union actuary determining that ten cents an hour will buy a benefit of \$5 a month per year of service while the management actuary viewing the same work argues that the appropriate accrual rate is \$3 per month.

I think that insurance companies occasionally do the public a disservice by not explaining adequately the meaning of figures included in pension proposals; by leaving the impression that a deposit administration cost estimate is equivalent to an insurance premium; and by not informing the employer that the long-term cost of a program providing a given set of benefits depends only upon investment, mortality, and expense experience and that the cost estimate is intended as a guide to the employer in the commencement of his funding program.

The obligations implied in PS-64 cannot be discharged by the employer unless he is given adequate and responsible information. We can minimize, I believe, some of the abuses mentioned before by insisting that the pension actuary, consulting or company, assume responsibility for the quality of the information that is passed on to the employer by severely restricting or eliminating field calculations; by requiring both the consulting actuary and insurance company actuary to set forth the assumptions upon which costs are based and perhaps to state the reason for the selection of each assumption; by requiring the actuary to explain the particular cost method used, the implications of the method, and the reason for its adoption; and by insisting that each valuation or cost proposal contain certain other minimum information. Hopefully, disclosure along these lines would bring out the fact, for example, that a salary

scale is not being used despite the fact that benefits are related to future earnings.

My plea is for more and clearer communication to the person ultimately responsible for the cost of a pension plan.

Many of us are already certifying certain things to the employer or to the employer's accountant. We attest to the initial unfunded liability and the remaining unfunded liability. Frequently we offer an opinion with regard to the maximum contribution deductible for tax purposes and the minimum contribution sufficient to maintain the plan as a qualified one.

Accountants will no doubt ask us to certify to the minimum and maximum provision for pension cost. I see no objection to rendering an opinion as to the adequacy or appropriateness of the funding of the pension plan. This may take the form of commenting on the progress in amortizing the past-service liability or certifying to the relationship between assets and accrued or vested benefits with perhaps a prediction of how this relationship would change in the future if the recommended funding program is continued.

On the other hand, considering the differences of opinion regarding what constitutes adequate funding, we might prefer to voice a broad opinion regarding the soundness and health of the plan and its finances.

**MR. RAYMOND B. KRIEGER:** I am in complete agreement on this point of disclosure and understanding. I have one specific thing to offer, and that is that a statement on the probable future progress of costs would be very helpful to all concerned. For example, certain cost methods start out initially somewhat high. An aggregate method that has no initial accrued liability would tend to drop down, all other things being equal. In an immature group, when using a unit credit method, the cost might tend to go up. Cost proposals very often indicate only the first-year cost, and there is a strong possibility of misleading the client. Only by adding a specific statement as to the probable future level of costs can we avoid misleading the client.

**MR. MORGAN:** I would like to dwell for a moment on this concept of adequacy in what we certify. We actuaries certify that we have used a normal or attained age or unit credit method and specify the assumptions which have been used—maybe even go so far as to say that we think these assumptions are reasonable—and that, on that basis, we have computed  $X$  dollars of costs.

One very important concept is the relationship of accrued liability

in case of plan termination to the assets, not only as of today but as it might be at various points in the future, using reasonable assumptions. Unless that is done we can only certify that the contribution is meeting the Treasury Department's PS-57 minimum requirements. PS-57 is a handy legal test, but it is somewhat artificial. Its use, I think, was adopted principally for tax reasons. It gives a decent measure in the early years of the plan just to prevent a company from installing the plan for the benefit of its highest-paid people and then eliminating it. But, beyond that, PS-57 is artificial, and the best way to test adequacy and to certify to it would be to project the relationships. Perhaps someone else might have a better suggestion. I would be interested in hearing it.

CHAIRMAN HAZLEHURST: One of our clients has been using a funding approach which they understood would result in their costs rising substantially in future years. That is what they wanted. My suggestion to them was that we would try to work with them as long as they understood what was happening. To further help their understanding of the situation, we suggested making a second valuation to give some indication where these cost levels would end. Another suggestion was to make a statement directly to plan participants indicating the extent to which accrued benefits were funded.

MR. DAVID G. GODDARD: I am definitely against standardizing actuarial assumptions. I think that it is utterly impossible, because there are so many different conditions in various plans and so many groups with totally different characteristics as to mortality, turnover, and other factors. Given no other information, I tend to use the 1951 Group Annuity Table for a labor group as a reasonable measure of probable mortality. But I have groups in which the mortality is much greater and others in which it is lower. I know this from long and careful observation, as does everyone concerned.

It is similar with turnover. There are groups in which people never quit, and there are groups in which the turnover is very high. Anything in the way of a standardized set of mortality and turnover assumptions would, I believe, be ridiculous.

MR. KRIEGER: It seems that standardized assumptions are just impossible and unworkable. If we fully disclose what has happened, what we have done, and what will happen in our opinion, I think that is all that we can do.

CHAIRMAN HAZLEHURST: There is much being done in this country to try to demonstrate to employees the kinds of benefits that they have. The area of employee communications runs through pensions and all other fringe benefits. Usually these deal with projected benefits at retirement rather than benefits accrued to date, although there are a number of corporations that are giving a statement of the accrued benefits to employees each year.

