TRANSACTIONS OF SOCIETY OF ACTUARIES
1969 VOL. 21 PT. 1 NO. 61

DIGEST OF DISCUSSION AT CONCURRENT SESSIONS

PENSION BENEFIT SECURITY BILL

1. Are the vesting, funding, and vested liability insurance provisions of the bill desirable from the standpoint of:
   a) Employees?
   b) Employers which have established pension plans?
   c) Employers which do not have established pension plans?
   d) Unions and employers which are parties to jointly managed pension plans?
   e) The general public?
2. How well are different kinds of private pension plans accomplishing the objectives that the bill is apparently aimed at?
3. Would the provisions of the bill:
   a) Accomplish the objectives?
   b) Assess costs which are
      (i) Reasonable in amount?
      (ii) Fairly distributed?
   c) Lead to regulation of actuarial assumptions?
   d) Create insurable risks and be administratively feasible?
4. Could some or all the objectives of the bill be accomplished better by other means, such as:
   a) Voluntary changes in practices as to disclosure, vesting, funding, and employer liability upon plan termination?
   b) Changes within the framework of the existing tax and disclosure regulation?
   c) Increases in the level of social security benefits?
   d) Other changes?

Session No. 1

MR. JOHN H. FLITTIE: The first topic is reminiscent of the Medicare discussions of the Society six to ten years ago. At that time the Society was asking, "Will there be Medicare? Will it be good or bad?" There was little discussion of new private health insurance distribution plans, and all the while the legislative wheels were grinding. The insurance industry, in general, in its opposition to Medicare was grouped in the public eye with the AMA as a self-interest group.

Similarly, more federal regulation of pension plans seems to many experts to be inevitable, with the form of regulation being the major question rather than whether it will be good or bad per se.

The problem seems to be how to obtain federal regulations that will

not unduly restrain the private pension system. A positive approach is needed by the pension industry instead of resistance to regulation altogether. The practicality of the persons listened to by Congress could determine whether the end results are good or bad for the general public.

From the standpoint of the general public, the least desirable aspect of the bills is that they do not recognize that security of pension expectations depends in the long run on the ability and the willingness of the employers to pay the required contributions.

If regulations are made more stringent and plans are made more expensive, the willingness and ability of employers to contribute will be restricted, particularly in the case of the marginal employers and small employers, where the largest deficiency in pension coverage now exists. This can only be detrimental to the general public.

In this regard, it is interesting to note that in prepared statements both of the Financial Executives Institute and of Walter Reuther to the Joint Economic Committee in 1967 the concepts of private pensions are very similar and at odds with many of the proposals of these bills.

From the standpoint of the general public, legislation *could* be a good thing if it narrows the area of administrative interpretations by the Internal Revenue Service. That is, if a plan conforms to minimum standards of funding, vesting, eligibility, reinsurance, and integration standards, there would be no concern with nondiscrimination and thus fairly automatic qualification.

Other positive aspects could be the combination of all regulatory functions into a single agency to replace the present myriad agencies and the setting of minimum standards for qualification as an actuary, as proposed in the Javits bill.

We have observed that IRS problems and red tape are perhaps the biggest deterrent to small employers starting qualified plans, particularly fixed-benefit plans. They turn instead to money purchase, profit sharing, or deferred compensation as simpler and "less costly."

This is particularly true if the idea of a retirement plan is brought up by a salesman of an insurance company or a mutual fund, because these alternatives are simpler for the agent to explain than a formula pension plan, particularly when IRS problems can be anticipated on a formula plan. Since the only way in which the average small employer is reached is through the salesman, many are discouraged from what is usually the best solution.

More automatic qualification of plans might outweigh the disadvantages of regulated minimum standards in encouraging the small employer to start a plan.

Changing emphasis from discrimination within one employer to uniform treatment between similar employees of varying employers, up to certain minimum standards, could theoretically lead to simpler regulation, thus increasing the social use of pensions.

MR. C. LAMBERT TROWBRIDGE: Question 2 can be stated in slightly different words: Given that the private pension movement up to now has operated with little governmental direction as to vesting, funding, and vested liability insurance, to what degree has it spontaneously developed along these lines?

With the wide diversity of plans now existing, it is not easy to answer this question, but I suppose I am in as good a position as most to tackle the vesting and funding parts.

The recent Pension Research Council study attempted to divide all plans in its large (over 1,000 plan) sample into three vesting classifications. Plans vested at ten years of service or earlier were thought of as early vested plans; those vested as soon as twenty years of service but not as soon as ten were viewed as intermediate; those vested later than twenty years were classified as late.

Under this classification, the results obtained are shown in the accompanying tabulation. The tendency for the larger plans to be earlier vested is readily apparent.

	Early	Intermediate	Late
By number of plans.....	27.3%	41.9%	30.8%
By number of participants..	47.3	33.8	18.9

Another measure is that the vested portion (including retired lives) of the present value of all accrued benefits turned out to be 81 per cent of the whole. This does not mean that 81 per cent of the employees are vested or even that 81 per cent of the accrued benefits are vested. Both of these, particularly the first, would be considerably lower, because unvested employees would typically have smaller accrued benefits and because at the younger ages the present value of each dollar of accrued benefit is smaller.

As to funding, for the sample as a whole assets were about equal to the present value of accrued benefits and to 123 per cent of the present value of vested accrued benefits. This, of course, does not imply, for several reasons, that there was in 1966 (the mean date for this study) anything like 100 per cent security in employees' pension expectations:

1. The heavy funding for some plans is not available to help the employees of lesser-funded plans.
2. The sample ignores plans that are not at least ten years old—and all pay-as-you-go plans.
3. Multiemployer negotiated bargained plans, which for good reasons tend to be funded lighter than other plans, are no doubt underrepresented in the sample.

Even on the exceedingly difficult question of the protection of pension expectations upon plan termination, the private pension movement has made some headway. I refer to a particular collection of bargained plans, involving several unions and different industries, under a plan known as the National Industrial Group Pension Plan, sponsored by the Industrial Union Department of AFL-CIO and by the United Auto Workers. In this plan great attention has been paid to the problem of the possible disappearance of one or more of the small units serviced by the plan, and a system of insurance is operating, through a pooling of the cost of guaranteeing the benefits over all units. Though it is too early yet to tell how well this arrangement will work, and though its wide extension to other private plans seems doubtful, still the private pension movement has made a little headway in a very difficult area.

CHAIRMAN MYLES L. GROVER: You mentioned that the mean date of your sample is 1966. We have a completely different financial picture right now. How does that affect the validity of your results? The interest rates are up higher; the stock market is down.

MR. TROWBRIDGE: The comparison of assets and liabilities was done on a market-value basis. The liabilities were valued by getting quotes from insurance companies as to the rate at which they would actually sell these benefits.

Three years have gone by, and interest rates have gone up considerably since then, so we have reductions on both sides of the equation—both the liabilities and assets sides. But I am fairly sure that, if we were to make a similar calculation today, the assets would look even larger in relation to liabilities.

One thing that we must realize is that this study is a snapshot in time and that long-term interest rates at that particular time are particularly important.

MR. JAMES A. CURTIS: A very sad commentary is that a copy of the PRC study was sent to Senator Javits. He read it and came to the con-

clusion that his bill was not going to hurt anybody, that the ratio of assets and liabilities was so near in balance for so many plans that it would not hurt too many people.

MR. TROWBRIDGE: The PRC study will be interpreted by different people in different ways.

One interpretation is that the private pension movement without any government duress has done a good job (and I think that is a reasonable supposition). But one can also take the position that, even though it has done a good job on the whole, there are a few bad apples in the barrel, and who should object to getting after those few bad apples?

Certainly Senator Javits' position is easily arrived at. He sees that this study shows that 90 per cent of the plans are doing well. He would like to get after the other 10 per cent. I do not particularly blame him for it. I think, however, that other people viewing the same statistics would come to different conclusions.

The Dent bill is very careful to tie the vesting concept in with both the funding concept and the reinsurance concept. The three-step progression here is very logical. If you buy the concept that ten-year vesting is in the public good, then you also very easily buy the concept that when you say "vested," you mean vested under almost any circumstances, and you can lead yourself to the other two fairly quickly.

I think that the real trouble, philosophically, is on that first point on vesting.

MR. FLITTIE: One of the major legislative concerns is the disparity of income between the 50 per cent of the labor force who will not have private pensions and will be living on social security alone and the other 50 per cent who will be living on private pensions and social security.

It must be recognized that personal savings as a source of income are insignificant in comparison with social security. The only thing economically equal to social security as a source of after-age-65 income is current compensation.

Therefore, to improve the post-65 economic position, one approach would be to encourage personal savings by granting tax deductions for personal retirement programs; by granting personal tax deductions for employee contributions to contributory plans; by granting tax deductions for employee social security taxes; and, at the same time, by lifting the restrictions on postretirement earnings, taxing social security payments, and encouraging small employers to start plans by elimination of red tape.

This would lead to a greater emphasis on contributory plans—both as the main retirement vehicle and as "thrift plan" supplements—and would give more equitable treatment of social security.

MR. GEORGE BRUMMER: There are two diametrically opposed views of vesting which represent a practical problem.

The employer says that he does not want vesting because he would like to see a valuable employee continue his employment during his entire working lifetime. The employee, on the other hand, feels that his efforts on the job entitle him to something after he has been working for the employer for a period of years, particularly since he is often told that pension plan benefits are a form of compensation. Both points of view are valid; how can they be reconciled?

With respect to the choice of actuarial assumptions, many actuaries apparently feel that the bill may well lead to regulation in that area. This is probably the case, but I wonder how bad it will really be. After all, actuaries concerned with life insurance problems have been restricted in a similar respect for many years by the Standard Nonforfeiture and Standard Valuation Laws. But this has not prevented the continued success of life insurance companies and the marketing of a variety of products.

MR. LAURENCE E. COWARD: I believe that the main point has been missed by the distinguished panel. Legislation on pension benefit security rests essentially on broad grounds of social justice. It is a form of consumer protection. There are other arguments for and against, which relate to such things as mobility of labor, the impact on social security, and the economic effects, but these are subsidiary. To the employee, early vesting is a simple matter of equity.

The average employee is so dependent on the pension from his employer's pension plan that it is disastrous for him and his family to lose his pension rights because of termination of employment, or insolvency of the fund, or failure of his employer to fund the plan. It is utterly impossible for the average worker to save personally nearly five year's salary by the time he is 65, which is what is needed to buy him a 50 per cent pension. He is forced to depend on his employer's plan.

An employee who has worked for many years in the expectation of receiving a pension considers it grossly unfair that he should forfeit it if he is fired, or retrenched, or has to leave before meeting some exacting vesting qualification. The employee naturally believes that his pension is earned year by year over his service, for this is how the pension formula is designed and how the plan is operated and funded.

Mr. Trowbridge and Mr. Griffin have given figures showing that in 31 per cent of pension plans with 19 per cent of covered employees, the members have no vested rights until after they have completed over twenty years of service. A Department of Labor survey shows that one-quarter of the largest United States pension plans provide no vesting whatever until early retirement. These facts in my opinion demonstrate the need for mandatory vesting laws. If pensions are regarded to any extent as a form of deferred pay, the employee should not have to wait more than ten years in one company to avoid forfeiting such pay.

The dire predictions of damage to the pension movement made when the Canadian legislation was introduced have not been realized. After nearly five years, there are no indications that the growth of pension plans has been retarded. The cost of vesting has generally been less than was expected and is usually considered a lost source of future profit. The serious objections are to the level of payments required under the funding and solvency rules. In Canada rather strict funding requirements are applied, but, on the other hand, there is no vested liability insurance.

Mandatory vesting would be beneficial to many employers. In the hiring of an experienced man it would not be necessary to offer a large salary increase to compensate for loss of pension rights—and then perhaps to make up the pension as well.

It has been stated that the fundamental issue is the preservation of freedom of choice. Any legislation involves the loss of freedom to somebody—usually so that a more important freedom may be preserved. The Pension Benefit Security bill would give a long-service employee the important freedom to change his job without being penalized many thousands of dollars.

Associations of businessmen and of actuaries tend to oppose any legislation in principle. The initial reaction is to regard it as the toe in the door, the thin edge of the wedge. Often the objection is not so much to the proposals themselves as to what the critic fears might develop from them. This is like arguing against control of guns in case it leads to control of table knives. It seems to me poor policy to refrain from tackling the present weaknesses of pension plans for fear that the supervisory bodies might ultimately run wild.

The United States is a nation on wheels. This flexibility and mobility has always been one of the strengths of the private enterprise system. The proposed bill should make the work force more mobile, to the advantage of management and labor alike. Moreover, a strong private pension system is the best defense against yet further intrusions by government in the field of social planning.

Support for legislation on vesting and pension security from the actuarial profession would improve our public image, by demonstrating that we do not always resist social measures.

MR. JOHN K. DYER, JR.: I thought of writing a new discussion, but I decided that I could not say it any better or more concisely than I said it last year. [Mr. Dyer then read his remarks of the previous year, printed in *TSA*, XX, D625.]

MR. WILLIAM A. HALVORSON: Switching the spotlight from Washington, D.C., or Ontario to the State of Wisconsin, I would like to bring the panel and audience up to date on recent developments.

As you know, Wisconsin has one of the few state disclosure laws. In 1967 this law was amended to require the Commissioner of Insurance to give the pension plan participants a report on the "actuarial status" of their pension plans. It soon became clear that the department was primarily concerned with loss of benefits in case of plan termination caused by employer business failure.

In working with the Employee Welfare Funds Division of the Insurance Commissioner's office, I in the beginning felt that a vesting standard would be implied in this report on actuarial status. Current proposals are taking the form of a one-page report from the actuary comparing the value of assets with value of vesting benefits. The report would probably require a repeat of the vesting provisions and a statement as to the allocation of assets by class of participant in case of plan termination.

We have endorsed this proposed procedure, since we believe that it deals with things as they are and, in addition, that it provides an important avenue of communication between the actuary and the plan participants. We think that the result will improve understanding and communications.

Session No. 2

CHAIRMAN J. DARRISON SILLESKY: The country seems to be preoccupied with security and with consumer protection. The pension benefit security bills that are now before Congress are merely one aspect of this larger concern. Congress is giving priority to other aspects of security at the present time, but it is inevitable that attention will be focused on pensions as soon as some of the other matters have been taken care of.

Of the several bills that have been filed in the 91st Congress, the two that we have chosen as a basis for discussion today are H.R. 1045 and

S. 2167. The former was introduced by Mr. Dent in the House of Representatives on January 3, 1969, and is entitled the "Pension Benefit Security Act." The latter was introduced by Mr. Javits in the Senate of the United States on May 14, 1969, and is entitled the "Pension and Employee Benefit Act of 1969."

MR. JAMES A. ATTWOOD: It seems appropriate, as an introduction to this discussion, to review the objectives of the pension security bills offered by Senator Javits and Congressman Dent.

In his introduction of S. 2167 on May 14, 1969, Senator Javits made the following comments:

> The provisions of the Javits bill . . . are designed to curb fraud in the handling of corporate and labor-union pension plans, as well as to insure that the reasonable expectations of employees to receive pension benefits will be met. The bill would protect against the denial or substantial reduction of benefits to employees because of job transfer, lack of tenure, or plant shutdown.

Senator Javits states that his bill is "a comprehensive legislative proposal to deal with the major problems and defects in our private pension plan system." He stated that it would accomplish eight major purposes. A quotation of the three primary purposes of the bill follows:

> First, the bill would establish minimum vesting standards for pension plans, thereby giving assurance that no pension plan could set its eligibility standards so high as to deny pension eligibility to all but a few employees.
>
> Second, the bill would establish minimum funding standards, thereby giving assurance that pension funds will be operated on a sound and solvent basis, enabling the fund to deliver the benefits which have been promised.
>
> Third, the bill would establish a program of pension plan reinsurance so that plans meeting the vesting and funding standards of the bill would be insured against termination and retirees would be insured against loss of benefits if an employer goes out of business before the plan has been fully funded.

Congressman Dent's bill (H.R. 1045, introduced on January 3, 1969) contains the following in its preamble:

> that despite the enormous growth in such plans many employees with long years of employment are losing anticipated retirement benefits owing to the lack of vesting provisions in such plans; that owing to the inadequacy of current minimum standards the soundness and stability of plans with respect to adequate funds to pay promised benefits may be endangered; that owing to the involuntary termination of plans before requisite funds have been accumulated, employees and their dependents have been deprived of anticipated benefits; and that it is therefore desirable in the interests of employees and their beneficiaries,

for the protection of the revenue of the United States, and to provide for the free flow of commerce, that minimum standards be provided assuring the equitable character of such plans, their financial soundness, and protection of benefits in the event of involuntary plan termination.

In essence, the objectives of these bills are to improve pension benefit security through greater fulfillment of pension expectations of covered employees. Before tackling the question of whether these bills accomplish these objectives, it seems appropriate to raise the question of whether this is the only question, or perhaps the real question, which should be asked about the private pension system. Are there other, perhaps even broader economic, social, and political problems which face us? It is too easy to concentrate on "mechanics" of particular bills. We must constantly strive to fit the pension dialogue into the broad problems. Also, we need to constantly question "why." What are the facts and evidence as to the need for and merits of certain proposals?

There are three broad economic and political problems which should be considered along with the objectives cited by the proponents of the pension benefit security bill. These are (*a*) inflation, (*b*) the shortage of savings and capital formation, and (*c*) the balance between social security and private pensions.

Senator Javits recognized the existence of these broader problems in his introduction when he made the following statement:

I am committed to preserving, fostering and improving the private pension plan system. I join those who also want to improve social security, but I have no illusions that social security will or ought to replace private pension plans. For private plans serve a dual purpose of supplementing the limited benefits payable under social security while at the same time providing very substantial funds for investment, thereby fostering the growth of this nation's economy.

One of our panelists, Frank Griffin, has been speaking extensively on these bills, and one of the points that he effectively makes is that "inflation is the real thief of pension security." The expectation of continued inflation, where inflation is becoming not only a fact of life but also a way of life, is something to which pension plans must adapt. All of us must be concerned about the adequacy of pension benefits in the face of the erosion of inflation. Inflation is a major disturbing factor which has upset many pension plans. A 2 per cent per year mild inflation means that a retired couple loses one-third of their purchasing power during the period of their retirement, let alone what happens before retirement. Certainly

any discussion of pension security must include a discussion of inflation and the role the government has in curbing its effect.

The important role of private pensions in meeting the pressing need for additional savings to finance capital formation is another economic fact which cannot be forgotten. There is a shortage of savings, and current events are a fresh reminder that investable capital is not in oversupply. The economy now and in the future could easily absorb the substantial funds made available by an expanding private pension system. The economic policy of full employment—a desirable social aim—is not going to be easy to maintain in the future, because our country is on the threshold of a staggering increase in the labor force and we are faced with the challenge to create jobs needed to employ the surging tide of manpower. Currently and in future years there will be a huge demand for capital funds for the creation of jobs, the accelerated growth of productivity, and the need for a more rapid advance in the level of living.

There is also the basic concern which Bob Myers has been telling us about, the proper balance between the role of private pensions and the role of government pensions, notably the role of social security. It is important that we not slow up the role of private pensions by increasing social security to provide benefits beyond a minimum needs basis. Social security does not and should not involve advance funding. It does not accumulate large reserves and provide capital formation. In fact, social security actually reduces savings, because taxes depress the ability of individuals to save. We can certainly second Bob Myers' recent statement that "there is an appropriate role of private pension plans and social security and that it is important, even vital, that each should have such role." It is important that those of us in private pensions support the moderate view of social security and rebel against the expansionist view.

Private pensions are an important capital source for our economy, and we cannot afford to risk an eventual shrinkage of private pensions by slowing their normal growth. Therefore, is not the real question how to encourage the growth of private pensions? Should we not review pension benefit security bills from this standpoint?

No one disagrees with the fact that employees covered by a private pension plan are entitled to know where they stand and to have confidence in the effective administration of their plan. Appropriate and meaningful disclosure requirements and fiduciary standards of responsibility cannot be objected to on sound grounds. Again, the question is whether the other proposals of the pension benefit security bills—notably regulated mandatory vesting, regulated mandatory minimum funding, and regu-

lated mandatory pension plan termination protection insurance—will encourage the growth of private pensions, through shoring up the inadequacies of the present system, or whether they will hamper the growth of this system.

MR. MARC M. TWINNEY, JR.: Before getting into the body of my remarks, I would like to mention that I speak here today as a pension actuary. Although many of my comments will be based on insights gained recently with a large manufacturer, they still represent my personal opinions.

What do employees think about pensions and vesting? I cannot believe that the young men and women in their twenties select or reject a job because the employer does or does not provide a pension plan, much less a plan with early vesting. The young employee may believe that his employer is more enlightened and the company is a better place to work if there is such a plan. A vast number of employees work where there is no plan at all; they are satisfied to have the job for now. I have seen modest plans introduced by small employers which were well accepted by employees. I think it would be tragic if small employers were discouraged from undertaking a plan at all because of vesting, funding, and reinsurance standards which were too awesome in their cost and complexity.

Just as I believe that the younger worker is not that retirement-oriented, I believe that there is a remarkable interest on the part of the older, long-service worker in retirement. Some of the benefit provisions developed over the last twenty years in the auto industry are highly complex—involuntary early retirement and disability benefits and supplemental allowances for early retirement. The fifty-year-old employee covered by these benefits knows and understands the details of these provisions very well indeed. In the plant it is not unusual to hear accurate and intelligent discussions of them. This should not be too surprising, but it is surprising to hear advanced by our legislators the concept that pensions should be vested because the least knowledgeable or informed employee presumes that they are.

This leads one into considering just what vesting is. Is it an integral part of the promise to pay income after the working years are over? Or is it a separation benefit? And, if these questions are valid, who should answer them—the parties involved, the employees and their representatives and their employer, or the government?

Are the vesting provisions desirable? It may be helpful to look at how premiums developed in one industry (and in one company). The question in the late 1940's was whether a union had the right to bargain pensions

for its members. That question was answered affirmatively, first by the parties involved and eventually by the NLRB.

Ford Motor Company has publicly stated that it attributes the lack of industrial strife since the 1940's in large measure to the introduction and improvement of the pension plan. When Ford first bargained on pensions in 1947, priority was given to adequate benefits for long-service employees. But the employees turned down the plan in preference to wage improvements. In 1949, when a plan was successfully bargained, the priorities of Ford and the UAW continued to be with benefits for long-service employees. Prior to the introduction of the retirement plan, the company kept employees on the payroll through a variety of practices. This was becoming much more difficult as the life span of the older worker lengthened and more and more employees reached age 65 from the large work forces hired in the 1920's. When the plan went into effect in 1950, thousands of employees retired, including one who was age 94! In subsequent negotiations, the *second* priority was total and permanent disability. The *third* priority was a special early retirement benefit to take care of the special problems in adjusting personnel and operations to the demands of a dynamic and competitive industry. This has proved to be an especially humane tool. The *fourth* priority was vesting. It came in a limited way in 1955 for employees who attained age 40 and 10 years of service after age 30. In 1964, after widows' benefits had been added and benefits for voluntary early retirement greatly expanded, vesting eligibility was liberalized to ten years of service. More recently, the union has asked for an eligibility of only five years of service.

But the *first* pension priority has always been the normal retirement benefit level, given current wage and social security levels. Also, pensions are just one element of the total economic security picture. The costs for pension improvements must be fitted in with all the demands on the available resources, a fact of life that pension specialists, in Washington and elsewhere, may tend to forget.

MR. ATTWOOD: I would like to reinforce that observation. Reasonable vesting provisions in pension plans are desirable and should be encouraged. Certainly there is an essential fairness in requiring vesting. But vesting is costly, and burdensome requirements may discourage employers, particularly small employers, from establishing pension plans. The basic question is not whether pension plans should have vesting but whether the government should mandate minimum vesting standards. Is a plan with no vesting better than no plan at all? Should employers and unions be able to establish their own priorities as to benefits? On the

other hand, does lack of vesting provisions inhibit labor mobility? Does lack of vesting provisions create an essential unfairness and weakness of private pensions? There are no easy answers to any of these questions, and the final policy decision which must be made is one which balances the advantages and disadvantages of the action.

MR. FRANK L. GRIFFIN, JR.: Jim Attwood has recited the objectives of pension security legislation authored by Senator Javits and Representative Dent, as set forth in the preambles to their bills. Certainly no one could find serious fault with such high-sounding purpose, other than perhaps to regret the unfortunate and mistaken inference that a rather sorry state of affairs exists under private pension plans.

Unfortunately, these bills in present form would fail to accomplish their stated objectives. They are aimed *only* at the healthiest plans in existence (essentially those qualified by IRS and meeting requirements for tax deductibility of contributions) and ignore completely those which provide the least security to employees (pay-as-you-go plans and the relatively poorly funded plans for employees of most public bodies). Moreover, they do not and could not come to grips with the principal threat to pension security, inflation, with which Congress and the administration should concern themselves more effectively before building complex machinery to prevent an erosion of pension benefits which is minuscule by comparison.

These difficulties with the bills are not cited for the purpose of opposing all legislation on the subject but rather as a reminder of the importance of maintaining perspective on the question. So, in mentioning objectives, before we join Javits, Dent, and a host of others in spending others' money to shape their pension plans in our own image, let us not forget another fundamental and highly desirable objective. This concerns the right of self-determination by the parties to private plans—employers, unions, or other employee groups—in selecting the type and amount of benefits, investment channels, and funding procedures most appropriate to their own circumstances. We should not forget that the one most noteworthy feature of private pension plans in the United States, which is the principal reason for their existence as well as a difficulty in the way of equitable regulation, is their *great diversity*. Their adaptability to varying needs and conditions has been one of the principal reasons for their highly successful development.

Just how successful private plans have been in providing ever expanded benefits and a high level of funding, without any compulsion whatever from government, can be seen from the statistics presented in the recent

Pension Research Council study. It might be mentioned that Javits' bill and many other proposals were introduced before any facts whatever were known concerning the vesting and funding status of private pension plans in this country. (A rather sad commentary on our zeal for reform, it seems to me.) Those of us who authored or participated in that first nation-wide fact-finding study felt that it was high time to bring a little light to this dark corner of pension information.

Vesting of deferred pension benefits is in reality an additional (severance) benefit, carrying an additional cost, which can be negotiated by employers and unions in addition to old age pensions, disability pensions, death benefits, and the like. Other things being equal, most of us would favor reasonably early vesting, just as we favor sound funding.

The question whether pension plans ought to include early vesting, therefore, has a simple answer: "They should when the parties to these plans are ready and willing to divert part of the cost of the plan from other benefit objectives to a severance benefit." The question really is one of who should set the benefit priorities under PRIVATE plans—the parties to these plans or the government?

The recent Pension Research Council study indicated that under plans which had been in effect ten or more years, 47 per cent of the participants enjoyed vesting provisions characterized as "early" (essentially after ten or fewer years of service) and another 34 per cent of the participants were covered under "intermediate" vesting (approximately eleven to twenty years of service).

If one cares to go back a few years to review the historical development of vesting practices, he will find that vesting *circa* 1966, the mean valuation year of the Pension Research Council study, was *far* more liberal than that existing a scant ten years earlier. There has been a definite trend toward voluntary liberalization under both unilateral and negotiated plans, and this trend continues.

A conclusion of the Pension Research Council study was that older plans have more liberal vesting, the inference being that such liberalizations occur as funding of past-service benefits is accomplished. (Again we find it is a question of benefit *priorities*.) Moreover, the study showed that small plans have poorer vesting than large plans (i.e., 27 per cent of plans and 47 per cent of participants have "early" vesting provisions). If it were more widely known that the principal burden of cost of mandatory early vesting would fall on small employers (and on employers whose benefits are otherwise the most generous), this particular issue could become political dynamite.

With respect to funding, the question appearing on the program might better be translated, "Should private pensions be funded according to rigid standards set by government or allowed some flexibility so as to give greater assurance of plan continuance through good times and bad?" Consulting actuaries, insurance companies, and employers have pretty well given an affirmative answer to the *principle* of funding; potential debate centers principally around the question of who should plan the cost budgeting and decide the assumptions.

The Pension Research Council study revealed that over 90 per cent of the values of vested benefits were already fully covered by assets. *Plans with an effective period of past funding of fifteen years or more had 99 per cent of their vested benefits funded.* (For total accrued benefit values, whether vested or not, the percentage of funding was 85 per cent over all and 94 per cent for plans with effective funding periods of fifteen years or more.)

More than 76 per cent of the plans in that study were having their costs "systematically funded." Of even greater significance in considering whether funding regulation is necessary or desirable, it should be noted that the approximately 15 per cent of plans whose supplemental costs were being funded "irregularly in non-uniform installments" had an ever higher degree of over-all funding than the more systematically funded plans. Flexibility, therefore, does not appear to be a handicap in achieving benefit security.

Comparing funding with a postulated bench mark of funding progress which proceeds from zero to 100 per cent over thirty years, the study showed that 94 per cent of the plans had BSR's (security ratios for *all* accrued benefits) in excess of the bench mark for their funding durations; 98 per cent of the plans had VBSR's (security ratios for *vested* accrued benefits) in excess of the bench mark.

A final point of interest in the funding summaries was the significantly greater benefit security under single-employer plans in comparison with multiemployer plans, in terms of the measurements used in the study. While logical reasons can be cited for a difference in relative position of Taft-Hartley plans, for example, at the same time the comparison would not seem to support any special treatment of these plans in the Secretary's proposed power to grant variations.

On the question of reinsurance of unfunded liabilities for vested pensions, alternatives ought to be more vigorously explored. It makes little sense, it seems to me, to follow a system which places so little responsibility upon an employer to adopt benefits which are within his means. Perhaps employers (as some voluntarily do now) should be required first

to stand behind vested benefits with their general assets, if need be. This might serve as a brake on the adoption of benefits that could not properly be afforded within the financial prospects of the company. Until a company first digs into its own coffers, I cannot see taxing prudent employers for the benefit of the imprudent. The Pension Research Council study seems to indicate that the reinsurance proposal would definitely be asking larger employers to subsidize the smaller ones.

Pleas for "social justice," appropriate for public welfare or social insurance schemes, are somewhat beside the point in the private employee benefit field. Justice has nothing to do, for example, with an employer's providing a widow's pension in lieu of vesting, with his decision as to the amount of group insurance to be provided, or even with the relative wages he pays. Any unreasonable differences in these areas will be corrected by the pressure of competition for employees, and this is as it should be. The concept of "social justice" applied to the type or amount of benefits selected by the parties to private pension plans is a totally unrealistic one, and I suspect that those who hang their entire argument on this concept do so for the very reason that more logical arguments are lacking.

My role on the panel has been largely that of commentator and "purveyor of statistics." It may be appropriate to quote briefly from the Griffin-Trowbridge study for the Pension Research Council, which has provided considerable background for this entire discussion:

> Overall, 81 percent of the *values* of all accrued benefits were [found to be] vested. Vesting therefore appears to be at a reasonably advanced stage in its evolution, with liberalizations continuing to occur as other benefit priorities are satisfied.
>
> The study furnishes impressive evidence that sound programs of financing have been the rule. While the recent period of rising interest rates has contributed to the favorable results, one may nonetheless conclude that conservative assumptions and cost methods have been employed in the funding of most private pensions.
>
> In the opinion of the authors, the principal message to be found in the results of this study is the clear evidence that during the past several decades, while the climate has been favorable to the independent development of private plans, these plans have responded with a remarkably healthy growth, both in the evolution of benefits and benefit forms and in the enhancement of employee security through sound financing.
>
> This study also demonstrates a tremendous diversity in the private pension field. Unions and employers, operating on the basis of free bargaining and independent judgment, have arrived at decisions leading to the adoption of a wide variety of plan provisions and funding policies adapted to their special require-

ments. Since the possibility of satisfying diverse objectives is one of the principal reasons why private pension plans exist, the wide variation in results presumably should be viewed as normal and desirable.

