

**TRANSACTIONS OF SOCIETY OF ACTUARIES
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EMPLOYEE BENEFIT PLANS

Benefits for Retired Lives

- A. To what extent are death benefits and medical benefits for employees and dependents kept in force after the employee retires? After his death? To what extent are conversion privileges offered? To what extent are available "65" programs being used?
- B. Where there is a continuation of such benefits for a retired employee or his dependent, what special problems can result (1) from remarriage or re-employment, (2) in the event of the enactment of a federal plan?
- C. What methods of paying for or funding such costs are used?
- D. What are the tax implications to both the employee and employer of the various approaches?

Boston Regional Meeting

MR. DELOS H. CHRISTIAN: Concerning Topic A, the Life Insurance Company of Virginia limits continuance of benefits to 25 or more employees, and limits lifetime medical benefits to \$2,500 for groups with less than 100 lives. On major medical, nurses' charges are on a 50 per cent coinsurance basis. Usual requirements include 10 years service and age 62 for female; 65 for male. We encourage noncontributory plans and require 75 per cent participation on contributory plans. Dependent benefits are only available during the retired's lifetime.

The plan with the best coverage on retirees is the one covering the agents and employees of our own company. We continue a comprehensive major medical plan with maximum lifetime limit of \$10,000 and an automatic reinstatement of \$500 per year. We do increase the yearly deductible from \$50 applicable to active employee to \$100 for the retired. Death benefits in the amount of a year's salary are continued on a basis which reduces the amount over a 10-year period to one-half the amount at retirement date, or \$10,000 if larger. Amounts under \$10,000 are continued without reduction.

About 10 per cent of our group policies covering 15 per cent of our insureds contain a provision for conversion of medical insurance upon termination of employment, including retirement. We have one policy of the basic hospital surgical type to which the insured may convert, but the daily benefit varies depending on the benefit of the active group. A charge is made to the group experience fund when a conversion is effected.

In the Virginia-North Carolina 65 Plan, having two states participat-

ing opens up new legal and accounting questions. Separate state funds are to be maintained. Immediate enrollment is available when made as employee reaches age 65 or with a four months' waiting period otherwise. The benefits are available to small groups with costs pooled and no cuts in benefits.

MR. HERBERT J. BOOTHROYD: Benefit continuation after retirement is becoming quite prevalent. Medical benefit amounts are generally reduced at retirement and a one-claim-per-year limitation is commonly used. Major medical is usually changed to a basic plan at retirement to limit coverage and avoid the lifetime maximum. The employers generally double their active outlay for retired health benefits.

The conversion privilege is being requested more and more often by employers not yet ready to help pay for retired health benefits.

The new State 65 plans offer a new method. These plans may be billed directly to the employer, enabling him to provide coverage outside his group plan. Or the employer could continue a modest basic group benefit and contribute toward State 65 Superimposed Major Medical. Although these plans involve mass enrollment morbidity and an average age of 74, the employer does get the benefit of extremely low expenses and broad pooling.

Some companies, such as my own, also offer a retired benefit package, which is available to all group policyholders. Experience is charged to a common pool. This is most useful where the employer wants to keep his group experience unaffected by the actual claims on a small number of retirees.

Part B of the question notes several special problems. The spouse generally loses all coverage upon death of the retired employee. However, nonprofit groups, such as ministers and teachers, tend to continue coverage until the widow remarries. Most plans will cover new dependents when a retired employee remarries.

Re-employment seldom affects coverage for several reasons. Most retirees who are able to obtain a full time job find that those hired after 65 are ineligible for fringe benefits, for obvious reasons. The old employer generally looks on retired benefits as a reward for past service, much like pension benefits. The new standard nonduplication clause minimizes any effect on claim levels from allowing an occasional retiree to obtain new group coverage.

Where the retiree pays for converted policies, he and his spouse own policies which they may keep independent of subsequent events such as remarriage or re-employment.

Enactment of any of the Medicare proposals would cover most of the benefits typically provided by retired plans. The nonduplication clause would protect the group plan's experience until its benefits could be redesigned to supplement the government benefits. Few retirees would continue individual policies, unless they happen to be ineligible for the federal plan.

However, the major medical portion of States 65 plans would continue to be attractive. It is interesting to note that the Massachusetts and Connecticut plans do not allow enrollment for basic benefits only. Those 65 plans which have one-third of their enrollees covered only for basic benefits would be much more seriously affected by a federal plan.

MR. PEARCE SHEPHERD: The employer and the insurer should feel some responsibility for continuing some group life coverage after retirement. The amounts may be sharply reduced because the need is reduced, Social Security benefits for dependents are available, and some payment related to the pension may be continued.

The employer and the insurer should feel—and do have in my opinion—a much greater responsibility for continuing some group medical expense benefits after retirement. The employee cannot provide for these needs adequately during active employment because we do not like duplication of coverage. He may be uninsurable when employment ceases. And at age 65 he may find it difficult to get and pay for adequate individual coverage. Having pre-empted the field during active employment, the group insurers do have an obligation to make adequate provision for benefits when employment ceases—at retirement particularly.

MR. HARVEY J. SAFFEIR: Various ways to pay for retired benefits have evolved.

1. Under the first approach group term premiums are paid on behalf of retired employees as part of the active plan.
2. A second approach involves a preretirement buildup of a continuance fund usually from dividends under the active contract.
3. A more recent development is the disbursement under self-insured plans of the retired costs as they emerge, generally in the medical area.
(Each of these first three methods is merely a pay-as-you-go approach.)
4. In very recent times, retirement plans have been used for the purpose of funding post retirement death and medical benefits.
5. A new alternative to meeting the heavy retired obligations could involve a 501(c)(9) beneficiary association although we have seen difficulties with respect to the 85 per cent rule.

We feel the group companies generally have not been fair to their policyholders when we consider retired coverage. We feel that retired life and medical costs should be prefunded, just as retirement plans are prefunded. If an employer chooses not to prefund, he should at least be told of the true emerging liabilities, not just the current one-year term costs.

Under the common continuation fund approach the current term withdrawals are fairly modest. But these retired costs climb rapidly as the retired population grows and ages, and inflation does its work. It is vital therefore that employers understand the iceberg effect which is present. I have seen instances where the term cost 20 years from now is 15 times today's cost. The various approaches have tax implications as to the employer, the employee, at death as income, or at death as part of the estate.

(1) Group term insurance is tax deductible to the employer; at premium time it is not considered income to the employee. The \$50,000 Group limit does not apply to retirees. The proceeds are not considered income at death, but the proceeds are includible in the gross estate.

(2) The tax implications of the continuance fund are probably similar to those of Group Term. No official rulings actually exist, but the procedure is quite common. My firm is not opposed to continuance funds; often they are the only device that is appropriate. Our main point is that the fund and the term premiums usually bear no relation to the true cost, and management is entitled to know this true cost. Sometimes the additions to the continuance fund are of sufficient size to produce adequate funding, but this is relatively rare.

(3) Self-insurance disbursements are tax deductible to the employer and are not income to the employee up to a maximum of \$5,000. The proceeds may be includible in the gross estate.

(4) Payments under the incidental feature of qualified retirement plans are deductible to the employer and are not income to the employee when the payment to the trust is made. Benefits are considered as income at death for amounts exceeding \$5,000 but are considered as long-term capital gains and are not includible in the gross estate except to the extent the benefit may be attributable to employee contributions.

(5) The tax implications of 501(c)(9) trusts and similar arrangements are unclear as yet. It would appear the contributions are not income to the employee, and medical benefits paid would not be income to the employee.

In summary, the funding methods in use today are usually modifications of pay-as-you-go, and more sophisticated funding techniques are now needed. Under the current tax laws there are uncertainties which

cause the funding of retired "group" benefits to be less simple than the funding of pension benefits.

Chicago Regional Meeting

MR. ROBERT G. ROBOTKA: I have some data on the experience of Benefit Trust Life for extending coverage to retired employees and their dependents. Under group life insurance, including dependent group life, we provide an extension by adding a retiree schedule to the group contract. Sixteen per cent of our group policyholders have continued group life insurance for retired employees on this basis. Of the 16 per cent who have continued coverage, 87 per cent have reduced the amount of life insurance, while the remaining 13 per cent continued coverage after retirement at the active employee benefit level.

Under Group Hospital, Surgical, Medical, and Major Medical, 14 per cent of our group policyholders have continued coverage on a true group basis by adding a retiree schedule to the group contract. Of these policyholders approximately 70 per cent provide reduced benefits.

We also have a guaranteed conversion privilege for casualty as well as life benefits. This privilege, provided by a rider to the group contract, has been adopted by 7 per cent of our group policyholders.