However, I am not aware of any company that gives each employee a benefit security ratio which would show the proportion of his earned benefits that he would have taken with him if the plan had shut down on the last anniversary.

MR. HOWELL: We are one of the companies that tell their employees each year the amount of accrued pension benefits. This year we changed our plan from a unit credit form to a final average form of plan. I see some real difficulties in any funded plan in telling an employee his benefit security ratio, primarily because of the preferential choices that exist in most plans. Most people who are nearest retirement have a 100 per cent funded ratio, and those farther away would have something less.

MR. WILLIAM H. BURLING: It is apparent that, if you look at the benefit security ratio from the view of plan shutdown, you would have to tell a number of employees their percentage is zero. If this is so, what is the point of communicating that to them?

CHAIRMAN HAZLEHURST: Well, from the standpoint of morale it is pretty bad. That is why corporations are not doing it, and that is why I think that it is pretty tough to get a client corporation to do this by themselves, without some sort of imposition of discipline from the outside, perhaps by actuaries.

MR. GIVENS: I am very sympathetic to the idea of telling the employee whether there has been any funding for him. I do not know of any case of ours where we have actually put out a report, but I have discussed it with some companies and there is a great deal of backing away from the idea of telling the employee his benefit security ratio is zero.

Some companies want us to tell the employee what the accrued benefit is. We can also give him a statement about the projected benefit. This funding ratio lends itself very nicely to entry-age calculations. The total of all the benefits is so many million dollars, and there is this much in the fund which will take care fully of all the retired lives, all the people

eligible for early retirement, three-quarters of the vested people, and none thereafter—and you can see an orderly progression from year to year.

MR. KERNS: We have a computer program accurate to two decimal places for determining the annual yield realized by a pension plan. Results relate to book value excluding capital gains, book value including realized capital gains, and market value. Subfunds—such as mortgages, bonds, or stocks—are analyzed separately if this is desired. Our results show yields for individual years and periods of years terminating with dates selected by the client.

This is a vital step in measuring the performance of a pension fund. An additional yardstick might be useful, namely, the effective earnings rate of the investment portfolio as of the current date. Other factors to consider in measuring the performance of a pension fund are the growth potential of the assets and the quality of the securities comprising the investment portfolio. These are somewhat subjective elements, and agreement, even among experts, might be difficult to obtain.

Our measurement of past investment performance does not reveal the degree of risk assumed. In order to obtain high yields, the fund manager may have to be somewhat venturesome in his choice of securities.

Investment performance needs to be looked at in the light of the objectives of the plan as stated by the employer or the board of trustees and the instructions or lack thereof to the fund manager. In some cases the employer will emphasize that benefits are related to final average earnings and insist that investments have the potential for expansion to match the possible increase in liabilities because of inflation.

Another employer may feel that the promise of fixed income should be backed up by practically risk-free investments, which, in turn, usually means below normal yields.

MR. GIVENS: When we started working on this business of comparing yields, it seemed so simple to say, “Had you been with us instead of where you were, and had you made these contributions and received this investment income at these times and put them into corresponding investments, be they fixed income or general account investments or common stock separate account investments, you would be \$40,000 better off by now.” But, no matter what you do, you can’t win. Any system that I can think of, you can discredit, and any system that the other fellow can think of, we can discredit. It is absolutely extraordinary how many things can be criticized.

What we have found out is that there is no single right way to do it, unless the client understands what he has to select and what the significance of it is and believes that it is worth all the time and effort, then explaining all the possibilities and defending against the criticism of others, and so on, are just not worthwhile.

MR. HOWELL: I disagree very heartily with the preceding speaker. Certainly it is an extremely difficult thing to measure investment performance, but I cannot think of anything more important today than to do it. I think that it is a matter of attacking these things problem by problem.

We ourselves in our own company in our own separate accounts make regular comparisons of our common stock performance with the Dow-Jones and the Standard & Poor indices. We do it on two different bases—one following a particular dollar put in at a particular point of time and one with level dollar amounts. If that does not work for a particular case, we will take into account the absolute expected incidence. We do a separate transaction comparison when we are requested to do so for fixed income investments, comparing that with our general.

It is, I agree, extremely complicated, but we have worked with some banks that have done a very sophisticated job; when you deal in that kind of atmosphere, you would be surprised how many problems can be resolved.

MR. DASKAIS: I think one of the difficulties with a comparison of fixed income versus fixed income and a separate comparison of equity versus equity, as Mr. Howell suggested, is that you do not evaluate the choice made by the investment manager as to whether fixed income investments or equity investments will be made and to what extent investments will be shifted. This choice may be more important than the selection of particular fixed income investments and particular equity investments.

A couple of years ago one of our clients decided to split his fund between two banks. Every transaction is split precisely 50-50 between the two banks except investment transactions. Ten years from now we will be able to say that Bank A did a better job than Bank B in the last ten years. Other conclusions may be drawn, and there will be differences of opinions as to whether those conclusions are warranted.