I happen to be one of those who recognizes that a case can be made for constructive pension legislation, particularly on the theory that greater portability, similar to but perhaps different from social security, might help to preserve the integrity of *private* pensions and the very important source of productive capital which they represent. I believe that matters to be covered in such legislation might encompass benefit and funding disclosure to individual employees as well as vesting provisions similar to those of Javits or Dent. I am opposed on a number of grounds, however, to the funding regulation and unfunded liability reinsurance provisions of these bills.

MR. ATTWOOD: As the insurance company representative on this panel, I have a particular interest in the insurance features of these bills. The name of this feature has had multiple labels. In addition to "insurance," it is sometimes called "reinsurance," "pension guarantee fund," and "vested liability insurance." Many of us in the insurance industry have labeled this feature PPTPP, "pension plans termination protection program."

Regardless of the name there is a *sine qua non* that any program must be combined with the meaningful funding standards. This is acknowledged by sponsors of the legislation and by all who have seriously studied these programs. A program cannot stand alone, lest some plans rely too heavily on the program. I am not sure, however, that all promoters of government regulations of private pensions agree. There have been, however, some promoters of such legislation calling for "underfunding and reinsurance."

Dr. McGill of the Wharton School and various committees of interested groups, including the life insurance associations, have examined this feature in depth. General conclusions usually are that a program of this type may be theoretically or technically feasible with certain conditions, but there are questions whether the program which is possible would also be practical and satisfactory to the advocates of this type of legislation. In my mind there is little doubt that a program can be set up which would be reasonably sound, but I seriously doubt whether that program, or the one contemplated in the Javits and Dent bills, will really satisfy the public's concept of pension plan benefits. Most critics of private pension plans really want full pension benefits under all circumstances, and any program which merely provides minimum vested benefits in the event of involuntary plan termination falls very short of that objective.

There are many technical (underwriting, actuarial, and administrative) problems and many nontechnical (philosophical) problems to be solved before a feasible PPTPP can be set up. Let me mention and comment briefly on a few technical problems:

1. When does a claim become payable? The definition of risk is key to the program. There are many risks we do not want to cover—depreciation of value of assets, underfunding from inadequate assumptions, etc. If they stick to the definition in the Dent bill, "involuntary plan terminations for reasons of financial difficulty or bankruptcy or plant closings," there is a complex and controversial determination to make in many situations. There can be many interpretations of partial plan terminations, plant closings, and business necessity and related situations. Who would make such difficult decisions?

2. What is the amount of the claim? This depends somewhat on the definition of vested liabilities. The amount determination might be easy on complete termination of plans, but what happens on partial terminations? Would assets be partitioned to various groups? If so, how?

3. Who should pay claims? Would the program fund pay the terminated plan, or would the terminated plan pay the program fund? Alternatively, each fund could pay a portion of the benefit. The terminating plan might pay until the assets were exhausted and then call upon the program fund for continuation of the benefits. It is even possible that annuities could be purchased.

4. How is the program to be financed by participating pension plans? Would there be advance premiums by covered plans or would there be assessments based on experience? Would strong employers be willing to provide protection to less strong employers? Should the government participate in excess claim cost or in premium stabilization?

5. What should be the requirements for participation? Would it cover only "qualified" plans? What about unfunded and multiple-employer plans? In the latter area, there may be less need, since the plan may survive even though a particular employer fails. On the other hand, there have been examples of difficulties in adequacies of funds for these plans. Should governmental plans, small plans, and self-employed plans be covered? There is attractiveness in covering smaller employers, because of their greater risk of failure, but the antiselection possibility is greatest in that area.

There are also nontechnical questions about PPTPP. Let me mention just two:

1. Who should administer the program? Should it be government-administered, privately administered, or should there be a private nonprofit organization with government participation limited to excess claims?

2. Most importantly, would the program hamper the trend toward more adequate funding or the creation of new plans? Would minimum funding standards become the rule, rather than the exception, and would employers rely upon PPTPP to bail them out?

In conclusion, looking both broadly and specifically at our problems, I believe that a strong private pension system is the best deterrent to future encroachment of social security. It seems to me that, if we can accept reasonable minimum standards of vesting and funding, the whole private pension plan movement perhaps will be stronger. With this strength, and with government acknowledgment and support of the private pension system, it will be possible for us to prevent an ultimate takeover of the private pension system by the social security system. Although there are strong arguments against legislation in the private pension area, on balance I feel that reasonable legislation will be helpful to the cause of maintaining a strong private pension system and of facing squarely the basic issue of the appropriate balance between private pensions and social security.

MR. TWINNEY: In reviewing the specific legislative proposals, I have become quite concerned in trying to determine just what vested benefit would be used for the funding standards and the "reinsurance" provisions. The Ford-UAW retirement plan provides a vested benefit deferred and payable in full at age 65 on a life annuity form. The normal retirement benefit, however, is payable as early as age 62 without reduction and, since January 1, 1969, in a form including a widow survivor's benefit. In addition, an employee retiring before age 65 would be entitled to a supplemental allowance. From the definitions in the proposed legislation, using new terms that are not found in standard pension nomenclature, I am unable to determine what benefit would have to become vested, funded, and "reinsured." I do know the vested liability situation on a going-concern basis for the *APB Opinion 8*. Clearly there will be no relation between the legislated vested liability and the one determined under *APB Opinion 8*, not so much for the difference between the going-concern and the termination-of-plan basis as the differences in the benefit considered. The premium required from the Ford-UAW retirement plan, indeed, for the plan termination protection, is thus an unknown. We do know that this premium would have no relation to the unfunded value of vested benefits according to the provisions of our present plan and our current actuarial basis, even though we have had vesting after ten years of service since 1964.

In order to implement the bill, regulation of actuarial assumptions would become mandatory. It seems to me that the public should have some idea of what form this regulation would take, whether there would be one standard applied to all or whether each employer would be able to present his own actuarial basis based on his own experience for such de-

termination. One cannot help but expect that the regulation would become complex and arbitrary, perhaps, involving such concepts as the "worse possible case" used in the Treasury Department's regulations in regard to integration of private pension plans with social security.

Although the Pension Security bill obviously has been subjected to some technical review, I would like to point out one other technical problem that would pose a real quandary for private plans. Under the proposals an employee not contributing to a contributory plan would not accrue a vested benefit for such periods of service. If he contributed to such a plan, however, his accrued benefits from employer contributions could not be forfeited by withdrawal of his own contributions at any time after vesting.

If we assume that the interest credited on employee contributions compensates for the value of the use of his money, the legislation would lead to situations in which two employees equally situated would have different vested rights. This would tend to force all contributory plans to eliminate the right of withdrawal of employee contributions upon the attainment of the statutory vesting requirements. If this is an object of the legislation, it would be more equitable to write a provision to accomplish this directly rather than to back into it.

Earlier this month I was fortunate in having the opportunity of visiting four of our companies in Europe. One of my strongest impressions from the trip was the universal interest in preserving pension benefits. In the United Kingdom, the white paper proposing a new national superannuation scheme also proposed that private pension funds be required to vest the private benefit granted in excess of the amount contracted out of the national scheme. In Germany, where book reserve has become the predominant method of financing, there is growing concern in official circles about how secure private benefits may be and whether it is wise to continue this method, by tax and labor regulation, as opposed to the modern funding media known in the United Kingdom and North America.

The most pertinent observation, however, concerns the Swedish experience, the one country that has experimented with pension plan termination protection. In Sweden, an employer has the choice between setting up book reserves or buying annuities for accrued benefits. It is the book reserve that is required to be protected by additional insurance in event of the discontinuance of the employer's business. But note the major distinction between Sweden's requirement and the proposals in Washington. In Sweden it is the reserve that has already been paid for and charged to the employer's books that is protected—*not* liabilities he has *not* paid anything for.

There are some alternatives to the Pension Security bill and the Javits bill that seem more attractive and practical but would not preclude ultimately going all the way to the total approach taken by these two bills. The first would be to require the employer to report to each individual employee his own accrued benefit, the vested right he has in the accrued benefit, and the extent to which this vested right is funded. Such a measure would be similar to the recent legislation in regard to lending and might be labeled the "truth in pensions" bill. A provision of this type is included in the present administration's bill and deserves the consideration of all.

Because the heart of the matter of delivering the promised pensions is paying for its cost, encouragement of more rapid funding of pension liabilities should be considered. This is in contrast to the possible discouragement of rapid funding if the provisions of the Pension Security bill were to be enacted. Presently, under the Treasury Department's rules, there are three different ways of determining the maximum deductible limit to contributions. It seems to me to be a simple matter to add a fourth alternative limitation which would permit the payment of normal costs plus 100 per cent of the unfunded vested liability. This would be a real step in the encouragement of vesting and funding of private plans. It also would remove a real problem for unions in bargaining for vesting and the possibility of plan termination in smaller companies.

Finally, if we are to have vesting and funding standards determined by law, it seems to me to be advisable to consider a minimum statutory benefit approach, independent of a plan's own provisions. This would be legislation similar to the concept of the minimum wage laws and should be less of a deterrent to the employer who now provides no pensions at all for his employees.

In conclusion, I would like to reaffirm the actuary's responsibility in being directly involved in the preparation of such legislation because of the manifold technical difficulties it entails.

MR. LAURENCE E. COWARD: [Mr. Coward expressed the view that the Griffin-Trowbridge figures and a Department of Labor survey demonstrate the need for mandatory vesting laws and that support for pension security legislation by actuaries would demonstrate that they do not always resist social measures. His remarks are printed in detail in the report of the November 17, 1969, panel on the Pension Benefit Security Bill.]

MR. ARTHUR W. ANDERSON: I am somewhat disturbed by the general tone of the discussion so far. I share the concern—expressed more than once during this meeting—that actuaries might someday be reduced to the status of clerks. But let us not imagine, when and if that day arrives, that it will be the fault of civil servants and politicians; it will be our own fault in not behaving as professionals. A true professional owes primary allegiance to the public good and only secondary allegiance to his clients; he is a leader, not a follower.

The accountants, for example, addressed themselves as professionals squarely to the problem of accounting for the cost of pension plans in a fair and consistent manner—the result being *Opinion 8*—and were not found complaining that the *Opinion* would infringe on their clients' "freedom" to juggle the books. Their stance in the matter was the epitome of professionalism, and they made a genuine contribution, in my opinion, toward the public good.

We have heard expressed the fear that social security will encroach on the "private pension system," but, in order to prevent such encroachment, we must make the private system do the same job as would be done by an expanded social security program; in particular, it must attempt to provide meaningful pensions for all workers, not just those who stay with the same employer for forty years, and it must therefore include a substantial degree of vesting. While there are good arguments for vesting that involve the employer's self-interest, we cannot rely on the general enlightenment of employers to do the work of forging the aggregate of private pension plans into a "system." This task can be accomplished only by outside leadership—leadership by government or, preferably, by the professional actuaries who wield considerable influence over the design of private plans.

We cannot claim that the private system is doing a job for the people and at the same time reject efforts to make the system work better on grounds that it is none of the public's business.

MR. CHARLES V. SCHALLER-KELLY: My reasons for believing that vesting and reinsurance legislation would add a valuable strengthening of the private pension plan system are fairly well known, at least to those unfortunate enough to have had to read my speech in Miami[1] for their Part 10E examinations. Had I known that they were to be inflicted on so many people, I would have spoken from a prepared text instead of notes. In short, I believe that the type of regulation proposed could, with some

[1] *TSA*, XVIII, 324.

amendments, both preserve the most essential parts of flexibility and add greater security and assurance of adequacy. As Mr. Anderson says, an employer or a union may only look at its plan. The actuarial profession and the legislators should look at the system.

I was then and am now aware that most private pension plans are reasonably well funded and that comparatively few companies go out of business. The fact that most people have some savings and comparatively few die before retirement, however, has never stopped the insurance industry from selling insurance and particularly group term insurance. The point is that the dependents of those few that do die do have a problem which cannot be solved by citing averages and statistics. Similarly, when a company goes out of business, the good funding position of the plant across the road is at best irrelevant and at worst infuriating for those employees who have lost both their jobs and their promised pensions.

Once again, I should stress that one of the attractive features of working for the UAW is the freedom we have to express our opinions; accordingly, my opinions should not be attributed to Walter Reuther, even though he has supported the idea of vesting and reinsurance legislation.

Generally speaking, I shall set down first what I believe to be desirable principles in a law of the kind now before Congress and then how I would envisage their being implemented. I do have a version of this speech which shows in detail how each of the proposed laws measures up to each of my principles, but I presume that this audience will be able to do that for itself where necessary.

COVERAGE

With very limited exceptions, all plans should be covered. Generally speaking, all plans which are now subject to IRS supervision or to the Welfare and Pension Plans Disclosure Act in any way should be covered. Even profit-sharing plans should be covered by the vesting and reporting requirements.

Some possible exceptions are mentioned in the bills; for example, plans covering partners or plans for top management which are not qualified under section 401(a) of the Code.

The exclusion of plans with less than twenty-six employees, however, would exclude a group of plans which has perhaps the greatest need of reinsurance. These plans were underrepresented in the Griffin-Trowbridge study. Inclusion of small plans has not proved too much of a problem for the unfailingly courteous and generally intelligent, helpful, and co-operative staff of the Pension Commission of Ontario. This exclusion is one of the two major shortcomings of the Javits bill. What

might help administratively would be to bring large, medium, and small plans under the act at six-month intervals.

The exclusion of pay-as-you-go plans (from all except the vesting provision of the Dent bill) might lead employers to choose this least secure approach and thus defeat the purpose of the legislation. This is the only major substantial (as distinct from administrative) shortcoming of the Dent bill, but it is extremely serious. The abolition of pay-as-you-go plans in Canada has not stopped the growth of pension plans there.

SERVICE COUNTED FOR VESTING

1. All service with an employer or a predecessor employer or under a plan should be counted in determining whether an employee has satisfied eligibility requirements for vesting.

2. As far as practicable, all service with an employer or a predecessor employer or under a plan should be included in calculating the amount of benefit though this should not forbid limiting the total service to be counted, for example, to thirty years. For practical reasons, contributory plans should be permitted to postpone eligibility for coverage for a few years (perhaps three years) after hire. These first few years could be excluded in calculating benefits required to be vested but not in determining eligibility for vesting. In equity, this same delay should be permitted to noncontributory plans.

VESTING REQUIREMENTS

The ultimate objective should be full vesting after ten years of service. Surely, after ten years of service, most employees have made a reasonable contribution to their employer to compensate for any training period. There should, however, be a *transitional period* to enable new plans to concentrate on maximum benefits for those near retirement age when the plan is instituted. Transitional provisions should be as simple as possible.

One of the major shortcomings of the Javits bill is that it would only require vesting of benefits after the date of the act or the date of an amendment in respect to additional benefits created by that amendment.

The complexity of choices under the Dent bill is such that a firm which can afford an actuary to determine which is the cheapest could also afford to choose the most expensive. On the other hand, a smaller company would be forced to choose between inadequate information or excessive actuarial fees.

Suitably simple transitional provisions would be as follows:

a) During the first five years of the plan's existence or, in the case of a present plan, during the first five years after its creation (or after an amendment which

increases total past-service liability by at least 50 per cent), no vesting shall be required.

b) During the second five years of the plan's existence or, in the case of a present plan, during the second five years after its creation (or after an amendment which increased its total past-service liability by at least 50 per cent), vesting shall be required after ten years of service as to that part of the accrued portion of the regular retirement benefit (including benefits provided under amendment) which is attributable to periods after the effective date of this act.

c) Not later than ten years after the effective date of the plan vesting shall be required after ten years of service as to the whole accrued portion of the regular retirement benefit.

Special rules for collectively bargained plans are mentioned below.

WHAT SHOULD BE VESTED

It is preferable that only benefits payable after the later of (1) age 65, or (2) the lowest age at which benefits are not actuarially reduced under the plan, or (3) the actual retirement date (unless subject to a work test) should be subject to mandatory vesting so as to allow maximum flexibility for experimentation in early retirement policy.

Both bills seem to allow for this, and this is an improvement over the usual Canadian law, which requires justifying and obtaining special exemptions. This is an inconvenience, despite the remarkably efficient service and enlightened attitude—at least of the Pension Commission of Ontario.

Only the paid-up value of individual retirement income policies should be vested (after ten years) irrespective of the formula used to determine their amount, provided purchase of benefits is done on a regular basis and either has started when the act becomes effective or starts within three years of hire.

The Javits bill allows a plan to provide for total commutation into cash of all vested benefits, including those required to be vested according to the bill. The Dent bill does not allow any commutation into cash of any benefits required to be vested. The typical Canadian law permits commutation of small amounts or of 25 per cent of total deferred vested benefits. The approach in Canada seems to be a fairly good compromise, except that the "small amount" which can be commuted could be substantially increased. Perhaps the lump sum should be limited to $\$X$ per year of service with interest.

An attractive feature of the Dent bill is that it forbids employers to discriminate in vesting between employees who leave in their own contribution and those who do not leave them in the plan. The usual provisions

permitting this have often led to employees' being tempted by their own money into losing valuable benefits; these provisions have been one of the reasons why legislation became desirable in Canada, where contributory plans are much more common.

THE PURPOSE OF FUNDING

The principal purposes of funding are (*a*) assuring the security of the promised pensions (this can be achieved more effectively by pension reinsurance) and (*b*) making advance provision for benefits so that rapidly rising pension costs of a plan in later years do not threaten the financial stability of the employer (this can be achieved by paying entry age normal cost and interest on the unfunded liability).

The only other use of funding would be for its contribution to savings in the economy. Use of this argument might lead to using pensions as a tool to control the economy and possibly to direct investment, but this is a matter for economists and politicians rather than for actuaries, and I only mention it for completeness. Funding is, of course, also used as a means of avoiding taxes in profitable years.

Funding provisions should be as simple as possible and require a minimum of actuarial calculations. The approach of the Dent bill has some theoretical merits, but it is very complex. It would require additional actuarial calculations which would be a burden on the small employer, and it apparently even worries the actuary for Ford.

I would prefer to see that no funding requirements in addition to those presently applied by IRS should be required. Reinsurance premiums are considered below. Funding should not be required for the risk of an occurrence (such as death or disability) in years after the current year which, if it occurs after termination of the plan, does not give rise to benefits. For example, if a person is disabled after a plan terminates, he would not receive immediate disability benefits but deferred benefits payable at normal retirement age. Accordingly, disability benefits should only be funded against the risk of disability in the current year. Additional funding should, of course, always be permissible, as usual.

EFFECT OF NONCOMPLIANCE WITH FUNDING REGULATIONS

There should be an effective sanction to make certain that funding requirements are met.

The remedy of additional reporting proposed in the Dent bill may psychologically deter some employers, but there are more direct and effective ways which do not increase everybody's paperwork—why punish the regulating authority too? The remedy may be desirable in the case of

employers' attempting to circumvent the law, but in the case of ordinary law-abiding employers, who happened to have an unplanned actuarial loss, this remedy is not suitable. The other remedies could inhibit the growth of plans in a distorted way.

The Javits bill (like the Canadian laws) requires experience deficiencies to be repaid over a period of five years, while contributions due are payable under penalty of the law. This is better.

The best way, and I feel strongly on this, would, however, be to require additional reinsurance premiums on unfunded liabilities due to experience deficiencies. Plans with such actuarial losses probably tend to be worse risks. This would be a self-regulating device which would avoid regulation of actuarial assumptions. The regulating authority should be able to exempt experience deficiencies due to bona fide strengthening of reserves.

REINSURANCE PREMIUM BASIS

There are two fundamental principles: (1) the reinsurance premium should bear a reasonable relationship to the amount insured and (2) the determination of the basis on which the premium is to be charged should require a minimum of additional actuarial calculation.

The approach of the Dent bill satisfies the first principle perfectly but requires substantial additional calculations. These calculations are desirable in any case but are not essential (even the accountants can be talked out of them in practice) and should not be imposed on small pension plans. Furthermore, Professor Carl Fischer's recent paper to the Conference of Actuaries in Public Practice has cast serious doubt on the usefulness of the value of vested benefits as a measure of anything.

The Javits bill bases premiums on total unfunded liabilities. This approach satisfies the second principle perfectly and may be justified on the basis of an ongoing plan, but it might tend to discourage new and expanding companies from starting pension plans. Furthermore, the Javits bill does not make suitable allowances for certain actuarial methods, such as the "aggregate method" (very common in the aerospace industry for soaking the government with its high cost while hiding past-service liabilities whose necessity the government purchasing agents stupidly refuse to accept), and it makes only partial allowance for individual retirement income policies. The aggregate method should not become a way of avoiding the reinsurance premium while an individual retirement income policy would not require reinsurance because of its paid-up values. The Javits bill would also penalize plans being funded on the entry age normal cost method compared to the unit credit method, since the former leads to higher gross liabilities for the same assumptions. It would also

relatively penalize plans with minimum vesting, but they may be worse risks and should be encouraged to improve vesting conditions.

A method more accurate and equitable than the Javits bill and simpler than the Dent bill would be to base reinsurance premiums on the excess of only a percentage of the gross past-service liability over 100 per cent of the assets (based on the mean of book and market). The percentage should vary, depending on the actuarial method with some bias in favor of those methods leading to more rapid funding. For illustrations, 70 per cent for the entry age normal cost method and 85 per cent on the unit credit method would be suitable targets.

The aggregate method still presents a problem. The most direct solution would be to base reinsurance on the method proposed under the Dent bill. There must, however, be actuaries with the right combination of academic brilliance, practical experience, and time who could find a reasonable percentage to apply to the total gross prospective liability. For illustration, 50 per cent should be reasonable. In this connection, Mr. Trowbridge's paper on "The Unfunded Present Value Family of Pension Funding Methods" (*TSA*, XV, 151) should provide inspiration. The percentages mentioned above are not works of science by Ruskin's dictum. Once the reinsurance premium is determined, it would remain constant either as a dollar amount or as a percentage of salary until the next actuarial report. No premium should be required if there is nobody eligible for vesting and nobody has ten years of service.

AMOUNT REINSURED

All vested benefits not provided out of the assets of the terminating plan should be provided by the government reinsurance mechanism, subject to safeguards to prevent unscrupulous milking of the reinsurance fund.

The Javits bill would cover all plans more than five years old at termination, including recent amendments to them. The Dent bill would cover plans more than three years old at termination but would not cover benefits created by amendments less than three years before termination. This latter provision is preferable.

The Javits bill limits reinsurance to pensions equal to 50 per cent of earnings, while the Dent bill excludes owners and partners owning more than 10 per cent from reinsurance. Both limitations are good.

The Dent bill covers cases in which a partial termination of the plan affects more than 20 per cent of covered employees. The Javits bill makes no provision for partial termination. All sorts of abuses could be perpetuated by unscrupulous consolidation or splitting-up of funds. This

field should be left open for regulation by the regulating authority. The form of the regulation, however, should leave very much responsibility to accredited actuaries who could certify that their methods are not designed to defy the law. Where necessary, the situation some years prior to plan termination could be re-established.

The regulating authority should also have powers to determine orders of priority in winding up and the extent to which the plan may specify them. As Professor Fischer has proved,[2] even in the unallocated funding media funds may, on termination, be allocated to nonvested benefits before vested benefits. In the case of conventional group annuities this is the rule rather than the exception. Some other situations requiring thought are especially generous early retirement benefits granted in cases of plant closing; early retirement benefits in course of payment which are in excess of the actuarial equivalent of the benefits at age 65 (and the fact that some of these may be subject to a work test); and benefits subject to cost-of-living adjustments, either before or after retirement.

The above would require detailed regulation but should not present a great problem to a logical and experienced mind. It should be an exciting, challenging job which I would enjoy.

ACTUARIES

The regulating authority should be able to rely on the figures concerning plans that are submitted to it and on the judgments involved in arriving at them. Accordingly, the section in the Javits bill providing for accreditation of actuaries is very welcome. I would like to see much more responsibility placed on the actuary. This can only happen if the privilege of being accredited can be fairly easily suspended or lost.

COLLECTIVELY BARGAINED PLANS

These plans should not be required to change their terms until the collective bargaining agreement expires, unless the date of expiry is more than three years after passage of the law or unless the collective bargaining agreement specifies funding in excess of the minimum, in which case such excess should be available for reinsurance premiums and, if any remains, to improve vesting provisions to the level required by the law.

In the case of collectively bargained plans specifying both contributions and benefits, the reinsurance premiums (or the funding under the Javits bill) should not be required until the earlier of (*a*) the termination

[2] *Loc. cit.*

of the current collective bargaining agreement or (*b*) three years after the act is passed. Similarly, the additional reinsurance premium (or repayment under the Javits bill) should not be payable until the end of the collective bargaining agreement during which the experience deficiency is discovered.

The regulating authority should have the right to require such plans to be valued at the plan anniversary preceding the end of the collective bargaining agreement by at least three months but not more than fifteen months and to prohibit pension agreements of this type of more than four years' duration. Percentage reductions of benefits for all those retiring after the deficiency is discovered should be a permissible way of eliminating the deficiency. The actuary would have to state when he revealed it to interested parties. The waiting period for reinsurance coverage would start when the first reinsurance premium is paid.

MULTIEMPLOYER PLANS

Allowance should be made for the administrative practices of multiemployer plans and funding in excess of IRS minimum should in no case be required. However, vesting provisions should be brought in line at the end of the current collective bargaining agreement as for all other collectively bargained plans. This latter opinion would be considered hotly controversial among unions. I prefer to be even more than usually unsure of where the UAW stands on this.

The Javits bill has excellent provisions in regard to funding, allowing IRS minimum funding and exclusion from funding of employees under age 40 with less than ten years of service.

ADMINISTRATION

The system should be kept as simple as possible provided it does not disrupt necessary government functions.

The aim of the Javits bill to merge administration of the proposed law and the IRS rules is good in the long run; however, until administration of the proposed law is running smoothly, the IRS would reasonably object to turning over its regulatory function to untried hands.

Accordingly, it would be better to set up a separate agency which could ultimately take over IRS regulatory functions (or possibly be merged with the IRS) under a law to be passed in the future. In the meantime, a submission for approval to this separate agency should automatically be passed on to the IRS for ruling when the agency has made its comments in light of the act it administers.

RECIPROCAL ARRANGEMENTS

The law should specify that the regulating agency be able to make arrangements with foreign (generally Canadian) jurisdictions to avoid duplicate supervision or double vesting. Both proposed bills lack this.

MR. JOHN B. MOORE: In his earlier remarks Mr. Attwood indicated that there seemed to be no readily identifiable group or groups, such as employers, unions, and so forth, which are promoting the pension benefit security bills but, rather, a scattering of individuals. About two years ago a group of us consultants and lawyers and other persons interested in private pension plans became concerned about this very situation, and so we formed the Association of Private Pension and Welfare Plans, Inc. The specific mission of the Association is to constitute a vehicle whereby varying points of view on pension legislation (such as the pension benefit security bills) can be channeled from the grass-roots level up to the top government level and back down again. The Association does not take any official stand on any of these matters but serves as a medium for the two-way communication of all significant points of view.

As a director of the Association, I have discovered (on the basis of many contacts that our executive director in Washington has made with congressional offices and various staff offices in the executive branch of the government involved in current legislation) that there is an intense concern about private pension plans in these governmental quarters. In both congressional and executive branches there is a general awareness that private pension plans cover half the work force of the economy and that they have accumulated assets of well over $100 billion and are, therefore, extremely important.

I have been chagrined to learn, however, that in these same quarters there is an alarming degree of ignorance about how pension plans really operate and, even worse, that there are a great many preconceived notions about some of the ramifications of the legislation that has been introduced.

I rather wish that Messrs. Griffin and Trowbridge had allowed themselves greater freedom to editorialize about the results of their comprehensive investigation. If they had, perhaps Senator Javits would have been less inclined to praise the study to the skies on the floor of the United States Senate and then promptly misinterpret it. I personally believe that a principal reason that study showed such an overwhelming proportion of plans in fine shape is precisely *because of* the high degree of freedom which has existed up to now in the private pension field.

Some of the remarks already made about the importance of vesting with respect to the individual employee's pension benefit security would lead one to expect that Taft-Hartley plans (which are to a large extent dominated by unions) would feature a high degree of vesting. The Pension Research Council study shows, however, that precisely the opposite is the case and that Taft-Hartley plans are typically "light" on vesting. This does not mean that Taft-Hartley boards of trustees have been short-changing their constituents but that they have assigned a higher priority to other forms of pension benefits, notably a high level of normal retirement benefits.

In considering pending legislation, we should all remember that the great amount of freedom that we have had has given us flexibility to tailor a given pension plan to meet the needs of a given situation. It seems essential to me that whatever legislation is passed should reflect the careful consideration by Congress of the opinions of experts in the private pension field. In this connection, some of Mr. Schaller-Kelly's suggestions are quite constructive. I am not opposed to any and all new legislation, but I am suggesting that some of the legislation now pending is so restrictive that, if it is enacted, we may well be throwing the baby out with the bath!

MR. HENRY E. BLAGDEN: Having been the chairman both of a subcommittee of the LIAA and ALC which studied the "reinsurance" proposal and of the Society subcommittee established for the same purpose, I have a special interest in this problem.

I agree with Jim Attwood that inflation is a major pension menace and that funded private pension plans should be encouraged because of the capital they make available for investment. Because inflation is a real problem, however, is no reason to ignore the other and very real problems dealt with in the President's report. Recently I took a sampling of small pension plans south of the Mason-Dixon line. Not one of them had a vested right on withdrawal, and two did not even have an early retirement provision.

The advisability of the proposed pension security legislation can be debated by business interests and their advisers. Doubtless that debate at times will obfuscate the issues instead of meeting them. If legislation should be passed, however, it is most desirable to avoid technical pitfalls, and actuaries are best qualified to help achieve such an objective.

The Society of Actuaries cannot take a position, but there is a need for expert technical advice. Would it be possible for the Society to suggest to the appropriate governmental agent that a group of actuarial advisers be

appointed to advise on the technical aspects of the proposed legislation? If such a group of advisers should number five, the Society could present the names of ten adequately qualified actuaries and the government agency could take its pick.

The panel of actuaries would be instructed that its job is not to discuss whether there should be legislation, but, if there is to be legislation, how it can best be set up to avoid technical flaws.

If the Society cannot fulfill such a role, perhaps the Academy can do so.

MR. RICHARD DASKAIS: I would like to be recorded as one more consulting actuary on this side of the border who agrees with Mr. Coward that the fears of the possible disappearance of private pensions because of the pension benefit security bills are unfounded.

The possibility that inflation may be a great threat to the growth of private pensions does not appear to be a valid reason for lack of concern with such things as vesting and benefit "reinsurance." More light would have been shed on the problems of the bills' provisions if there had been more discussion of the agenda and less discussion of other problems. In lieu of a discussion of the agenda, Mr. Attwood and Mr. Griffin have discussed the "bigger picture." Mr. Attwood has assured us that there is an ALC-LIAA committee considering the detail problems. This seems consistent with the expressed desire of many Society members for the Society to take positions on broad social and political aspects of pensions, while technical questions will be discussed in nonpublic groups, such as ALC-LIAA committees, and perhaps the Society's Committee to Study Pension Plan Problems.