A special retired employee plan which does not require either a minimum participation or an employer contribution is also available. Only one benefit level is available. Although this plan has been available for only a year and a half, 15 per cent of our group policyholders have adopted it. The plan's acceptance among our policyholders is probably due to the fact that it enables the employer, without cost to himself, to give his retired employees an opportunity to continue coverage on a reduced cost basis, as expenses under this plan do approximate group expenses.

MR. WILLIAM A. HALVORSON: Under regular groups, where the employer is paying a substantial proportion of the cost of health insurance benefits, an extension of basic hospital and surgical benefits for retired employees seems to be becoming more prevalent. In most instances it appears that the extension has taken place on sound premium rates, especially if the special problems of providing such benefits have been properly studied prior to extension. Therefore it seems likely that such extensions will continue to grow. Duplicate coverage has been found by some employers to be more common for retired lives than for active lives, where individual policies are also subject to the nonduplication provisions. This is at least partly due to the fact that all insurers have concentrated on basic hospital and surgical benefits, areas more familiar

to all of us than major medical coverage for retired people or coverage of physician visits, nursing care, and drugs and medicines for retired persons. Thus there is danger of overprotecting or duplicating hospital care and neglecting other needed medical care protection for our retired people, even without Medicare. What would seem to be needed most is an expansion of many forms of major medical plans for retired lives, with workable nonduplication provisions, and with proper control over custodial care which might sometimes be confused with medical care. My own belief is that more can be done by local communities as well as group health insurers and employers in solving this problem.

MR. HOWARD YOUNG: Out of a group of 469 retirees who had been covered by Hospital, Surgical, Medical Insurance, which required no premium payment on their part, 401, or 84 per cent, of the retirees definitely retained their insurance when it became necessary for them to pay the premium for their coverage. Of the other 68, 23 discontinued coverage, and the other 45 did not inform us about their coverage. Thus the total who retained coverage may have been higher than 84 per cent. This is an indication of the value retirees place on Hospital, Surgical, Medical Insurance.

Underwriting

- A. What has been the experience on large amounts of life insurance on individual lives under group policies of various sizes? What underwriting standards have been employed?
- B. What has been the experience under group policies, or individual policies issued on group underwriting principles and providing life and health insurance where the number of lives is less than ten? What underwriting standards have been employed?
- C. Is there any way in which claim payments or other factors can be analyzed so as to indicate when an increase in over-all dollar limits of medical care policies should be made? What has been the experience with limits expressed in other than "dollar" terms?
- D. What progress has there been in administering various forms of nonduplication of coverage provisions?

Boston Regional Meeting

MR. PHILIP BRIGGS: The Metropolitan has for some time underwritten amounts of group life insurance which, considering the size of the groups, were in excess of normal underwriting limits. To do this, we have made use of several mechanisms. One of the techniques used for medium-sized cases is to pool individual amounts in excess of the normal underwriting maximum. In such cases relatively few lives and relatively little insurance is subject to the pooling mechanism. This pool, in spite of its small size, is of special interest, since it consists entirely of higher paid personnel of assorted business enterprises.

The lives included in this pool have insurance according to schedules which are related directly to salary. For amounts in excess of normal underwriting limits, tight actively-at-work provisions are used which, among other things, require that the insured not be absent from work for reason of sickness or injury during the three weeks prior to the effective date. For amounts in excess of twice the normal maximum, statements of health and mercantile reports are required. Very few lives have been rejected as a result of these statements of health or mercantile reports, although some lives were classified as substandard for the purpose of determining the pool charges which are made.

During the period studied there were 2,669 pooled life years exposed, with \$44,674,000 of insurance in excess of our normal underwriting maximum (an average of approximately \$17,000 per life). On the typical case, the life exposed had earnings in excess of \$20,000 per year. Most of the lives had been included under the tight actively-at-work provision alone, while the others had been classified according to the statement of health results for the purpose of determining pool charges. We have detailed

information on all lives in the pool and were able to calculate expected claims for all lives in the pool based upon the 1960 Basic Group Mortality Table. The expected pool claims were calculated to be \$539,000, and the average age was estimated to be 55. The actual pool claims for the period amounted to \$280,500, or approximately 52 per cent of the expected claims.

While the exposure studied here is relatively small, experience obtained on this type of insurance is satisfactory in spite of the relatively high average amounts of insurance involved. This would seem to indicate that persons in the upper income brackets have at least as good mortality as the average group certificate holder. We believe that adherence to relatively strict standards of underwriting and design of schedules, use of reduction formulas, and the use of a tight actively-at-work provision contribute importantly to this result.

As a further note, we recently studied the experience of approximately 1,000 groups having between 25 and 200 lives, which had various types of life insurance schedules. We separated the groups into two categories: those that had maximums of \$15,000 or less, and those that had maximums exceeding \$15,000 but not more than \$40,000. The groups having high maximums were subject to tight actively-at-work provisions for the amounts in excess of \$10,000, had schedules directly related to pay, and had reduction formulas providing for reductions to 50 per cent or less at ages 65 or 70. The experience was quite satisfactory and was virtually identical for the two categories studied.

MR. HENRY KUNKEMUELLER: On Topic A, American International Life Assurance Company of New York is a member of the American International Insurance Group, with member companies located throughout the world, so I have been able to do some research into the underwriting of large-amount coverage for group life insurance risks overseas.

In underwriting large-amount coverages for overseas employees of United States companies, we allow reasonably high amounts, with no evidence of insurability, based on the over-all size of the group. This can lead to fairly large individual amounts because we are willing to combine the experience of an employer for all coverages placed within the American International Group, even though portions are placed in various member companies and in various currencies. (This is frequently done to obtain the advantages of placing the coverage with companies admitted in the various countries involved and of using local currency for the local nationals.) We have several individuals, primarily in Europe, Latin America, and the Middle East, insured for \$100,000 or more on this basis.

For groups of United States residents going abroad on a temporary basis, we normally require evidence of insurability for all amounts above reasonable limits based on the size of the group. This is in addition to the normal group underwriting of the group itself. The largest amount written to date on this basis is \$60,000.

Where we insure the Third Country National top management of a foreign firm for very large amounts of group life insurance, we frequently offer the coverage without individual underwriting. We have one such group in Latin America with 178 lives, where the smallest amount of coverage provided is \$30,000, and the maximum, \$80,000, all without individual underwriting.

Experience on all three types of large-amount coverage is apparently satisfactory for those cases where proper group underwriting principles have been followed. Many cases will go for years without a claim. Of course, one or two large claims on some of these groups will eat up several years' premium, so it is difficult to specify at which point the experience becomes sufficiently mature to permit safe conclusions.

MR. PAUL E. SARNOFF: Prudential's loss ratios on underwritten business (less than 10 employees initially insured) have averaged 80-90 per cent of the experience on business in the 10-24 employee range. Loss ratios on life, accidental death, and dismemberment have recently risen but are still below expected; weekly income experience has been favorable. Medical care has shown a consistent upward trend. Over-all, our experience has been favorable.

MR. BURTON E. BURTON: There seem to be two methods of analyzing increases in over-all limits of medical-care policies. One method is to make claim-file studies for the particular policyholder, while the other method relies on company surveys, intercompany studies, and other published reports. At the Aetna, the latter approach is generally used. Regarding nonduplication provisions, the Aetna has adopted the industry model on all policies issued or revised on and after September 1, 1963, and have documented claim savings ranging from 1 to 7 per cent. As much as 35 per cent of the total savings results from including individual Blue Cross and Blue Shield benefits in the plans subject to the provision. We rely primarily upon the employee statement for administration of the clause and use the form developed by the Uniform Forms Committee of the Health Insurance Council for exchange of multiple coverage information between companies. We also use an independent agency to check selected claims where no other family employment was reported.

Employment of other family members was found in a significant number of these claims.

Chicago Regional Meeting

MR. PHILIP BRIGGS repeated the discussion which he had presented at the Boston meeting.

MR. JOHN MAHDER: The industry model nonduplication provision adopted by the Aetna for all new and revised plans includes a broad definition of other "plans" with which benefits are co-ordinated, but individual insurance policies purchased and paid for directly by the insured are not included in our standard definition of a "plan." Since the nonduplication provision specifically empowers us to exchange both information and money with other carriers when settling claims involving duplicate coverage, we do not require written permission from the employer and the employee before releasing information requested by other insurance companies.

We rely on the employee statement of claim to identify duplicate coverage. As an additional check, we employ an independent agency to investigate a small random sample of claims where the employee's statement indicates no other benefits and no other family employment. A significant number of claims investigated did involve employment of other members.

We believe it is important to explain carefully to the policyholder and the employee the need for nonduplication provisions as well as the mechanics of how they operate. We found it is better to talk about co-ordination of benefits rather than nonduplication.

MR. CHARLES E. PROBST: I want to briefly cite, under Topic D, some of the problems in implementing nonduplication.