MR. KERNS: I have a topic that I would like to bring to your attention. The current performance of insurance companies almost demands that an enlightened employer give consideration to insured funding. In my

opinion the most important factor in the selection of a particular insurance company is the potential investment performance. In estimating potential investment performance, the actuary is probably influenced to the greatest extent by recent new-money rates. My frustration lies in the lack of comparability among the figures released by various companies. The new-money rate is variously reported as before and after the effect of federal income taxes, or the federal income tax may be reflected as a charge in the experience rate process. Some companies will not acknowledge the existence of a residual federal income tax on pension funds, ignoring, I think, the tax on surplus that may arise in situations where Exhibit 8 reserves are required, such as deferred annuities or retired lives.

Some companies credit capital gains; others do not. If capital items are allocated to the pension fund, this may take the form of an adjustment to the investment rate, where it may be credited separately. Similar variations may exist in the handling of the mandatory securities valuation reserve and any voluntary investment reserve. Not only are the figures difficult to analyze, but some companies seem reluctant to release information regarding the practices being followed.

*Group Life and Health*

- A. Is there an increasing interest in level premium life insurance in connection with employee benefit plans? What kinds of sales situations are being encountered, and what types of level premium insurance plans are being offered separately or in conjunction with group term life insurance? What underwriting, actuarial, and other problems are encountered in the design and marketing of such plans?
- B. What is the market for medical care plans, including vision care and drug expense benefits? What are the underwriting and administrative problems involved?
- C. Is there any evidence of an increasing lag in the presentation of claims for (a) health care expense benefits and (b) weekly indemnity benefits? What are the factors that may be contributing to such a trend? How can companies deal with this matter?

*New York Regional Meeting*

MR. RICHARD H. HOFFMAN: Recently there has been some interest expressed in a type of level premium plan under which an employee has the option to buy permanent level premium insurance in replacement of his group life term coverage.

Usually, the term plan is noncontributory. The employer shares the level premium payments with the employee and contributes, toward the cost of the permanent coverage, an amount based on the employee's age, which approximates the amount that he would have contributed had the coverage remained on the normal group term basis. The employee pays the difference between the employer's contribution and the gross premium. The division of the premium between term and permanent varies with issue age. It is about 50-50 for straight life insurance on an average case. Upon termination of service the permanent insurance may be converted to a regular individual contract, in which case the employee will pay the full premiums. Other options at termination are paid-up insurance or cash surrender.

The permanent insurance is available without evidence of insurability. Companies who offer this plan pay commissions on the permanent insurance that are higher than the regular group scale. Some pay regular individual insurance commissions.

The plan combines group mortality with the administrative expense and commission rates of individual insurance. The resulting cost may be higher than the cost of regular individual policies. It does provide insurance for an employee's long-term needs, but the employee who terminates his permanent insurance has received no additional insurance benefits for the increased premium that he has paid. Perhaps the additional premiums could be better used to buy more term insurance.



Especially difficult problems for a company desiring to offer these plans are the allocation of dividends on the permanent insurance by mutual companies and what commissions to pay when insurance is increased as a result of salary increases or on conversion.

MR. WILLIAM C. WIRTH: I feel that there are a number of disadvantages in the kind of group term and permanent coverage which has been described. Some of the more important ones are the following:

1. The employee's cost is increased so that his ability to build up a satisfactory insurance program is restricted.
2. The enrollment procedure may be complex and time-consuming. To explain the plan properly, an agent should be available to interview all employees initially and all new employees or employees eligible for an increase in benefits. The employer should ask himself whether the resulting disruption of his normal business functions for this purpose is desirable.
3. There may be a question of whether the agent can eliminate his own self-interest in properly advising employees as to whether to elect term or permanent insurance.

When the employer wants the estate-planning services of an agent for his employees, I believe that a better arrangement would be to offer *supplementary* individual permanent insurance rather than to *replace* the desirable low-cost group term insurance.

4. The "term or permanent" product is more complicated to administer, not only for the insurance company but also for the employer. Initial employer premiums for those employees electing the permanent coverage may be higher than the premiums for those electing term premiums; new "units" of permanent coverage must be purchased if benefits are increased; and insurance company costs may be substantially higher.
5. A standard group paid-up and term policy is more effective in reducing the after-retirement cost of the employee benefit plan.

MR. JOHN H. BIGGS: One plan of level premium life insurance which is much talked about currently is a "permanent replaces term" plan. One might call it a "tontine with term" plan involving a pure endowment benefit paid for by the employee and a conventional group term life benefit paid for by the employer.

One of the principal underwriting difficulties in writing a "permanent replaces term" type of plan is designing a schedule of employer contributions which (1) will provide the same value in employer contributions for the employee who elects to pay extra money for permanent and to the employee who declines, (2) will be level, thus permitting level employee payments, and (3) will not create taxable income to the employee.

It may be impossible to satisfy these three seemingly reasonable

criteria. The first two conflict, since either the electing or the nonelecting employee may not stay to retirement. Unfortunately, both items 1 and 2 may be in conflict with item 3. As a result, the plans currently being offered range from employer contributions on a term-to-65 basis—for either the full face or the net amount at risk—through yearly renewable term rates at the attained age (for the individual or for the group) to no contribution at all.

Other types of plans offered include (1) the permanent second deck, or complete extra life insurance policy; (2) the dealership type plan, in which the permanent policies are sold, usually by means of a face-to-face solicitation, to all the contractually allied wholesalers, dealers, or distributors of a producer; and (3) typical trade association plans.