I think that some of the harsh forfeitures of accrued unfunded pensions that arise at plan termination may be the result of the typical design of termination priorities. Usually all accrued benefits are provided for each priority category before any funds are allocated to the next category. As Mr. Griffin has pointed out, this may result in no benefit for a large portion of employees, although the plan may be 70 or 80 or 90 per cent funded as to amount of present value of accrued benefit. Would it not be preferable for plans to allocate some assets to lower-priority categories after assets had been allocated to provide part of the benefits for higher-priority categories? For example, this might result in the 70 per cent funded plan providing 80 per cent of benefits for employees over age 60, 70 per cent for the age 50–60 group, and 50 per cent for the under-age-50 group. This concept might be developed, perhaps in conjunction with Mr. Twinney's minimum benefit (analogous to minimum wage) to produce more generally acceptable priorities on plan termination.

If there is to be some reinsurance of unfunded accrued benefits, we must deal with the objections of the employer which may be unfairly charged a reinsurance premium, since there is virtually no chance of its plan benefiting from the reinsurance. This employer should be given the option of being relieved of all or part of the reinsurance premium by pledging its general assets to provide benefits that would otherwise be reinsured. This might take the form of balance sheet reserves or relaxing the statutory provisions of section 503(h) on the adequacy of the security of employer obligations used to fund pension plans (although there might be provisions restricting the deductibility of contributions to the extent the fund is invested in inadequately secured obligations).

Last, I would like to comment on the implication of Mr. Griffin's mention of the failure of reinsurance provisions to cover unfunded plans. Although the legal cases are anything but clear, there is a good possibility that some or all benefits of these plans are a liability of the employer as part of its employment contract with employees, since the employer is not protected by the usual trust provision limiting its liability to pay contributions during the continuance of the plan.

VARIABLE INSURANCE PRODUCTS

1. What types of variable insurance products are now being offered or are under study in the United States and in Canada? Is the variation in benefits or premiums related to (*a*) the performance of a separate account, or some similar investment portfolio, or (*b*) some index, such as the consumer price index? What is the nature of the consumer "needs" that such products seek to satisfy?
2. What guarantees are being considered for such contracts in terms of death or disability benefits, premium levels, cash and maturity values? What actuarial considerations underlie the determination of appropriate premiums and reserves for such guarantees?
3. What are the regulatory and legislative problems associated with offering such products in the United States and in Canada? In regard to SEC regulation, should variable life insurance be exempted totally, partially, or conditionally, since such contracts can be considered predominantly life insurance rather than investment contracts? What is the impact of the standard nonforfeiture and valuation laws on these products? Are there any special federal income tax considerations?
4. What are the special problems in connection with the market and distribution of such products? What effect, if any, may such problems have on compensation levels?
5. Are there any special administrative problems related to equity-based variable insurance? What modifications are required in the usual policy provisions?

Session No. 1

CHAIRMAN DANIEL F. McGINN: For many years we have all been aware that the insurance industry's share of the United States savings dollar has been declining. The long-term trend is indicated by the continuing decline in the industry's average premium per $1,000 of insurance from $27 in 1950 to $16 in 1968. During these same years, the public's savings dollars have been funneled into mutual funds, saving and loan associations, banks, privately held securities, and other savings media. As a consequence, the insurance industry has seen its share of "savings dollars" shrink from 51 per cent in 1945 to 31 per cent in 1955 and to 22 per cent in 1968!

After overcoming enormous legislative and regulatory problems, the industry is now taking steps to reverse this trend. The relatively recent introduction of the variable annuity shows that the industry is attempting to face squarely the need of the public for products that offer an oppor-

tunity to participate in the country's economic growth and to secure a "hedge" against inflation. The variable annuity has the unique features of mortality and expense guarantees that the public clearly recognizes as valuable. The variable annuity, however, is just a beginning! Today, we will be discussing new forms of variable insurance products which, in all probability, will help to solve other "needs" of the public—in providing the financial security that only life insurance can provide *while* also recognizing the fact that those "needs" are not static because of the impact of inflation and the resulting decreasing purchasing power of the dollar.

MR. FRANK P. DiPAOLO: Last September the Economic Council of Canada, in its sixth annual report, predicted that the Canadian gross national product—which was $66 billion in 1967—will rise to $100 billion by 1975. This last figure, in 1967 constant dollars, represents an increase in the gross national product of over 50 per cent in eight years. Consumer spending is predicted to increase, over the same period of time, from $39 billion to $59 billion. Again, both these figures are in constant 1967 dollars. The real living standards of Canadians should improve 35 per cent by 1975. The council expressed the hope that inflation will be contained to within 2 per cent per annum. It may well be, however, that the average annual rate of inflation will be somewhere between $2\frac{1}{4}$ and 3 per cent, if not higher.

Against this economic background, let us consider the case of an insured who purchased a conventional insurance policy in 1967 and who will likely find by 1975 that the sum assured has been eroded some 20–25 per cent by inflation. It is also likely that this policyholder will find that his insurance "needs" will have increased over 35 per cent because of improved living standards. Obviously, one solution to this insured's problem would be to review his insurance program regularly and to purchase new policies whenever needed. This is a solution, but it is one which is based on the premise that the insured's health will continue to be satisfactory. A better solution, it seems to me, is variable insurance, where the amount of insurance is automatically adjusted to reflect changed conditions. By variable insurance I mean the broad spectrum of insurance contracts where the sum assured changes from time to time according to the performance of a separate account, or according to the behavior of some economic indicator, or because of additional policies issued pursuant to the guaranteed insurability benefit.

A great deal of experimentation has been going on in Canada in the field of variable insurance. Such experimentation has been made possible

by the 1961 amendment to the Canadian Insurance laws, whereby companies are now permitted to maintain separate accounts with respect to policies where reserves vary in amount depending upon the market value of certain specified assets. I believe that most of the Canadian separate accounts are invested in equities.

The most commonly issued Canadian variable insurance products, where variability depends on the performance of a separate account, can be grouped into four different classes:

1. There is a special dividend provision whereby dividends paid with respect to conventional participating insurance can be used to purchase units of a separate account. At the time of surrender, death, or maturity, these units are redeemed at the then unit value.

2. The next type is a package deal whereby a portion of the gross premium is used to purchase units of a separate account. Only the amount of term insurance is guaranteed at the time of death. In the event of surrender, death, or maturity, the units are redeemed at the then unit value.

3. Then there is a conventional participating insurance contract with paid-up additions where a portion of the reserve is invested in a separate account. In addition to regular dividends, a "special dividend" based on the performance of the separate account is declared each year. The "special dividend" may be positive or negative; if negative, not only could it wipe out the entire regular dividend but it could also reduce the paid-up additions previously purchased.

4. Finally, there is an equity-based endowment contract where a portion of the premium is used to cover mortality costs, premium tax, and expenses, and the remainder is used to purchase units of a separate account. The premium can only be paid monthly by preauthorized bank checks, and the sum assured is the annualized premium times the number of years to maturity. At the time of death or maturity, the larger of the sum assured or the then value of the units is paid. In the event of surrender prior to maturity, the then value of the units less a small surrender charge is paid.

The most commonly issued Canadian variable insurance products, where variability depends on the performance of the consumer price index, can be grouped into three main classes:

1. One type is a conventional participating life insurance contract where dividends are used to increase the insurance coverage. Annual increments to the sum assured are equal to the corresponding percentage increase in the consumer price index subject to a maximum annual increase, which, in the case of one company, is 6 per cent of the original sum assured. Any percentage increment to the sum assured is equally applied to future cash values, dividends, and gross premiums. One company uses dividends to purchase paid-up additions and then, whenever the sum assured is increased, redeems a sufficient amount of paid-up additions to finance the cost of this increase. Should the amount of

paid-up additions become exhausted, further increases will not take place unless the policyholder is willing to pay the cost himself.

2. There is a special rider to a specified age issued in conjunction with conventional life insurance contracts. This rider increases the death benefit each year according to the corresponding increase in the consumer price index. The gross premium is also increased, but not necessarily in the same proportion as the death benefit. The nonforfeiture and other benefits of the basic policy remain unchanged. In effect, each year a small amount of term insurance is issued, and the additional premium is calculated according to the attained age.

3. Finally, there is a special yearly renewable term contract where the sum assured changes each year according to the consumer price index. This term plan is also issued as a rider attached to a regular policy.

MR. HAROLD G. INGRAHAM, JR.: Since World War II, common stocks in general have appreciated in value at a much higher rate than the rate of increase in the consumer price index. However, 1969 has been a year in which the CPI climbed at an annualized rate of approximately 5½ per cent while the majority of stock prices have declined. There is no guarantee that the price of stocks will correlate to cost-of-living changes. Thus cost-of-living coverages with guaranteed benefits provide the best pure inflation hedge.

Certain features seem particularly desirable in cost-of-living policies or riders. Death benefits should correlate as closely as possible to changes in some accepted index, such as the CPI. Death benefits should not drop below a basic coverage floor, if the CPI declines. Premiums, reserves, and nonforfeiture benefits should be determinable at issue. Premiums should either be level, or annual increases should be restricted to some limited percentage (like 3 or 4 per cent) of the initial premium.

New England Life has been marketing a cost-of-living rider since April of this year. The rider can be attached at issue to most nonpension series permanent policies. It can also be attached to most existing CSO business subject to liberal evidence requirements.

Our rider uses the basic policy dividends to provide a blend of one-year term insurance in combination with paid-up additions or dividend accumulations. In essence, the total actual coverage in a given policy year is multiplied by a cost-of-living factor to calculate the desired coverage for the next policy year. The total actual coverage is the policy face amount plus any one-year term insurance and paid-up additions or dividend accumulations. The cost-of-living factor equals the ratio of the CPI three months prior to the annual premium due date divided by the CPI three months prior to the preceding annual premium due date.

If the dividend is insufficient to provide the desired coverage called

for by CPI changes, it will be applied to buy as much one-year term insurance as possible. Dividend accumulations, to the extent available, will be used to purchase the balance of coverage. If a deficiency still exists, however, the insured has the option, without evidence of insurability, to buy whatever additional term coverage is needed by means of an additional single sum payment. If the CPI drops in any year so that no term insurance is needed, the entire dividend will be applied to buy paid-up additions or to accumulate.

The maximum total actual coverage provided is two times the policy face amount. The purchase rates used for one-year term coverage provided by dividends are those applicable under our fifth dividend option. The cost of any voluntary supplemental term coverage is based on these same one-year term rates plus a $2 administrative fee. Attachment ages are 15–65, inclusive.

This rider has been attached to about 2 per cent of our eligible nonpension issues since it was introduced. Reports from our field force indicate that the rider is useful as a "door-opener" and that its availability enhances the agent's and the company's prestige. There is, however, no commission incentive to push the rider. Also, some agents feel that the nature of the increased coverage provided by the rider may serve to cut down on future sales to the same client. The logical answer to this argument is that the rider is intended to protect the death benefit of a given policy from inflationary erosion—but it should not substitute for new coverage called for at a later date by changing insurance needs called for by an increased standard of living.

MR. RAYMOND L. CRAPO: I would like to indicate what one company went through in trying to determine what to offer in the way of variable life insurance. As a stock company they do not offer any participating policies. The first policy that this company sought approval for was a fixed-premium limited pay life policy. The original face amount was fixed, and at the end of each year 5 per cent of the original face amount of insurance was converted from fixed to variable, as was the cash value. At the end of twenty years (the premium-payment period), the life insurance became a fully paid up, fully variable policy.

This policy had a minimum death benefit guarantee during the premium-paying period of the original face amount. When the market went down, therefore, the death benefit was never less than the original amount insured. After it became fully variable, there was no minimum guarantee. This policy did not meet with great success at the insurance department.

A revised version was introduced. This is a completely variable or-

dinary life policy in which death benefits and nonforfeiture values are adjusted weekly according to performance in separate accounts. The premium is determined at the end of each month, depending on the previous month's investment. This is a completely unitized policy and has had a little more success. It is relatively easier to explain how this policy fits in with standard nonforfeiture laws. It has been approved in one state and has been filed in several others. It is my understanding that there are policies of this type available in Europe. The Dutch have a variable endowment policy with an upper limit feature—if the premium exceeds twice the initial premium, the owner can cancel out part of the policy and therefore prevent a spiraling premium.

CHAIRMAN McGINN: Perhaps one of the most ideal insurance products that could be developed would be a life insurance policy under which the face amount automatically adjusts to reflect the consumer price index while the cash values vary directly with the performance of a separate account fund invested primarily in common stocks. It seems to me that this type of product would be readily understood and eagerly accepted by the general public.

Certainly, such a product would serve a valuable social purpose in protecting the purchasing power of death benefit proceeds while, at the same time, providing the equity cash values which the public today finds attractive.

MR. JOHN M. BRAGG: In December, 1968, Life Insurance Company of Georgia commenced the sale of a "cost of living policy." This product has the following characteristics:

1. The death benefit increases by annual increments in accordance with the consumer price index for urban wage earners and clerical workers, United States city average index. As a matter of interest, the policies which were issued in December, 1968, will be entitled to an increase of 5.81 per cent on their anniversaries in December, 1969.
2. Premiums are level.
3. Cash values, reserves, and paid-up values are fixed at issue and do not increase with the consumer price index. Extended insurance values are based on the initial face amount only. This means that the "guaranteed purchasing power" that is built into the death benefit is maintained only so long as the policy continues in a premium-paying status.
4. Cash values and reserves are calculated by a special method known as the "change of state method." It is designed so as to be in literal compliance with the Standard Nonforfeiture Law and the Standard Valuation Law.

We do not maintain that this is the final word in variable insurance products. It does, however, satisfy the need to protect the purchasing power of the insurance dollar. Furthermore, it avoids all the problems relating to separate accounts, SEC regulation, special agent licensing, and so on. From a regulatory and legislative standpoint, it appears to be something that can be done now, within the traditional framework of life insurance company operations.

MR. DiPAOLO: Perhaps the most troublesome guarantee is the one related to the performance of the separate account, which is invested entirely, or mostly, in equities. Although this risk may appear to be a serious one (especially if one looks back to 1929), nevertheless, and provided that there are no minimum guaranteed cash values, this risk is meaningful only at two points of time—death and maturity. The former can be assumed to be a purely random occurrence, while the latter is so far removed from the date of issue that it would seem unthinkable that anyone would want to buy an equity-based contract expecting that the stock market is about to fall.

In the case of contracts related to the consumer price index, the basic guarantee regarding mortality, interest, expenses, cash values, maturity values, and the like, is similar to those normally associated with conventional insurance policies. However, the percentage by which the sum assured is increased (pursuant to the increase in the consumer price index) may be subject to a maximum limit, especially if the increase is to be extended also to cash values and dividends. As mentioned before, one of the indexed participating whole life contracts issued in Canada provides that the increase in any one year must not exceed 6 per cent of the original sum assured.

Let us consider an insurance contract where the sum assured, cash values, dividends, and gross premiums vary from year to year according to the consumer price index. One method that could be used to calculate a scale of gross premiums for such a contract would be to assume a priori an annual rate of increase in the consumer price index and then calculate gross premiums using the usual actuarial techniques.

An alternative method would be to ignore the a priori assumption of an inflation factor and to calculate gross premiums as though the contract provided fixed life insurance benefits. Then, in order to force the policy benefits to follow the curve of the consumer price index, the following three steps would have to be taken at the end of each policy year: (1) the increase in the consumer price index over the previous policy year should be calculated; (2) the minimum rate of investment earnings which

is necessary to support a corresponding increase in the face amount should be determined; and (3) an investment strategy for the following twelve months should be plotted so that the minimum required investment earnings, as determined in item 2, can be realized.

The equation of equilibrium, applied to an indexed contract, is

$$\{[({}_{t-1}V_x) + (1 + C_{t-1})P_x](1 + i + \epsilon_{t-1}) - (1 + C_{t-1})q_{[x]+t-1}[1 - ({}_tV_x)]\}\prod_{s=1}^{t-2}(1 + C_s) = ({}_tV_x)\prod_{s=1}^{t-1}(1 + C_s)$$

where

$(1 + C_s)$ = annual rate of change in the consumer price index during the sth policy year, that is, $C_s = \mathrm{CPI}_s/\mathrm{CPI}_{s-1} - 1$, for $s \geq 1$;

$$\prod_{s=1}^{t}(1 + C_s) = (1 + C_1)(1 + C_2)(1 + C_3) \ldots (1 + C_t) = (\mathrm{CPI}_t)/(\mathrm{CPI}_0)\,;$$

$i + \epsilon_t$ = minimum rate of interest that must be earned during the $(t + 1)$th policy year to support a rate of increase of C_t in the face amount.

From the equation of equilibrium,

$$\epsilon_{t-1} = C_{t-1}\frac{({}_{t-1}V_x)(1 + i)}{({}_{t-1}V_x) + P_x},$$

when $({}_{t-1}V_x) = 0$, $\epsilon_{t-1} = 0$, and when $P_x = 0$, $\epsilon_{t-1} = (1 + i)C_{t-1}$; therefore, $0 \leq \epsilon_{t-1} \leq (1 + i)C_{t-1}$. Thus, when the terminal reserve is zero (as in the case of yearly renewable term), the minimum required rate of interest is i. When the premium is zero (as in the case of paid-up insurance), the minimum required rate of interest is $i + (1 + i)C_t$.

As indicated above, the assumption is made that an investment policy can be plotted at the beginning of each policy year consistent with the increase experienced by the consumer price index. This means that if the valuation rate of interest is, say, 2 per cent and the consumer price index were to increase by 3 per cent, the required rate of interest to support an increase of 3 per cent in the face amount is approximately 5 per cent. Of course, the gross premium is also increased 3 per cent.

As long as we are dealing with creeping inflation and not with currency inflation (that is, as long as the annual rate of inflation does not exceed, say, 4 per cent or so), it should be possible to find investment media that can produce a rate of investment return sufficient to cover the cost of increasing the face amount.

In order to illustrate the principles discussed previously, let us consider the case of a ten-year participating indexed endowment contract issued on January 1, 1958, to a male 35. Under this contract, the initial face amount of $1,000 is adjusted at each policy anniversary according to the change in the consumer price index during the previous policy year. Downward changes in the consumer price index are disregarded, while upward changes are recognized up to a maximum of 2 per cent with carryover. Consumer price index increases beyond the guaranteed 2 per cent are allowed if the then accumulated value of policy dividends is sufficient to cover the cost of such increases.

TABLE 1

ECONOMIC STATISTICS

Year (1)	Consumer Price Index at End of Year (1949=100) (2)	Change in CPI during Year (3)	Security Price Index at End of Year (1956=100) (4)	Change in SPI during Year (5)	Net Interest Rate Earned by Canadian Life Companies (6)	Minimum Value of $i+e_t$ for $i=2\%$ (7)
1957.....	123.1	.....	80.1	.....	.....	.....
1958.....	126.2	2.52%	100.9	25.97%	4.66%	4.57%
1959.....	127.9	1.35	107.9	6.94	4.80	3.38
1960.....	129.6	1.33	106.4	− 1.39	4.98	3.36
1961.....	129.8	0.15	137.0	28.76	5.13	2.15
1962.....	131.9	1.62	124.0	− 9.49	5.26	3.65
1963.....	134.2	1.74	139.2	12.26	5.38	3.77
1964.....	136.8	1.94	173.1	24.35	5.53	3.98
1965.....	140.8	2.92	179.0	3.41	5.65	4.98
1966.....	145.9	3.62	161.8	− 9.61	5.79	5.69
1967.....	151.8	4.04	184.5	14.03	5.91	6.12
Annual average.....	.....	2.12%	.....	8.70%	5.19%	.....

SOURCE.—Columns (2) and (4): Dominion Bureau of Statistics. SPI does not include stock dividends; column (6): 1968 Canadian Life Insurance Facts published by the C.L.I.A.

Table 1 gives a number of economic statistics used in the illustration. The figures in column (7) represent the minimum rates of interest required to support the changes in the consumer price index given in column (3).

Table 2 illustrates the results under the ten-year indexed endowment, if reserves are invested at precisely the average rate of interest earned by Canadian insurance companies on their total assets. The dividend in the last policy year is somewhat larger than that in previous years because the face amount does not receive the benefit of the increase in the consumer price index in the last policy year. Thus the excess interest that would have been available to cover the cost of this increase is distributed in the form of a termination dividend.

It must be noted that the investment strategy associated with this illustration is a passive one. It is assumed that no attempt has been made to control, in any way, the investment results. Had an intelligent investment policy been plotted and carried out successfully, it could well be that significantly better results would have been obtained. At any rate, this example illustrates that during the ten-year period from 1958 to 1967 even a passive investment policy would have been capable of supporting in full the increases in the consumer price index experienced during this period of time.

Table 3 illustrates the results under the hypothetical ten-year indexed

TABLE 2

PARTICIPATING 10-YEAR INDEXED ENDOWMENT—MALE 35
RESERVES INVESTED IN THE GENERAL FUNDS

Year	Sum Assured	Gross Premium	Annual Dividends after Adjustment for CPI Increase in Excess of 2%	Acc. Value of Dividends if Left on Deposit to Earn Canadian Insurance Co.'s Interest Rate
(1)	(2)	(3)	(4)	(5)
1958....	$1,000	$103.97	$ 1.68	$ 1.68
1959....	1,025	106.57	4.08	5.84
1960....	1,039	108.02	5.97	12.10
1961....	1,053	109.48	12.89	25.61
1962....	1,054	109.58	9.09	36.04
1963....	1,071	111.35	10.35	48.33
1964....	1,090	113.33	12.04	63.04
1965....	1,111	115.51	6.16	72.76
1966....	1,144	118.94	2.29	79.16
1967....	1,185	123.20	44.00	83.84

ASSUMPTIONS

	Gross Premium	Dividends
Mortality.....	1958 C.S.O.	90 per cent of C.A.A. 52–56 Table
Interest.....	2 per cent	Average rate of interest earned by Canadian life insurance companies given in Table 1
Expenses including compensation and premium tax	15 per cent of gross premium each year	15 per cent of gross premium each year

endowment plan, on the assumption that reserves are invested in a "mixed fund" rather than in the general funds of the company. The "mixed fund" is assumed to be 75 per cent in conventional life insurance assets and 25 per cent in equities. Policy dividends are used to purchase units of an equity fund.

Again, a passive investment strategy has been assumed in this case. The 75 per cent of reserves invested in conventional life insurance assets barely yield the Canadian companies' average. The 25 per cent invested in equities yield earnings consistent with the Canadian security price index.

Finally, Table 4 compares the results under the two investment ap-

TABLE 3

PARTICIPATING 10-YEAR INDEXED ENDOWMENT—MALE 35
RESERVES INVESTED IN THE MIXED FUND

Year (1)	Sum Assured (2)	Gross Premium (3)	Annual Dividends after Adjustment for CPI Increase in Excess of 2% (4)	Acc. Value of Dividends if Invested in Segregated Fund* (5)
1958	$1,000	$103.97	$ 7.21	$ 7.21
1959	1,025	106.57	6.45	14.38
1960	1,039	108.02	3.60	18.21
1961	1,053	109.48	38.47	62.46
1962	1,054	109.58	− 5.30	53.11
1963	1,071	111.35	25.06	86.27
1964	1,090	113.33	50.96	160.82
1965	1,111	115.51	7.75	178.87
1966	1,144	118.94	−27.85	164.26
1967	1,185	123.20	75.28	267.51

ASSUMPTIONS

	Gross Premium	Dividends
Mortality	1958 C.S.O.	90 per cent of C.A.A. 52-56 Table
Interest rate	2 per cent	Average annual earnings of mixed fund,† including capital gains and/or losses
Expenses including compensation and premium tax	15 per cent of gross premium each year	15 per cent of gross premium each year

* Segregated fund is assumed to be invested entirely in equities and to perform according to security price index given in Table 1. Common stock dividends are assumed to be 3 per cent of unit value at beginning of each calendar year.

† Mixed fund is 75 per cent invested in regular insurance assets and 25 per cent in units of a segregated fund.

proaches. In both cases the maturity value is the same. It is slightly less than $1,000 because the 1968 increase in the consumer price index is not reflected, but, as indicated before, a termination dividend has been assumed to have been paid in lieu of the increase.

It should be pointed out that section 63(7) of the Canadian Insurance Act permits life companies to hold common shares up to 25 per cent of total assets. Thus, in Canada a life company could conceivably use a "mixed fund" approach for all its life contracts.

TABLE 4

COMPARISON OF RESULTS IN 1958 CONSTANT DOLLARS

1. *If reserves are invested in the general funds and policy dividends left on deposit:*	
Maturity value	$ 960.92
Accumulated dividends	67.99
Total value at maturity	$1,028.91
Premiums paid	1,039.70
Loss	$ 10.79
2. *If reserves are invested in the mixed fund and policy dividends used to purchase units of a segregated fund:*	
Maturity value	$ 960.92
Accumulated dividends	216.92
Total value at maturity	$1,177.84
Premiums paid	1,039.70
Profit	$ 138.14

If I may return now to equity-based contracts, there are two basic actuarial aspects that must be considered very carefully. First, we have the problem of calculating a premium for the risk that the company is assuming with respect to the various guarantees. Second, we have the problem of maintaining adequate reserves. It should not be very difficult to arrive at an adequate premium for the mortality and expense guarantees, but the calculation of an adequate premium for the investment guarantee may present some difficulty. A fair amount of research, however, has already been done in this area. For example, Sam Turner describes in his paper, "Asset Value Guarantees under Equity-Based Products," one of the techniques that could be used for this purpose. Perhaps

other techniques will be tried in the future. Nevertheless, Mr. Turner's approach is certainly an excellent start.

With respect to the maintenance of proper reserves (especially in connection with the investment guarantee), there is still much to be done. First of all, we must recognize that there are two sets of interests which need to be safeguarded. On the one side we have the "variable" policyholders who have received the guarantees; on the other side we have the "regular" policyholders (if a mutual company) or the stockholders (if a stock company), who stand to lose money if the separate account has insufficient assets to meet these guarantees.

Obviously, the regular policyholders or stockholders must be properly compensated for the risk they are assuming. Hence the need for an adequate risk premium. But, when this risk premium is transferred from the separate account into the general funds of the company, it should not be immediately released into surplus. This premium, in effect, is related to a risk that may not materialize until many years have passed. Thus it seems to me that it should be used to build up a risk reserve which could be released into surplus only after the risk has disappeared. The principle for this treatment of the risk premium is akin to the principle on which the unearned premium reserve is based.

Periodically a check should be made on the adequacy of the risk reserve by making a sufficiency test based on the relationship between the total sum assured of the contracts expected to mature during the following twelve to twenty-four months and the assets held in the separate account with respect to these contracts. In other words, it is quite possible that at some point of time the risk reserve may appear to be insufficient to meet the obligations assumed by the company with respect to the variable contracts that are about to mature. If so, the company should set up a "special reserve," which would be akin to the deficiency reserve. Ruin theory could be used to establish the degree of insufficiency of the risk reserve and to determine the size of the special reserve. Incidentally, the special reserve is calculated prospectively, whereas the risk reserve, to which I referred before, is calculated retrospectively.

Finally, in order to safeguard the interests of the variable policyholders, we must also calculate regular reserves according to the local valuation laws. For example, if we are dealing with a variable pure endowment contract which guarantees a minimum maturity value, we should calculate the regular reserve for the guaranteed amount by use of the prescribed mortality table, interest rate, and so on. If the sum of the assets in the separate account, plus the risk reserve, plus the special reserve is less than the regular reserve, then the special reserve should be

increased until equilibrium is established. This does not mean, however, that the special reserve is automatically reduced, if the regular reserve is lower than the sum of the other three items. Nevertheless, it is possible that the risk reserve may become redundant, in which case the special reserve becomes negative, permitting the release into surplus of a corresponding portion of the risk reserve. The degree of redundancy of the risk reserve can be determined by means of the sufficiency test to which I referred before.

Incidentally, the guidelines issued by the Canadian Federal Superintendent of Insurance respecting equity-based contracts recognize these various types of reserves. For example, Guideline 6 requires the setting-up of a risk reserve which should be equal to the accumulation of 1 per cent of the contract premium at interest. This risk reserve must be increased by a special reserve if it is less than the higher of (*a*) 10 per cent of the maturities taking place during the following calendar year or (*b*) 60 per cent of the maturities taking place during the following calendar year less 40 per cent of the value of the units held in the separate account with respect to such maturities. Guideline 7 requires that regular reserves must be calculated and that the risk reserve, plus the assets in the separate account, plus any other reserve held with respect to equity-based contracts, should add up to the regular reserves. Finally, Guideline 9 sets out the rules to be followed in order to release a portion of the risk reserve into surplus, should it appear to be redundant, that is, if the special reserve should become negative.

MR. CRAPO: The guaranteed minimum death benefit in the fixed-premium policy that I described before has certain distinct advantages. It is easily understood by buyers, who have become accustomed to money-back guarantees. The simple statement that, no matter what else happens in the first twenty days, at least the original face amount is payable on death, is quite a salable point. The reserve itself is relatively simple also.

The policy reserve may be determined by use of standard techniques and an additional risk reserve determined much along the lines of the generally accepted minimum death benefit under variable annuities. The actual techniques are the same.

MR. INGRAHAM, JR.: Establishing a level of gross premiums for variable life insurance involves some considerations not applicable to fixed-dollar insurance. Typically, insurance companies will establish investment management fees and charges for mortality and expense risks assumed as percentage deductions from invested assets in determining revised unit

values. Income from these fees and charges should be considered when setting the level of gross premiums. There will be no excess interest available to offset any adverse mortality or expense experience. Gross premium levels will also be affected to the extent that the level and incidence of commissions and other expenses are different.

The assumed investment return (AIR) will definitely affect the gross premium level. This differs from fixed-dollar insurance, where the expected or most probable investment return on the company's general portfolio assets is more important than the reserve interest basis when it comes to setting gross premiums. The AIR for a variable life insurance contract may be set at 3½ per cent or lower, for reasons of policy design, marketing philosophy, and applicable state insurance laws. The price levels of a company's comparable fixed-dollar products should serve as a practical bench mark and constraint in determining the gross premium level (and, hence, the AIR) applicable to variable life insurance.

Variable life insurance contracts offered by mutual companies will be credited with dividends based on mortality and expense elements only. Under fixed-dollar contracts, the interest element produces most of the increase in scale by duration. Thus dividend scales under variable life insurance contracts may be relatively flat—or may decrease by duration —depending on the relative interplay between the expense element and the mortality element. Agents and policyholders conditioned over the years to increasing dividends may present communication problems. It may well be necessary to artificially dampen a more theoretically oriented dividend scale at earlier durations so that higher dividends in turn can be paid at later durations.

CHAIRMAN McGINN: Perhaps many years will go by before a "cost of living" life insurance policy with equity cash values will be offered. Within the next few years, however, it seems that at least three additional "guarantees" will be offered to the public with variable insurance products:

1. A "guarantee" that the monthly annuity payments under a variable annuity contract will never be less than the initial monthly payment.
2. A "guarantee" that the amount of insurance *at any time* under a fixed premium variable benefit life insurance policy will never be less than the initial face amount.

   Perhaps this "guarantee" feature will be offered as an option at an additional risk premium, or it may become an *integral feature* of insurance that varies according to the investment performance of an equity investment fund. It seems clear, however, that this "guarantee" would tend to justify a substantial exemption of variable insurance from SEC regulation.