We have had a major medical policy provision that permits some nonduplication—we describe it as a plan which "coinsures the coinsurance." In other words, after taking into account benefits paid by other insurers' plans that do not have such a provision, we pick up the remaining unpaid charges and apply our formula. I think, like all of you on base plans, that we have had absolutely no type of nonduplication provision.

This problem, then, as I see it, divides down into about four subproblems.

First, is the major medical or blanket reimbursement policy that has no nonduplication language designed to implement the Pettengill recommendations. The second category is scheduled plans, or basic benefit

plans, such as hospital and surgical, where there is a schedule and where practically no one has had a nonduplication provision. The third category is your new contracts for major medical and similar blanket benefits which have been drawn to accomplish exactly the intent of the Pettengill Committee. And then, number four, your basic plans which can present some special problems both from the standpoint of public acceptance and of philosophical grounds when the new nonduplication provisions are added.

We at Provident Mutual have a smaller operation, and we can probably turn around a little faster than some. We are planning to change over our present major medical contracts that have the old provisions (with no express provision to carry out the intent of the Pettengill Committee, but do have this so-called "coinsure the coinsurance" provision), and implement the new provisions administratively on or about July 1.

On our base plans, sometime between July 1 and September 1, but not later, we are going to start changing over as of the contract anniversary, feeling we have to have some kind of formal agreement with the policyholder, in view of the fact that there is no express anti-duplication provision in this category of base plans.

About September 1 we hope to have our major medical contracts drawn so that we can incorporate the exact intent of the Pettengill Committee's recommendations, and then about the same time, have our revised base plans ready.

Of course, all our proposed changes are subject to state approval.

Insured or Noninsured

- A. What are the advantages and disadvantages to
1. the employer
 2. the union or union welfare fund
 3. the employee or union member
 - a) while working
 - b) after retirement or termination of employment of insured vs. non-insured plans for
 - (1) death benefits
 - (2) temporary disability income
 - (3) long-term disability income
 - (4) medical expenses
 - (5) pensions
 - (6) survivorship incomes?
- B. What has been the recent trend in the development of the two approaches—by size of group and type of coverage?
- C. What differences are there in the treatment of insured and noninsured plans with regard to
1. regulatory supervision
 2. legal requirements such as those relating to conversion rights, etc.
 3. taxation at either the federal or state level?

Boston Regional Meeting

MR. WENDELL A. MILLIMAN: The successful operation of pension plans is more dependent upon good investment management and performance than on the risk-taking capacity of insurance companies. Competition between insured and noninsured pension plans has been more organized and more intense than has been the case with other types of employee benefit plans. At present, there are few areas where one can say with assurance that there are advantages or disadvantages which flow directly from the fact that a pension plan is insured or is noninsured.

Recently, noninsured plans have been more popular with large employers and the reverse is true for small plans. Plans are compared on the factors of cost, security, flexibility, and service. Large employers have the expectation that costs will be lower among noninsured plans. Among small companies, the popularity of insured plans is probably due to a number of causes, including security of benefits and insurance company services.

The expectation of lower costs arises from

1. Until recently, only the noninsured plan had a practical vehicle for common stock investment.
2. The traditional portfolio average method used by insurance companies for

allocating investment results penalized new pension funds during a period of rising interest rates.

3. Insurance companies incurred some expenses, notably commissions and premium taxes, which would not be incurred by a noninsured plan.
4. Insurance company guarantees require a higher level of funding.

Now that insurance companies have introduced segregated funds and mortgages are more readily available to trust funds, neither type plan has built-in advantages in these areas.

The insurance industry has had success in its quest for tax treatment equality. Many insurance companies have modified commission payments to be closer to the services performed by agents or brokers. Thus these elements of costs, which are frequently considered disadvantages of insured plans, have decreased in importance.

The larger current outlay required by an insurance company when it guarantees retirement benefits may be considered a disadvantage to the employer, but this is the primary source of security to the employee. It is questionable whether the higher early outlay required for this security is a disadvantage, since it should be offset by lower contributions in later years.

The insurance company services such as the standardized plans, forms, and procedures, the breadth of expertise in development, installation and administration of pension plans are difficult to match in any other type of organization. These are quite advantageous to the smaller employer. The cost of advice for developing and administering a noninsured plan can be disproportionate for a small plan.

More substantial employers tend to rely on the services of independent pension specialists. In these cases the advantages of the plan are more dependent on other factors than upon whether the plan is insured or trustee.

Whether freedom of action and flexibility are always advantageous is an open question, but to the extent that they are desired, the advantage lies with the noninsured plans.

MR. CHARLES A. SIEGFRIED: In viewing the matter of insured versus noninsured plans, we must keep in mind the relationships and interests of employers, employees, unions, the public as represented by state and federal authorities, and insurers where insurance is involved. Prior to the last 15 years, taxes on insured plans were not a significant item of cost. Likewise, the impact of state supervision was of a mild sort. Since then dramatic changes have taken place. Employee benefit costs now are a high percentage of payroll, and more attention of top manage-

ment has been given to cost factors. In the public sector an element of uncertainty applies largely because not much thought has been given to this aspect until recently. The first expression of concern from the public sector was voiced by the N.A.I.C. in a resolution of December 6, 1962, which pointed to the "alarmingly accelerated trend toward the utilization of noninsured arrangements." They recommended that each Commissioner "give immediate consideration to the need of legislation" or eliminate "any existing inequities in regulation, taxation or other wise, which induce the adoption of noninsured plans."

It seems to me that most of the issues are not actuarial. Rather, they involve questions of public policy and questions of equity and fair dealing. If an employer wishes to utilize the service of an insurance company in providing benefits, is it fair, desirable and in the public interest to double, or at least add a substantial percentage to, the administrative costs associated with such an insured plan? Are the significant, additional, and discriminatory taxes the result of deliberate government policy or merely historical accident? Is it proper to have taxes that favor not only the noninsured plans, but also the so-called nonprofit service type plans and domestic insurers?

There is, of course, the view that the insured plan is a superior plan and is worth the higher costs that flow from premium taxes and state supervision. I believe the recent discussions of this topic have developed in an impressive and convincing way the fact that well-equipped insurance companies do render a long list of valuable services to the employer which either cannot be readily duplicated or cannot be provided by the employer at as low a cost as the insurance company. Moreover, the insurer can more readily provide a continuity in the availability of necessary skills that would be difficult, if at all possible, for even large organizations not in the insurance business. Consideration should be given to the contribution insurance companies are making in the development of a great variety of statistics and information that is valuable to the administration of employee benefit plans. These have been made freely available, but similar data have generally not been made available by noninsured plans. Isn't there a public interest consideration in this aspect?

Is it a wise public policy to let discriminatory premium taxes and regulations continue in the field of employee benefits? If revenue considerations require it, perhaps employee benefits should contribute to the tax take whether the plans are insured or noninsured. If the state is concerned with employee welfare, there are compelling considerations in support of state regulation of plans whether insured or noninsured. If so, will not the federal government fill this gap for noninsured plans if the states fail to act?

MR. ALLEN L. MAYERSON: We have to consider pension plans and other plans separately, since self-insured pension plans have been in use for many years. The type of supervision to which they are or should be subject has been established by usage and practical consideration. The main type of supervision is that of the Internal Revenue Service. The trouble is that I.R.S. supervision is mainly concerned with a reasonableness of an employer's pension and pension contributions rather than with its adequacy. Most state supervision over insurance companies is concerned more with solvency. I feel that pension plans need more supervision from the point of view of solvency than they have noticeably gotten and think that the only governmental authority to handle the job is the I.R.S. I do not believe that the states could or should take it on. I think that in the regulating agencies, very few states have been able to obtain and hold the type of actuarial talent necessary to take on this responsibility.

With respect to uninsured welfare plans providing death benefits and health insured coverage, I think there is a much greater argument for regulation on a state level, including regulation for solvency and regulation for equity and reasonableness.

Most plans provide health insurance benefits for dependents as well as for employees. Claim fluctuations are greater than in the case of pension plans, and this is an argument for regulation for solvency at the state level. The states can handle the supervision of uninsured welfare plans and supervise them much the same way an insurance company's plans are supervised.

Most employees of large and medium-sized firms are now covered by insured group plans. Here the pattern of state supervision is well established. If these insured plans shift to noninsured plans, it might narrow the coverage and be rather unfortunate. Now the standard restrictions applicable to group life and health insurance tend to insure adequacy of coverage.