The greatest problems in this new development involve marketing. How is the coverage to be solicited? In what areas should group be used rather than a company's already developed individual forms? What agency and brokerage firms are equipped to handle the sale of the large or national accounts?

As to the underwriting and actuarial problems, the best starting point is a review of the classic paper on group permanent—Warters' paper in the 1947 *TASA*, which describes group permanent insurance as seen in the days before the tax rulings which made the employer contribution taxable. One addition to that paper necessary for the current market is the inclusion in the policies of several typical individual policy features, such as loan values and dividend options.

**MR. ROBERT C. McQUEEN:** I question the propriety of the plan which Mr. Hoffman described. A company which induces an employee to exercise the permanent insurance option merely provides him with a rather poorly performing savings plan. He has only the cash values. He receives no additional insurance and has no loan values.

**MR. WALTER S. RUGLAND:** As an alternate to this new approach and in competition with it, may I suggest that we sell the traditional group paid-up life insurance? Instead of having the traditional \$1 per thousand employees contribution, let the contribution be a level amount depending on entry age so that it would accumulate a fixed amount at retirement, such as \$500 or \$1,000, or a fixed per cent of the group life benefit.

**MR. HOFFMAN:** The market for vision care benefits appears to be somewhat limited at this time. This coverage is usually considered after all other health coverages are provided.

It should be pointed out that the more costly type of care, that is, surgical or medical treatment for disease or injury to the eyes, is covered under normal health insurance contracts.

What is not covered is the more routine costs, that is, the cost of examinations, lenses, and frames. The latter benefits might be considered as budgetable and payable out of an employee's income without the added cost of administration required under insured arrangements. Of course, these are tax-free benefits, and this automatically produces some interest in providing them by insurance. With the advent of Title XIX some states have provided vision care as part of the eligible benefits in their programs. This may also give some impetus to the market for this coverage.

In designing a vision care plan, such limitations as one set of lenses a year and one set of frames in each two or three years should be considered, as well as limiting the benefits to refractions only. Exclusions of such items as contact lenses, subnormal vision aids, sunglasses, and special frames should also be considered. The benefit formula may consist of a scheduled plan or an unscheduled plan accompanied by coinsurance and, perhaps, a deductible.

With regard to drugs, adequate provision for the cost of out-of-hospital prescribed drugs is provided under most major medical plans. These plans would seem to satisfy most of the demand for drug coverage at this time.

However, there has been some interest in providing benefits for drugs as a separate coverage. Insuring drugs separately would likely result in the payment of numerous small claims, which, in turn, would produce high administration costs.

In designing a separate drug plan, the following should be considered:

1. Controls on overutilization.
2. Controls on excessive charges.
3. Use of the generic name rather than the trade name in prescriptions.

The following limitations could be used:

1. Limitation of coverage to those prescribed by a physician.
2. Use of coinsurance and deductibles. The latter on a calendar basis will also reduce administrative costs.
3. Use of a calendar-period maximum.
4. Limitation of the amount of drugs furnished in any one prescription.

I have noticed that separate drug plans are being developed in Canada, primarily at the instigation of the pharmacists, but am aware of little activity in the United States.

MR. GEORGE B. TROTTA: Until the present, there has been no significant demand among Metropolitan group policyholders for expanding the scope of vision care and drug expense benefits as they now exist in our comprehensive or major medical policies. Historically, the lack of emphasis on these coverages has rested on the policyholder's attitude of "first things first" in the way of medical care coverages. His attention has been drawn primarily to those areas of medical expense which conformed to the more traditional definition of an insurable risk, that is, a contingency which is relatively infrequent, generally beyond the control of the insured, and of sufficient financial magnitude to be beyond anticipation by budgeting.

Out-of-hospital prescription drug plans, as entities in themselves, have been a recent development among insurance companies. To date the market for these plans has been mainly union groups. As a matter of fact, unions often self-administer their own plans. We might expect negotiated cases in the future to look to these fringe-type benefits as a source of new and expanded coverage.

Recent developments also indicate that insurance carriers will soon be asked to expand their benefits for vision care. During state legislative sessions of recent years, there has been increased demand for laws requiring carriers to recognize optometric services on a par with the more traditional medical services covered under our policies. In addition, the recently enacted Medicaid law of New York State (Title XIX) includes optometrists with qualified physicians, dentists, nurses, and so forth, as the professional personnel for whom coverage is provided. This may give impetus to demands that comparable coverage be included in group policies.

The underwriting and administrative problems of these benefits are similar to those of any coverage which one might describe as "haircut" insurance (and this description is meant to be more graphic than facetious). After all, the annual claim cost for a "haircut" plan would be in the neighborhood of \$40-\$50, which would not be too different from the comparable net annual claim costs for these benefits.

Without a suitable deductible, say, \$25, to eliminate the smaller claims, the claim administration expenses will represent a considerable portion of the over-all insurance cost. On the other hand, unions have sometimes contended that such deductibles minimize the value of these coverages to their members.

Many carriers presently cover only drugs prescribed for the treatment of an illness or injury. In practice, however, a claim administrator may be hard-pressed to determine from a pharmacist's receipt whether a particu-

lar prescription is curative or preventive in nature. Another difficulty in processing drug claims is that of culling out a prescribed drug cost from the numerous other noncovered items which are sometimes purchased at the same time.