3. A "guaranteed maturity value" under both variable annuity and fixed premium, variable benefit life insurance. The "guaranteed maturity value" would be available at a stated point in time. This guarantee is currently available under many Canadian equity contracts.

MR. PAUL MASON:* As an attorney with the Life Insurance Association of America I have seen very little of the product design itself. I have had the opportunity of reading the New York Life paper and of attending several meetings of actuaries where it has been generally discussed. You can recognize by the discussion that has preceded mine that there are any number of products which are likely to evolve and be labeled as variable life insurance.

My contribution to the panel today is not intended to reach any conclusion as to the likelihood of SEC regulation or in general to try to advocate or to summarize the position that the SEC is likely to take, but to suggest some of the considerations which might come into play before a final determination is reached at the SEC level.

I would like to start by discussing the SEC itself. Obviously I am not going into a lengthy description of the framework of the organization, but it is an institution like any other institution, and the decisions that are likely to evolve may vary considerably, depending on the people currently on the staff and currently on the Commission.

Those of you who have had experience with SEC with the registration and regulation of the variable annuity or mutual fund product will recognize that the first basis of contact is with the staff of the Division of Corporate Regulation. They are the people charged with the responsibility of implementing all the rules and regulations under the Investment Company Act of 1940. You will also recognize that these are technicians; these are career people. They are people, especially at the senior level, who have spent almost their entire professional life working in this specialized area. They are the people least likely to turn away from the issues involved in regulating variable life products. They are the individuals who, on the basis of their training and experience, are likely to say that there are elements in the variable life product that are similar to a mutual fund and that regulation and registration are needed for investor protection. I do think that our initial staff contact is likely to lead to that general over-all view without reference to the kind of ultimate reaction we are likely to receive at the Commission level.

The question of registration and/or regulation may be largely contingent on the nature of the first contract presented to the SEC in this

* Mr. Mason is Associate General Counsel of the Life Insurance Association of America (not a member of the Society of Actuaries).

area; that is, whether it is a contract, for example, with a variable premium and benefit, or whether it is a contract with a fixed premium and/or variable benefits, or a combination thereof.

In the New York Life paper it is indicated that the life insurance company would hold the reserves for these life insurance policies in a separate account, the assets of which would be invested primarily in common stocks; the benefits payable under these life insurance policies would be adjusted to reflect the investment performance of the separate account. The policyowners would bear the entire investment risk with respect to the investment performance of the separate account, and the life insurance company would not share any part of this investment risk.

The hurdle that we will have to overcome is similar to the one we had to face and did face—albeit somewhat unsuccessfully in the variable annuity area. That is, from the point of view of the legal considerations involved, when the SEC sees a product where the investment risk is borne by the individual rather than by the company, the tendency has been to label it a security and to submit the product and the seller thereof to the full ambit of SEC regulation, including what is one of the gravest concerns to the life insurance companies in this area—regulation over the sales load, which, I gather from the conversations I have had with some of the companies, would be an almost impossible hurdle to overcome.

As an analysis begins of the new product, I believe that we will find that the mortality risks and expense guarantees are borne by the company, as is true of all conventional life insurance.

This is true in the variable annuity as well, where the SEC has exerted jurisdiction, but in the variable annuity the investment feature is considered to be dominant, the mortality and expense guarantee features being of lesser significance, as is spelled out in the court decisions and SEC rulings regarding the variable annuity. When variable life insurance comes up for discussion with the SEC, we hope to stress that in variable life insurance the dominant feature is the life insurance feature—that, although there is an investment element, the insurance factors are primary.

As to where we are at this stage and where we are headed, a committee has recently been formed within the life insurance trade associations to study the very question of how to proceed on the federal-SEC level and how to negotiate with the SEC as to the applicability or nonapplicability of one or more of the federal securities acts. We hope that we will speak as a unified voice on behalf of the industry. Of course, as you recognize, any company today may be proceeding with the SEC on an individual basis,

a company not a member of the life insurance trade associations or, indeed, one that is, but a company that feels that it must press forward.

We hope to stress with the SEC that the application of the securities laws to variable life insurance would have very serious policy and administrative implications for our industry, for the state insurance commissioners, and for the SEC. We would also point out that the SEC's time has already been unduly taxed out of all proportion by trying to fit variable annuities into a statutory and regulatory scheme that was designed for a different kind of product and that these difficulties would be magnified if the federal securities laws were to be applied to variable life insurance.

There are several alternatives to be considered. Obviously, no SEC registration of variable life insurance products would be the ideal. There is no guarantee that this will be the result. Some people would be willing to accept, at this stage, 1933 Act registration but no 1940 Act registration. Another possibility is a special registration along the lines of Rules 3c-3 and 6e-1. Another possibility is a separate new federal statute to deal with this product.

I would like to refer to the Supreme Court decision in the United Benefit case. The Supreme Court, in analyzing the United Benefit plan, considered whether contracts such as flexible funds offered important competition to mutual funds and are pitched to the same consumer interest in growth through professionally managed investment. The Court concluded that it seems eminently fair that a purchaser of such a plan be afforded the same advantages of disclosure which inure to a mutual fund purchaser under the Securities Act.

This is what it may come down to in part—how variable life insurance is to be sold. An argument in favor of special exemptive treatment is weakened to the extent that we compete with mutual funds and stress the same reasons for purchasing such products. The fact that we may not be competing with the mutual fund industry but rather with other kinds of life insurance may, in the last analysis, help decide whether we are subject to federal-SEC regulation.

MR. INGRAHAM: Section 3(a)(8) of the 1933 Act expressly exempts from regulation "any insurance or endowment policy or annuity contract or optional annuity contract issued by a corporation subject to the supervision of the insurance commissioner . . . of any state."

In this regard, however, it is relevant to again review Justice Brennan's separate, concurring opinion of ten years ago in the SEC v. VALIC case. He pointed out that the insurance regulatory functions of the states focus

on the adequacy of a company's stated reserves to meet its obligations and the establishment of permissible categories of investments to assure solvency. This type of regulation, he stated, is rational and purposeful where the obligations of the company are measured in fixed-dollar terms. But where the company's only obligation is to pay whatever the assets it holds are worth, its liabilities are measured and determined by its assets, and it becomes meaningless to speak of determining the adequacy of reserves. Justice Brennan concluded, in the case of variable annuities, that the provisions of the 1933 Act and the 1940 Act are very relevant where the purchaser participates on an equity basis in the investment experience of an enterprise.

The basic insurance nature of variable life insurance contracts is interwoven with the investment features. Whether or not the investment element is of relatively minor importance until a relatively advanced policy duration will depend on the contract form—ordinary life or otherwise.

Certainly, at least a partial exemption from 1940 Act regulation is desirable for the industry, if variable life insurance is to be successfully marketed. This will permit sales loads (and thus commissions) in excess of those limits imposed by the 1940 Act with respect to pure investment contracts.

At least in my opinion, however, a case can be made for regulation of variable life insurance under the 1933 and the 1934 acts. This would mean that disclosure of these new products would be provided through prospectuses, and sales and advertising practices would be controlled. Remember that agents—not actuaries—will market these products to the public. Even a rudimentary comprehension of variable life insurance to all but the most sophisticated agents and clients will not be easily achieved. In many instances, suitability of the product for a particular client will be a concern.

The paper describing fixed premium variable benefit policies demonstrates that, on a per $1,000 actual face-amount basis, reserves computed according to various assumptions and methods for such policies are exactly the same as those under corresponding fixed-dollar policies.

This paper also shows that the statutory minimum cash values per dollar of actual face amount under fixed premium variable benefit policies would be exactly the same as the statutory minimum cash values per dollar of face amount under corresponding fixed-dollar policies, provided it was assumed that the unamortized initial expense deficit per dollar of actual face amount at the end of each policy year for fixed premium variable benefit policies would be exactly the same as that for corresponding fixed-dollar policies.

Furthermore, the paper demonstrates that fixed premium variable benefit policies could—by reflecting this underlying concept—show a table of cash values and nonforfeiture values identical to those contained in a comparable fixed-dollar policy.

The paper makes the basic assumption that nonforfeiture benefits (paid-up insurance, extended term insurance) will be variable rather than fixed. Either approach is possible, depending on whether the reserves continue to be invested in the equity account or are transferred to the general portfolio. The approach taken by the paper produces the anomalous result of an extended term death benefit increasing faster than it would have increased on a regular premium-paying basis.

The present federal income tax provisions applicable to life insurance companies do not seem to cover variable life insurance and will have to be amended at some future date to accommodate this new product. In this regard, the existing provision applying to separate accounts—section 801(g) of the IRC—is limited to contracts which provide "for the payment of annuities." Currently, nonqualified variable annuity contracts are subjected to a double federal income tax with regard to capital gains income realized on the sale of assets. Under present law, these capital gains are taxed to the insurance company and then are taxed a second time when they are distributed to the policyholder, either on surrender of the annuity or as part of his annuity payments.

The A.L.C.-L.I.A.A.'s Subcommittee on Company Federal Income Tax Matters has proposed draft legislation which would eliminate this double tax by adopting the "pass-through" approach now applicable to mutual funds (whereby capital gains allocable to contracts in the accumulation stage could be distributed to the policyholder when realized, in which case the policyholder would pay a current capital gains tax and the life insurance company would be exempt from tax on these gains). Concern has been expressed, however, over the possibility that any "pass-through" of capital gains to policyholders in the case of nonqualified variable annuities might carry over to variable life insurance. But, in this regard, it should be noted that the double-taxation problem would not generally exist under variable life insurance, since the proceeds are exempt from tax under section 101 of the Code.

MR. CRAPO: Paul Mason has indicated that he believes that the sales-load implications of the 1940 Act might be too difficult a hurdle for the insurance companies to cross. There might not be adequate sales load permitted by the 1940 Act to sell variable life insurance. Both he and Harold Ingraham have implied that the 1933 Act registration is going to be required in any event.

My personal impression is that, if we have to disclose the pricing structure of our life insurance policies, then we have the same hurdle to cross whether we face the 1940 Act limitations or not.

I would like to make a comment about the impression that I have gained from talking with members at the staff level at SEC, not the Commission—two entirely different groups of people. I feel that staff members would find no problem in recommending an exemption for a policy with a minimum death benefit and guaranteed nonforfeiture benefits including cash values. This would be the most difficult product of all to reserve, but this is the one for which the staff seems to feel that they might be able to recommend to the Commission that no registration be required.

MR. DIPAOLO: In September of 1968, the Association of Superintendents of Insurance of the provinces of Canada introduced a set of interim rules applicable to equity-based contracts. At the Washington meeting last year, Mr. C. T. P. Galloway gave an excellent summary of these interim rules, which were prepared by the provincial superintendents while wearing, as it were, SEC hats. In effect, the interim rules are meant to ensure that the policyholder is fully informed of the risks that the insurance company is or is not assuming.

In December, 1968, the Canadian Federal Superintendent of Insurance issued certain guidelines with respect to equity-based contracts containing certain guaranteed benefits. I summarized some of these guidelines earlier in this discussion.

With respect to variable insurance contracts where variability depends on the performance of the consumer price index, there are no unusual valuation and/or policy-form restrictions. Of course, the usual valuation requirements applicable to conventional fixed-dollar contracts would also apply to these indexed contracts.

The rules regarding taxation of life insurance proceeds are set out in the newly introduced section 79D of the Canadian Income Tax Act. Inasmuch as there is no capital gains tax in Canada at the present time, section 79D makes a clear distinction between the tax treatment of proceeds from equity-based contracts and proceeds from other life insurance contracts.

In the case of equity-based contracts, all stock dividends and other interest earned during the year by the separate account must be allocated to the various policyholders and reported to them. They, in turn, must treat such dividends and interest as income in their income tax returns. When the contract is surrendered or matures, the proceeds are completely tax-free.

In the case of other contracts, including indexed contracts, there may

be a tax liability to the policyholder at the time the contract is disposed of by surrender, termination, gift, or maturity. It must be pointed out that the sum assured paid on death is not subject to income tax.

Income tax on indexed policies is levied on the "profit" calculated at the time the policy is disposed of and is equal to the excess of the then guaranteed cash or maturity value over the premiums paid to date less policy dividends. The insured has the option of treating the profit so calculated as income earned during that taxation year or of being taxed at a special rate under section 35, which is the averaging section of the Income Tax Act.

CHAIRMAN McGINN: Until recently, there appeared to be no question regarding the regulation of variable insurance products in Canada—it was understood that all variable contracts were subject only to the provincial insurance acts. The Quebec Securities Commission, however, has recently stated that individual variable annuity contracts are "securities" and that companies issuing such contracts *and* their agents must be registered under the Quebec Securities Act. Now other provinces are re-examining their previously established positions regarding the regulation of such contracts. At this time, no one knows whether or not there will be dual regulation of variable annuity contracts under both the provincial insurance *and* securities acts, in a manner similar to that of the United States. If dual regulation ultimately prevails in Canada, it could add greatly to the legal, administrative, and sales burden of Canadian insurance companies similar to that experienced by United States companies, as we have had to assimilate the sales, administrative, and regulatory concepts of the SEC, which are foreign to the life insurance business. Also, such dual regulation raises serious questions concerning the regulation of variable benefit life insurance in Canada similar to the questions that we face here in the United States.

A model variable contract law and model variable contract regulations have been submitted to the NAIC by the A.L.C.-L.I.A.A. Industry Advisory Committee. The model law has been developed in the hope that the NAIC will recommend it to the state legislatures for enactment so that variable benefit life insurance can be offered, whether the variation depends upon the investment performance of a fund or upon some type of index. The model variable contract regulations will, hopefully, be recommended by the NAIC to the state insurance departments for their adoption so that there will be maximum uniformity among the states in the treatment of these contracts and so that the regulation can integrate with the requirements of the SEC. The model regulations at this time,

however, do not accommodate "index" variable contracts, because it is questionable as to the need for such specific regulation. If the cash values of "index" contracts are based on an equity portfolio, it is likely that regulations will definitely be required.

From personal experience in registering variable annuity contracts with the SEC, I am greatly impressed by the volume of information which the SEC requires to be disclosed and wonder whether or not this great detail does any more than confuse the public. If the SEC requires the same degree of disclosure with regard to variable life insurance, it seems to me that the confusion will be far greater because of the complex way in which the face amount is adjusted to reflect the performance of invested funds, the adjustments to the funds on account of mortality gains and losses, and the manner in which the cash values change from duration to duration.

As Messrs. Miller, Sternhell, and Fraser have indicated in their paper, the existing standard nonforfeiture values will need little adjustment to accommodate fixed-premium, variable benefit life insurance, since the simple exchange of the word "units" for "dollars" can accommodate this type of variable life insurance. Perhaps it will be possible also to accommodate variable life insurance within the framework of the existing laws when the life insurance varies according to an index (e.g., consumer price index) and cash values vary according to a fund's investment performance.

The principal federal income tax questions that arise under variable life insurance involve the fact that the federal income tax law as it treats a life insurance company's separate account only accommodates the special handling of realized and unrealized capital gains attributable to variable annuity contracts, not to variable life insurance contracts. Therefore, the federal income tax law will have to be amended in order to provide appropriate tax treatment to variable life insurance reserves in a manner consistent with that provided variable annuities. Since the "inside build-up" of the interest element of life insurance reserves has never been taxable to the insured, it seems entirely reasonable to assume that the insured will not be taxed on dividend and interest income "inside build-up" in the cash values of variable life insurance contracts.

MR. GERALD A. LEVY: I would like to point toward a potentially serious problem which I believe can only be solved by legislation. Currently, a considered effort is being expended to present model variable contract legislation to the NAIC, which will permit the sale of equity-based life insurance policies, funded in a separate account. This model

bill is intentionally general to permit the industry to develop its own approach to benefit design and investment vehicles. It is essential, however, that this legislation not only permit a universe of different product designs but also consider most carefully the needs of the insurance companies that will sell those products—the small insurers as well as the large.

Variable life insurance, if it receives market acceptance, must be permitted to be sold by every life insurance company, even the very smallest. Permission to sell is of little value if a company is excluded through lack of resources, whether they be financial, investment, or otherwise. If we accept these statements, it then is necessary that legislation leave sufficient doors open not only to permit a company to develop its own products but also to allow a company to receive assistance, whether it be surplus relief from new business, mortality risk sharing, or the use of another insurer's separate account or administrative back-up.

There may be several solutions that could minimize this problem. One such solution, which has conceptual acceptance for fixed-benefit coverages, among insurance department authorities, is to adapt the reinsurance product of coinsurance to permit a reinsurer to hold all the assets from these variable benefit policies in his separate account. I call this new reinsurance product "separate account coinsurance."

MR. INGRAHAM: The marketing and distribution of variable life insurance products will certainly be influenced by the degree of SEC regulation. The SEC may well require prospectuses, in accordance with the 1933 Act, and subject insurance companies and their agents selling such products to the constraints of the 1934 Act. If this is the case, advertising and sales promotion material will have to be cleared by either the SEC or the NASD—and companies will be compelled to comply with the SEC's Statement of Policy.

Expense levels may well be subject to SEC regulation—depending on the degree to which variable life insurance products are regulated under the 1940 Act. If this is the case, a practical constraint will have been placed on the pattern of commission scales that can be used with variable life insurance policies. Specifically, it may be necessary to adopt scales with considerably less "fronting" of first-year commissions and less heaping of early renewals than is the case under fixed-dollar life insurance policies today.

If commissions for variable life insurance are considerably lower in the early policy years than they are for comparable fixed-dollar insurance, agents may use variable life insurance products only as defensive, competitive tools in sophisticated markets. We should remember that, in

these same sophisticated markets, variable life insurance must compete for the agents' attention with equity-funding programs, involving the payment of fixed-dollar, permanent insurance premiums through loans secured by hypothecating mutual fund shares. Alternatively, minimum-deposit schemes involving the sale of maximum-loaned ordinary life with the traditional "fronted" commission scale payable to agents have been an industry problem for over a decade. The field popularity of minimum deposit, enhanced in recent years by the emergence of sophisticated computer service facilities, will not yield gracefully to variable life insurance products providing a lower level of early-year compensation.

In my opinion, the problems relative to the marketing of variable life insurance go beyond questions of the regulatory climate or even of relative commission differentials.

Older agents may resist selling variable life insurance because such a product, in their minds, strikes at the heart of fixed-dollar insurance, which they have sold for so long. These agents, who have not forgotten the hardships associated with the depression, may regard any shift in sales emphasis from fixed-dollar to variable life insurance as apostasy.

A more important concern is that some agents may resist selling variable life insurance because they feel that this product will cut down on future sales to the same client during periods of a rising market (thus increasing death benefits and contract asset values).

A further point is that many agents will find the policies difficult to understand and thus even more difficult to explain to their clients. In this regard, it should be noted that mutual funds *are* easier for agents to understand and to explain. And, to the extent that variable life insurance products reflect higher expense loads than mutual fund/life insurance packages, such packages may fare well in a comparative cost analysis although valid comparisons will often be difficult.

Despite the foregoing concerns, many of a company's younger top producers will enthusiastically sell variable life insurance products—particularly in the so-called sophisticated markets. I predict, however, that for quite a few years into the future variable life insurance will represent a relatively small segment of the ordinary insurance market.

CHAIRMAN McGINN: One of the greatest problems faced by the insurance industry in marketing and distributing variable insurance products is that these contracts may be subjected to the same SEC prohibitions as a variable annuity contract. Some of the problems which result from SEC regulation follow:

a) No projections of cash values at any point in time or face amounts of insurance can be made.
b) It will be difficult for many agents to explain how the face amount is adjusted to reflect the investment performance of the invested funds.
c) Unless there is a guaranteed minimum death benefit, it seems unlikely that a prospect will find variable benefit life insurance attractive in his basic financial planning.

In regard to distribution of variable benefit life insurance, it raises not only the question of whether the SEC will claim jurisdiction—thus requiring dual regulation—but also the significant question regarding state licensing. It seems obvious that each state would change its variable annuity licensing requirements to "variable contract licensing" requirements. In so doing, the states may require all agents who are already licensed to sell variable annuities to take a new examination, they may require additional fees, and they may also require even additional authorization in every state before an insurance company can offer the variable insurance contracts.

From the SEC viewpoint, variable benefit life insurance may be considered equivalent to an individual variable annuity contract during the accumulation period with a form of fluctuating, decreasing term insurance. From that standpoint the SEC may prohibit the usual large first-year commissions which have traditionally been paid under ordinary life insurance policies. For example, the SEC may limit the portion of each year's premium that may be used for sales and administration expenses in the same way that it currently does for individual variable annuities. In this instance, the implications could be traumatic; for example, (*a*) the level of equity cash values in the early contract years would be significantly greater than that under ordinary fixed-dollar life insurance contracts and (*b*) the agent's compensation would have to be greatly reduced in the first year and/or the insurance company's investment in the contract would have to be even greater than it is today under ordinary life insurance contracts. Naturally, any SEC rules that will require an agent's commission to be reduced for variable contracts below the commissions payable under fixed-dollar contracts will diminish, if not totally destroy, the market potential of variable life insurance.

MR. CRAPO: One of the most important things in variable life insurance is how to describe the cash value. This is quite different from fixed-dollar life insurance. If you put in the contract some sort of cash-value tables which look like the traditional fixed-dollar ones, you immediately face a problem with some insurance departments—they feel that you are im-

plying a guarantee. You may not intend to imply a guarantee, but the buyer looks at the table (which looks like another policy that he has) and says to himself, "Under no circumstances will I get less." You have the serious problem of misleading sales.

In the absence of a cash-value table of the traditional type, the description of the cash-value calculation itself must be clear enough for the buyer to understand and to permit him to apply the factors to determine his cash value and face amount.

MR. DIPAOLO: There are a number of administrative problems that are peculiar to the management of a portfolio of equity-based contracts. Some of these are the following:

1. The monthly or more frequent valuation of the separate account necessary to determine the unit value.
2. The intricate accounting procedures necessary to transfer moneys from the separate account to the life insurance fund to cover the cost of the various guarantees.
3. The maintenance of the various reserves as required by the supervisory authorities.
4. The filing of policy forms and other advertising material with the provincial supervisory authorities. I should point out that in Canada such filing is not required with respect to conventional plans.

The extent to which the usual policy provisions may have to be modified depends on the characteristics of the equity-based plan. For example, if there is no guaranteed cash value, the loan clause should be suppressed or modified. Indeed, the company has an obligation to invest all the assets belonging to equity-based contracts in equities and should not be required to invest some of these assets in personal loans. The company, however, may give the insured the right to borrow up to a certain percentage of the value of the units from the general funds, using the contract as collateral.

The lack of a guaranteed cash value would also require the suppression or modification of the automatic premium loan. Thus, in the event of premium default, the automatic nonforfeiture benefit should be the "paid-up option" whereby the number of units are frozen and can be redeemed at any time for the then value of such units. Of course, as soon as the "paid-up option" becomes operative, the various guarantees should immediately cease.

If an equity-based plan provides certain guarantees with respect to the maturity value, it is essential that the principle of "dollar cost averaging" be religiously respected, otherwise the risk associated with such a guar-

antee may be grossly increased. This means that the usual five-year reinstatement provision is not practical. The outright suppression of the reinstatement clause may be too harsh, but, if it is included, it should allow reinstatement only within a few months from the date of default.

In the case of the equity-based endowment that I described earlier, the misstatement of age had to be modified. Although the premium does not vary by age, nevertheless, the insured's age does affect the eventual maturity benefit, inasmuch as a level mortality premium, based on the insured's age, is deducted from the gross premium before units are purchased. Thus a misstatement of age affects the number of units purchased, and, while it does not alter the minimum death and maturity guarantees, it does affect the eventual payout.

MR. INGRAHAM: It seems likely that equity-based policies will incur higher administrative expense than their fixed-dollar counterparts, in part due to regulatory requirements.

Furthermore, United States companies may experience considerable frustration and delay with many of the state insurance departments relative to the proper level of special reserves for guaranteed benefits—such as minimum death refund features or minimum asset value guarantees at maturity. Perhaps a harbinger of things to come has been the dialogues between certain departments and various insurance companies offering individual variable annuity contracts providing preretirement death benefits equal to the greater of the asset value or the sum of purchase payments made. Because of its essentially *de minimis* nature, a case can be made for holding one-year term reserves based on adjusted amounts at risk with respect to this death benefit. Nonetheless, some states have taken the position that considerably greater reserves should be held; for example, the accumulation of 1–1½ per cent of purchase payments or, alternatively, one-year term reserves based on total purchase payments.

Under fixed-premium, fixed-benefit insurance policies, when premiums are paid during the grace period the insurance company sustains a small interest loss as a result of the delay in payment. Under equity-based variable insurance, however, the delayed investment of net premiums in a sharply rising market may result in considerably more significant losses to the company. The opposite would be true in a falling market.

Companies wishing to have values and benefits reflect the actual dates on which premium payments are made will be compelled to consider this question.

However, as pointed out in the paper on fixed premium variable benefit life insurance, under present law a premium paid within the grace

period must be treated as if it were paid on the due date for the purpose of determining policy benefits and values. It would seem considerably simpler from an administrative standpoint to transfer the appropriate premium amount from the company's general assets to the separate account on the premium-due date. This approach would restrict the company's interest loss to that applicable in the fixed-dollar case. Of course, if the premium is in fact not paid and the policy lapses, the company would be in the position of having made an investment from its general assets into the separate account, on which it may experience either a gain or a loss.

It seems clear that statutory requirements governing reinstatements must be substantially modified. The paper on fixed premium variable benefit life insurance suggests permitting reinstatement on the basis of paying back premiums with interest or the increase in cash value, if greater. This method seems to prevent the policyholder from, as the paper phrases it, "playing the stockmarket with hindsight."

However, if the equity-based life insurance policy provides for a cash (or asset) value guarantee at maturity equal to the total premium payments made under the policy, it would appear that the foregoing reinstatement approach would also permit investment antiselection during a depressed-market period. This suggests that such maturity guarantees are incompatible with reinstatement periods of more than a few months.

The small and dwindling number of disability income riders attached to fixed-dollar policies usually provide for $10 monthly income per $1,000 of insurance. In the case of equity-based insurance, should this ratio depend on the original face amount, or should it fluctuate with the subsequently varying face amounts? There is also the question whether the disability income payments themselves should be fixed or variable. Because of the premium complexities associated with having the initial amount of disability income vary in accordance with the face amount, there appear to be ample reasons for not adding these riders to equity-based insurance policies.

CHAIRMAN McGINN: Today with individual variable annuity contracts the SEC requires that all values be determined on a daily basis. Naturally, if a fixed premium variable life insurance policy is to be marketable, the SEC will probably require the face amount of insurance and the cash values to be determined on a daily basis. Daily changes in amounts of insurance will create enormous accounting, administrative, and file-control problems for insurance companies. Also additional problems will arise to the extent that the SEC or state regulatory authority

would require notification to policyholders of changes in their face amounts of insurance or cash values.

Already experience demonstrates that a highly computerized system is mandatory for individual variable annuities because of the impact of daily valuations, confirmations of all transactions, and frequent reports. Yet these contracts are more readily understood and less complicated than pure variable life insurance. Furthermore, if frequent valuations and policyholder confirmations are required, the expense factors used to determine the premium rates for such variable products will have to be completely re-evaluated.

Session No. 2

CHAIRMAN WILLIAM M. WHITE, JR.: What is variable insurance? It is certainly one of the most popular topics of the day and a source of much wonder and confusion. In general terms, I prefer to think of it as insurance, some of whose features are "un-fixed" at time of issue—which may change in the future, depending upon other developments. Some new word or term is needed to cover the broad generic category of what I call "un-fixed" insurance, since the word "variable" has been in practice pre-empted by one specific kind of insurance whose features change in relationship to the performance of investments in a separate account.

There seem to be three basic approaches to "un-fixed" insurance: (1) a packaging or combination of existing or new coverages with an equity vehicle, such as a mutual fund; (2) index-related coverage; and (3) equity related or "variable" insurance.

Let us turn first to packaging or combination of existing products. Annual premium life insurance has been able to react to the inflation-created need for more protection by the sale of more insurance. Although the coverage provides for payment of a fixed benefit whose real value is decreasing, the coverage is paid for in fixed premiums whose value is also decreasing. The only problem with this solution is that the buyer may not qualify for the additional insurance. If there were some way of expanding the guaranteed insurability type of coverage to allow for purchases of increased amounts of insurance to maintain the "real" benefit desired from the coverage, this might be an ideal solution.

The combination sale of existing insurance with mutual fund or variable annuity products in various proportions could be a way of providing for an equity-type build-up which would supplement the fixed-dollar coverage.

Merits of the packaging or combination approach would include ease

of understanding, fewer regulatory problems, and adequate sales compensation.

Coverages which vary in relation to an external index, such as the consumer price index, possibly come closer to meeting real customer needs. The rising cost of living is probably the buyer's major concern, and coverage which changes in relation to some measure of the cost of living would probably be more adequate at all times than coverage changing in relation to performance of an investment portfolio.

Among the companies which have developed some form of index-related coverage are Fireman's Fund American, Gulf Life, Life of Georgia, New England Mutual, North American Life Assurance Company of Canada, Northwestern National, Penn Mutual, and Republic National. Some aspects of these coverages are that they are more complex, harder to understand, can involve greater cost to the insured, pose difficult pricing problems with regard to the company risk assumed, and pose difficulty with regard to compliance with the state insurance laws.

Let us now examine the equity-related types of contracts which have, in practice, pre-empted the name "variable." Under these, some or all of the moneys are invested in a separate account, and some feature(s) of coverage varies in relation to investment performance of that account. In essence, the investment risk is passed on to the insured or owner.

The fully variable or Dutch-type contract, in which premiums, death benefits, and cash values all change, can be thought of as a traditional insurance contract written in terms of units rather than dollars. The value of the units change in relationship to the underlying values of the separate account. Thus, the death benefit, cash value, and premiums will all vary.

Another variation of an equity-related contract is one in which the benefits vary but the premiums are fixed. The paper written by John Fraser, Walter Miller, and Charles Sternhell, of the New York Life, describes the actuarial theory for such a contract.

Of prime importance in the consideration of variable insurance are the consumer needs that the product is meant to satisfy. What do the customers really want? An analogy to the purchaser of half-inch drills is meaningful. Does he really want the drills themselves? No, he is in need of half-inch holes. Does the customer really want variable insurance per se? I doubt it. I think that he is fundamentally seeking a type of inflation hedge, financial security in the sense of protection against erosion of the dollar. He is probably seeking to provide "real benefits," such as college education of his children, which will probably bear an increasing price tag in the future. The real question is how best to meet these needs.

In evaluating the various approaches, we must keep in mind the following questions:

1. How well does the variable aspect meet the buyer's need?
2. How will the cost for the benefits which are guaranteed be determined?
3. Who is to bear the investment risk?
4. How complicated or understandable will the products be?
5. Can they be sold and for what compensation?
6. What are the regulatory problems involved?
7. What will be the financial impact on the company of having (or not having) such products?

Under the proposed model variable life insurance law, coverage would be provided through the use of separate accounts. Current separate account regulations include a number of size restrictions, such as seed capital minimums, which small companies would probably be hard pressed to meet because of their limited facilities. Would it not be advisable to provide for participation in pooled accounts to enable smaller companies to join larger ones in writing this business?

MR. JOHN C. FRASER: We certainly agree that this is a desirable outcome. We feel that to the greatest extent possible smaller companies should be enabled to write variable life insurance. The suggestion of pooling, which would require an amendment to the proposed model law, seems a good one.