The regulatory aspect was considered by the N.A.I.C. A model bill was proposed at the December, 1963, N.A.I.C. meeting, together with the model bill proposed for tax equalization between insured and uninsured welfare plans. An uninsured regulation bill similar to the N.A.I.C. model was introduced into the Michigan legislature this year. It provides regulation by the state insurance department over employee welfare benefit plans. It does not apply to plans under which all benefits are provided by an insurance company, a nonprofit hospital or medical care service corporation. The bill requires that any employees' welfare benefit plan be filed with the insurance commissioner. The commissioner has the

right to examine and audit its annual statements. A separate fund with sufficient securities to guarantee solvency is required. The bill did not get through the committee stage.

Now I want to mention the companion bill to equalize taxes between insured and uninsured welfare plans. One of the influences impelling some employers to shift to uninsured plans is that insured plans are subject to a premium tax at about a 2 per cent level. This comprises a substantial portion of the insurance companies' retention. Many employers feel that, by shifting, they will save the premium tax. This gives the state a considerable interest in the regulation of taxes.

Despite this, I see little enthusiasm for the model tax equalization bill. The state premium tax is looked at as a source of state revenue. I sat through a committee meeting where the police and fire departments maintained that this premium tax money is no longer needed for the primary-school fund and would the legislation therefore allocate at least the tax revenue raised by premium taxes on fire and automotive insurance companies to increase pension benefits for policemen and firemen. The argument offered for this diversion was that, without police and firemen, insurance rates would be higher.

MR. DORRANCE C. BRONSON: Mr. Mayerson implied the misconception that all insurance company pension plans are solvent and many uninsured plans are not solvent. First, I do not know what solvent means. I have never seen a definition of it. The point is that when you get to a funded form with all its variations and then turn to the uninsured pension plan and compare, you see that they are just the same.

MR. MAYERSON: I did not mean to make any such implication. I recognize that a D.A. plan and an I.P.G. are like an uninsured plan in the actuarial aspect and any control of solvency should apply to both D.A. and I.P.G.

MR. STANLEY W. GINGERY: Let me cite some of the services and benefits that are available only under an insurance plan.

1. It provides a predictable maximum unit cost for the ensuing year, and the employer can budget his benefit cost for the year with the knowledge that it may be less because of an experience refund but will not exceed the stipulated premium. His net cost is usually stabilized through pooling and risk-sharing with the experience of other cases.
2. Only under an insured plan are life and health conversion privileges available to terminating employees.

3. Optional modes of settlement of death benefit proceeds are unique to insured plans.
4. None of the life insurance proceeds is subject to income tax, whereas on a noninsured plan only the first \$5,000 is exempt. However, employer contributions in excess of \$50,000 are subject to tax.
5. Benefits paid by an impartial third party subject to close supervision by state insurance departments has advantages for both the employer and the employee.
6. Insured plans provide a waiver of premium for disabled employees under group life.
7. Long-Term Disability coverage is available to supplement conventional earning's replacement plans.

Employers are sometimes attracted to noninsured plans by the promise of lower costs. If so, it is important that all items of cost be included if the comparison is to be on a fair basis.

The cost of an employee welfare plan can be divided into the benefit expense and the administrative expense. Under a noninsured plan, the cost of insurance company retention for expenses is eliminated, but there is a compensating increase in direct employer expense, since he must provide for the insurance company's services himself. The employer could easily spend more money than the insurance retention if he tries to match the talent and facilities available in an insurance company's staff.

Preoccupation with administrative expenses can divert attention from the major element of cost—that for benefit payments. Since the cost of medical service is rising and there exists overcharging and unnecessary utilization of medical care services, the cost of these benefits is significantly affected by the quality of the claim administration and control system. The facilities of insurance carriers for controlling claim costs just cannot be matched by any other organization. When we consider that a reduction in claim cost of only 5 per cent is equivalent to about 50 per cent of the administrative expense on larger cases, employers interested in obtaining the maximum value for their welfare benefit dollars cannot afford to noninsure.

There is already evidence that some of the states may not continue to take a hands-off attitude toward noninsured plans if they expand substantially at the expense of insured plans. Regulation and taxation might well result. The concern of the N.A.I.C. was expressed in their December 6, 1962, resolution. Recently, several large cases have been put on a basis that retains all the advantages of the insured plans but also saves premium taxes. This plan limits the premium to an amount sufficient to cover the insurer retention and a margin. Claims up to the expected claim

level are paid directly out of policyholder funds. Most of the insurer responsibilities and services remain, and such plans continue under the supervision of the various state insurance departments. Until the tax status of the employer payments and the question of whether or not he is in the insurance business becomes more clear, we advise against such plans. Nevertheless, we have had to rewrite two of our in force cases where the alternative was noninsurance.

MR. ROBERT E. SHALEN: We have heard talk recently of groups with large maximum amounts of group life noninsuring amounts in excess of \$50,000 in order to avoid new federal income tax on employees insured for such amounts. Normally, group life benefits are seldom considered for noninsurance because of the income tax to the beneficiary, because employees want a conversion privilege, optional modes of settlement, and premium waiver disability benefits; and because of the substantial catastrophic risk and the fluctuations in benefit costs. With regard to temporary disability income and medical expense plans, the fact that most employers have considered noninsuring but rarely decide to noninsure constitutes a large vote of confidence in group insurance.

Increasing emphasis has been placed in recent years on group insurance retention (expense plus risk charge). Noninsurance is the ultimate step an employer can take to minimize retention, but it gives up all the know-how and services of the insurance company and diverts the executive's time from his primary business to that of insurance matters. The practice among insurance companies of carrying losses forward to be charged against the policyholder's account in a subsequent year for the purpose of holding down retentions has encouraged employers to consider noninsurance.

Employers are sometimes persuaded to noninsure so that they can keep the claim reserves which would otherwise be held by the insurer. Employers who decide to noninsure because of the premium tax advantage and lack of insurance department supervision which accompany noninsuring will find these "advantages" are not likely to continue.

The assumption that noninsurance can continue to reap the benefit without sharing the cost of certain functions vital to the survival of private health insurance is fast becoming invalid. These functions include the work of the Health Insurance Council and the experience studies of insurance company actuaries.

MR. ROBERT A. MILLER III: The central consideration for employees, employers, and unions is whether an insured program can deliver

more security for less money than a noninsured arrangement. It appears to us that an insurance company's specialized abilities in the area of claim cost control and the availability of the advantage of the nonduplication clause in the insured plan will keep the total cost of an insured program far enough below the level of the total cost of a noninsured arrangement to outweigh by far the disadvantage of the premium tax. Specialization and volume production enable an insurance company to perform the routine administrative work required for any group benefits program at lower cost. The insurance company can provide its policyholders with guidance in designing the most efficient administrative procedures for their plans. Also, an insurance company meets nonroutine problems of administration every day and it enjoys a substantial advantage in this area over a noninsured arrangement. The insurance company's experience in plan design avoids the risk of loss from improperly drawn language or inconsistent claim administration. Despite the attitude expressed by many persons, anyone who is completely honest with himself has to recognize that an insurance company does assume a risk in underwriting a group insurance plan and that this fact has real value for every policyholder.

Chicago Regional Meeting

MR. DONALD D. CODY: The insurance company's basic product is the taking of risk. Ability to undertake risk enables our companies to offer a guaranteed price for coverage from year to year. Our customers can depend upon this price and arrange their budgets and financial affairs with assurance. The willingness of insurance companies in the group business to charge premiums realistically is an established fact. We undertake real risk against trends in hospital costs, random variations in claim, catastrophes, epidemics, effects of variations in employment, and other such factors that routinely affect the cost of group life and health insurance. We hold claim reserves against the run-out of existing claims whether in process of settlement, open, or unreported, so that if our policyholders terminate their contracts, we bear this continued risk.

Group contracts provide protection against catastrophic losses, like those caused by the Texas City disaster. Such losses would be very serious indeed to uninsured plans. Many insurance companies do not experience rate life insurance and accidental death and dismemberment losses in excess of fixed limits in disasters, which are usually defined as accidents or natural disasters resulting in at least five claims. These limits are usually higher, the larger the group plan.

I have studied the annual statements of insurance companies in the

group business in an effort to determine what is charged for this risk taking. It appears to average about 1 to 1½ per cent of premiums over the whole group insurance business. On very large cases it undoubtedly averages less than 1 per cent.

INSURANCE COMPANY SERVICES

(1) *Availability of specialists.*—The service operation of an insurance company involves a 2-way operational system connecting salesmen, servicemen, actuaries, lawyers, underwriters, claim examiners, accountants, auditors, public relations people, and executives in the insurance company first with brokers, agents, and consultants; second, with policyholders' executives, insurance managers, management, and unions; and third, with doctors, hospitals, nurses, and other providers of medical care. Through this operational system flows in both directions planning of benefits and eligibility rules, claims handling and controls, and various financial, actuarial, and industrial relations analyses necessary to the optimum functioning of an insurance plan.