So far as vision care is concerned, one might expect some difficulty in establishing a line of demarcation between medical and cosmetic services. If a physician or optometrist declares that contact lenses or sunglasses are essential for the well-being of his patient, will the carrier be obliged to provide benefits? This might be overcome by imposing periodic maxima either in terms of dollar amounts or particular services, that is, one set of eyeglass frames every three years. In all probability the cost for this coverage, without such limitations, would be greater for females, since they often require frames and lenses as accouterments as much as for instruments of necessary eye care.

In considering the premium structure for these benefits, it is probable that the cost for children would be very important, since the care of their vision may require frequent visits and corrective action by the ophthalmologist or optometrist.

Although secular trend plays an important part in the calculation of premiums for most areas of medical care, it does not appear that this would be an important element for prescribed drugs. The drug component of the consumers' price index has been almost stable over the last six years in contrast to the sharp increases which have characterized other components of the medical care index.

Many actuaries may still feel that "haircut" coverages do not properly fall into the category of insurance, but it appears that we will have to once again adjust our operations to the demands of the insuring public. We have done it successfully many times in the past, and I am sure that we will do it successfully many more times in the future.

**MR. HOFFMAN:** There is considerable evidence of a recent sharp increase in lag in the presentation of claims for health care expense benefits. In measuring the increase, however, it is important to recognize the existence of a normal upward trend in the lag. The normal increase has been on the order of 3-5 per cent per year, depending upon the particular coverage. During 1966, the lag seems to have increased to a level of 5-10 per cent according to studies at Equitable Society.

Two important causes of the increased lag are changes in hospital accounting practices to comply with the requirements of the Medicare reimbursement formula and the increasing use of the co-ordination of benefits provision.

Interpretation of current claims experience both for the aggregate business and individual groups is more difficult with this changing lag pattern.

To further complicate our problem, there is evidence that gaining admission to a hospital is becoming increasingly difficult because of the high utilization of Medicare patients, which, in turn, has probably reduced the utilization of non-Medicare patients. Sharp increases in hospital charges have probably resulted in increased costs. These developments, in combination with the effect of the change in lag, make it most difficult to determine accurately the actual level of current experience.

MR. ERNEST A. ARVANITIS: Last fall many people started showing some concern about the paper work surrounding Medicare. No one could say for sure just how much extra delay there was. There were some indications that the lag might be somewhere between 5 and 15 per cent greater than normal for the under-65 group.

The impact of Medicare will, hopefully, be of a temporary nature. Quite apart from this, however, there seems to be an increase both in the lag and in the relative level of funds needed for open and unreported claims. These increases have been gradual and steady over the long term. The rise in the extent of medical care coverage has resulted in an increasing degree of duplication of benefits and has led to the adoption of co-ordination of benefits provisions. With such provisions and in the event of duplication of benefits, there is probably less urgency to request reimbursement of medical expenses. For doctors' bills, there might even be a deliberate delay on the part of the certificate-holder. The certificate-holder might be embarrassed to submit forms from different insurance companies at the same time.

Another factor which might be contributing to the lag is the general rise in the level of prosperity with the accompanying shortages developing in the labor market. Hospitals and employers alike are understaffed, to greater or lesser degrees, with an increasing backlog in the processing of paper work developing. Major medical benefits superimposed upon basic plan benefits are subject to at least as long delays as the basic plan benefits themselves.

With factors such as these, it becomes very difficult to offer any really constructive proposals. We can try to streamline and standardize claim forms further so as to reduce the amount of work required in their completion. Mechanization has opened the possibility of maintenance of in-force records in the insurer's office, thereby cutting down the policyholder's paper work. Some experimentation is being done in Canada with the use of simple punched cards for the submission of doctors' bills.

Turning to weekly indemnity benefits, we find that almost half the claims are not submitted until after the employee has returned to work. These are, of course, invariably the short-duration claims, but this is an indication of the lag problem involved.

Much the same type of factors operating in the case of medical care coverages is present in weekly indemnity claims. Liberal salary continuance plans remove much of the need for prompt filing. In fact, where weekly indemnity is payable concurrently with sabbatical leaves with pay, such as those available to the steelworkers, the weekly indemnity benefit is just so much additional income. The resultant lag is much more troublesome in the case of weekly indemnity than it is for medical care.

Medical care does not require the degree of investigation that weekly indemnity requires, and it becomes extremely difficult to investigate weekly indemnity claims after the claimant has returned to work. Difficulties in this area will almost invariably be accompanied by general absenteeism problems for the employer.

Making the employer aware of such problems can very often have beneficial results in both business costs and insurance costs for the employer, and co-operation can be enhanced through the self-interest of the employer. Similar co-operation can often be elicited from the unions as well. Malingering on the part of a small minority of union members in effect reduces the amount available for legitimate claims to the majority of union members. Union officials are interested in obtaining maximum benefits for the maximum number of members and are willing to co-operate against malingering in general when they become conscious of the consequences of such malingering.