MR. GEORGE N. WATSON: In developing suitable equity-linked insurance products, I think it is important to keep in mind that they must be simple to understand and explain or they cannot be sold. It would seem difficult to understand precisely how some of the policies described today will operate and on what actual guarantees the policyholder may rely.

Crown Life Insurance Company has, within the past few days, introduced for sale in Canada, a new product called group equity endowment. Investments are made in a segregated fund or a separate account invested in common stocks. This new product provides annuity options at the maturity date, usually age 65, but it is linked to another well-known group product—group ordinary life insurance. In order for the employee to make contributions under the group equity portion of the contract, he must be a participant and make contributions to group ordinary.

At maturity, the employee may elect to withdraw the cash value, convert to a guaranteed annuity, or split his permanent insurance proceeds between the two optional forms—paid-up and cash. There is a large variety of options available to him by linking this equity endowment with permanent life insurance.

We believe that this arrangement has some advantage, because it encourages him to first make sure that he does own a reasonable amount of guaranteed permanent life insurance. In the group equity endowment, the value of his contributions is not guaranteed, and this is clearly explained and understood by him. The amount of insurance on his life is, of course, the total of the group ordinary insurance plus the cash value at the time of death of the units purchased under the group equity endowment. Thus the amount of life insurance is, in fact, variable.

By making use of the pay-in provision in the group ordinary policy, the employee may convert his permanent life insurance to any plan he wishes, assuming that there are sufficient funds accrued in the group equity endowment at that time. He can elect any plan commonly found in the ordinary ratebook. The amount required to be paid into the group equity endowment to accomplish this is not computed precisely because it cannot be done accurately. The general idea is to contribute an amount which is amply sufficient to carry out any plans that he may later determine upon.

We sell this plan on the basis of the following statement: "Buy permanent insurance and invest the difference." You may possibly have heard of a statement along similar, although not identical, lines.

In addition to the advantages of simplicity, this arrangement effectively provides a whole ratebook of plans which may be said to be equity-linked or variable. In addition, it guarantees that the basic business of the life insurance company, the sale of permanent life insurance, will not be endangered. Since the institution of life insurance depends upon the sale of permanent life insurance, this approach will guarantee healthy growth in this new direction.

Of course, we are not at this time able to offer the group equity policy in the United States because of the inhibitions introduced by SEC regulations and state laws, but we are making it available in Canada and believe it will be well received. In our opinion, it is the real way to give the public what it needs and wants and yet guarantee the future of our business.

MR. WALTER N. MILLER: Mr. Watson has made a very valid point. It is true that a theoretically sound idea presented in an actuarial paper will not necessarily give you a ticket to success in the market place. However, we are entering an exciting era in the life insurance business. I think that we are going to see a lot of alternative benefit designs in the variable life insurance area.

Some of the designs are going to be successful in the market place and some of them are not; but there is a need for the insurance industry to be

responsive to a demand for equity products, and you cannot really tell what will happen until you try.

MR. FRASER: From a marketing point of view, we did not like the idea of offering the public a policy with variable premiums. We felt that people would hesitate to agree to pay a premium that will go up and down with the stock market. One of our basic objectives, therefore, was to see whether we could come up with a policy with fixed premiums and variable benefits.

CHAIRMAN WHITE: Instead of using a separate account, why do you not use a mutual fund chosen by the policyholder on a trusteed basis? In this way you could allow several funds, depending on the policyholder's desire for investment philosophy.

MR. MILLER: The model legislation currently being drafted for submission to the NAIC does contemplate that insurance companies would fund variable insurance through a separate account.

One type of separate account is the unit investment trust, where contributions are placed in a segregated fund for investment in shares of a specified mutual fund.

It is also true that companies may, if they wish, have several separate accounts with differing investment objectives and philosophies.

CHAIRMAN WHITE: Your paper assumes that the full reserve is invested in a separate account. In the earlier years the company must borrow from surplus to set up the reserve. Unlike fixed-dollar policies, the insured is credited with investment earnings on the full reserve. Is this equitable to holders of fixed-dollar accounts?

MR. FRASER: The approach in our paper is based on the assumption that there would be no radical departure from basic life insurance concepts. The design presented in the paper is simply a different *type* of life insurance policy. The company is investing the *reserve* on the contract in the separate account, not the policy's cash value. The cash value that would actually be paid to the policyholder would, of course, reflect a deduction for the amortization of the initial expenses.

Whenever a company issues a traditional fixed-dollar policy, it usually has to borrow money from surplus in the early years to set up the reserve. This is accepted practice in the life insurance industry, and there is nothing different in the case of variable life insurance. The company borrows from surplus to set up the reserve in the separate account but is careful

not to return the full reserve to the withdrawing policyholder until such time as the initial expense has been amortized.

CHAIRMAN WHITE: Why did you not want to go to a cost-of-living approach, which might more directly meet the customer's needs?

MR. CHARLES M. STERNHELL: We have no objection to contracts geared to the cost of living. We felt that there is a growing demand on the part of the public for equities and that mutual funds would not be the answer. We wanted to preserve all the characteristics of life insurance, but somehow combine it with the opportunity of capital growth through equity investment.

CHAIRMAN WHITE: You mentioned contemplated changes in insurance laws in your paper. What changes in the Internal Revenue Code do you feel are necessary? Some tax attorneys have doubts that reserves under the New York Life approach would be considered life insurance reserves in the eyes of the IRS, because they may not be based on an assumed rate of interest provided for separate account annuities in section 801.

MR. FRASER: The Tax Code does not envision variable life insurance within the definition of a separate account contract. Section 801(g) certainly indicates that. The Code would have to be modified to obtain necessary preferential treatment. The assumed rate of interest is not a prerequisite element of a separate-account contract. The Code points out how to define the assumed rate of interest.

MR. ALBERT PIKE, JR.: It is true that section 801(g) needs merely to be amended to refer to life insurance as well as annuities, but that is more easily said than done.

The greater problem is re-examination of the propriety of a lot of deductions and separation of Phase I from Phase II, which were all sold to the Internal Revenue Service on the assumption that insurance companies have long-range risks. If these long-range risks are removed, some of these deductions may be re-examined for variable life insurance.

MR. DONALD S. GRUBBS, JR.: Not all common stocks have the same amount of risk. Stocks with the lowest risk are not necessarily the best investment. If an insurance company guarantees the investment experience, will this affect its decision about whether to invest in AT&T or

Polaroid, for example? Might it not be in the buyer's best interest not to put the insurance company in that position?

MR. SAMUEL H. TURNER: I do not think that the subject of guarantees is yet completely understood. For example, the companies which now assume the federal tax risk find the same question of philosophy arising. I think this exists to a lesser extent in some other areas.

MR. PIKE: The Variable Contracts Subcommittee of the A.L.C.-L.I.A.A. actuarial committee has worked on model regulations and a model statute. Existing model regulations for variable annuities would have to be amended to extend to variable life insurance. The statute part would be brand new, embracing from the beginning both annuities and life insurance. That variable annuity products are already in existence without a model law can be explained by the fact that acceptance of equity-based accounts throughout the industry is a fairly recent event. We do not anticipate any trouble with the insurance commissioners, except concerns arising out of lack of familiarity with this type of product. In the long run, we think we will be successful on the state level, but in the short run we may have all kinds of difficulties explaining new concepts to insurance departments.

If a life policy under which the insurance company bears all investment risk is contemplated, it should not, in my opinion, be called a "variable" contract. True, its benefits vary, but the Model Statutes and Regulations referring to variable accounts imply contracts with only limited guarantees, where coverage varies according to the performance of an investment account.

It is possible to design variable contracts with guarantees of such magnitude that they can be interpreted as "fixed" after all; so there is a gray area for which some ground rules will have to be developed. The regulatory problem, of course, does not finish at the state level.

In regard to the SEC, there are two types of problems. One deals with the practices the SEC has developed over the years in dealing with securities; they have some pretty fixed ideas about what is or is not permissible. There is a whole spectrum of other problems, however, that are much more fundamental. Of these I would regard the limitations on front-end loads as being the most serious, since the concept pervades the life insurance business. There is a bill pending in Congress to regulate the front-end load on contractual mutual funds. If this is ever applied to the life insurance business and the SEC extends its proposed restrictions to life insurance loadings, we will have difficulties with our traditional marketing ap-

proaches both to this product and to fixed-dollar life insurance. In dealing with this bill, the SEC appears to have made distinctions between life insurance and contractual mutual funds. It is interesting to note that in fighting the proposed front-end load limitations, mutual fund representatives have made the same arguments for the need for front-end loads that life insurance companies would offer. The SEC has countered with argument before committees of Congress that there is a distinction between front-end loads for contractual mutual funds and those for life insurance. The distinction rests on the fact that life insurance is bought primarily for the purpose of insurance, not investment; with the exception of high premium forms, the investment portion is incidental. We hope we can continue to depend on this distinction, so that even if we do find ourselves with SEC jurisdiction, we can get out from under the more severe consequences of its ideas about front-end loads.

MR. FRASER: New York companies were asked by the New York Insurance Department to take a look at the present New York statute. It is a special statute, and there are special problems. A group of industry representatives has created a recommended law for submission to the department; it recognizes the special nature of the New York law.

I would also like to comment on Mr. Pike's remarks about the treatment of guaranteed minimum benefits in the model regulations. The model regulations were carefully drafted to make it clear that cash values may disregard incidental minimum guarantees as to the dollar amounts payable. The model regulation goes on to indicate that incidental minimum guarantees include, for example, but are not limited to, a guarantee under a policy, which provides for an assumed investment increment factor, that the amount payable at death or maturity would be at least equal to the amount which would otherwise be payable if the net investment return credited to the contract at all times from the date of issue had been equal to such factor.

MR. WHITE: With regard to proposed regulation by states, would it not be best to delay introduction of any variable life insurance regulation or statutes until we (*a*) find out what kind of products are really under consideration and (*b*) solve the question of possible guaranteed benefits?

MR. PIKE: That is what we tried to do in the case of variable annuities and look at the hodgepodge existing today. I think it is important to establish some order ahead of time. This model statute is so general that, in my opinion, it will be all-encompassing. The regulations are fairly

general and more easily changed. My judgment is that, if we ever want to get this variable life insurance product off the ground, we should get the model regulations and statutes adopted by the insurance commissioners (NAIC) and legislation passed in the states.

MR. PAUL A. CAMPBELL: In our research on variable insurance we learned of an NAIC survey conducted by Commissioner Barnes of Colorado. Apparently, twelve states surveyed have received filings for contracts which vary either according to an index or equity performance. Six states have approved cost-of-living plans with a guaranteed minimum benefit equal to the initial amount; approval was based on interpretation of benefit as being actuarially sound. Six states have disapproved filings on the basis of either insufficient provisions in state insurance laws or interpretation of contracts as not in the public interest.

The survey shows state insurance departments are concerned about four elements: (1) proper underwriting, (2) adequate disclosure for sufficient public understanding of complex benefits, (3) the undeterminable nature of benefits provided, and (4) questionable applicability of evaluation laws. The twelve state departments were asked whether they would welcome model legislation, and only nine of the twelve said that they would.

TRENDS IN HOSPITAL AND MEDICAL CARE UTILIZATION

1. What are the short- and long-term trends in supply, utilization, and cost of hospital, physician, and other health care services?
2. What developments have taken place that may modify these trends in the future?
3. What implications do these developments and trends hold for health care insurers and prepayment agencies?

CHAIRMAN BURTON E. BURTON: The basic trends in the utilization and cost of hospital and medical care are pretty well known. Today, however, there are a great many knowledgeable and influential people who think that these trends are not in the right direction and that they must be changed substantially. This pressure for change does not arise simply out of concern for rapidly rising costs or increases in hospital utilization. It reflects a deep-seated and widely held view that our present health care system has major faults which should be corrected.

In this connection, the Health Insurance Association's Committee on Medical Economics has just published a report called "Health Care Delivery in the 1970's" that discusses this point in considerable detail. This report is based on some thirty-one informal interviews with acknowledged experts in the fields of insurance, medicine, medical education, group practice, public health, and organized labor. The majority of the persons interviewed in this report feel that our present health care delivery system does not provide the highest level of care of which we are capable, does not provide a satisfactory level of care to all segments of the public, and does not provide care economically. These faults have existed for some time, but the difference, today, is that these views are widely held by both laymen and professionals.

The report also states that our health care delivery system is uncoordinated and inaccessible, particularly for the poor and rural population, and is oriented primarily toward the treatment of acute illnesses instead of toward the maintenance of good health. Many say that our system needs improved management and control.

Some of the proposed solutions are political, such as national health insurance, extension of Medicare below 65, Governor Rockefeller's compulsory health insurance, and the legislation currently sponsored in some states to place controls on hospital operations and charges. Other proposals are aimed directly at specific problems and include educating and training more health personnel, establishing community ambulatory

health centers, supporting comprehensive community health planning, and facilitating growth of group practice.

What proportion of our health care system directly affected by these proposals is not yet financed by government programs? Even after excluding the very high cost of health care for the aged under the Medicare and medical assistance programs, the remaining private consumer health expenditures are very large, as indicated in Table 1. Any national health insurance proposal involving federal financing to provide for coverage of these private expenditures would be a tremendous financial undertaking. It would involve raising additional tax revenue equal to approximately

TABLE 1

HEALTH EXPENDITURES AND TAX INCOME

(In Billions)

	1965 (Before Medicare)	1967 (After Medicare)
Medical assistance	$ 1.48	$ 2.83
Medicare	0	4.74
Total	$ 1.48	$ 7.57
Private consumer health expenditures	$28.17	$30.42
OASDI taxes	$16.78	$23.65
Federal income tax:		
Individual	$48.79	$61.53
Corporate	25.46	33.97
Total	$74.25	$95.50

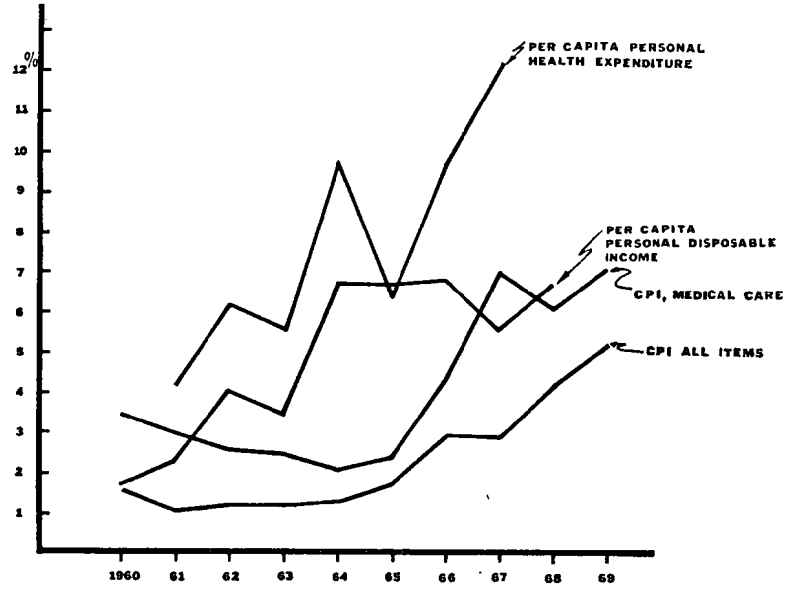
$1\frac{1}{4}$ times the taxes raised under the existing OASDI program and equal to approximately 50 per cent of all individual income taxes.

The over-all trends in utilization and cost are shown in Chart I. The annual rate of change in the price level of medical care as compared to the corresponding changes in the price level for all items measured by the consumer price index appeared to be converging in Chart I until just prior to Medicare, when they diverged sharply. Their relationship for 1968 and 1969 was static but at a much higher level than it was in the past. The annual rate of change in the average per capita personal health expenditure is considerably greater than the annual rate of change in the price level of medical care. This suggests that very substantial increases are taking place in the utilization of medical care services. An analysis of the

1966 and 1968 fiscal year per capita personal health care expenditures shows that price and utilization increases accounted for 65 and 35 per cent, respectively, of the total increase in per capita expenditures for persons under age 65 in comparison to 36 and 64 per cent, respectively, for persons 65 years and older. Shortly after Medicare, many insurance companies noted under insured plans a substantial lessening in the rate of increase in utilization and costs for persons under age 65.

CHART I

ANNUAL PER CENT CHANGE IN PRICES, HEALTH CARE EXPENDITURES, AND INCOME



The substantial increase in the medical care costs during the 1960's have caused many to say that our population cannot afford the medical care which they need. Except for the period immediately following Medicare, however, increases in per capita disposable personal income, as shown in Chart I, have more than kept pace with price level changes but are somewhat below the rate of increase in personal health expenditures.

MR. S. MARTIN HICKMAN: Approximately 45 per cent of the total per capita health care dollars is spent on hospital care, which represents expenditures and services attendant to roughly 1,600,000 hospital beds

throughout the country. Of these beds, approximately 50 per cent, or 806,000, are in short-term general hospitals.

Concentrating on this type facility, let us look at the past patterns of supply, utilization, and costs that have developed in these short-term institutions.

In the last five years the number of beds in these facilities has increased by approximately 100,000, to a total of 806,000—a rate faster than the growth of the general population. The result is that beds per 1,000 capita have increased some 11 per cent, from 3.7 in 1963 to 4.1 in 1968. And still we hear reports that we are in need of something in the order of 85,000 additional short-term beds. If we were to have that many additional beds, the result would be an additional increase in the per capita bed count of roughly 10 per cent.

At the same time that the bed supply was increasing, the average occupancy level was also increasing. The per cent of occupancy level of hospitals in the early 1950's was generally in the low 70's, and this rose to about 76 per cent in 1963 and is presently about 78 per cent. (Many people knowledgeable in this field suggest that 80 per cent is probably the maximum level at which a hospital can operate with reasonable efficiency to all parties involved.) This occupancy increase in the last five years is equivalent to a 3 per cent increase in bed supply. It might be pointed out that the occupancy situation is particularly acute in the large hospitals in major metropolitan areas, often ranging into the 90 per cent levels.

We have, therefore, had an increase in the supply of beds as well as an increase in their occupancy, which combined would amount to about a 14 per cent increase in bed facilities available and being utilized over the last five years.

Moving on to the frequency of hospital admission, we find that there has been an annual increase of some 1.0 per cent over the last ten years, from a level of 125 cases per 1,000 population in 1958 to 138 in 1968. It should be noted that in 1967 the level actually fell off slightly. In 1968 claims frequency appears to have held fairly constant.

A second important aspect of utilization is the length of stay patterns in hospitals. We are all familiar with the downward trend in these patterns following World War II, when length of stay dropped from a high of about 9 days per case to a level of about $7\frac{1}{2}$ days in the late 1950's and early 1960's. Then, in 1965, there seemed to develop a slight upward trend, and since Medicare this trend has been quite pronounced, with the average length of stay reaching a level of 8.4 days per case in 1968. This upward trend since Medicare is largely a reflection of the different age cross-section of hospital patients that has developed. Since Medicare, a

much larger share of the patients is in the "over 65" category than was true in the past, and, of course, older patients generally have longer lengths of stay.

If we combine the impact of "frequency of admission" and "length of stay," we find that the "days of hospitalization per 1,000 of population" have, since 1958, increased at an annual rate of approximately 2.2 per cent. More recently, since 1963, the rate has been a little more pronounced —about 2.6 per cent. During the last couple of years, since Medicare, the utilization by persons over 65 years of age has gone up very dramatically, apparently at a rate of about 8 per cent a year, while the "under 65" utilization has actually gone down slightly.

Incidentally, attendant on these patterns of inpatient care, outpatient care has increased about two times as fast as the inpatient rate. That is, in the last five years it has increased at a rate of about 5 per cent a year.

If we look more directly toward the insured population—using Blue Cross experience here as fairly typical of the general insured population—the frequency of inpatient claims prior to Medicare appeared to have an increasing secular trend of about 1 per cent a year. With Medicare, there was a substantial drop, reflecting the drop out of the over-65 population. But, in addition to the expected drop in utilization resulting from the government's transfer of the high-usage over-65 population out of an insured status into a Medicare status, there was also a drop in under-65 claims frequency. This age-adjusted impact on the under-65 population amounted to about $2\frac{1}{4}$ per cent in 1966 and 6 or 7 per cent in 1967. It primarily resulted from the strain of Medicare on hospital facilities and was a timely relief to all insurance carriers and Blue Cross rate structures, since it coincided with an unusual surge in hospital-cost levels. More recent data suggest that these downward trends may have started to bottom out in late 1968 and that perhaps there will be a slight upswing in the future.

As for length of stay, in Blue Cross experience we saw an upward trend of about 1 per cent a year in the early 1960's. Actually, this was largely the impact of our efforts at that time to increase our enrollment in the over-65 segment of the population. But with the advent of Medicare there was a dramatic shift downward for length of stay, and now it appears to be fairly stable—bouncing around from quarter to quarter in 1968 to the net result of about $\frac{1}{10}$ per cent increase in the length of stay as compared to 1967.

But it is the topic of hospital costs, not utilization levels, that has received the most attention in the public eye in the last year or so. Costs have been going up at an extremely fast rate in the hospital area, much

faster than anybody expected, and especially so since Medicare. What are the underlying reasons? One cause is that the number of employees per patient has increased about 13 per cent in the last five years, up to a present level of 6.8 employees per 1,000 adjusted patient days. This is largely the result of shorter workweeks, shorter workdays, and added technologies and services that are being made available in hospitals.

Compounding this situation are the increases in wages that are being paid these employees. Historically, wages represent between 65 and 70 per cent of the total hospital bill; in the last five years average hospital wages have gone up from $3,600 to about $5,000, or an increase of roughly 35 per cent. Causes of this are general inflation, the short supply of help in a time of major expansion in the hospital field, unionization efforts, increased specialization and greater technical skills required within the hospital, and the impact of the minimum wage laws. While the $5,000 figure does include some "catch up" in hospital wage structures, it is still relatively low in comparison to other industries. Construction industries and trades average about $8,500 a year; classroom teachers, $6,800; manufacturer employees, $5,900. So there will probably still be much emphasis on increased wage scales for hospital employees in the future, and probably rightly so. We can therefore expect to live with this trend for a while longer.

An additional element affecting hospital costs is the number of new services being provided in hospitals today. Illustrations of this point would be the following: the percentage of hospitals providing recovery room care has increased from a 63 per cent level in 1963 to 73 per cent in 1968; only 18 per cent of the hospitals reported intensive care facilities in 1963 in comparison with 42 per cent in 1968; renal dialysis facilities and organ bank facilities were available in approximately 10 per cent and 2 per cent of the institutions, respectively, in 1968 but were practically nonexistent five years ago. It should be pointed out that many of the new services require not only additional operating expenses (e.g., intensive care monitoring systems, dialysis equipment, chemical analysis devices, high compression oxygen chambers, etc.) but also major capital expenditures and highly trained people.

A fourth element that has affected hospital costs is the increase in costs of new construction. In 1948 the cost of a new hospital bed and supporting facilities attendant on it was about $12,000. Currently this would average about $30,000, with a $40,000 figure probably more appropriate for new facilities in the large metropolitan areas. This increase, again, is largely a result of general inflation and more sophisticated equipment and design requirements. Compounding this is the increased cost of borrowing money

for capital construction. The impact of having to pay 8 per cent for money for capital expansion in comparison with 6 per cent of a few years ago or 4 per cent of ten or fifteen years ago has a dramatic impact on hospital costs. For example, the annual costs of amortizing the capital costs of new construction over thirty years are approximately 22 per cent higher if the hospital has to borrow money at 8 per cent instead of 6 per cent. This effect is further aggravated by the hospitals' increasing dependency upon borrowing for capital expansion. This results from proportionately less funds available from private and corporate contributions and reductions in operating margins. The latter has been especially compromised with the withdrawal of the 2 per cent additional reimbursement factor under Medicare.

The actual charges that the hospitals are making to reflect these costs have taken an interesting pattern. With the advent of Medicare, it has become especially important because of the Medicare reimbursement techniques that hospitals bring their charges for the various services offered more directly in line with their costs. As a result, some services have increased faster than others. For example, the room and board charges increased about 17–19 per cent in 1966, slightly less in 1967, and in 1968 the increase was about 13.1 per cent.

Ancillary services have generally increased at a somewhat slower rate, averaging 3–5 per cent for laboratory services, X-rays, and drugs, whereas the operating room and delivery room have followed for the most part the general pattern of room and board trends; that is, an increase of about 17 per cent in the last year. The combined impact of all these costs has resulted in total charges going up about 18 or 19 per cent in 1967 over 1966 and falling off to about 13.8 per cent in 1968 as compared with 1967 charges.

Where will these various trends put us in the future? With the many new pressures focused on the health care system these days, it is clear that a mere extrapolation of past trends set forth in Chart II is not appropriate. In relation to utilization levels, I have to feel that utilization will largely be the function of three factors: the supply of beds available, the occupancy levels that prevail, and the changes in the general population. Looking back at historical figures, we see that in the period 1963–68 the aggregate bed supply went up 3.1 per cent annually, and the occupancy level went up 0.6 per cent annually, while the population only went up 1.2 per cent annually. The result was an increase in utilization trends of approximately 2.5 per cent a year. In the future, new bed construction will probably vary considerably by geographic area but is

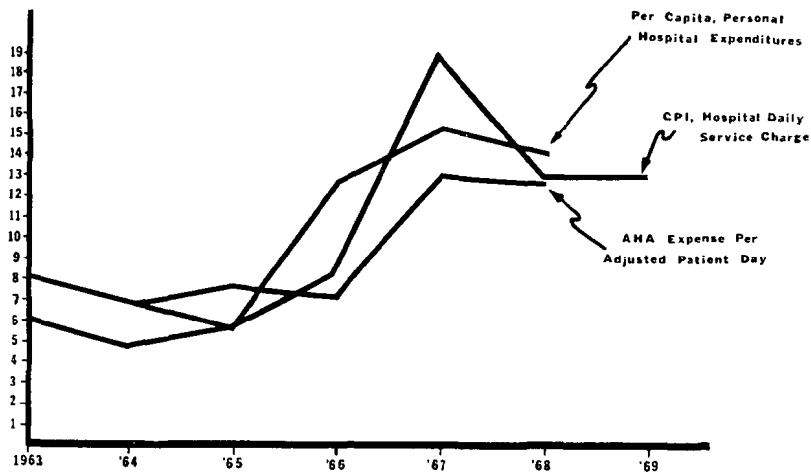
expected to increase nationally at a rate of approximately $2\frac{1}{2}$ per cent a year for the next five years.

Occupancy levels will probably hold fairly constant because of the stabilizing effect of area-wide planning efforts on construction of new facilities, coupled with a sort of Parkinsonian law which states that the number of patients will tend to expand to fill the number of beds available.

The population is expected to increase approximately 1.3 per cent annually over the next several years. The net effect of these three factors is that utilization will probably increase in the magnitude of $1–1\frac{1}{2}$ per

CHART II

ANNUAL PER CENT CHANGE IN HOSPITAL COSTS



cent annually over the next five years. This should be largely represented in the form of increased frequency of cases rather than increased length of stay, since recent emphasis on utilization review will tend to stabilize the length of stay. Also, the public has become much more hospital-orientated and is increasingly coming to expect in-hospital treatment as the proper mode of care. This, of course, would tend to push up the frequency of admissions.

In relation to per diem costs, a consensus of opinions of people within my own organization, both locally and nationally, and various hospital controller organizations suggests that 1969 costs are going up at the rate of about 13 or 14 per cent and that in 1970 the increase will probably be of the magnitude of 12–14 per cent. This will probably taper off slightly

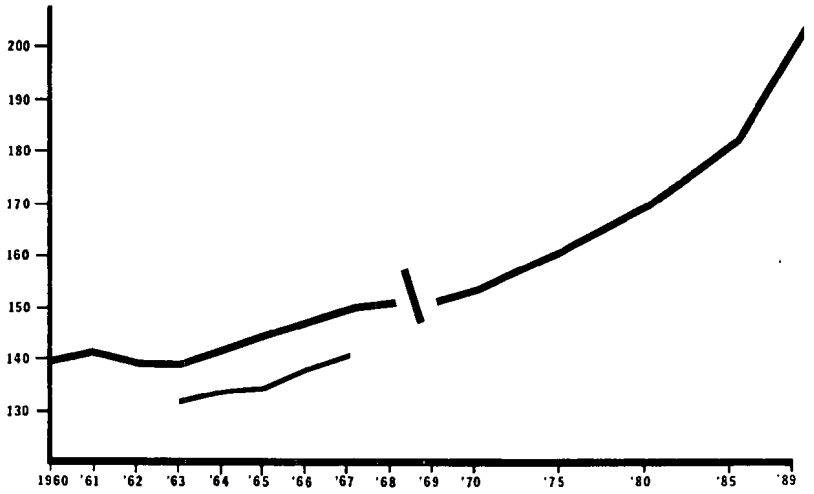
in the next several years to something on the order of 8–10 per cent annually by 1973 as a national average.

Hopefully, some of these rising utilization and cost trends will be offset by use of lower-cost facilities and attention to utilization review programs. It will behoove all parties involved to try to direct the care to the most economical type facility available and to assure that unnecessary care is not provided.

MR. WILLIAM C. HSIAO: When discussing the supply and cost of physicians' services, we need to be mindful that they are directly related

CHART III

ACTIVE PHYSICIANS PER 100,000 POPULATION; PHYSICIANS IN PATIENT CARE PER 100,000 POPULATION



to other medical professions, such as nurses, the cost of living, and the general wage level.

The upper line of Chart III shows that the supply of active physicians per 100,000 population was relatively level through 1964 and then increased gradually. The anticipated accelerated growth beginning around 1970 is the anticipated result of public concern as translated into action by the federal government and the medical profession. There were 85 medical schools in the United States in 1960 and 104 in 1969. It is estimated that they will number 109 in 1972. There were 7,100 graduates in 1960 and 8,500 in 1969. It is projected that they will number 9,400 in

1972 and 15,000 in 1980. It is disturbing to note that the number of physicians in patient care as represented by the lower line on Chart III has not grown as rapidly as the number of active physicians. A greater percentage of physicians are going into nonpatient care employment, such as administrative medicine and research.

There are two major reasons for the acute concern for the supply of physicians. The first is that there must be an adequate supply of physicians to render the necessary medical services for our growing population, and the other is related to the concern about the rising cost of physicians' services. The economic law of supply and demand which states that the price decreases as the supply increases is not necessarily applicable to physician services. Many physicians enter the medical profession for humanitarian reasons rather than for economic reasons. The National Advisory Commission on Health Manpower concluded in 1967, "Physicians enjoy the position of being discriminating monopolists. However, they appear not to have used their market power to maximize income in the short run." This report also states that, given the rapid growth in the demand for physicians' services, the price could have risen much more rapidly than it did over the years 1955–65. Instead, waiting periods and queues for physicians' services grew longer. Although there are almost twice as many active physicians per 1,000 population in the northeastern section of the United States in comparison with the southeastern section, the charge per office visit is much higher in the northeastern section, even after the difference in the cost of living between these two sections is adjusted.

Chart IV shows the annual rate of increase in the price level of physicians' fees as measured by the consumer price index. Since 1950 the increase in physicians' fees has been approximately parallel to the increase in general wage levels. Since 1966 the increase in physicians' fees has been more rapid. Many attribute this to the Medicare and Medicaid programs. For the long-term trend I hopefully expect that physicians' fees will increase in line with general wages, unless there are drastic changes in the health care system.