(2) *Electronic data-processing.*—Insurance companies have the latest electronic data-processing machines and systems available for providing rapidly and inexpensively the data necessary to enable the insurance company and its policyholders to operate the insurance plan effectively. Highly trained actuaries apply their professional knowledge to presenting the data in their most effective form. The electronic data-processing of claims gives us insight into the incidence and extent of claim payments, warns of overutilization and abuse, and enables rapid correction of shortcomings in benefit designs and claims controls.

(3) *Knowledge of other plans.*—Our experience in employee benefit plan designs over thousands of policyholders and our experience in administering contracts are available to every policyholder. We know in depth the specific problems and costs in various types of design and do not operate on general knowledge alone. We can save each policyholder the price of expensive experimentation in benefit design where such experimentation has already been conducted elsewhere.

(4) *Skill in presenting plans to employees.*—Experienced insurance company personnel are available to set up procedures and aid in the presentation of new and amended plans to employees, thereby getting insurance plans off to good starts.

(5) *Claims handling.*—Payment of claims is an important reason for the existence of the insurance plan. Depending upon the size of the case, 75 per cent to 95 per cent of the cost of an insurance plan is in the claims themselves. It is easy for an employer or trust fund to pinch pennies in

retentions and to lose dollars in claims. Claims must be paid rapidly, equitably, and with full controls aimed at paying every legitimate dollar of claim without abuse, unnecessary utilization, or overpayment.

To these ends, insurance companies use modern, efficient electronic data-processing and specialized claims personnel experienced in thousands of cases and experienced in the characteristics of the providers of medical care in each area. We have at our disposal the state Health Insurance Council committees dealing continuously with providers of medical care in every part of the country. Our claims offices are available in every part of the country to deal with employees on vacation or on retirement. Our permanent corporate structure enables us to offer settlement options to widows, waiver of premiums on life insurance and long-term disability benefits to disabled employees, continuance of benefits to retirees, and conversions of life and health insurance to terminating employees. Our country-wide operations enable us to keep in touch with such people throughout their lifetime wherever they may be. Nonduplication clauses will shortly be normal provisions in health insurance with resultant legitimate savings in claims amounts. These clauses can be expected to reduce loss ratios by several per cent. Only insurance companies can operate such clauses effectively.

(6) *Loss control engineering.*—Many insurance companies make available a procedure which, in my company, New York Life, we call Loss Control Engineering. This involves first of all a review of a sizable sample of individual weekly indemnity or medical claims to uncover anomalies in utilization patterns indicating abuse of overutilization (such as excessive hospital use for respiratory ailments). The findings are presented to the policyholder by the group field man and a Loss Control Consultant. They then undertake benefit design modifications, employee educational programs, discussions with group plan administrators, with unions, and with the local providers of medical care such as doctors and hospitals. We attend meetings of medical societies and utilization committees. A considerable amount of time is spent with particular hospitals and with particular doctors to advise them of the impact of their fee-making, diagnostic, and confinement procedures on the cost of medical care to the employer. We introduce programs of payroll envelope stuffers, articles in the employers' house organs, and letters from the policyholder to employees so as to make the employees aware of how they can help. These programs are extended into all of the employers' locations where the statistical analysis has uncovered problems. The results of this effort

are sometimes quite astonishing, running into 10 per cent or more of premium.

In recent years the emphasis on low retentions, which in many instances has led to less claims control especially through the use of draft-books, has not, in my opinion, been beneficial to our customers. Reductions of 1–2 per cent in retentions, offset by the policyholders' expenses in handling the draft-book, we think in many cases have led to increases in claims of 5–10 per cent, with resultant increased costs to policyholders. Policyholders would probably save money by requiring their insurance companies to provide more claims services at somewhat increased retentions.

(7) *The matter of public interest.*—The insurance business has gained in stature and strength for the last century because of its foundation in law and its attention to its responsibilities under the law. The insurance of the payment of claims on death, disability, sickness, and old age is a matter of deep public interest.

There is model legislation sponsored by the National Association of Insurance Commissioners in December, 1963, aimed at regulation of employers and trust funds doing an insurance business without the use of an insurance company. You can be sure that over the next 10 years stronger and stronger regulations will be imposed in the public interest on uninsured plans. With the regulations undoubtedly will come taxation, and the National Association of Insurance Commissioners has recommended model bills aimed at equalizing premium taxes as between insured and uninsured plans.

THE PRICE

The group insurance business operates on a very small margin of profit. We think that all the services just outlined are essential. We operate in a very competitive market. We think we are pretty efficient because competition has made us this way.

We would ask our policyholders to judge us for what we do and the quality of our doing and their need for what we are doing. In considering going uninsured, we ask that they judge objectively the services of the proposed consultants and administrators, look at the depth and quality of operation of the consultants and administrators, consider the objectivity of expense projections, set standards for quality of performance, and consider the greater financial and legal risks.

MR. RICHARD A. BOSSHART: International Harvester Company is one of the companies that is using the minimum premium approach. We have been on this basis over a year, almost as long as Caterpillar. Since

I realize I may be a minority of one in this group, I feel compelled to say a few words in defense of the approach.

The previous speaker, Mr. Cody, discussed several arguments for insurance as opposed to self-insurance. Three of the major arguments are that insurance companies (1) have a lot of talent, (2) can assume large risks, and (3) can level the effect of claim fluctuation. Industrial giants like International Harvester also have a lot of talent. On our payroll we have many doctors, lawyers, and accountants, some of whom specialize in employee benefits. Even more important, the minimum premium approach is an insured approach. Therefore, we also have access to the insurance company talent Mr. Cody was talking about. Essentially, minimum premium is excess-loss coverage which, in my opinion, is true insurance. For the large organization, the usual approach is more like trading dollars. Companies of our size, I believe, can take risks at least as great as many of the insurance companies can and are not subject to a wide range of claim fluctuation. I would agree with Mr. Cody that if small companies were to use this approach, there could be real trouble.

In Illinois, premiums must be at least equal to the employee contributions. To this extent, premium taxes are involved under the minimum premium approach. Our hospital, surgical, and medical benefits are non-contributory, and our loss-of-time benefits are less than 50 per cent contributory. Our life insurance coverage is not handled under the minimum premium approach because, among other reasons, relatively large employee contributions are involved.

We have a very liberal package of benefits. For example, it includes a 365-day hospital plan with full semiprivate room reimbursement and unlimited extras. Our loss-of-time benefits are roughly two-thirds pay for 52 weeks. When you provide these lucrative benefits for about 75,000 active employees and essentially the same hospital, surgical, and medical benefits for about 10,000 retired employees, you have a substantial annual premium. You also have a large premium tax. The minimum premium approach in our case results in annual savings of almost \$500,000.

We all know that about 95 per cent of the premium tax dollar goes to general revenues. This means that companies with extensive benefit plans are paying more than their fair share of taxes. To compound the inequities, premium taxes do not apply in the case of Blue Cross, Blue Shield, or union welfare funds.

The adoption of minimum premium plans, resulting in reduced state revenues, has already prompted a good deal of action toward changing state laws. Let us hope that the solutions correct some of the existing inequities.

MR. MARVIN R. NELSON: We are normally concerned at Bankers Life Nebraska with plans involving not more than 2,000–5,000 participants, depending on the type of coverage.

The advantages of an insured plan to this type of employer or union welfare fund generally are:

1. The service provided with the insurance contract.
2. The assumption of the risk of unusual claim experience, especially catastrophic losses.
3. Insurance costs are put on a budgetable basis.

The services start out with the administrative tools provided by an insurance company which include the forms and procedures used in that part of the administration which only the policyholder can perform. A most important service is claim control, which includes third-party influence, dealing with hospitals and doctors, which is enhanced by industry co-operation through the H.I.C. and the experience an insurance company has in dealing with particular claim problems and in spotting abuse. Claim control can save many dollars in claims and still result in a more satisfied group of participants than if the policyholder provided the benefits on a noninsured basis. Another service often overlooked is the design of plans, which not only helps claim control but applies the employer's money where it will be most beneficial. Other services include claim analysis, preparation of communication material to inform employees of the value and objective of the plan, and assisting the policyholder in employment practices which will reduce insurance costs.

The assumption of risk should be quite obvious, but the policyholder who happens to have had one or more good years may very well overlook this, and catastrophic risks are more often overlooked than considered.

Even in some coverages where risks average out in a few years for a fairly small group of employees, the budgeting factor can be important. Premium payments also have the advantage of budgeting for claims as they are incurred, rather than to build up an unfunded liability. Finally, one of the more important budgeting aspects is the elimination of a need for an abnormally large amount of liquid funds. Working capital is usually in short supply, and not having to tie it up to cover potential claims is a big advantage of an insured plan.