MR. JOHN M. BRAGG: The 1964 volume of *Transactions* contains a paper entitled "Health Insurance Claim Reserves and Liabilities." This paper points out that claim reserves and liabilities are needed because of three lags—the accrual lag, the reporting lag, and the payment lag. The paper gives examples of lag tables derived from claim-payment data at Life Insurance Company of Georgia for the months of January, 1962, and January, 1963.

A new study has been made for the month of January, 1967, to determine whether the reporting and payment lags have tended to increase. The finding is that both reporting and payment lags have increased.

For group nonmaternity base hospital benefits, the median length of time required to report a day's stay in the hospital was 29 days in 1962-63 and is 36 days now. For group maternity hospital benefits, the median reporting time was 24 days in 1962-63 but is now 36 days. The increased

reporting lag may be due to shortage of hospital accounting personnel and general confusion resulting from Medicare bookkeeping.

There also appears to be an increase in the payment lag, which is the length of time required by the insurance company to pay the claim after the appropriate hospital and physicians' statements are received. In 1962-63, 90.6 per cent of the claims were paid during the first four days, a period arbitrarily selected as meaning "immediate payment." In 1967 only 76.9 per cent of the claims were paid in the first four days. During the first two weeks it was possible to dispose of 94.7 per cent of the claims in 1962-63; in 1967 it was possible to dispose of only 87.5 per cent of the claims during the first two weeks. The increase in the payment lag is very largely due to the introduction of the co-ordination of benefits provision, which often requires an investigation of claims and an interchange of information.

There is probably not much that companies can do to decrease reporting and payment lags. However, the resulting need for higher claim reserves and liabilities should be recognized.

MR. A. HENRY KUNKEMUELLER: Medical claim payments for American International Life Insurance Company's overseas portfolio have also shown an increased lag time.

MR. STANLEY L. OLDS: Since Medicare has come in, many of us have observed decreasing claim ratios. This can be explained, in part, as resulting from an increasing lag in claim payments. I suggest, however, that the lower claim ratios developed when coverage for those 65 and over was replaced by Medicare and we did not reduce our premiums to the full extent of the risks that we lost.

Mr. Hoffman, would you like to comment on this?

MR. HOFFMAN: I would agree that this is probably another contributing factor to the reduction in claim ratios.

*New Orleans Regional Meeting*

MR. THEODORE J. KOWALCHUK: Considerable interest has been generated in recent months in employee benefit level premium life insurance plans, frequently referred to as group ordinary. The types of plans offered are whole life, life paid up at 65 or some other age, and retirement income plans. Relatively few underwriting rules, in addition to the normal requirements for group term life insurance, are employed. No evidence of insurability is required, since a portion or all of the group term insurance is replaced by the group ordinary amount applied for by the employee.



Several actuarial problems must be resolved in the pricing of the group ordinary product. Because of the liberal underwriting standards employed, a higher mortality pattern can be expected under group ordinary than on ordinary policies. A different persistency pattern can also be expected, since many individuals will undoubtedly elect not to pay the entire ordinary premium when their employment terminates or the master group policy is cancelled. In the typical situation the net effect of the mortality, lapse, and expense factors will be such that a higher premium may be appropriate for group ordinary than for a comparable ordinary policy.

Another important actuarial consideration is determination of the maximum employer contribution to be permitted for each plan. This can be set at a level equal to the level premium for the term insurance to age 65 component for the group ordinary plan.

Other questions to be considered are the following: (1) Will enrollment of the employees be handled by the agent or by a broker, and what will be the role of the group man, if any? (2) What commissions would be paid, and can the product be successfully marketed with commission rates lower than the ordinary scale? (3) How should increased insurance amounts become effective in order to reflect salary increases? (4) Is it desirable to permit those employees who wish to continue all or a portion of their group insurance after retirement to fund the cost of such permanent insurance over their lifetimes by making such a program available to them?

**MR. JOSEPH W. MORAN:** In this type of plan, a group in which all employees elect whole life moves from a premium basis which anticipates standard group mortality to a basis which anticipates standard select ordinary mortality. There must be a substantial expense saving, compared to individual insurance, to cover the difference in mortality. Yet we find the prospective expenses in some of these plans to be higher than they are under either group term or individual insurance. With both higher expenses and higher mortality, there seems to be a systematic inconsistency in the actuarial bases for group term and optional group whole life coverage.

**MR. KOWALCHUK:** A question has been raised with regard to an employee who has elected the group ordinary and at a later date desires to drop this coverage. It is my understanding that he would be automatically covered for his total amount of insurance as group term insurance.

The total level premium, as computed by a large West Coast company,

is divided into two level premium components—one for the term insurance element, which the employer pays, and one for the permanent insurance element, to which the employee contributes. Probably this company would not have done this if it had not felt that this arrangement would satisfy the Internal Revenue Service if the question should arise. On this basis the employer contribution would not be taxable income to the employee. The company does suggest, however, that the employer have his own tax counsel answer this question.

Regarding Topic B, the demand for vision care and drug expense benefits appears to be relatively limited. Major medical coverage, if provided, would cover the more serious optical problems.

Under the vision care benefit, coverage can be provided for examinations, frames, and lenses. While the deductible and coinsurance approach could be used, it should be easier to control overutilization by placing dollar limits on each covered expense. Consideration should also be given as to the exclusion of sunglasses and contact lenses.