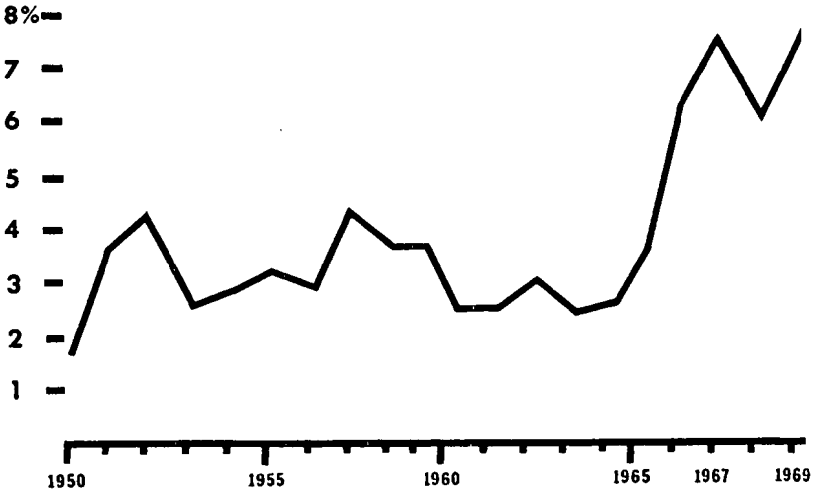
It is extremely difficult to find an appropriate measure of the output of physicians. The purpose of using physicians' services is to improve health, save morbidity days, and the like. The conventional measures of performance, such as physicians per capita, patient visits, and expenditures for physicians' services, are all measures of input. This task is compounded as the process of producing physicians' services changes and the services performed under the direction of the physicians expand. The National Advisory Commission on Health Manpower devised a method

of measuring physicians' productivity based on personal expenditures for physicians' services. The result shows that physicians' productivity has been increasing at approximately 4 per cent per year.

Another crude method of measuring productivity is the median patient visits per week (from *Medical Economics*), which were 123, 120, 124, 124, 130, and 137, respectively for the years 1963–68. I would like to caution you on using these data because of the survey method used as well as the newness of the survey, which began in 1963. There was a dramatic increase in patient visits per week in 1967 and again in 1968. Most physi-

CHART IV

ANNUAL PER CENT CHANGE IN PHYSICIAN FEES



cians now have two or three examining rooms and are using their nurses to record the simple facts of the patient's medical history. Patient visits per week are increasing as a result of population growth and the trend toward physician specialization. The aged seek more physician services, and that portion of our population is increasing.

Historically, the federal government has not played a major role in the medical care field. In the last decade, however, it became a commonly accepted principle that it is a right of every citizen to be able to obtain the health care that he needs. At its 1969 convention, the AMA adopted a declaration to affirm this principle. Because of this fundamental principle the government became involved on behalf of segments of our population which lacked the financial resources to satisfy their health

needs. In 1965, Congress enacted the Medicare program for the aged. This is the first major program for which the government became the financing agency for medical services.

The federal government is concerned with three major related areas of medical care, namely, (1) the supply and distribution of resources, (2) the cost and quality of care, and (3) financing the cost.

Physicians are the key in any medical care system. A physician is the patient's point of entry into the medical care system. He not only provides services himself, but he also refers his patients to other providers of medical services. The federal government, working closely with the medical establishment, has increased the total capacity of medical schools, provided loans to medical students, raised the salary of interns and residents, and experimented with different forms of medical education, such as a combined six-year premedical and medical school. Also, many medical schools are offering courses to educate further physicians on services that can be provided by allied health workers. These efforts by the federal government will intensify in the coming years.

One approach to increase the supply of physician services is to increase the number of physicians. Another is to increase the productivity or the proper utilization of them. Many people argue that solo practitioners do not put their medical talents to full use because they are involved with so many activities not related to their professional training, such as the time they have to spend running their offices. Many argue that group practice is more efficient than solo practice. The government has been encouraging prepaid group practice by giving grants for experimentation. Many state laws and conventional practice require the physician to render the total service to a patient. Much of the service currently rendered by physicians can be performed by nurses or physician's assistants. The government is trying to encourage the most efficient utilization of physicians' skills. There is experimentation in the training of physician's assistants similar to the training of army medics and in using pediatric nurses to provide care to "well" babies.

Even if we had an adequate supply of physicians, we would still have the problem of distribution. The shortage of physicians is greatest in rural areas and low-income urban areas. The Office of Equal Employment Opportunity has embarked on a neighborhood medical center program to bring salaried physicians to ghetto areas. The Harvard Medical School is planning to bring comprehensive medical services to low-income areas around Boston. The federal government is endeavoring to equalize the distribution of services throughout the country and to increase the

efficiency of physicians. All of this means that the organization of physicians' services might change.

In the area of hospitals we have heard a great deal about the shortage of hospital beds, but this mostly occurs in urban and surburban areas. There is a surplus of beds in many rural areas. The American Hospital Association reports that the occupancy rate in 1968 in nonfederal short-term hospitals was 78 per cent. The occupancy rate in the maternity and pediatric wards is even lower. Our archaic hospital practices have prevented better utilization of these facilities. The governmental thrust today is to encourage the proper level of care to patients. A person who needs intensive care should not be placed in a general ward or vice versa. The term used by many to describe this is the "progressive care system." This approach would be workable and would reduce the total cost if the various levels of care are provided under one roof and one management. This means that intensive care, nursing care, general care, and convalescent care are all provided in the same facility but in different wards rather than fragmentated to different institutions and geographical locations.

Many of us can give personal testimony on the rapid increase in the cost of medical care. In my personal opinion, some of this is the seed we sowed years ago. In the hospital field, most of the costs are paid to hospitals through third-party payees. Through this mechanism, the consumer has lost his direct economic leverage and free choice with the providers of services. Meantime, many third-party payees view their role only as a payee, taking the money with one hand and disbursing it with the other. They play no role in representing the consumer's interest or in exerting economic leverage. Whenever the hospitals increase their charges, the third-party payees increase their premiums. They provide no external stimulants for institutions to control their costs and proper utilization of facilities and personnel. There was a haphazard growth in hospital beds and capital purchases. For example, the *New York Times* reported that, in 1967, for all hospitals in New York City that had open-heart-surgery equipment and the medical teams to perform such surgery, 75 per cent did not have even one operation performed in that year.

In the area of physicians' fees the government has used the method of moral persuasion in asking physicians for self-restraint. As to the quality of service, most governmental efforts have been concentrated in the area of licensing and certification requirements. A new thrust was introduced in the Medicare program—peer review. It requires institutions to have utilization review committees.

The financing of the cost of medical care has been largely left to the private sector. During recent years, however, when the cost of medical services increased rapidly, more and more pressure has been exerted for the public sector to assume some of the load. After thirty years of public debate, Medicare for the aged was enacted by Congress. As to people under age 65, HIAA has reported that 89 per cent of the civilian population has hospital insurance. This percentage does not give us any indication as to the adequacy of the coverage. Even though this over-all average is high, there is an uneven distribution of this protection by income group. It is estimated that virtually all families with incomes greater than $10,000 have hospital insurance. Meanwhile, only 35 per cent of families with incomes less than $3,000 have hospital insurance coverage. This disparity points out a great social problem—those who need the greatest financial protection have the least.

We see many headlines in the press today on the topic of national health insurance. What does this mean? On one end, it can mean private health insurance coverage for everyone in the nation. On the other extreme, it can mean socialized medicine. Recently, Aetna Life and Casualty testified before the House Ways and Means Committee and proposed a private-government partnership program. The Secretary of the Department of Health, Education, and Welfare has directed the Task Force on Medicaid and Related Programs to look into the question of national health insurance. The Task Force has made no findings on this subject. However, we need to bear in mind that additional financing alone will not solve the problem. If everything else remains unchanged, additional financing provided either by the public or private sector can only increase the cost of medical services. The problem has to be tackled as a whole. The supply, distribution, organization, proper utilization, and financing of medical care must be looked upon as one total problem.

MR. JAMES J. OLSEN: Historically, it has not been a simple matter to distinguish the different types of institutions known generically as "nursing homes," since they might have included homes for the chronically ill, the convalescent, the aged, the disabled, the alcoholic, the drug addict, the mentally disturbed, the mentally retarded, the blind, and the deaf. Among governmental and nongovernmental sources varying definitions and classifications of nursing homes have been used. In view of both the absence of such uniformity and the variations of state licensure laws, it has been difficult to categorize the degree to which a nursing home provided nursing or medical care in contrast to residential or custodial care.

The growth in the number of nursing homes and beds is shown in

Table 2. In addition to noting that the large increase in the number of nursing homes and in the number of beds, it is interesting to note that the average number of beds per home has increased markedly and that the number of homes decreased from 1965 to 1967. The decrease probably resulted from the reclassification of nursing homes unable to meet standards set by the states. The Department of Labor estimates that by 1975 the number of nursing home beds in the United States will reach 1.2 million, which is almost double the 1967 number. That projected total of 1.2 million will exceed the number of short-term general hospital beds predicted at 900,000 by 1975.

Medicare benefits for care in extended care facilities—as nursing homes are termed under the law—became effective January 1, 1967. The par-

TABLE 2

NUMBER OF NURSING HOMES AND BEDS

Year	No. Homes	No. Beds	Average No. Beds per Home
1939.....	1,200	25,000	21
1954.....	7,000	180,000	26
1961.....	9,700	338,700	35
1965.....	12,736	519,563	41
1967.....	12,650	632,609	50

ticipating extended care facility must have a transfer agreement with one or more participating hospitals and must meet the following certification requirements:

1. Is primarily engaged in providing skilled nursing care and related services or rehabilitation services.
2. Has the medical staff to develop and execute policies and govern services.
3. Requires every patient to be under the care of a physician who is available for emergency calls.
4. Maintains clinical records for all patients.
5. Provides adequate twenty-four-hour nursing care.
6. Has a utilization review board in effect.
7. Is licensed by the state or local agency.
8. Meets health and safety requirements specified by the Secretary.
9. Has appropriate methods for dispensing and administering drugs and biologicals.

As of July, 1967, extended care facilities certified under the Medicare program numbered 4,160, with 291,307 certified beds. About 3,200, or

25 per cent, of all nursing homes were certified, with the remaining 1,000 facilities classified as extended care facilities being in various types of institutions. Most of these units are in hospitals. About 236,000 beds, or 37 per cent, of all nursing home beds, were in certified nursing homes. The remaining 55,000 beds were in other institutions, primarily hospitals. The average number of beds in the participating nursing home was seventy-five, and in other institutions it was fifty-five.

From July, 1967, to July, 1968, the number of approved extended care facilities, as well as the number of beds, increased by 13 per cent. The increase from July, 1968, to July, 1969, was about 3 per cent.

It is quite clear that nursing homes are utilized primarily by persons aged 65 and older. Prior to the enactment of Medicare, only about 35–40 per cent entered the home from the hospital. Medicare will unquestionably alter this picture, since Medicare requires prior hospitalization. The average age of the residents of nursing homes is 78. Approximately 12 per cent were under 65 years of age. About two-thirds of all the residents were females.

The Medicare concept of extended care places a great deal more emphasis on short-term convalescence and rehabilitation, and many hope that this will result in greater use of extended care facilities by younger people. The average daily cost for extended care facility benefits under Medicare was about $18 in 1967. It is estimated that about 4 per cent of the population eligible for benefits under the Medicare program in 1967 utilized approved extended care facilities. The average duration of stay was forty-two days.

There has been a very definite trend toward the increased utilization of nursing homes; this trend has been accelerated by Medicare. This form of care will improve, and there will be an acceptance of the care by the public. The average cost of nursing home care will rise as the level of care is improved, but the per diem cost should be appreciably less than that incurred in a hospital.

More and more insurers, including Blue Cross–Blue Shield, are providing nursing home benefits on an individual and group basis. However, since most of the persons insured are below 65, where the utilization of nursing homes has been very low, the cost of the benefits has been very low. To illustrate this point, my company has a convalescent nursing home benefit in all our current series of term to 65 individual medical expense policies. In 1968 we paid over $8 million of benefits on this series of policies, of which less than $4,000 was paid for convalescent nursing home benefits.

There may be a number of reasons why nursing homes have not been

widely used by persons under age 65. Patients are often unwilling to enter the nursing home, and it would appear that the doctors are not anxious for them to do so either. The hospital is the base of the physician's workshop because it provides many ancillary services which the nursing home cannot furnish. Also time and transportation problems—and the fear of giving the patient "second best" care—appear to be disincentives to the wider use of nursing home care. If the patient receives insurance benefits in the hospital but not in the nursing home, this would tend to curtail the use of the nursing home.

MR. JAMES L. PURDY: I think *Time* magazine in its feature article last summer pointed to prepaid group practice as an absolute must if we are going to do something to stem the rising cost and growing shortage of facilities.

The typical prepaid group practice plan, if there is such a thing, is basically a closed medical care delivery system. Physically, it is normally composed of an ambulatory care facility with a large number of ambulatory services, such as X-ray, laboratory, and the like. The plan will generally own a hospital or, if it does not, it will be physically located near one with full staff privileges for plan doctors. There is a group of full-time doctors employed by the plan with some support from part-time physicians for various specialties. There is a closed group of patients who get all their medical care and treatment from the prepaid plan. These patients are people who pay some sort of monthly fee on a prepayment basis that covers all the services provided by the plan. The doctors that provide the service treat only patients that are members. Generally, doctors are on some sort of salaried basis, with perhaps a bonus for efficiency however that is defined.

Patient records in a situation like this are available to all the physicians rather than each doctor's having individual separate records. The plan provides twenty-four-hour service, and in some cases there is a home call service.

How does prepayment fit into this? Recall that the services that are provided here are more than just crisis services. We are also talking about physical examinations, routine immunizations, and so-called preventive care. There is generally very nominal coinsurance on the part of the patients, such as $1 or $2 for an office visit or $40 or $50 for total maternity care. The criticism of present forms of health insurance—that they tend to drive people into hospitals in order to get benefits for their care—is not applicable to this kind of plan. People get all their care whether they are well or sick on a fixed prepayment basis.

How does this tie in to these questions of utilization and costs? Let me quote a few statistics. Although there are a lot of actuarial factors which are not reflected, such as age and sex adjustments, nevertheless, some of these numbers appear in articles and speeches of various people who are proponents of prepaid group practices.

There is about one doctor for every 700 people in the country. Under the Kaiser Plan, which is the largest existing prepayment group practice plan, there is one doctor for every 1,400 people. Nation-wide, there are 4.1 hospital beds for every 1,000 people. Under the Kaiser Plan, there are approximately two beds for every 1,000 people. Hence, under the Kaiser Plan, there are half as many doctors and half as many hospital beds for a given population. These statistics are very general, with no adjustments for age, sex, and so forth, and the real differences are not nearly as dramatic. Nevertheless, these numbers are being used by many people to form a reaction to or recommendation for prepaid group practice.

Other utilization results come from the annual statistics published under the Federal Employees Health Plan. Again, these statistics have to be qualified, since they are not adjusted for differences in the composition of the groups. The hospital days per 1,000 covered people have remained fairly stable since 1960 at about 400 days per 1,000 people for those who have elected a prepaid group practice plan. The employees who are enrolled under the indemnity plans had a hospital utilization of 650 days per 1,000 in 1960 and 880 days per 1,000 in 1966. These are nonmaternity figures. This comparison indicates that there are only about half as many hospital days used by people enrolled under prepaid group practice plans as compared with those enrolled under the indemnity plan.

This, then, is the picture that is presented to the public and to the people who are interested in doing something about changing the health care system. Group practice is a sort of minisystem presently in operation that has fewer doctors, fewer hospital beds, apparently more efficient procedures, facilities that are basically accessible to the people, and considerable acceptance in many areas of the country where these plans exist.

Why has it not developed very rapidly, then? First let me note that the Kaiser Plan was created under unique circumstances. During the war, when Kaiser built shipyards, there were no medical facilities for his employees, and something had to be provided. The start-up motivation was, therefore, quite different from what it would be today. We should recall too that the doctors in the past have always been the focal point of medical care. Some people refer to the prepaid concept as supermarket medicine with the individual solo doctors in a position similar to that of

the independent corner grocer. It is a little unrealistic to expect all the independent corner grocers (doctors) to urge the development of a supermarket.

There are some other pressures now which may encourage new group practice plans in addition to cost-saving and utilization pressures. A number of medical schools have, for various reasons, concluded that it is to their advantage to develop prepaid group practice plans in connection with their own medical schools. For one reason, with the advent of Medicare and Medicaid, there is a significantly lower number of welfare patients available for teaching purposes in the hospitals. Furthermore, medical school training really did not train physicians in the total health concept. Training was primarily crisis-oriented and episodal in nature. There was little education in family medicine, so that physicians going out into practice never really had a chance to develop or to see family medicine in their formative years.

Also, the trend toward specialization has created a serious problem in terms of an individual being able to get all his medical care from his doctor. Now you have to find your own specialists, in many cases without any real basis for doing so. Doctors, too, are feeling the pinch of overwork. The organization of physicians into some sort of a group practice can be attractive, since it provides them with a little more ordered life.

Furthermore, new doctors coming out of school cannot afford the huge initial cost of equipping and establishing an office practice. They have been trained to do most of their medical treatment with expensive equipment that is present in the medical school complex, and they are somewhat lost, in a sense, without the availability of such equipment. So, in short, there are many pressures for group practice in addition to the tremendous concern over the cost of health care.

It would sound, then, as if this is really the whole answer to the problem and that we ought to immediately proceed to organize the whole country into one huge prepaid group practice plan.

Let me, without going into any real detail, pose a few of the questions and concerns that, even today, surround some of the existing prepaid plans. Is there a possibility that quality, however one defines that term, will really decline in a supermarket situation? Another question that is continually raised is why hospital utilization is significantly lower under the various group practice plans? Does it really mean that half of the people who are in the hospitals today do not need to be there? Why, as some studies show, are there somewhat different patterns of surgical care for certain kinds of disabilities under the group practice plans? Tonsillectomy is a prime example, in that the number of tonsillectomies is

vastly lower under prepaid plans in comparison with the general public. Will all this reorganization produce more medical care, or will it merely result in more free time for the physicians? The doctors may lose the kind of incentives and drives that generated the present pattern of physician care, and higher organization may not generate more medical service but merely more free time. There are many different studies that people are trying to undertake to evaluate some of these questions. Some of the insurance industry has banded together in one venture, and there are some other studies addressed to these questions.

One other very key question is what all this would do to the future of the insurance industry. What part does the group health business really have in the spread and continuing growth of prepaid group practice? Are there any insurance risks to bear in prepaid group practice? Just where does insurance fit into the picture?

In the minds of some people, there is no role for the insurance company in this kind of setup. I think that, generally speaking, the labor people, who are rather strongly in favor of development of prepaid group practice, have said officially that they feel there is no real role for the insurance companies. Many insurance companies think there is a role. As many of you, I am sure, know, there are some experiments under way right now. One is being carried on in Boston with the Harvard Medical School to try to relate to a prepaid plan in its formative stages and to discover how and with what success the insurance companies can relate to prepaid group practice. It is too early to tell exactly where this will go and what will happen, but I am sure we will all be seeing a lot more emphasis on this kind of thing in the future.

MR. HICKMAN: There have been considerable concern and complaint over the fact that the health care providers seem to be insulated from the consumer and the normal competitive pressures of the market place and that as a result there are few incentives for the provider to improve his performance. On the assumption that we cannot achieve effective incentives in the form of profit motives and competition among facilities, the most commonly discussed method is to provide incentives for efficient use and operation of facilities through third-party reimbursement systems.

It would seem that ideally any incentive system should be effective in four major areas. The most commonly heard about is to encourage efficient operations of the facility itself. But, probably equally important, if not more so, should be incentives to minimize unnecessary admissions, to minimize unnecessary services either in their number or their intensity,

and also to give direction for new facility construction to areas of greatest real need. Limiting ourselves to the third-party reimbursement mechanisms that might be effective in these areas, I might mention that over the years Blue Cross plans throughout the country have developed a number of incentive programs and, more recently, the HEW requested specific proposals for test programs to be used under the Medicare system. Fifty or so were received, and I understand to date that about five have been approved by HEW. Essentially, the basic concepts of all these seem to break down into about seven or eight categories. Each one of these different concepts should be measured against their effectiveness in each of the four areas mentioned above and examined for difficulties that might have been experienced in their use.

The first and most comprehensive incentive system is to make payment on the basis of a pre-established per capita payment. (By "pre-established" I mean that it is a basis of payment which is either negotiated between the parties involved or established by an outside authority who is presumably objective and competent.) The per capita system would seem to offer incentives in at least three of the four desired areas. Since the provider receives the same amount of money no matter how great the utilization, this approach should encourage operational efficiency and it should minimize the number of unnecessary admissions and the frequency of unnecessary services or unnecessary intensity of services. It probably does not give much direction to new-facility construction. Primary difficulties in this system are twofold. First, in order to be effective it has to have a self-contained and definable exposure of people who will only use the facilities of the providers who are participating in the program. This situation is especially hard to achieve, except in small local communities with limited facilities or through prepaid group programs. Second, there is quite a bit of criticism, rightly or wrongly, that this sort of system results in incentives so powerful that it jeopardizes the quality of care. That subject is the topic of considerable debate. Some areas using this method would be the prepaid group practice plans, such as Permanente; HEW has approved a test reimbursement of this nature with HIP in New York; the Colorado Blue Cross Plan has been testing this concept for a couple of years now in a small community in the southwest part of their state; and a small community of Maine has proposed a similar system for HEW consideration for Medicare.

A second concept would be to make payment on the basis of a pre-established per diem payment to the hospital or facility. The per diem could be a common per diem for all similar types of facilities or tailormade for each facility, based on a number of considerations. Here the primary

effect is to encourage operational efficiencies and to minimize the number of unnecessary services. The primary difficulty is that it might be a disincentive to minimize the length of stay in a facility, since the extra days that might be tacked on to any particular case would probably include few ancillary services and be at a lower cost than the average per diem negotiated. There would, therefore, be some incentive for providers to prolong stays. This aspect would have to be dealt with specially under such an incentive system. An example of a "third party" which uses this approach is the New York City Blue Cross Plan, which, effective January 1, 1970, intends to establish for each hospital a flat per diem which would be used as the basis of final payment for all services rendered in each hospital for Blue Cross members in the ensuing calendar year. They have also included in this program a control item on utilization which is intended to offset the hazard that length of stays might be prolonged under the system.

A third concept is to make payment on the basis of pre-established charges for various services that are received. Here again, this primarily offers incentive toward operational efficiency and does not, in itself, do anything to minimize unnecessary admissions. It may actually be a disincentive for minimizing the number of services rendered, since, if a provider were to substantially increase the number of services rendered, the unit costs for such ancillary services would probably be reduced and the provider would be able to enjoy a windfall through the margin of the pre-established charge over its artificially reduced unit costs. Still, this approach can be effective if utilization patterns are carefully monitored, and it has been used by almost all Blue Cross plans that pay providers on the basis of full charges instead of "cost statements." The Indiana Blue Cross Plan has, under its Controlled Charges Program, the most notable example of effective use of this approach. It involves an official contractual relationship for negotiating the pre-established charges, and the negotiating board includes representatives of the public, providers, professions, and industry as well as Blue Cross. It is my understanding that HEW has also recently approved a test program of this sort in the Connecticut area.

A fourth system would be to reimburse providers on the basis of actual costs but share with them the savings achieved through improvements in productivity that result during the year. Here again, this is orientated toward incentives for operational efficiencies primarily, and it faces the same hazards as other per diem and per services incentives in that unit costs may be artificially reduced by prolonging length of stay or by increasing the number of ancillary services for each case. As a result, strong

utilization-review programs must go along with this type of program. An example of this sort of system is one that has recently been approved by HEW for twenty-six hospitals in southern California. This system provides for industrial engineers to work with the various hospitals that are involved, constantly trying to improve their performance in various specific areas. At the end of each year they will attempt to estimate the savings that have resulted from these efforts, and these savings will be shared with the provider, the carrier, and, through the carriers' rates, the public.

A fifth concept is the actual sharing of savings from reduced *utilization* that has resulted during a particular period. This usually focuses only on savings or shortening of length of stay. Often it is used in tandem with a "per diem" or "controlled charges" approach to incentive reimbursement systems. This is the device that the New York City Blue Cross Plan intends to incorporate in its January 1, 1970, per diem incentive program, whereby, if the length of stay, subject to various tests, is shortened significantly, the provider will share in the savings that result for the third party. The Virginia Blue Cross Plan has also been doing this for some time with its contracting hospitals.

A sixth form of incentive that has been used involves a comparison of the various facilities among themselves and permitting those that are the most efficient or produce the lowest increases in costs from one year to the next to share in the "savings" that are a result of their greater efficiency. Again this system is largely orientated to operational efficiencies and really offers little incentive for minimizing unnecessary admissions; if not carefully monitored it could actually offer a disincentive for controlled use of the number of services or length of stay. Some examples of areas that are using this especially effectively are the Cleveland, Saint Louis, and Richmond, Virginia, Blue Cross plans. Under each of these programs the provider is permitted to keep about 20–25 per cent of the savings that result from their "better than average" efficiencies.

A seventh concept is more a "control" system than it is an incentive; on a postaudit basis the facility is measured as to whether its operations in specific areas were efficient, and in those instances that they are deemed not to be, a ceiling is set on costs that will be reimbursed by the third party. This technique clearly requires a great deal of co-operation between the providers and the third parties, and, if properly expanded, could take into consideration not only operational efficiencies but also utilization efficiencies. An example of this sort of program exists in Maryland, where the HEW has approved a test program whereby an outside industrial engineering firm works with the hospitals in various depart-

ments to establish uniform accounting and work-measurement programs. This provides for a basis of comparison of results among the various hospitals, and on a postaudit basis measures the effectiveness of the hospital provider. In instances where the providers do not appear to be operating effectively or have not made the necessary improvements, this outside organization actually sets a ceiling on the reimbursement. Also it is my understanding that the recent law passed by the New York State Legislature relating to control of hospital costs for Medicaid and Blue Cross is more or less of this "postaudit cost ceiling" basis.

So far none of the systems that have been touched upon are really suggested as very effective in giving direction to the construction of new facilities in the areas of greatest need. I am personally convinced that this has to be done to a large degree through area-wide planning approval requirements in the reimbursement formulas. As you are aware, the AHA has gone on record as supporting the concept of area-wide planning reimbursement principles. The HEW also has recently taken this position, and, of course, the Blue Cross plans and the insurance industry have historically been involved in the voluntary area-wide planning efforts throughout the country.

There are at least two approaches which have received only little discussion but which might merit some investigation. One would be to make payment on the basis of a pre-established "per case payment." This could be like a surgical schedule presently used to pay physicians but would be designed to pay the institutional provider a flat amount for each case; this could vary, depending upon the patient's age and the nature of the admission. This would provide incentives for both operational efficiencies and limiting the number and intensity of services rendered to a patient to those which are absolutely necessary. Since payment to the provider would not vary with the length of stay or number of services rendered the patient, there would be a strong incentive to minimize the number of unnecessary days of care and the amounts of unnecessary ancillary services. It could be used by all third parties, whether or not they have reimbursement agreements with the provider.

The second of these, which has been tried in a few places but is really outside the scope of reimbursement arrangements, is to make incentive payments directly to the employees of the facilities, so that they participate in operational savings. Where this has been tried, it seems to have been effective, at least on the surface, in controlling increases in operational costs. A by-product effect in at least one instance was a substantial reduction in employee turnover. This aspect in itself would almost make the experiment worthwhile.

Most of these systems are basically too new to give any undisputed results and answers as to their effectiveness, with possibly the one exception of the per capita approach under the prepaid group concept; even here there is much controversy on what the actual savings are and on the impact on the quality of care under the system. In any event, probably almost any system that is developed will absolutely have to be supplemented by strong utilization review procedures by all parties and supported by complete co-operation among the providers and the third parties in area-wide planning efforts.

MR. ALDEN W. BROSSEAU: Recognizing (1) the impracticality of trying to control hospital utilization after the fact and (2) the central role of the physician, Cal-Western Life, in conjunction with the Medical Care Foundation of Sacramento and the major Sacramento hospitals, has developed an experimental hospital confinement certification system. The program provides the following:

1. Preventive care benefits.
2. Broad outpatient benefits, reducing physician-patient incentives to hospitalize.
3. Preadmission certification for "medically necessary" confinement, with special provision for emergency and out-of-area confinements.
4. 100 per cent coverage, including intensive care, of certified confinements for the certified length of stay (noncertified confinements are covered at 75 per cent of charges).
5. Benefits for progressive care: extended care and hospital-co-ordinated home care, both on a certified basis.

The plan is administered by a certification co-ordinator under the supervision of Foundation doctors, and all major hospitals in the Sacramento area participate. Confinements are certified initially for a length of stay equal to the fiftieth percentile of stay for the given diagnosis and age of patient, based on the 1969 study by the Commission on Professional and Hospital Activities, Ann Arbor, Michigan, adjusted for California utilization patterns. Certification for extending the stay to the seventy-fifth percentile requires review by a Foundation doctor. Certification beyond the seventy-fifth percentile requires review by a committee of Foundation doctors. Both patient and attending physician are kept informed in advance of certification status.

Patients retain their right of free choice of doctor. Foundation doctors accept fees according to the California Relative Value Studies, with a specified unit value of 100 per cent payment in or out of hospital.

The program has just been introduced on a pilot basis locally, and the experimental period is expected to continue for at least a year.

MR. HARRY L. SUTTON, JR.: I believe that the implementation of a scheme of national health insurance at the present time would result in chaos because of the inability of the present health care system to cope with the resulting demand for health care services. Consideration should be given as to whether the health insurance business should be considered generically a part of the medical delivery system rather than a financing mechanism, as we have traditionally considered it. This change in concept might well lead to a different direction of policy and goals.

INSURANCE DISTRIBUTION AND MARKETING SYSTEMS

1. In terms of new distribution and marketing systems for insurance products, discuss:
   a) Systems which have been developed, including mass marketing and sponsored markets.
   b) The market research activities that have been employed.
   c) The impact on the pricing of the insurance product.
   d) Special home office services offered to the sales force or the clients.
   e) The impact on the existing sales force, including compensation of salesmen and managers.
   f) New-product designs that have emerged.
   g) The role of the actuary in these developments.
2. What new distribution or marketing systems are likely to emerge in the future?
   a) What influences in our society will create the need for new systems?
   b) Are any such new systems now making their appearance in beginning stages?
   c) What will be the role of the actuary in creating and operating these systems?

CHAIRMAN JOHN C. ARCHIBALD: As we all know, successful marketing is very important in any industry. Unless we are able to sell our products to the public, we are in difficulty. Each industry is trying to find better ways to serve the public. While the insurance industry has grown rapidly, we know that it is also receiving a smaller percentage of the savings of the public at the present time than it did a decade ago.

In the Future Outlook Report prepared by the Institute of Life Insurance under a committee headed by John Miller, Past-President of the Society of Actuaries, it is stated that the current-attitude studies strongly suggest that market penetration can be improved if we adopt new techniques. One of the techniques mentioned was mass marketing. Can this idea be used to a greater extent than it has in the past? It has been successful in other industries.