The advantages of an insured plan to employees and union members are:

1. Contractual guarantees available under insurance contracts
2. Protection of state regulation
3. Financial resources of insurance companies to meet their obligations
4. Assurance of uniform and nondiscriminatory claim practices

5. Plan design including the use of such provisions as antiduplication restrictions which allow claim dollars to be spent on those benefits most needed

The contractual guarantees provided under insured contracts include the right to convert life insurance and usually most medical expense coverages. They include waiver of premium benefits for life insurance and extensions under disability medical expense plans in case of termination while totally disabled. In case of pensions after retirement, benefits are usually guaranteed for the remaining life of the retiree as contrasted to the fund which is not always sufficient.

The disadvantages to the employer, union, or welfare fund include the premium tax element which must be covered in the premium rate, although from an over-all cost point of view a policyholder of the size considered here will save money with an insured plan in spite of the premium tax.

There are no other real disadvantages. The supposed interest loss on reserve funds is considered in the insurance company's over-all retention. This is quite obvious if we consider the minimum over-all profit shown by group insurance companies including their investment income.

In the area of pensions, two disadvantages of insured plans that existed in the past have been substantially eliminated. Prior to the passing of separate account laws, insured plans could not benefit from equity investments to any great extent. About half the states have passed such laws, and more are passing them all the time. Federal income tax relief with respect to pension plans in 1959 and with respect to separate accounts last year has removed most of this disadvantage of insured pension plans.

There are no direct disadvantages of an insured plan with respect to the participants in cases of this size, where benefits could not be provided on a long-range basis for less under noninsured programs than on an insured program.

MR. WILLIAM F. MARPLES: It should be noted that certain pairs of benefits are complementary as far as their effect on gain and loss in a pension plan is concerned. These pairs are:

1. Death benefit and survival benefit (pension at retirement)
2. Pension on disability and pension on retirement
3. Participants' pension and survivors (widows) pension

These pairs should all be funded by the same funding medium. If the benefits are put in separate funding mediums, not only will the offset effect not be realized but in each separate account contingency reserves, margins in actuarial bases, and retention will have to be set up in larger

amounts than if the benefits were kept in combination. Separation will definitely add to cost.

I think the situation as regards the trust fund or insurance contract for pension plans is a stand-off now. Trust funds are going substantially into mortgage; and insurance companies can provide equity investments. Insurance companies are producing a higher yield on the fixed interest investments but their expense charges are higher. The final decision will turn on the inclination of the board of trustees, the personalities of the sales representatives on either side, and even the negotiating strength of the two parties to the plan. Finally, the difficulty of getting straightforward statements out of the insurance companies is a source of irritation.

Valuation Standards for Pension Plans

- A. Is there any practical way to develop acceptable or recognized standards as to:
1. Methods of valuation of pension plan assets and liabilities,
 2. Actuarial and other assumptions used therein,
 3. Forms of presentation to employers, governmental authorities, etc.? If so, who has the responsibility to do this?
- B. Would statements along these lines be of assistance to employers generally?
- C. Would these statements eliminate or reduce the possibility of additional governmental regulation?
- D. How well has the recent attempt to provide a standard set of definitions for the various actuarial methods of pension funding succeeded? Is this new terminology adequate for the Society's examinations, papers, and discussions? Will the new terminology be helpful in standardizing pension valuation reports? (See the September, 1963, *Journal of Insurance*, p. 456.)

Boston Regional Meeting

MR. DORRANCE C. BRONSON: In view of the remarkable accomplishments in the funding of most private pension plans to date, I see no need to develop valuation standards for pension plans in the United States, and I feel that if they were forced upon us, they would bring stultifying aftermaths, especially if promulgated by the government. However, assuming I were forced to such a task, I would place the keystone for the standards at an objective of attaining within a few decades, a 100 per cent funded ratio (accumulated assets to accrued liabilities according to the funding method used by the actuary). For this I would leave asset valuation methods about where they are, a choice ranging from cost to market, in respect of both insurance company plans (e.g., separate accounts) and trust fund plans. For actuarial liabilities and costs under this objective of a long-range 100 per cent funded ratio, I would set up standards for the funding method on a range basis. The actuary could use any recognized actuarial cost method which he and the employer were accustomed to under the plan; except that methods following "terminal funding" or "interest only" or "tightly frozen liability" would require revamping to bring out increased contributions pitched to the funded ratio objective.

I would also set a wide range of choice for each actuarial assumption, which list of assumptions would need to be very comprehensive. By offering this wide range of choices for each actuarial assumption, the exercise of judgment by the actuary would be implicitly assumed in order to prevent absurd assumptions. The concept of standards for actuarial valua-

tions on a range basis offering choices to trustee and actuary, respectively, would minimize the threat of a strait jacket. I feel strongly that the method of ranges would be the only way to do it while retaining any objective of realistic results under truly professional actuarial guidance.

Forms for standardization in presentation of the valuation techniques and results would, I believe, mainly be of interest to "outsiders," e.g., government researchers, employers, competitors, accountants, actuaries, insurance companies, agents, etc. The use of a standardized form would not bring about the homogeneous comparisons that many of these outsiders might infer, that is, as long as a range of actuarial choice was permitted.

This topic does not postulate just who would establish the standards. If the government should do it mandatorily, that would be very different from a group of actuaries doing it for their use and for recommendation to others by example; the latter method had been suggested a number of years ago. Note that it is the practice in Great Britain to place great reliance on the accredited actuary. The actuarial strait jacket prevails in one or two other foreign countries. I am particularly concerned that if the federal government becomes the superactuary it would lead to mandatory pension plans, increasing regulation for successive steps toward "deprivatizing" private pension plans.

MR. HOWARD H. HENNINGTON: A number of groups would like to see the establishment of recognized valuation standards for pension plans. Pressures in this direction come from accountants, the S.E.C., those interested in welfare fund registration and reporting, and those who wish to encourage governmental legislation to enhance the security of pension plan benefits.

It seems to me that pension valuation standards are inevitably going to be brought forward by stimulation from the groups mentioned. I believe that an actuarial body should promulgate such standards so that we retain the initiative. Perhaps the Society of Actuaries or the proposed American Academy of Actuaries could promulgate standards as a supplement to or part of the *Guides to Professional Conduct*. If standards are developed by a group of actuaries, they will recognize that from a practical viewpoint it will be essential to permit a large degree of latitude in the choice of funding methods and assumptions.

Actuarial standards should probably best take the form of guide lines rather than strict standards. The guide lines should cover the concepts of a continuing plan and also its discontinuance. For a continuing plan, a pension valuation should provide a disclosure of the present and future

cost of the plan. In other words, a cost quotation should be on a basis which will be a stable representation of future costs. As to the plan's possible discontinuance, the pension valuation should provide the employees with some knowledge of the plan's security. It would show the extent to which the fund is adequate to cover the accrued benefits which employees would expect on discontinuance.

As to actuarial assumptions, the guide lines should specify that the assumptions be reasonably in accord with the expected experience which is likely in the actuary's opinion to apply over the future of the plan. An important part of any set of guide lines would be a requirement that the assumptions and methods be clearly stated.

To the extent that a promulgation of a standard by an actuarial group would eliminate the need for a governmental agency to establish standards, this would reduce the possibility of governmental regulation. On the other hand, the existence of a standard could lead others to frame governmental regulation based on it. It seems appropriate at this stage of the development of retirement plans for the actuarial profession to give more evidence of a desire to police its responsibility to employees, to the employers, and to the public at large. A failure to take this responsibility would be a fundamental reason for a governmental agency to step in and take leadership.

MR. STUART J. KINGSTON: The phenomenal growth in the number of qualified pension and deferred profit-sharing plans in the past twenty years has contributed to the development of a number of actuarial fallacies. My purpose is to list twelve of them which should be prohibited by any set of standards which may be developed for the valuation of pension plans.

1. Double Mortality Discount

This fallacy occurs in uninsured pension plans, or insured individual policy pension plans which have an auxiliary uninsured fund, or insured deposit administration Group Annuity plans which necessarily have a partially uninsured active life fund. The fallacy consists in claiming that reserves released on death will serve to reduce costs. This is a fallacy, since such releases cannot reduce costs twice, once at the time of the discount and again at the time of the death. The correct claim to make is that, if the reserves released by death exceed the anticipated releases, then costs will be reduced by the excess. Of course, if reserves released by death fall short of expected, then costs will increase by the deficit.

2. Double Turnover Discount

Same fallacy as Double Mortality Discount, related to the turnover factor.

3. *Double Capital Gains Anticipation*

If unrealized capital gains are included in the investment results credited to the plan's account currently, then they cannot be credited again when realized. Only excess gains should be credited.