In the cases of both vision care and drug expense benefits, considerable utilization can be expected. The expense of settling claims will generally be relatively higher.

**MR. WILLIAM H. BURLING:** Recently the province of Alberta improved its medical service plan by including eye examinations by ophthalmologists, of which there are fewer than two dozen in the province. This caused numerous complaints, because patients had to travel great distances to find an ophthalmologist. Effective July 1, 1967, the government will pay optometrists on the basis of one visit per year with no initial waiting period. Payment is made only for the examination, not for glasses. Effective on the same date, the province will pay for drugs up to \$100, with no deductible.

**MR. KOWALCHUK:** With regard to Topic C, there is evidence of an increasing lag in the presentation of health care benefits. There are three principal reasons for this lag in reporting claims: (a) changes in hospital administrative practices as a result of Medicare, (b) uncertainty of some employees as to which carrier has primary liability, because of the coordination of benefits provisions now prevalent, and (c) liberal salary continuance plans resulting from rising prosperity.

**MR. GEORGE J. VARGA:** At year end, after compiling our paid experience under our group hospitalization policies, we found it to be better than we had expected. The recently published experience of eight hos-

pitals in Franklin County, Ohio, embracing a metropolitan area of nearly 1,000,000 people, shows some interesting results that may help to explain this (see accompanying tabulation).

	Change in Last 6 Months of 1966 over Last 6 Months of 1965	No. Hospitals Showing a Decrease	No. Hospitals Showing an Increase
Medical/Surgical Patients under Age 65			
Admissions.....	- 5.3%	6	2
Length of stay.....	- 0.3 days*	6	2
Medical/Surgical Patients Age 65 and Over			
Admissions.....	+16.3%	0	8
Length of stay.....	+ 1.6 days†	2	6

\* For the last six months of 1966, the average stay for all eight hospitals was 8.6 days, with individual hospitals ranging from 4.7 days to 11.9 days.

† For the last six months of 1965, the average stay for all eight hospitals was 16.6 days, with individual hospitals ranging from 11.7 days to 23.8 days.

From this tabulation the following interesting deduction can be made: If, out of a given number of insured persons under age 65, 100 were admitted to the hospital during the last six months of 1965, they would have been hospitalized, on the average, for 890 days. However, out of the same number of insured persons only 94.7 would have been admitted during the last six months of 1966, and these would have been hospitalized for 814 days. For the group of insured persons, this represents 8.5 per cent fewer days of hospitalization or, in terms of six months' hospitalization claims, about half a month's claims. The savings, moreover, tend to be understated because the data for 1966 is unadjusted for the increase in population that occurred in one year.

MR. MORAN: Some of New York Life's studies may help to indicate the extent of the extra claim lags in the last few months. For each month's claim payments, we have a distribution by incurral month. For incurral months since last summer, we find consistently that the ratio of (a) claims paid through the fifth month after incurral to (b) claims paid through the first month after incurral is about 15 per cent higher than for the same calendar month of incurral in the previous year. These results are aggregates for all basic hospital and surgical, major medical, and weekly indemnity combined, but it might be desirable to analyze each coverage separately.

*Survivors' Benefits*

What are the advantages and disadvantages of providing widows' and survivors' benefits as part of (1) a group life insurance plan and (2) a qualified pension plan?

*New York Regional Meeting*

MR. RICHARD H. HOFFMAN: There are many forms of widows' and survivors' benefits. They may be payable for life or for a temporary period. When payable in a lump sum or for a temporary period prior to retirement, such benefits should be provided under group life insurance.

The advantages of using group life for temporary benefits are (1) essentially the risk characteristics are the same; (2) benefits can be integrated with basic group life, thereby avoiding excessive coverage; (3) group life provides flexibility and plan design, such as eligibility benefit levels and employee contributions; (4) in half the states there are no amount limits; (5) there is no income tax to the beneficiary, although group life insurance is normally includable in the estate and the premium for amounts in excess of \$50,000 may be subject to income tax on the employee; and (6) there are no antidiscrimination requirements imposed by the Internal Revenue Service.

There are, however, certain cost disadvantages to the group life approach as compared with the qualified pension plan approach: (1) conversion privilege must be provided; (2) state premium taxes are generally higher than they are on annuity plans; and (3) federal taxes on interest earnings are somewhat higher.

MR. WILLIAM A. DREHER: Plan design is a factor that affects the determination of the amount of insurance. For example, if a survivor benefit is made available soon after employment, the present value of prospective payments can be very large unless a remarriage clause is included. Another element of plan design is to be able to satisfy the requirement that a qualified pension plan can provide only incidental benefits. In our calculations we have been obliged to include "dependent spouse" rather frequently. The Equal Opportunities Act makes it desirable to specify a dependent spouse rather than a widow to qualify for the benefit.

MR. J. MARTIN DICKLER: I would like to describe briefly the more recent forms of survivor benefits that we have underwritten and why we feel that group life insurance is the desirable approach. Eligibility is *not* geared to longer-service employees who have the right to elect early retirement, and the amount of survivor benefits is *not* related to the

accrued pension benefits. The emphasis is, rather, on income continuance protection for a specified period when the widow or other eligible survivor is making the necessary adjustment in living arrangements.