MR. HAROLD D. ALLEN: At John Hancock, we see our main problem for today and for perhaps most of the next decade as one of increasing the level of our agents' compensation. Fifteen years ago an ordinary (non-debit) agent could, after a three-year training period, expect to make quite a satisfactory income for himself by producing a level amount of, say, $300,000 of ordinary business per year. Based on Linton A lapse

rates and our then average-size premium of $31 per thousand, such production would have provided this agent with an income of about $5,500 in his fourth year with the company.

Due almost solely to the decrease in the average-size premium from $31 to $19, our agent would now have to produce about $500,000 to earn the same $5,500 in his fourth year in the business. For our agent to keep up with the 37 per cent increase in the cost of living from 1954 through 1969, he must produce an additional $185,000 per year for a total of $685,000 and a total income of $7,500.

Finally, keeping up with the cost of living is not likely to be enough except for those individuals who are locked into a particular profession or company. In other words, the average man in the United States (and I presume around the world) tends to expect his compensation to increase not at the rate that the cost of living is increasing but at the rate that salaries of his neighbors and acquaintances in other lines of business are increasing. In other words, our agent expects his compensation to increase at the rate of the cost of living plus the average productivity increase being realized in industry and in general. The fact that these productivity increases may not be realized in the sales end of the insurance industry matters not a whit to an individual who is contemplating the life of an insurance agent. We can see this quite easily in that our training-allowance-plan salaries have increased from $350 per month in 1954 to about $650–$700 per month today. Using this as a guideline, our typical agent must produce at a steady $900,000 rate to have the amount of income (about $10,000) in his fourth year comparable to that which would have been produced by a level of $300,000 in 1954.

In a nut shell, the majority of our agents are not doing this well. This is hurting us in many ways. Our agent-termination rate is increasing. It is frequently harder to hire a new agent unless we are willing to employ a starting allowance which probably cannot be validated—a straining of our section 213 margins. It is necessary to pay even higher settlements in our regular negotiations with our unionized debit agents (who are faced with very similar earnings problems).

In view of the foregoing, our first concern in the development of any new marketing techniques has to do with the effect of such techniques upon the compensation of our agents. Hence, after considerable study, the John Hancock has committed itself and its ordinary and debit agents to the sale of mutual funds and variable annuities, and we are considering going in the same direction in regard to casualty business. We have taken these steps for a number of reasons, including, certainly, the advantages of offering a complete coverage to our policyholders and considerations

of the profitability of these new lines of business to the company. Our first and foremost reason, however, for introducing these new lines has been and continues to be that we believe our agents can make more income by having the additional lines of business available.

As many of you know, the John Hancock a few years ago offered its unique so-called Olympic plan, which offered group insurance to college students at extremely low rates on the order of $2.20 per $1,000. The John Hancock, in fact, was widely criticized in some parts of the industry for selling insurance on such a wholesale basis; yet, here again, we are doing this primarily to provide valuable leads to our agents at the time the Olympic group insurance would normally terminate and only secondarily to build up our group volume and group earnings.

As a final example the John Hancock has within the past twelve months formed a new corporation which, in effect, trains our agents to become general counselors in the competitive field of insurance and financial services to doctors and dentists. Each agent who is trained then has the opportunity to acquire a franchise for a fee of, say, $200. This franchise might cover one to two hospitals in a city or perhaps an entire county medical association. While we certainly expect this new corporation to be profitable, our principal reason for starting this venture was not the anticipated profits of the corporation but, rather, the anticipated substantial increase in compensation to those John Hancock agents who acquire and take advantage of the medical franchise made available through this corporation.

We research each new marketing approach as thoroughly as is feasible with due consideration for timing, the total investment involved in the venture, and the kind and cost of the research that can be done. For example, preceding the decision to enter mutual funds and variable annuities, we did a great deal of research involving portions of our agents who would be likely to pass the registered representative's examination and the levels of production and income that various classes of newly licensed ordinary (and debit) agents might expect to attain, the extent to which such additional compensation might operate to reduce our life insurance compensation, and so forth. We are making similar market research studies in the casualty area.

While many of the marketing ventures have had no particular effect on premiums or dividends, some certainly have. For example, in connection with the new corporation that provides franchise business for agents in the medical area, it was necessary to develop a brand new minimum deposit plan with its own scale of premiums and dividends. Also, in the area of Olympic group life insurance for college students, we

developed a very special and very low group life insurance rate of $2.20 per $1,000. Obviously in the variable annuity area a whole set of new rate structures is being developed.

In connection with certain of these new marketing ventures, special home office services are made available. Again let me refer to the corporation that provides franchising to agents who service doctors and dentists. The corporation itself, not the home office, provides many services to these agents. First, in any new area being approached, all doctors included in the area are sent literature indicating that a representative of the corporation (our John Hancock agent) will be approaching them in the near future and also indicating that they will have an opportunity to be given some competitive group insurance, and so on. The agent is given a list of all such doctors in the area, together with an additional list of those who have indicated by return mail or postcard special interest in any particular insurance or financial service. Next, the corporation makes available the financing of 100 per cent of the premiums, not just the amounts covered by the policy loan value, as would be normal for a minimum deposit plan. Finally, this corporation provides outlets for other financial services that the client may want, and, for some of these services, commissions are available to the agent.

In regard to our Olympic group case, each agent (agency) is given a list at certain intervals of every eligible covered individual.

MR. ALFRED L. BUCKMAN: My company, Beneficial Standard, was the first company to use credit-card facilities as a means of billing and collecting premiums. We started this system in 1958 by offering a specially designed product to the approximately 1,000,000 members of Diners Club. Since then, we have branched out to use the facilities of many other credit-card organizations, including department stores, banks, oil companies, and even the Playboy Club. In each case we tried to design a special policy form that would be best suited to the composition of the membership of the respective credit-card organizations. To date, we have been successful in the sale of travel accident policies, all accident policies, hospitalization policies, and hospital and surgical policies. We have not yet been successful in selling life insurance products to members of credit-card organizations.

Another marketing program that our company has entered upon is the sale by salary deduction of a combination mutual fund and life insurance package. The basic plan provides for a $5 weekly contribution by each employee enrolled in the program. Approximately half of the premium goes into a no-load mutual fund, and the remainder of the premium

provides life insurance on the employee. No deviation from the $5 weekly contribution is permitted.

Sales are made by first obtaining the consent of the employer to approve the salary-deduction plan and to permit salesmen to call upon his employees. The employer is not permitted to contribute any part of the $5 weekly contribution. The employee is prevailed upon to set aside this amount for his future by investing part of the money in American industry through mutual funds and the remainder to provide insurance protection on himself. The amount of insurance varies with the age at issue. The policy contains a double waiver of premium disability benefit, so that in the event of total and permanent disability of the employee there would be income to replace the mutual fund payment as well as to waive the premium on the insurance policy.

The employer makes the salary deductions. If the salary is paid on a semimonthly or monthly basis, the employer deducts $10.83 or $21.66, respectively, in order to keep the $5 weekly contribution level for all employees. The employer sends the withholdings to a trust company, which divides the funds between those which go into the insurance company and those which go to the mutual fund.

The agency writing this business has been extremely successful. It will pay for nearly $300,000,000 in insurance in 1969, not all of it coming to our company, and indications are that it may reach $500,000,000 in sales in 1970.

I want to say some things about some of our market research activities. The first product that we offered to Diners Club credit-card holders was a traffic and travel policy with high limit benefits and premiums which were admittedly conservatively high to protect the company against expected antiselection. In spite of the conservative premium, our first-year loss ratio was nearly 90 per cent—far in excess of what we had anticipated. With the passage of time, however, we found that we were able to liberalize the the benefits on three different occasions, each time amending all the policies previously issued to include the more liberal benefits currently being issued.

A different and more direct type of research was used in 1967, when we sold two companies from the Beneficial Insurance Group to J. C. Penney Company, the second-largest retailer in the country, who felt that they had to compete with Sears Roebuck. J. C. Penney asked us to manage the two companies for them. They have 10,000,000 credit-card holders, 6,000,000 of which are active.

With so many credit-card holders to solicit, it was necessary to experiment to find the most desirable product for this particular population.

Our first experiment involved 400,000 card holders, using fourteen different tests of approximately 30,000 each. Seven different product combinations involving hospitalization only, hospital and surgical benefits, all accident, or travel accident were tested. For each product combination, we prepared sales literature in our shop. J. C. Penney employed a Madison Avenue advertising agency to prepare literature for the same products in the belief that the professional advertising agency could prepare more attractive sales material than we could develop. The results of each of the fourteen tests varied considerably, but in each instance our literature proved more effective than the corresponding literature produced on Madison Avenue. This indicates that there is no substitute for experience in a specialized area of activity.

In the case of the mutual fund and life insurance product combination that we are selling, an agency brought this to us in 1968. We have sold this combination for approximately a year and a half, but the agency started experimenting with it in 1964. At first, they tried to promote individual packages of life insurance and mutual funds, all paid for by salary deduction. They soon discovered that this does not work; they then developed the idea of having one level combined contribution of $5 weekly.

The sale of this package is not made to the individual until the employer's approval is given, because the agents cannot solicit a salary-deduction plan without the employer's approval. An experienced businessman, the employer, believes that this package is desirable for his employees so that they will share through mutual funds in the American scheme, even though he has only $5 a week to put aside. For this $5 per week, he has both the insurance and the mutual fund.

One would believe that a mass marketing of insurance would have a profound impact on the pricing of the insurance product. However, when one analyzes the premium rates that are being charged by various companies engaged in the mass marketing of insurance, one finds a great range of prices, from considerably below that normally charged for individually sold policies to prices that are in some cases considerably higher than corresponding, individually sold policies. This is particularly true in policies providing basic hospitalization insurance.

The method of sale has much to do with the ultimate price of the product. Where a product is sold with a minimum of underwriting and, therefore, a maximum of antiselection, as is true of the hospital policies sold by newspaper advertisement to persons over 65 years of age to supplement Medicare benefits, the premium rates are exceedingly high. It is here, however, that the insurance company experiences the maximum

amount of antiselection. Naturally, a company that offers such a product, as a rule, does not have a comparable product in its portfolio for sale by an agency force on an individual basis. The antidiscrimination statutes of the various states would be violated if the company did have identical products sold at two different premium rates.

Premium rates for accident-only benefits, including travel accident coverages, are generally lower when sold by mass marketing than by individual sale. Gross premiums for these benefits are low, even for large amounts of risk, and the expense factor becomes significant in determining the gross premium.

In the field of mass marketing of life insurance, there is also a great range in prices. There are some quasi groups that are being sold at premium rates which are in some cases even lower than true group insurance premiums. One such group that I came across charged $14.40 annually for $10,000 of term insurance sold to college students while they were still students with the right to convert to permanent insurance upon graduation or separation from the college. This is considerably less than true group insurance premium rates for persons of this age group.

Other quasi groups covering professions such as doctors, lawyers, and accountants are found on the market providing amounts of insurance up to as much as $25,000 at premium rates significantly lower than individual ordinary rates but higher than true group rates. Agents may find these quasi group rates difficult to compete with, but, since the amount of insurance available under these plans is limited, the effect on the agency force because of the existence of these plans is not too disturbing.

In general, if one were to go by the prices of insurance products alone, one could learn the prices of everything and the value of nothing. The variation in prices of accident and health products sold on a mass-marketing basis is generally related to the method of marketing. The variation in prices in mass marketing of life insurance products would indicate that some companies, in their anxiety to sell insurance, are pricing their product below the level of economic feasibility.

A special home office service that could be offered to the sales force concerns conversion of term insurance policies. As you know, we are moving away from permanent plans of insurance in our industry to term insurance, and it behooves us to make every effort to improve the conversion rate of this business. Yet there is a recent L.I.A.M.A. report that showed that 97 of 139 reporting companies merely send letters on the expiry date of the conversion option. The remainder send more frequent letters at other times; some on each anniversary; some at the end of the second, third, and fifth years; and some at the mid-point of the term. Two com-

panies reported that they enclosed looseleaf, printed leaflets at time of issue of the term policy, giving a full description of what is available on conversion.

We have independent agencies, and they are producing the lion's share of the business for the company. Even though we are doing a substantial volume of mass marketing through the programs I have described, we have had very little friction with our own agency force. We have had much more friction with outside agency organizations, which have objected to our mass-marketing techniques.

One thing that we have done from the very beginning in all our programs offered through credit-card facilities is to provide for the applicant's own agent or broker to act as his agent. Less than 1 per cent of the business comes through personal agents; over 99 per cent comes directly through the mail. The products that we sell, I repeat, are low-premium products, generally below the level of premium that an individual agent would find worth his time trying to sell. For this reason, the impact on agents of our mass-marketing programs has been negligible.

The role of the actuary in mass-marketing plans is to take the responsibility for failure while the sales department takes the credit for success. Actually, the role of the actuary varies from company to company and with the capacity of the individual actuary. Each actuary has his own specialty; some do well in one area of activity while others excel in another. Generally, the actuary is responsible for the economic feasibility of any program. He has to make his analysis and his asset-share studies based on reasonable assumptions which can be developed in brainstorming sessions with his associates. Obviously, the questions of product design, experience within the industry, retention limits, reinsurance, standards of underwriting, and similar considerations must be the concern of the actuary.

Basically, he is the person responsible for the economic feasibility of the program, and, if he has enough influence in his organization, he can prevent many failures. He should be able to make changes in suggested programs, where necessary, to make economic successes out of what may be sales successes but economic failures. We are responsible, we actuaries, for the economic feasibility, and we cannot shirk that responsibility.

MR. HAROLD THOMPSON: In Canada, group ordinary is a relatively new product involving in most instances a new marketing system. Although it is only offered by a few companies, one company—the Crown Life—has enjoyed rather marked success with it. They sold approximately $300 million of it in 1968. In the early stages about 55 per cent of

eligible employees elected "ordinary insurance," but this has dropped to about 35 per cent in more recent cases. This illustrates that much of the success of obtaining "ordinary" elections is dependent on the agent—will he follow through with all eligible employees or will he ignore large segments of the group?

Just recently, the Crown Life has added a further twist to group ordinary. In addition to allowing eligible employees to elect "ordinary" insurance, the employee may also elect to make contributions to a segregated equity fund.

Group ordinary, along with equity, is the Crown Life's method of developing a new marketing system for individual insurance to assist the agent to become more effective. It is an attempt to supply the agent with a ready source of prospects and a method of dealing with these prospects very efficiently. Crown Life has developed a 14-minute audio-visual presentation that an agent uses with small groups of employees. The agent holds discussions with groups of ten to twenty-five, using the audio-visual presentation and sales-material handouts. He then has the opportunity, depending on the response of the individuals in each group, to have individual sales interviews with employees.

The results depend largely on how well the agent actually follows through. I understand that in some groups the agent ignores the lower-income employees and concentrates on the supervisors and managers. Apparently, the commission system that is used is the cause of this. Perhaps if there were agents on a salaried basis or something other than the commission method of payment, they would go after the more modest income groups. Something is needed to create a discipline to ensure that all the employees are adequately interviewed and more completely sold.

The only sort of new distribution system—and it is not really new—in Canada is the university students' program. It is sold by one company and is sponsored by the university unions across Canada. It has been covered by this one company for several years and is an attempt to create a market for its own agents. The coverage that is sold is primarily a term insurance product.

It would be an impossible task to survey all companies in the United States and Canada to determine what market research activities they employ or have employed. However, the Life Insurance Agency Management Association is the principle industry source of sales and marketing information. But, when I asked Paul Thayer, Vice-President of Research of L.I.A.M.A., what market research activities have been used by companies, his answer was "Very few."

There have been the Yankelovitch opinion and attitude surveys,

which have been of considerable help to the industry. Recently, one of the larger firms of consulting actuaries conducted a survey of a representative group of companies. The question asked was in two parts: (*a*) What are you doing in market and product research? (*b*) What should you be doing in market and product research? Although the question suggests that a reasonably precise and, perhaps, uncomplicated answer might be expected, it was not found to be quite so simple. The answers ranged from the one word "none" to descriptions of some excellent programs.

I believe that several conclusions can be made from the answers to this survey. First, to return to the answer given by the Vice-President of Research of L.I.A.M.A. to my question: "There are very few market research activities and even fewer organized market research activities."

Second, there is a definite interest in the college and student markets in mass-marketing areas of association groups and salary savings and in mutual fund and equity sales and combined sales with life insurance.

Third, there is some indication that companies are beginning to work on determining answers to questions like the following:

1. Whom are we selling to now, geographically and individually?
2. What are the characteristics of our buyer and the product that we are selling to him?
3. How does this compare with the population and economy of the specific area with a view to determining better sales methods under the present distribution or marketing system?

MR. ROBERT C. DOWSETT: As Mr. Thompson mentioned earlier, an interesting new marketing idea has been developed by the Crown Life Group Department and made available in Canada. As a companion to a group ordinary life insurance (GOLI) policy sold to an employer, a special group equity endowment (GEE) policy can be issued, under which those employees who have elected to contribute enough dollars to get the ordinary life protection are given the opportunity of depositing additional amounts (starting as low as $5 per month) into savings benefits directly tied to a separate investment fund. The minimum GEE policy monthly premium is $50. No employer money is paid into the GEE policy—only employee contributions. The benefits provided to the individual employee are very much like those available under a separate monthly premium deferred variable annuity, which is equity-linked during the accumulation period and has flexible premiums. In Canada we are presently able to issue this type of insurance contract without Securities Commission supervision, as the provincial superintendents of insurance have developed and are using special rules for regulation of variable insurance contracts.

MR. WALTER S. RUGLAND: Connecticut General considers mass marketing as an area of great opportunity. We have done a significant amount of research regarding possible marketing approaches, and the outcome has been the establishment of what we call the "special marketing department." The special marketing department is best described as having a twofold purpose: (1) sales support in making the sale to the plan sponsor and (2) solicitation capability for reaching all prospective policyholders under the influence of the sponsor. Our market target is employee-employer groups of 200 or more lives and association or franchise organizations of 1,000 or more units.

Our approach to special marketing is to split the sale into two pieces. The first is the master sale to the sponsor; the second is the solicitation or sign-up of individuals given access to the plan through the sponsor.

Special marketing involves all Connecticut General product lines. Individual life insurance, equities, property and casualty insurance, pension plans—all are products appropriate to our special marketing program. The principles guiding us in the development of the products which we will make available in special marketing are the following:

1. The products must meet an identifiable policyholder need.
2. The cost to the policyholder should be lower or the coverage better than that which can be purchased through individual marketing.
3. The enrollment procedure will make the purchase convenient.
4. The underwriting procedures for individual applicants must be simplified.
5. The premium payments will be made on a convenient basis. In employer-employee situations salary deduction is required. Administration must be simplified and require a minimum of sponsor involvement.

Our approach is to develop a separate portfolio of products and systems. This effort is now under way and near completion. We will be able to market tax-deferred annuity programs, association-franchise pension plans, individual life insurance, a mutual fund investment completion program, automobile and homeowner insurance, and association group insurance. We will offer expertise in the enrollment and solicitation area for each of these particular lines of business.

Our prime determinant in deciding to enter the special marketing development was an extended period of research among insurance brokers and other insurance companies. We also spent time with the academic community in an attempt to get a firmer fix on the demand anticipated by the individual most likely to benefit from mass marketing over the next few years.

Connecticut General special marketing products are priced with anticipated exposure and experience in mind. As an example I will comment

on the individual life insurance pricing. It would be quickest to say that we have priced our special marketing products, which are nonparticipating, with completely dissimilar gross premium assumptions, with the exception of the interest assumption, which is the same as that in our most recent regular business. We have used mortality consistent with that anticipated, including extra loading for possible adverse selection in the early years. Our expense assumptions are, by definition, required to be significantly reduced, and we have put ourselves on a tight expense discipline in the development of our systems which will handle this mass-marketed business. We have also adjusted our lapse assumptions to reflect anticipated exposure.

We feel it is important to have the outcome of the gross premium calculations reflect somewhat lower premiums in the age brackets under 40. As the age increases over 40, underwriting liberalizations and the convenience of the availability of the coverage become more important to the client, and therefore the premium-rate differential can be less. Our mortality assumption requires that it be less also.

We feel that home office services are the key to the success of the special marketing approach. Our effort is geared entirely toward capitalizing on the relationships our group and individual sales force have with decision makers. By our definition, their role is limited to this function. We will provide proposal services and master sale assistance if deemed necessary. In addition, we will offer a trained group of sales representatives. These men are trained in the sales technique that we like to refer to as the "bullet sale." We anticipate fifteen minutes of face-to-face consultation, and we ask the possible policyholder to make only one or two decisions—with a maximum of three choices for each decision. The ideal situation, however, and the one which we feel we will use most, is to give the prospective policyholder one decision with two possible answers—yes or no. The second-level decision in some instances will be how much. But, there again, he has only two or three choices.

We have introduced the mass-marketing facility as an additional tool to aid in the growth of our field force in terms of total growth and individual growth. It allows us to sell more business *through* the people we already sell business *to*. We have divided the traditional insurance sale into two pieces; the master sale or "control" piece will pay commissions to salesmen, and in many instances these commissions have been somewhat leveled. The commuted commission pattern will be between the normal individual insurance and group insurance scales. We will pay managers according to the established mode, with the master sale commission as the base. The special marketing department, through its

soliciting facility, will use that portion of the premium normally allocated for its solicitation or administration.

Although no specific coverage designs have been newly developed for the mass-marketing program, we have developed a complete set of new products. The policy forms are new, and the rates are determined for the anticipated experience; everything is a newly developed feature. In addition, we have developed some unique packages. One of these is the pension program available to units of associations or franchises. Another is the investment completion plan. A special part of our program is that we will consider designing special coverage forms for groups large enough to merit the development and gear-up expense. As of today, we cannot anticipate whether these would be existing product forms in a newly massaged structure, or whether we would have a coverage pattern as yet not known in the industry.

Our actuarial staff has been prominent in the implementation of the special marketing operation. Our roles have not been different, however, from the traditional actuarial functions. We have been involved in pricing, product design, and other fundamental development areas, including system work. Perhaps the most difficult part of the actuary's function in our work has been to divorce himself from the traditional approaches inherent in his current-line responsibilities to visualize the difference in the mass-marketed product from the regular line in which he is involved. This is one area where we are not allowed to say that we will do it as we have always done it. By definition, the way we have done it won't work.

MR. PAUL T. BOURDEAU: In 1968 the Travelers Insurance Company formed an employee financial services department in order to assist employers in establishing programs whereby their employees' personal insurance needs could be effectively handled. Through this arrangement with the Travelers which the employer makes possible, the employees may purchase, if they so elect, various forms of individual life insurance and annuities, homeowners insurance, and family automobile insurance. Premiums are handled through payroll deduction; there are no employer contributions in this program at this time.

Representatives of the Travelers are made available at locations specified by the employer to discuss the employees' insurance needs in these various areas. The Travelers representatives are compensated either by commission or salary, depending on the needs of the particular situation. In all cases there are a broker of record and a countersigning agent, where required by law.

A full range of life insurance products is made available. In the homeowners and automobile field, prepackaged plans with options are employed. We have required that life insurance coverages be made available in order to install such a program. There are no totally new products, but a special, open-end automobile policy is used, which also has monthly premiums and simplified rating. The simplification of the product line helps to reduce distribution as well as administrative costs. Moreover, it simplifies the training of agents and salaried staff men.

The cost of insurance to the employee under this program compares very favorably with similar forms available to individuals on a non-payroll-deduction basis. I would estimate that the cost to the employees for a homeowner or automobile policy averages about 15 per cent lower than our similar policies sold outside this program. About two-thirds of this reduction is possible because of lower marketing and distribution costs, and about one-third of this reduction is due to administrative savings. It appears that the administrative and marketing economies for life insurance can be reflected in monthly premiums which are one-twelfth of our regular annual premiums with our usual payroll-deduction size discount factors. It is of interest to note that the homeowners and automobile policies are issued through the Standard National Insurance Company, which is a subsidiary of Travelers Corporation.

The degree of employee participation in such a plan depends on many factors, including the support given to the program by the employer. In one location with over 1,000 employees and good employer support, we have experienced in the first nine months about 50 per cent participation, with 35–40 per cent of the participation being in automobile coverage. The life insurance participation has been 15 per cent for this period. The homeowners' participation varies greatly from one location to another, depending upon the attitudes of the local banks.

It is felt that the long-range outlook for such a marketing approach hinges greatly on labor union attitudes. According to a paper written by Professor Bernard L. Webb of Georgia State College, we can expect, with favorable labor union attitudes, that 10–20 per cent of all the automobile coverage sold in the United States in 1975 will be sold on this basis. According to him, 40–50 per cent would ultimately be sold with favorable labor union attitude. He also emphasizes that there are several other important factors: (1) the form of compensation provided by law for auto accident victims, (2) government regulation of collective merchandising, and (3) government regulation of insurance company risk selection practices.

I believe that success in this field depends upon ample home office sup-

port and service. Currently, we have a staff of about fourteen salaried personnel, who provide general expertise in such areas as program content and the preparation of brochures. We are establishing special data-processing programs in order to fully realize the potential administrative savings. We have completed considerable formal school training of agents and staff men, particularly in the cross-training of casualty-property personnel to handle life sales as well as life personnel to handle casualty-property sales. Another aspect of home office support is in the preparation of simplified applications and sales materials.

I have been asked whether the fact that large group writing companies are entering the mass-marketing field reflects any disenchantment by employers with regular group products and approaches. I would like to answer that, on the contrary, we entered this field to make this new service available in addition to the various employees' benefits provided by the employer. This new approach should enhance and strengthen our position in the traditional group insurance field.

DEFERRED AND INCENTIVE COMPENSATION

1. Can deferred or incentive compensation plans be used effectively by life insurance companies? How can they fit into the over-all compensation patterns of a company?
2. How is the effectiveness of a plan influenced by such factors as:
   a) Use of cash or stock as form of compensation?
   b) Relative size of eligible group?
   c) Recognition of individual merit?
   d) Vesting provisions?
   e) Deferral of constructive receipt?
   f) Profit-sharing or savings features?
   g) Tax qualification?
3. What features could well be included in a qualified profit-sharing plan for most home office employees? What objectives can be realized by such a plan?
4. Can a plan of deferred and/or incentive compensation restricted to higher management levels be devised? What evaluation methods can be used to determine the relative size of an individual's award?

CHAIRMAN J. EDWIN MATZ: There was a time when a topic such as this one probably would not have been able to find itself on the agenda of an actuaries' meeting. For it may well be asked whether there are any aspects of deferred and incentive compensation which are of an actuarial nature sufficient to warrant their inclusion on our list of permissible topics for discussion.

In rebuttal, it may well be argued that, whether deferred and incentive compensation does or does not require actuarial expertise, in any event actuaries frequently find themselves working on such plans.

One of the reasons is the old difficulty with measuring sticks. There has never been a completely satisfactory definition of a life company's profit, or one which is satisfactorily immune from irrational fluctuation or conscious manipulation. Actuaries have always been assumed to have in their arcane bag of tricks more knowledge than other people about the influences which bear on measurements of a life company's financial success. Consequently, their advice and counsel has usually been sought whenever such matters figure significantly in a compensation program—which frequently is the case.

On the other hand, it may be that the topic has nothing to do with an actuary's capacities. It may simply indicate the normal interest all people have in where the money is. For about a quarter of a century now our

office operations have been struggling with staffing problems that never seem to go away. The difficulty of recruiting and retaining personnel in sufficient numbers has existed at all levels, from the bottom ranks to high management levels. It seems to have been accentuated in recent years by the need for our companies to rely increasingly on specialists of various types, such as lawyers, actuaries, investment analysts, computer experts, and accountants. Such skills have been in short supply. They are readily transferable from one company to another, within or outside the life insurance business.

But we have not only been living in a world which has had an insufficiency of talent; we have also been living in an environment in which managerial and staff capacities have been more highly rewarded in businesses generally than ever before. Stock options, bonus formulas, deferred compensation arrangements, and profit-sharing plans may not always have been uniformly successful in achieving every one of their purposes. They certainly have been fabulously successful, however, over the past several decades in producing highly satisfactory returns for their beneficiaries.

In a society committed to progressive taxation, of course, increased rewards would normally be accompanied by increased taxes. With so many facing this dismal prospect, it is not surprising that part of man's ingenuity in devising compensation plans has been diverted to devising tax shelters. So successful has this effort become that we find ourselves publicizing cases of people with seven-figure incomes and no tax liability.

Over the years ours has been an industry characterized by stability of employment and security of income. The usage of special compensation plans either to generate satisfactory rewards for performance or to shelter income from taxation has been relatively minor. Perhaps this is to be expected in a business which has been generally characterized as one of stewardship.

But certainly there is more entrepreneurship in the management of our companies now than there used to be, and if, in fact, people are being asked to be bold, imaginative entrepreneurs, they are liable to question why they are not compensated in the same way in which entrepreneurs are in other businesses. Perhaps these are some of the reasons why we have some interest in this topic.

MR. JOHN R. TAYLOR: Ed Matz asked me to review the fundamentals, underlying principles, philosophy, and ground rules of this subject. Basically, I will review the material covered by the first two questions.

Let us start with some definitions. By "deferred" I mean payment at a later date somehow related to service now. By "incentive" I mean payment, deferred or not, hopefully related to success or failure of effort in such a way that superior performance is not only encouraged but obtained.

Let us take a look at question 1: Can deferred or incentive compensation plans be used effectively by life insurance companies? Of course they can. As an industry we are probably more committed to deferred and/or incentive compensation plans than almost any other. Our various commission plans and field-manager compensation plans are based on incentives, and many payments are deferred. We are not, however, going to spend time today on commission plans or bonus plans for the field. Our subject matter is oriented toward home office executive-type plans.

The second part of question 1 is, How can they fit into the over-all compensation pattern of a company? The important thing to look at first is the purpose of a deferred and/or incentive plan. Is this plan to be part of a basic salary structure? Is the plan to be part of the fringe benefit package, or is it given in lieu of fringe benefits? Are we talking about something extra, over and above basic compensation or fringe benefits? Is the incentive plan given in lieu of stock or ownership interest? To what group are we trying to appeal? Are we trying to stimulate better performance of all, or do we view the plan as an aid to recruiting or retaining key men?

I would say that the objects of an incentive compensation plan are superior performance for the company and superior rewards for those who perform in superior fashion.

The object of a deferred compensation arrangement is, of course, deferral of tax to the employee, but there must also be (1) assurance of receipt of money by the employee and (2) assurance of a deduction to the employer, if that is a factor.

Now let us discuss question 2, *a*, with respect to the use of cash or stock as a form of compensation. If cash is used, the motivational effect is immediate and direct, but it may be confused with basic salary. Furthermore, you do not build in the extra incentive obtained by the desire for company stock appreciation. In the past cash incentives have been easier for mutual companies, but, with the coming popularity of downstream holding companies, that may not be a factor anymore.

There are various ways to include stock in the program. A stock bonus is a possibility. This does not require employer cash outlay, and any tax reduction increases cash resources. It does, however, water down the interests of other stockholders. Because a stock bonus is immediately

taxable to the executive, a cash bonus and a stock bonus are often paired.

Another type of plan is the so-called appreciation, or shadow, plan. In this plan the executive does not actually receive any stock, but he is given rewards as if he did have ownership. The appreciation from the value of the stock and any dividends that would be earned on the stock, if he owned it, are credited to his benefit. While there is a delusion of ownership for the executive, there is no actual dilution of ownership for the shareholders.

Another type of plan is a stock purchase plan. This is not really deferred or incentive in concept except to the extent of employee interest in seeing the company grow through the motivation of ownership. Last, and certainly not least, there are, of course, stock options.