4. *Inadequate Disability Eligibility*

A pension plan may have fifteen years of service qualification for age retirement and have a service qualification for disability retirement such as ten years of service prior to disability retirement age. In computing age retirement costs, all employees potentially capable of having fifteen years of service by normal retirement date are usually considered. It is a fallacy if, in computing disability costs, only those who already have ten years of service and have reached disability retirement age are included. If so, the disability costs are understated. All employees capable of having ten years of service by retirement age should be considered. If not, the report should point out that disability costs will rise significantly in future years as more lives enter the disability calculations.

5. *Noncomparable Disability Funding Method*

Sometimes a level cost method is used for pension costs and a one-year term cost method is used for disability costs. From this the employee may falsely conclude that the disability cost is level too.

6. *Failure To Point Out That Cash Values Are below Reserve Values*

This fallacy occurs most frequently in conventional group annuities when the cash value may be something like 95 per cent of the premium accumulated at, say, $3\frac{1}{4}$ per cent interest, whereas the reserve grows with benefit of survivorship as well as with interest.

7. *Fallacies Introduced When the Entry Age Normal-frozen Past Service Liability Funding Method Is Used*

The method itself is basically correct of course, but the fallacies arise from erroneous calculation techniques which contradict the stated or implied basic characteristics of this method. The basic characteristics are that the plan normal cost will remain level and that no additional past service liability will be generated. The fallacies consist of using calculation methods which cause changes in the frozen past service liability or in the normal cost. These changes occur upon the use of the following:

- a) An average of arbitrary entry age in place of the true entry age for each participant
- b) The actual pension for computing the normal cost rather than the pension which would have been credited if the plan had always existed
- c) The actual normal retirement age for computing the normal cost rather than the normal retirement age which would have been scheduled if the plan had always existed

d) The employment age for computing normal cost when there is a waiting period for inclusion in the funding

8. *Aggregate Funding Method Fallacy*

The fallacy in this method is to divide the sum of numerators by the sum of denominators rather than the individual method of dividing each numerator by its denominator.

9. *Past Service Amortization Fallacy*

This fallacy occurs when a method which amortizes past service is compared to one in which past service is funded by a level cost method. Even if the amortization period is the same number of years as the premium paying period of the level method, a distortion exists because the level premiums cease upon death, whereas the amortization payments do not.

10. *Unit Credit Fallacy*

This fallacy consists of claiming, without a projection to support the claim, that changes in composition of participants will offset the automatic year-by-year increase in future service costs as age increases.

11. *Historical Fallacy*

This consists of making illogical deductions from a history of a pension fund and consequently results in fallacious conclusions about the plan.

12. *Basic Probability Fallacy*

This fallacy is a special case of reasoning in a circle. If the actuarial assumptions are not truly characteristic of the group, not only is the computed cost a poor estimate but the probability of fluctuation is also invalid.

MR. A. CHARLES HOWELL: We at the John Hancock have been trying for years to develop standards for actuarial people in preparing actuarial reports for deposit administration plans. The more we try to be clear, the longer the reports become and the less readable they become. I fear that if the Society ever did develop a uniform standard acceptable to us all, we would defeat our purpose of trying to convince the employer of the adequacy of his pension plan. We want to think about educating the employer. Our sales department did something along this line when they developed a booklet called *Pensions, Fact or Fiction*.

MR. CHARLES E. FARR: The September 1963 issue of the *Journal of Insurance* printed an article entitled "Actuarial Cost Methods—New Pension Terminology," which was a concrete contribution by the Committee on Pension and Profit-sharing Terminology toward the definition

and adoption of a standardized nomenclature. For years there has been a need for standardization, and we can list the areas where acceptance would be necessary for success in such an endeavor. This list would include:

1. Textbooks and other material used in the colleges and universities
2. The *Society's Committee on Standard Notation and Nomenclature*
3. The *Society's Study Notes* prepared for actuarial students, and the actuarial examinations themselves
4. Papers and discussions prepared by the Society's members and published in the *Transactions* and other publications
5. Pension valuation reports, actuarial studies, and communications between actuaries and clients
6. The IRS code, regulations, bulletins, rulings, and mimeographs

The new terminology has been used in the second edition of Dan McGill's *Fundamentals of Private Pensions*, and it may be anticipated that future publications of the Pension Reserve Council will employ this terminology.

MR. JOHN K. DYER, JR.: I first became conscious of the need for standard terminology a couple of years ago when the Committee on Pensions and Profit-sharing Terminology was first having one of its earlier meetings. A group of a half a dozen actuaries on that committee was discussing these things. We had been talking for a couple of hours when we discovered we were not talking about the same things at all, which was not the same language. That is the basic problem. We have got to establish a standard language. Will the new terminology be helpful in standardizing reports? I do not know or care. We are not trying to standardize pension valuation reports. We are simply trying to establish a common language to be used in writing up those reports. The format and contents should be highly individualized.

MR. ARTHUR PEDOE: Touching on terminology, we still have not got uniformity of life insurance terms. For over 100 years we have been talking about "reserves" which conflicts with the everyday meaning of the word "reserve." For the most common policy there is used "ordinary life," "whole life," and "straight life." If we go back to the early fundamentals of our business, we will find we still have not agreed on our alphabet.

MR. FRANK L. GRIFFIN, JR.: Before we go too far along the road of *what* standards, or *how* to regulate pension funding, perhaps we should devote greater attention to whether such action should be contemplated at all. One of the factors in the solid growth of pension plans during the past 20 years has been the flexibility of financing available to employers

in industries exhibiting wide fluctuations in earnings. It would be ironic if we were to shut off the flexibility which permitted these plans to prosper in the first place.

The current talk toward regulation is largely based on misinformation. Certainly most private plans are on a sound schedule of funding by any realistic standard. Perhaps the actuarial profession has been remiss in failing to provide businessmen and others with a clear exposition of the effect on employee security and company fiscal policy of different levels of pension funding. With this in mind, those who urge regulation of funding should, at the very least, make sure they understand what it is they wish to regulate.

Like the mountain which somehow has to be climbed "because it is there," some persons seem to believe that an accrued actuarial liability has to be surmounted because *it* is there. Whether this need ever be done depends on *what* liability we are talking about—i.e., what cost method we are using to measure it. Except in unusual circumstances, for example, neither company fiscal policy nor employee security requires the full funding of an accrued liability determined by the entry-age-normal cost (E.A.N.C.) method.

If we are talking about the security of employees' pension expectations, we are talking about the funding of accrued liabilities measured by the unit credit method. This amount, computed on appropriate assumptions (no turnover, and other factors appropriate to a terminating plan) measures the amount of assets which should be on hand, if the plan terminates, in order to cover in full the earned pension benefits. This would almost never be as much as the liability developed by the E.A.N.C. method on a "going concern" basis. Many pension plans having unfunded liabilities by the E.A.N.C. or "frozen initial" methods, are actually overfunded on a terminating plan basis. Thus there are a great many such plans which do not need heavier current funding to protect employees' pension expectations, despite an "unfunded liability."

A pension plan will either continue indefinitely or it will terminate. If it continues indefinitely, payment of only the minimum (current cost) by the E.A.N.C. method will, in almost all situations, keep the plan solvent. Moreover, minimum payments by the E.A.N.C. method may actually result in a gradual amortization of the unit credit liability described above, which measures the amount required to protect earned pensions. Other than to manage contributions for tax advantage, or to serve other special purposes not properly encompassed by regulatory standards, it makes no sense to contribute to a pension plan more than is needed for either a continuing plan *or* a terminating plan. This fact seems obvious but it has escaped many of us.

I hope we can get this important message across to business leaders, academicians, and others who influence legislative action, before regulation embodying ridiculous requirements can become a reality.

Chicago Regional Meeting

MR. WILLIAM F. MARPLES: The only way to develop the use of good actuarial cost methods is to teach them properly. There has been too much emphasis on a cost method as a piece of actuarial expertise and too little on developing a fair representation of the facts. Computers are making approximations obsolete, and we have no excuse nowadays for such things as setting of salary scales against withdrawal rates and so forth—if indeed we ever had. An actuary should exhibit the facts on which he made his choice of actuarial bases and comment on his selection with special reference to any point at which his selection is incomplete. The Society has a responsibility to develop professional standards by example, and all of us should contribute to this.

MR. FRANK L. GRIFFIN, JR., repeated the discussion which he had presented at the Boston meeting.

MR. HOWARD YOUNG: Based upon the actual experience of a Trust Fund where contribution income ceased in 1956, adjusted book values have been calculated for the years 1957 through 1963 as

80% [Previous year adjusted book *plus* investment income (excluding capital transactions) *less* withdrawals (for benefits and expenses)]
plus 20 per cent Market.

The corresponding growth rate has been defined as

$$\frac{\text{Increase in Adjusted Book plus Withdrawals}}{\text{Average Adjusted Book}} .$$

The adjusted book values have grown fairly smoothly from 106 per cent of inventory to 116 per cent of inventory. Related to market value the adjusted book has varied between 89 and 93 per cent, except that at 6/30/62 it shot up to 97.1 per cent. The growth rate has been 6–7 per cent in three years, and 7–8 per cent in three years; for the year ending 6/30/62, it was 4.9 per cent.