An excellent example of this type of survivor benefit plan was that negotiated in 1964 in the automobile industry. The benefit under the 1964 automobile industry plan is a flat \$100 per month and is not related to an accrued pension benefit or length of service. There are two different types of benefits—transition and bridge—which determine the total period of time for which benefits are payable. This period varies from two to twelve years, depending upon a number of factors, such as the age and marital status of the survivor's spouse. A plan which is currently receiving favorable reaction provides a survivor monthly income benefit of \$10 per month for each \$1,000 of group life insurance for as long as sixty months. Obviously, many variations are possible in terms of benefit amounts and periods of payment.

The automobile industry plan and variations thereof have been written as group life insurance, since the risk involved is essentially a death benefit risk and the benefits can be better integrated with the basic group life insurance schedule. This approach has been found to be satisfactory to both employers and employees. Additional advantages when group life insurance is to be used are that the same underwriting considerations, premium rates, policy provisions, and administration and experience rating techniques can be applied to the survivor benefits as are applied to the basic group life insurance.

MR. DONALD R. ANDERSON: Since the premium for group insurance in excess of \$50,000 (\$25,000 in Canada) is taxable to the employee, there can well be a situation in which the widow would remarry shortly after the bridge and transition benefits began and they might therefore be payable only for a few months. It would seem unreasonable to tax the employee on premiums for a face amount of insurance equal to, say, 10 years' payments, when in actual fact the payments are not to be made.

Another problem relates to the fact that a beneficiary cannot be named since the plan provides that the benefits are payable to the wife. However, if there is overriding state or provincial law that gives the employee the right to name any beneficiary that he wishes under group insurance, the insurance company could be caught between the union agreement and the applicable law.

MR. DREHER: We have found this point to be a very real problem, not only with respect to the preferences of the employee but also with respect to whom the employer considers to be an eligible beneficiary.

MR. DORRANCE C. BRONSON: In respect to the accounting bulletin, let us assume that widows' and survivors' benefits are included within a pension plan. Would the *Opinion* of the Accounting Principles Board comprehend these features, and, if so, how? Consider such things as vesting and funding thereof and questions of handling a portability law or a reinsurance requirement, such as the Hartke measure. Then there would be the relationship accounting-wise under the so-called benefit security ratio, on which work is proceeding. If, however, the benefits are treated as a separate group life plan, then—presumably for good and sufficient accounting reasons—they are not subject to the items mentioned above.

MR. JOHN E. CHAMPE: Under life insurance a benefit is paid if the insured dies. However, under survivors' benefits insurance, as under a reversionary annuity, benefits are paid only if there is a survivor but with the further provision here that the survivors remain eligible during the payment period. The premium calculations may reflect these probabilities, including the probability of remarriage, without ascribing a specific amount of insurance to an individual. This makes it impractical to impose the \$20,000/\$40,000 maximum amount which is required in a number of states. It also reinforces the view that this is not truly life insurance.

MR. RUSSELL L. MILLMAN: Our own plan, instituted in 1966 (Johnson & Higgins, New York), combines both group life and a survivor benefit from the pension plan. If any employee dies while covered under the plan, a survivor benefit will be payable for ten years after his death. This portion is payable through a group life plan. On the other hand, if the employee has named his dependent spouse as a beneficiary and that spouse is unmarried and alive at the end of the ten-year period, then the survivor benefit is continued for the balance of her life or until her prior remarriage. Here we have both approaches in one plan, which is voluntary and contributory, thereby eliminating some of the tax problems.

*New Orleans Regional Meeting*

MR. THEODORE J. KOWALCHUK: Some of the advantages of the group life approach for providing survivors' benefits are (1) it eliminates the risk of a sudden, sharp depletion of the pension fund; (2) group life is logical if the benefit is a lump sum; (3) it is preferable if the survivor benefit is more than just an incidental adjunct to the pension plan; (4) there is no taxable income to the survivor (or to the employee if under \$50,000); and (5) the estate tax would be a major consideration only to the higher-paid employees.

The pension plan approach has advantages (1) when the survivor benefit is stated as a monthly income rather than as a lump sum; (2) when the benefit is related to the amount of pension accrued to the employee at his date of death; (3) when there is a difference in eligibility requirements for pensions and group insurance; (4) if there are no other pre-retirement death benefits, whence the insurance element becomes negligible; and (5) if the employee happens to be in poor health, since it avoids problems of amounts of insurance above the limit of guaranteed issue.

From the standpoint of expense, it is debatable which approach is better. Usually group life retention items are greater than pension trust expenses. However, the relative ease of integrating with group life or pension benefits provided is probably the deciding factor as to which route is chosen for the survivor benefits.

MR. HARRISON GIVENS, JR.: In general, group life is advantageous up to the early retirement range; after retirement it is preferable to provide survivors' benefits under the pension plan. Cases may arise, however, where the amount of benefit, expressed as group life insurance, might exceed that permitted by state law. Also, where survivor benefits are provided by group life insurance, the conversion clause could be costly to the employer.

MR. IRVING G. ROTH: The Internal Revenue Service imposes certain limits on incidental benefits under pension plans. The group life approach to survivor benefits does not cut into these limits, since no IRS approval is required.