Recognizing that the investment considerations in “realizing” a gain are different from the actuarial considerations, and mindful that the disregard of unrealized appreciation in a fund belonging to a closed group may lead to an almost “tontine” situation, the trustees are hopeful that some method will be generally accepted as a means of evaluating the assets and growth of a pension fund.

MR. RICHARD DASKAIS: It appears that the thinking of those who want more regulation is that in some instances pension expectations have not been fulfilled. We will probably all agree this is not desirable. However, regulation to bring the fulfilment up to the expectations is not the only way to get fulfilment and expectations at the same level. By meaningful disclosure, the expectations can be made more realistic where they are not now realistic.

We have to start by informing our clients—the employers, unions, and joint boards—where their funds stand and can be expected to stand in the future. Many of them will be very happy to find that, on a termination basis, their funds are much more adequate to provide accrued benefits than they had thought, and some of these will, in turn, inform the plan participants of how secure their pensions are.

I believe that adequate Social Security benefits are a necessary condition for disclosure to be a substitute for funding regulation. Employees may logically expect greater security of pensions which are basic subsistence pensions than of pensions which supplement an adequate social insurance benefit.

MR. ALAN A. GROTH: The question implies that we are looking for some kind of a strait jacket to put valuation standards and actuarial assumptions into, one which would perhaps satisfy the accountants or the government in their search for exact pension costs, but which would result in losing that very precious freedom that we have right now.

Frankly, I have to admit that sometimes I have the feeling that there is a need for a minimum standard. In our office, we usually select the actuarial assumptions on a reasonably conservative basis, or conservatively reasonable basis. We like to avoid unpleasant surprises when next year's valuation comes around and our conservatism merely requires the employer to contribute a little more now which will be credited as a future experience.

However, our task is no longer that simple. An entirely new family of pension plans has developed in the very recent past. I am talking about the pension plans which were jointly negotiated by multiple employers providing identical contributions and paying identical benefits. Here the actuary's task is quite different, because this is the first occasion where his assumptions will directly affect the benefits which are being paid to people who are going to retire tomorrow.

We cannot be satisfied with reasonably conservative assumptions if they will mean that some employee who retires tomorrow will get a smaller benefit just because we like to be conservative. The gains which

might develop under those circumstances from the conservative assumptions as to the general actuarial assumptions, the valuation of the assets, the actuarial methods used, should be anticipated and proper benefits be paid to the employees right now.

Our responsibilities in these plans are not only to an employer or to a joint board of trustees but directly to the employees whose benefits will be directly determined by the conservatism of our assumptions. So, in establishing any valuation standards for pension plans, I think that this particular new area, a growing area, of pension plans should be considered.

I am not advocating that general valuation standards be developed, however. If, and when, some such standard is introduced, then, perhaps, two standards should be introduced rather than one.

I would like to say one word about Topic D, about the standard nomenclature. We are talking under the recommended standards about actuarial cost methods. Cost has a definite implication as far as executives of companies are concerned, who, with financial accounting background, consider cost to be a fixed item.

We always say that the cost of a pension plan will be determined by the benefits paid, the expenses incurred, and the investment income of the fund.

What we are calculating under the various methods are not costs. They may be cost estimates, or perhaps even more properly, they are contribution requirement determinations. The cost of a pension plan will not be affected by use of the accrued method or the entry age premium method with or without frozen initial liability, projecting the benefits with the supplemental liability method. All we are doing is to tell the employer how much he has to contribute to be able to meet the anticipated benefit payments under the plan. I think the term "cost" should be avoided if a standard nomenclature is finally developed.

MR. CHARLES L. TROWBRIDGE: It is still too soon to tell how much acceptance the new terminology will eventually get. A concrete proposal as to standard terminology in the pension funding area has been published by the Committee on Pension and Profit-sharing Terminology, a committee whose letterhead contains names from the academic world and also such well-known actuarial names as Bronson, Curtis, Dyer, McConney, Melnikoff, Nelson, Peterson, St. John, and Sloat. The terminology proposed has been adopted by Dr. McGill, Chairman of the Committee, in the very recently published second edition of his *Fundamentals of*

Private Pensions; but otherwise there has been no published reaction. Perhaps the relative quiet on this front arises from the unfamiliarity among actuaries generally of the *Journal of Insurance*, in which the recommendations were published last September.

If the language suggested is to catch on, it needs more support than has been demonstrated so far from the actuarial world. The Society's Committee on Standard Notation and Nomenclature should perhaps consider these recommendations, and the matter should perhaps be faced by the Education and Examination Committee, whose Course of Reading influences the terminology of actuaries in training.

My personal reaction to the Committee's recommendations have already been sent to Dr. McGill—and can be summed up as follows:

1. The need is great for better agreement on pension terminology. Hence the goal is a worthy one.
2. I can certainly accept the term "actuarial cost method" for what I have for years called a "funding method."
3. The distinction between "accrued benefit cost methods" and "projected benefit cost methods" is straightforward and logical; and I can also accept the terms "individual level" and "aggregate level."
4. I am bothered by the term "Supplemental Liability," because the noun creates an image of a liability in the legal or the accounting sense—but perhaps it is now too late in the development of pension terminology to change.

MR. JOHN HANSON: Where reasoned differences of opinion exist, I believe that standards can be established, by committee or otherwise, only if the logic supporting the suggested standards is irrefutable. With respect to the Society of Actuaries, the spirit of the constitutional prohibition against resolutions that are expressive of opinion would appear to prohibit Society approval of false standards based only on authority or tradition, and permit Society approval of standards only when justified on such a rigorous logical basis.

Turning to Topic D, the Committee on Pension and Profit-sharing Terminology, in suggesting that it is necessary to distinguish between pension costs and the "financial provisions made to meet these costs," suggests an important and traditionally neglected insight.

Financial provisions, as distinguished from pension costs, have been described as: (a) the annual cost provision, which is the accounting charge to profit and loss in the year, regardless of the amount contributed and (b) the cumulative cost provision, which is the sum of the accumulated funds and the accounting liability on the balance sheet.

A definition of pension costs, which is independent of the financial provisions made to meet these costs, is as follows:

Pension costs are actuarial measures, as of a specific date, of the value of pension benefits to be paid thereafter. [Under this definition, any figure depending on the accumulated funds or the accounting liability would not be a pension cost.]

A consistent definition of actuarial cost method would then be as follows:

An actuarial cost method is a technique for relating pension costs with the accumulated funds and the accounting liability, if any, as of a specific date, and thereby developing figures indicating the annual cost provision then appropriate. [Under this definition, the annual cost provision is not determined independently of past contributions.]

It is evident, I believe, that incidence of pension contributions (after establishing a funding objective) and incidence of accounting charges are both determined essentially by decision of the employer, the first on the basis of cash flow, and the latter on the basis of accounting principles.

The committee decided "that a good starting point would be the adoption of appropriate terminology to describe the various techniques for calculating the incidence of pension costs." A better starting point, I believe, would have been to adopt definitions of (a) pension costs and (b) incidence of pension costs.

Although I do not believe the present definitions of the Committee will have significant impact, I am pleased to see the question approached on an intellectual basis, and I believe that discussion and inquiry in this and other controversial areas are essential to the advance of actuarial science.

MR. MARPLES: The present actuarial descriptive titles in the realm of pension plans are poorly fashioned, incomplete, and a hindrance to the conveyance of meaning. Recently, six actuaries sitting around a table were asked for their definition of "entry age normal." The result was six different definitions. The new nomenclature has made two giant strides forward in distinguishing between "accrued benefit" and "projected benefits" and between "individual" and "aggregate" calculation methods. At this point it tails off weakly. The next choice is the type of normal cost—accrued benefit, entry age, or attained age normal cost. Even then some of the old titles need to be brought back and firmly attached to their particular method. I refer to terminal funding, money purchase, and aggregate funding. With any of these methods, a supplemental liability may or may not be set up and the situation has to be identified accordingly. Finally, to pinpoint the method in use, we need to know the method of absorption of gain or loss. Thus, there are five items of information required to identify completely an actuarial cost method.

At this point I must protest against a subject, which is primarily actuarial, having to be described solely by reference to another journal. Surely, a short paper could have been written for the Society in order to initiate discussion. Further, who is to say when the nomenclature is complete and when it is to be adopted? I understand the Internal Revenue Service is willing to rewrite its regulations in the new nomenclature and, if it does this, the nomenclature will be clamped on us. It is incumbent on us as chief operators of these methods to see that the nomenclature is complete, clear and usable before this happens.