Question 2, *b*, deals with the relative size of the eligible group. This depends on the purpose of the plan. Are the awards part of the current year's earnings, or are they considered extra rewards? Is the company trying to improve the over-all morale or trying to measure the contributions to results? The money available may also be a factor, in that, if the company already has an adequate compensation and fringe benefit program, the available funds may be limited.

One of the real key questions is question 2, *c*. How does one recognize individual merit? How accurately can one measure that which results from a particular person's contribution? Will wide variations in rewards be possible as a practical matter, even when justified?

Here are some guidelines which may be helpful in determining merit recognition:

1. The award must accurately reflect success or failure to the maximum extent possible.
2. The factors to be measured must be acceptable—realistic measures of performance—to those who are involved.
3. The award system must be communicated to and understood by the people involved.
4. The participants must believe in the fairness of approach.

Let us comment on a few of these.

With respect to accurate measurement, it is probably not possible to be exact, but you must keep trying. Improve the plan this year, and next year, and next year, and so on.

With respect to measurement in acceptable factors, there may be important people who have no effect on the bottom line. Profit does not have to be the only standard. Other suitable factors could include a measurement of efficiency of work and a measurement of adherence to budget.

Regarding communications, if employees do not understand how the award system works, they cannot perform in superior fashion.

The last guideline is that participants must believe in the fairness of the approach. Here we get to the question of objective or subjective measurement. If many employees are involved, it may well be that you will try to develop a formula. A formula implies fairness. It cannot, however, give that variation that sometimes should be recognized. It may also be that, by using a formula, you are abdicating your management responsibility and turning the management of the person involved over to the formula.

The next question deals with vesting. The virtues of vesting under a deferred and/or incentive compensation plan are identical with those with respect to pension plans. Does one delay vesting because people will stay in order to benefit? Does one grant vesting because people will be motivated from having "joined the club"?

The effectiveness of vesting probably depends on the class of employee. The higher paid with large amounts at stake will stay. Clerical employees will largely ignore vesting, just as they do under pension plans. The bargaining position of the employee or employees may determine the vesting provisions and may relate to what other companies have. In summary, the question is one of having "earned" the awards versus the exertion of leverage to stay.

Question 2, *e*, is, How is the effectiveness of a plan influenced by such factors as deferral of constructive receipt? This, of course, is the object of a deferred compensation plan, so the deferred compensation plan's effectiveness is rather seriously impaired if this is not achieved. There are other values, of course, besides tax savings. Accumulation under deferral is beneficial.

Two concepts have been involved in the question of current taxability: (1) "Constructive receipt" can occur when the employee actually has the right to receive money now. (2) "Cash equivalence" can occur when the employee is given an economic benefit by his employer, unless a rule of law specifically excludes it from gross income.

There is probably no problem now, but some authorities still recommend that it is safer to add "conditions" where amounts are credited to bookkeeping reserves under deferred compensation plans. These conditions might involve forfeiture in case of termination of employment or if an employee works for a competitor. Another condition that has been used is to require that the employee be available for consultation. This latter condition may cause social security problems, however.

As to profit-sharing or savings features, of course the total contribu-

tions by the company can be tied to profits in some way. Under a qualified savings plan, the employee may earn interest on his savings on a tax-deferred basis.

I would like now to comment on the effect on one's pension or profit-sharing plan if a deferred compensation plan is in effect. There are two revenue rules in which you will want to become interested.

Revenue Ruling 68-454 provides that "a pension or profit sharing plan will not qualify under section 401(a) of the Code where contributions and benefits for some employees are based solely on compensation while those for officer-employees are based on compensation plus credits under a deferred payment arrangement." A related ruling is Revenue Ruling 69-145, which provides that "a pension plan may qualify under section 401(a) of the Code where benefits are based on sales commissions fixed by an employment contract that applies equally to all salesmen, notwithstanding that part of the commissions are deferred under an unfunded, nonqualified, deferred payment arrangement." The logic behind the first ruling is a little difficult to follow. In any case, you will want to become acquainted with the two rulings.

Question 2, *g*, concerns tax qualification. The greatest tax advantages are obtained by using a "qualified" plan. That is, the employer gets a current deduction for amounts contributed, the employee is not taxed on such earnings, and the earnings on the funds accumulated are not currently taxed. Such would be the case under a qualified profit-sharing plan or savings plan. But these are not available without disadvantages. Coverage of employees must not be discriminatory, and a larger group may have to be included than is ideal.

Thus many deferred compensation arrangements are not qualified. The employer can pick and choose who is covered and how much they receive.

My understanding of the tax rules that apply here can be summed up as follows:

1. If the employer contributes to a trust or account to which the employee's rights cannot be forfeited, an immediate tax deduction to the employer can result but the amounts contributed are currently taxable to the employee.

2. By making the employee's rights forfeitable, taxability to the employee can be avoided but the employer may forfeit his deduction for all time, even when the benefits are actually paid to the employee. There are some court decisions contrary to this, but my understanding is that the rule just quoted applies in most jurisdictions.

3. Thus most nonqualified deferred compensation contracts are not funded in the sense of setting aside, without right of revocation, sums of money for

employees. On this basis, the employee is taxed and the employer takes a tax deduction, when benefits are actually paid.

I would like to comment briefly on my understanding of the treatment for social security of deferred compensation plans.

If the employee is not on call for advisory or consulting services, payments are considered to be additional compensation for preretirement work. Amounts received are subject to social security tax as received, but they cause no forfeit of any social security benefits because of the work test.

If the employee is on call for services, it is my understanding that a social security tax is paid and a loss of social security benefits may occur only if the employee is actually rendering service.

MR. ROSS J. WILSON: I would like to touch on the question you raised on social security taxes and benefits and the effect of deferred compensation on them. As an illustration, consider a plan under which an employer purchases a $50,000 life insurance policy on the life of an employee which provides for payment of the death benefit to the insured's beneficiary upon death prior to age 65 and provides a paid-up policy for the employee in the case of other termination before age 65. Upon retirement at age 65, the employee is to receive roughly $5,000 a year for ten years certain. The deferred compensation contract has a clause giving the company the right to call upon the man for consultation after retirement. The purpose of this, of course, is to provide for favorable income tax treatment for the employee.

Under these circumstances, is the $5,000 considered earnings and therefore subject to social security taxes, and, further, will receipt of these payments cause forfeiture of the employee's social security benefits?

In chapter 21, section 3121 of the Federal Insurance Contributions Act, the definition of wages includes all remuneration for employment, except that such term shall not include (among other items) any payment made to an employee after the month in which he attains the age of 65 if he did not work for the employer in the period for which such payment is made, or any payment or series of payments made to an employee or any of his dependents upon the employee's retirement because of attaining an age specified in a plan, whether or not the payments are made pursuant to the plan, and other than any such payment or series of payments which would have been paid if the employee's employment relationship had not been so terminated.

We cannot get an answer from social security on this. Their reply is that the employee loses his social security benefits and must pay social

security taxes, not at the employee rate but at the self-employment rate, which is a fairly stiff penalty for a $5,000 income. A lawyer specializing in deferred compensation plans does not know the answer either. His first reaction was that the income is taxable and subject to social security taxes, although the legal definition of earnings made him stop and think about it. If anyone has any information on this, it would be greatly appreciated.

MR. JOSEPH B. CRIMMINS: I would like to ask one question about vesting. There are different ways in which one can look at vesting; first, that it is done to reward the employee who stays with the company for a long time and, second, that it is done to prevent the employee from leaving before his benefits have vested. What do you recommend now that you have been through this problem?

MR. ROBERT B. GOODE: I shall cover aspects of your question later in my comments. My topic covers the subject matter of question 3. The following notes are based on observations and experience after seventeen years with a qualified profit-sharing plan. First, let me give you a brief description of the Connecticut General plan.

Eligibility.—All company employees are eligible for the plan after five years of service. Included are field clerical and managerial personnel, such as branch office managers. There are now about 2,200 participants, which is roughly 80 per cent of the eligible group. Benefits vest immediately upon entry into the plan.

Formula.—The company contributes the same percentage of pay for all participants. The company contribution is based on 2 per cent of the gain from operations plus 2 per cent of first commissions. This amount is divided by home office participants' compensation to determine the percentage payment. This same percentage is then used to determine the allocations to field sales management personnel. The maximum percentage is 10 per cent, and over the seventeen years of the plan it has varied from just under 5 per cent to just over 8 per cent.

When received.—A participant may elect that his share, attributable to compensation up to $10,000 per year, be paid to him in cash two years after the allocation date. At such time it would be taxed as ordinary income. The majority of the allocations go into a permanent investment fund that is held until termination of employment. Thus there is no constructive receipt at the time of allocation.

Upon termination of employment, a number of options are available,

including an annuity form, fixed installment payments, or a lump sum in cash or securities.

Another important feature of the plan, which was recently included, is that an employee's interest in the trust can be withdrawn or used as collateral for bank loans for educational purposes. It also includes a provision for hardship withdrawals subject to the approval of the advisory committee.

Investments.—The majority of the permanent fund investments have been in Connecticut General stock, from two-thirds to three-fourths of of each year's payment. The balance has been invested in a list of good common stocks. We are now using a no-load mutual fund sponsored by Connecticut General for non–Connecticut General stock investments.

Voluntary contributions.—Unlike many of the plans that have been set up in recent years, no voluntary contributions can be made. It should be pointed out, however, that a stock purchase plan on a payroll-deduction basis is also available. Because of the commissions on stock purchases and tax on the accumulations, these payroll-deduction plans are probably a little less advantageous to employees.

Taxability.—The plan is qualified.

Next, let us consider the plan from the point of view of the company.

Company contributions to the plan are an important cost of doing business. We contributed about $1.75 million on account of 1968 operations and naturally hope that more will be contributed this year. Deductibility of contributions was not a consideration when the plan was established by the company in 1952. At the present time our tax status is such that there is only a small tax break for us.

It should be pointed out that at the present time the plan holds only about two-thirds of 1 per cent of the outstanding stock of the company, so the plan is not a major factor in bidding on the company stock or in choosing management.

This plan has been the only way in which the company has sponsored employee interest in our stock. We have no stock option plan, and it was only two years ago that a stock purchase plan was installed to enable employees to buy company stock on the payroll-deduction basis. The stock purchase plan has not proved very popular.

I do think that the plan has been helpful to us both in recruiting and in retaining valuable employees.

Finally, let us consider the plan from the point of view of the employees.

Our plan is officially called the "Employees Incentive Plan and Trust."

However, it is not and never was really intended to be an individual incentive plan but, rather, a deferred compensation plan. It is my opinion that companies considering the establishment of similar plans should recognize that little individual incentive is gained from them, and I doubt whether these plans really affect the way in which people do things.

This is true because of the relatively narrow range over which company contributions vary and the fact that the company contribution is a uniform percentage of salary. As far as the impact of any individual's efforts on the plan is concerned, we can look at a couple of examples. Consider the participant earning $10,000 per year who, by his own efforts, increases the gain from operations by $10,000. The impact on his personal incentive plan contribution is less than $1. Or consider the $50,000 per year executive who adds $100,000 to company profits. He gains about $5 through the incentive plan. The collective efforts of all employees can really add up, of course, and we have the additional leverage of company stock appreciation.

Employees do understand that the plan is favorable to them from a tax standpoint. Company contributions are not taxed at the time they are allocated.

As a form of deferred compensation, the plan is accomplishing its objectives. Employees consider it an important part of their over-all financial plan, and it has been a major factor in increasing employees' awareness of company profits and their impact on the price of company stock.

MR. DELOS H. CHRISTIAN: The Life Insurance Company of Richmond, Virginia, is now part of a holding company complex, as is so common these days with many of our companies. With that kind of an arrangement, many of the top officers are wearing two, three, and sometimes even more hats; therefore, some of the incentive compensation plans that are designed by the parent or by one of the subsidiaries tend to overlap. I will start by telling you something about the total complex of our three incentive compensation plans. I will dwell longest on the one that is particularly specified in question 4 of the agenda.

This year the Richmond Corporation adopted a qualified stock option plan which has a five-year qualifying period and the stock must be held for three years after the exercise of an option in order to get the most favorable tax treatment. I think that these types of plans have some serious limitations; at least we are finding some difficulty in trying to ascertain how some people can raise the funds needed to exercise the options. Incidentally, this plan is limited to a very small number of key officers of the holding company itself.

A second plan that was also instituted this year is a broad-based thrift stock option plan. It is available to all employees of the parent Richmond Corporation and its subsidiaries. The plan involves an arrangement under which the employee signs up for payroll savings ranging from a minimum of $2\frac{1}{2}$ per cent to a maximum of 10 per cent of his salary over a $2\frac{1}{4}$-year period. At the end of this period, he can apply his total contributions under an option to buy Richmond Corporation stock at the market price at the inception of the period. If he decides to exercise this option, the company will purchase for him an additional 20 per cent of the number of shares that he has bought as an additional incentive. Actually, the company has had the benefit of his contributions during this period, and this is in lieu of interest. If he exercises the option and takes his 20 per cent additional incentive, the value of the 20 per cent incentive is immediately taxable to him at normal tax rates. However, if he sells the stock at least six months after the date of exercising the option, any excess money that he receives over the total of his contributions and the value of the 20 per cent will be treated as capital gain. If he decides not to exercise the option, the plan is a very simple savings plan under which interest is granted at the rate that we have declared on our settlement options for the period.

The main plan is rather unique; in fact, I know of no other plan like it in the life insurance industry. It is an incentive compensation–cash bonus plan available only to the top officers of the company. We started the plan in 1963 and are now in our seventh year of operation. The first year we included the top seventeen officers of the company as a trial so that we would not have too many people to work with while we were doing some learning. The next year we expanded the plan to all officers of the company, which numbered approximately fifty at that time. With the number of years of experience that we have had, it may be of interest to note that we have reversed ourselves and have now restricted the plan to the top job grades in the company, and this now includes twenty-two officers. So we have gone through a cycle of expanding the participation and then contracting it.

The historical reason for starting the plan goes back to some thoughts that the president of the company had just prior to 1963. He desired to find a way to reward special efforts of officers for a particular year, if they had been unusually helpful on certain projects or had had particularly trying tasks and performed them well. He had seen officers perform well during some years and not so well during other years, so there was a desire on his part to provide a one-shot award that would not be locked in, as a salary increase would be. There was a further desire to instill in the officers

comprising the policy-making group a greater degree of interest in the financial success of the company by providing a means for the officers to acquire some capital stock of the company and thereby increase their financial interest. There was really no priority given to establishing a plan that would qualify for special tax treatment unless this could be done within the framework of the other two priorities.

After we started our research on this plan, one of the first things that we observed was the fact that it was extremely important to have a sound salary structure before attempting to try to award incentive compensation. Otherwise, there would be a continual effort to try to use the incentive compensation award to try to correct some deficiency in the salary structure. Our first step, therefore, was to make a thorough review of our salary structure. We employed a management consultant for this purpose. We also solicited the help of some twenty companies near our size, and some of you may be members of those companies. If so, I wish to thank you personally for your help in this regard.

After we had established what we considered to be a sound and competitive salary structure, the next problem was to define an over-all approach to a plan. Basically, the plan involves the establishment of a pool of money that can be distributed to officers in a particular year in amounts bearing a direct relationship to the amount they were considered to have contributed to the company in the particular year. Our first task, then, was to establish some means of determining the pool; this is, as you all know, a very difficult actuarial task which I think many have tried. What we were looking for basically was some measure of profit performance. The gain and loss exhibit itself is a miserable tool for this particular purpose. Many of the formulas that are used by financial analysts to attempt to determine earnings for the year are not particularly good, because they do not reflect the sort of thing that is needed for management control. Ideally, if one knew what the future held in the way of interest, mortality, expenses, and the like, I think that we would use a formula that would provide the present value of the profit in products that were sold during the year as our measure of profit. But this approach is wide open to variations in assumptions and manipulation, and I think we could come out with almost any kind of pool we wanted.

So we tried to provide something practical in between these two approaches. We adjusted our gains from operations for such things as capital gains by spreading them over ten years, and we made some adjustments for the excess initial cost of placing insurance on the books by working with first-year commissions. Finally, in order to provide some real incentive for growth of sales, we added an amount based on increase

in insurance in force and multiplied this by 10 with the idea that we wanted to accentuate it. Specifically, this latter amount was ten times the average earnings per thousand of insurance in force for the year multiplied by the increase in insurance in force as an addition to our gain from operations. This formula was then used to develop the amount of the pool to be distributed.

The next problem, and one of at least equal if not greater difficulty, is that of deciding how fairly to distribute the fund. Our method here is for each officer included in the incentive plan to prepare written descriptions of the goals that he thinks he should accomplish for the year with a step-by-step procedure for their accomplishment. These are submitted through his superior officer and, after any necessary amendments, are approved by the president of the company. During the year periodic reviews between the officer and his immediate superior are encouraged. At midyear there is a formal review of goals. At the end of the year there is an appraisal prepared by each officer of the extent of completion of his goals and of the quality of his work for the year. These are reviewed again by his superior officer and are finally brought to the attention of a small committee of senior officers.

The performance of each officer is appraised and is rated superior, excellent, very good, good, or satisfactory. The recommendations of this committee are submitted to the president, who makes any adjustments that he feels are desirable and adds his own ratings of the senior committee members who could not rate themselves. The recommendations are then submitted to a committee of the board for final action.

The method of determining actual awards once the ratings are finally decided is as follows: An officer with a rating of satisfactory gets no award; officers with ratings of superior, excellent, and very good receive, respectively, five, three and one-half, and two times the award, per dollar of salary, that an officer with a rating of good receives. Within a particular rating class, the awards vary directly with salary; in other words, there is a constant per cent of salary within each rating class.

The management consultant that we employed to help us with this plan actually recommended an increasing percentage with increasing salary. His approach on this was that the incentive award after tax at the top bracket should bear a constant percentage to the aftertax salary at the average tax-deduction rate. Since the senior officers were really in the driver's seat in deciding how the formula should go, it was deemed impossible to explain this to the junior officers, and, therefore, this recommendation of the consultant was rejected.

Once the individual award is determined, the method of distribution

for officers under the age of 55 is one-half in stock of the company and one-half in cash. Since there is no tax avoidance or deferral for these officers, the half in cash is provided to enable most of them to have sufficient cash to pay the income tax on the award and to retain the stock without problems of cash outflow for tax. For officers 55 and over, it was felt that perhaps the common stock ownership was not as important because of the shorter period to retirement and that there was more interest in a retirement program, so the funds were deferred and made payable over a ten-year period starting at retirement date. In this case there is a deferral of tax for the employee, but there is no deduction for the company at the time the award is granted.

You might be interested to know how this plan has fared over the six years of our experience with it. We have distributed to date approximately $500,000, or about $83,000 a year on the average. The highest award was $153,000; the lowest was $65,000. Last year, for example, with a total payout of $77,000 to 59 officers, we had an average percentage payout of $6\frac{1}{2}$ per cent and a maximum, payable to officers with superior ratings, of $12\frac{1}{2}$ per cent. It was our initial intention in this plan to provide about 15 per cent of total compensation to officers in the form of incentive compensation of this kind, so we have not nearly met this particular goal.

The other area, though, of very general consideration is possibly more important than the actual money itself that we paid out. I remember that, when this plan was installed, one of the extremely successful businessmen on our board cautioned us that he had tried a plan of this nature which involved judging his fellow officers; he found it so distasteful that he discontinued it. This was done before we started our plan, but we had such a strong desire to pursue the plan that we went ahead anyway. I am personally involved with the senior staff committee, and I work with the president on his review; in addition, I am on the committee of the board that makes the final determination of the awards. I can assure you that I find this my most difficult task for the year.

The effects of the plan on our officers and their reactions to it have been varied. We found that the people who received good awards, as might be expected, expressed mild appreciation for them. Those who received no award or small awards were vehement in their reaction. These reactions caused us to wonder whether the plan was having a salutary effect and whether the officers really liked it. Early this year, when we decided to limit participation in the plan to the top twenty-two officers instead of the total officer group, we found that we had a great silent majority. The reaction of this group to our cutting them out of the plan was very unfavorable, in spite of the fact that appropriate adjust-

ments were made in the salaries of the officers affected. The adjustments were permanent increases in salary rather than one-time awards. I think, therefore, that the officers, although they do not speak very loudly when they are receiving the awards, really do appreciate the system.

Another effect that I think is especially good was the reaction of some of our officers who, after a review of their goals, made statements that this was the first time that they really felt that they knew what was expected of them by the company. Some of these officers seemed quite happy with this particular type of communications setup. Of course, this result could have been accomplished by good management techniques without having to tie in the incentive feature, but this is one of the very salutary effects of the program.

We found the job of administering the program extremely demanding. One of the problems that we have had is that we have not devoted the time to the administration of the program that it probably demands. This has been a weakness in our particular operation of the program but should not be considered a weakness of the program per se. Finally, the formula that we have used to develop the salary pool is quite complex, and I fear that it is understood only by the actuaries of the company. If the formula is not widely understood, it cannot provide the great incentive moving force that we had hoped that it would. This may be one reason why all the goals that we had for the program have not been achieved.

MR. RALPH L. GUSTIN:* While bearing in mind that you were dealing with top officers, I wondered if there was any evidence, in connection with the administration of your performance ratings, of a rotational effect from year to year in the ratings superior, satisfactory, and the like, assigned to a particular officer? I raise this question because, if a man is rated satisfactory each year for six years, he obviously may decide to quit.

MR. CHRISTIAN: We have rated a man superior one year and satisfactory the next. There was an extreme and bitter reaction. He started the new year determined to restore the superior rating and, of course, in so doing, he did exactly what we wanted. In this sense, then, there is variation. We do worry, however, that, once an officer receives a particular rating, his boss may get in a rut. I won't say that we do not have problems with this, but we have had some extreme examples the other way.

* Mr. Gustin, not a member of the Society, is Senior Vice-President and General Counsel of the John Hancock Mutual Life Insurance Company.

CHAIRMAN MATZ: If I may zero in on that question, I received the impression that one thing being asked here is whether or not the people who do the rating had the tendency to rotate the ratings so as to achieve an average over a period of years. For example, will they rate an officer "good" this year, "superior" the next year, and "very good" the following year, in order to average out over the years?

MR. CHRISTIAN: One of the problems with any program like this is that human beings are operating it and these people are definitely not infallible. This is why I feel that this is the most difficult job that I perform. The ratings can never be completely objective. I believe there is some tendency to do a minor amount of rotating. For example, we do not give out many "superiors"—maybe two or three a year—and, if one officer gets two superior ratings in a row, it gets increasingly tough to repeat the rating for a third year. There is a tendency to rotate somebody out of the top category if he has been there too long.

MR. ALDEN W. BROSSEAU: What would you say is the greatest feature of your plan and what is the worst?

MR. CHRISTIAN: I believe that the greatest features of the plan are the forced method of planning and of communicating to officers what you want them to accomplish for the year and the forced appraisal at year end when the officer looks at the job he did and the superior looks at it and they talk about how he succeeded and where he failed. The greatest weakness in the plan, I would say, again, is the human frailty of not being able to be completely objective. Basically, I think we all like some people better than others, and I do not know how to eliminate completely the effects of these feelings. The only thing you can do is try. I do not think we have fully achieved the guideline that John Taylor was talking about, that is, that the officers who are being rated must consider this rating system as fair in order for the plan to be successful.

MR. BROSSEAU: Have you given any thought to increasing the amount of money that you award each year so you can get up to your 15 per cent average?

MR. CHRISTIAN: At the inception of the plan we established a formula that I think is justifiable. It seems to me that the company has to perform at a level that would produce higher awards; otherwise the plan would be a phony. I do not think that we performed as a company well enough to

justify the full 15 per cent, and arbitrarily to increase the amount determined by the formula would, in my opinion, be completely wrong.

We do not make a public announcement of the amount each officer in the program receives. I think there is a lot of exchange of communication at the grass-roots level on this type of information, so at least the more inquisitive officers have a fairly good scope of the whole field.

MR. C. RONALD RILEY: It seems to me that the heart of the plan, and the real issue, is the setting of goals. What inside limits or rules do you have which would prohibit one officer from setting goals which are easily obtained and another officer from setting goals which are not so easily obtained?

MR. CHRISTIAN: You are hitting right at the heart of the matter of objectivity. I think it is an impossible problem to set a goal in the underwriting department, for example, that you can defend as being of the same difficulty as goals in the investment or sales departments. They are entirely different types of activities. What actually happens is that the senior staff committee that reviews the goals at the end of the year tries to recognize and adjust in a practical way for this problem. If all goals are achieved by an officer and if all of them are very easy in comparison with another officer's very difficult goals, half of which the other officer achieved extremely well, we might give the one who has achieved half of the very difficult goals extremely well a greater award. I recognize that this procedure is open to challenge, and that is what makes the job difficult. Who is the judge of whether you are right or not on decisions of this kind? That is one of the basic problems with the plan.

CHAIRMAN MATZ: I heard somebody remark once that life insurance is essentially a bureaucratic industry and it is almost impossible to introduce into it a system of compensation without selectivity. It is not surprising to me that the questions have been heavy on this unique plan which involves a feature so attractive and so forbidding at the same time.

1. If a life company statement is adjusted to generally accepted accounting principles, should the adjustment be made integrally or as an addendum to statutory-basis results? When should a reserve basis change be reclassified from a surplus entry to an income statement entry?
2. Is it appropriate to consolidate the statement of a life insurance company with that of a property and casualty insurance company or a noninsured insurance company? Are there regulatory obstacles?
3. What accounting-presentation problems arise out of consolidation of the two kinds of insurance company statements? Consider conflicting accounting treatment of such items as realized capital gains, increases in reserves for policies in force, valuation of preferred stocks, and the like.
4. What accounting-presentation problems arise out of consolidation of life company statements with noninsurance company statements? Consider conflicting accounting treatment of such items as valuation of bonds and stocks, premium income and mutual fund receipts, realized capital gains, unrealized capital gains, and the like.

MR. DWIGHT K. BARTLETT III: As actuaries we are all familiar with the fact that life insurance business is a peculiar one in the sense that in years of large sales earnings tend to be reduced. In years of poor sales earnings tend to go up.

This is something that really does not make a great deal of sense to many people, and, as far as I know, it has no parallel in other businesses.

The reason for this, of course, is that, typically speaking, the amount of acquisition expenses we have plus the reserve set up for the first year's business, plus whatever installment of claims you may pay for first-year business normally adds up to substantially in excess of 100 per cent of your first-year premium income.

I think that the motivation for making adjustment to earnings is, in part at least, this: to remove the effect of depression of earnings by writing up new business.

I think, second, that the security analysts have also had the additional motivation of perhaps attempting to incorporate in current year's earnings the present value of future profits of business being written in the current year.

Historically, the security analysts, who perhaps have the most immediate motivation in dealing with this problem, have made adjustments in earnings by rule of thumb. Typically they would multiply your increase

in permanent insurance in force by $20, increase in term insurance in force by $5, group by $3, weekly premium by 26 times the increase in the weekly debit, individual health insurance by 50 per cent of the increase in earned health premiums, and group health by 5 per cent of the increase in group health earned premiums. Obviously, this kind of rule of thumb was not anything more than that and may or may not have had some reasonable relationship to what the actual facts were.

Of course, the analysts have recognized all the inadequacies of the rule of thumb, and the Association of Insurance and Financial Analysts some time ago appointed a committee to study this problem and to devise more realistic adjustments. One of the shortcomings of the committee report was that it failed to distinguish between the two motivations that I mentioned originally—one being to remove the profit strain of writing new business and the other being the incorporation of the present value of future profits on the increase in the business in force. The committee still has not distinguished between these two purposes to my satisfaction, but it has presented an answer.

The answer is contained in the committee report, which is going to be presented to the parent body, the Association, on November 20, and I am told by the current committee chairman that he expects the parent body to approve his report, in substance, at that meeting. The report is very extensive, and it would be impossible for me to review it in detail right now, but let me mention briefly what it attempts to do.

First of all, it relies entirely on figures which are in the annual statement. The committee tried to get additional figures from the companies that it was working with but had a very poor response. It felt that whatever formula it came up with would have to be based on figures entirely obtainable from the Convention statement.

The first major element is the expense element. The committee attempts to identify all those expenses which are clearly acquisition expenses, such as first-year commissions, agency supervision, medical examinations, inspection reports, and other expenses which are clearly first-year expenses. These expenses are capitalized in the year in which they were incurred and amortized by use of the sum-of-the-digits method of amortization. The period of amortization is determined from each company's average lapse rate, by using the A. M. Best Company formula. The committee report has a table which tells you over how many years you should amortize your expenses, depending on the Best formula lapse rate.

The second major element is adjustment of the increase in reserve to what the committee feels is a more realistic interest assumption. The committee has taken the formula which is included in the life insurance

income tax return and extended it, the formula being $(1 + 10i - 10j)$ times the increase in the individual life insurance policy reserve. The i factor is the average valuation interest rate, and j is the average Exhibit 2 rate over the last ten years.

Then there are a number of minor adjustments for individual noncancellable health insurance, where the same expense adjustment is made as that for life insurance. No adjustment is made for group insurance, the rationale here being that group insurance is experience-rated. The company experiences little or no strain in writing, since the company typically recovers its first-year expenses rather quickly. Participating departments are treated as minority interests.

After the total adjustments are obtained, a tax adjustment is made on the assumption that the company is in a Phase II situation. The amount of earnings adjustment is reduced by the marginal tax rate for expenses.

MR. JOHN BERNAUER:* The C.P.A.'s, of course, have been very interested in the proposal put forth by the financial analysts and that part of the proposal which addresses itself to the amortization of first-year costs over some future period of time. As Mr. Bartlett has pointed out, there is some substantial problem in trying to identify what those costs are for purposes of amortization. But by far the larger and much more complex problem appears to lie in the method of amortization and the period of amortization. In fact, this is one of the problems that C.P.A.'s themselves are struggling with very, very hard without a great deal of result up to this point in time.

I am interested in Mr. Bartlett's report that the financial analysts have recommended a sort of a sum-of-the-digits declining-balance method of amortization. This appears to be different from the type of amortization that takes place in the preliminary term method of setting up reserves, and I would be very much interested in hearing what the actuaries' reaction to that type of amortization would be.

The C.P.A.'s are not nearly so enthusiastic about the adjustment to the reserve that has been suggested by the financial analysts; that is not to say that the C.P.A.'s are unaware that some adjustment may be indicated.

If you compare the statutory factors that are used in computing the

* Mr. Bernauer, not a member of the Society, is a Chicago partner of Ernst & Ernst. He has had a close association with the auditing of insurance companies and has been active in the Association of Certified Public Accountants' Insurance Committee, dealing specifically with insurance accounting and the auditing of insurance company statements.

present value of future benefits in the life reserves today with interest yields being attained and earned by the industry, and, even more importantly in the view of the C.P.A.'s, the interest assumptions which went into the premium structure in the first place, it would seem that perhaps some adjustment in the computation of present value of future benefits is indicated. But the adjustment which has been suggested by the financial analysts seems to leave us hanging in limbo in that they make an adjustment each year but there does not seem to be any continuity at all. It is just an adjustment of the beginning and ending reserves, and it is rather a new ball game each and every year without providing any continuity for determining earnings on a comparable basis from year one to year two to year three and to year four. The C.P.A.'s would not be able to certify a statement which is adjusted in the manner in which the financial analysts suggest.

MR. STEPHEN D. BICKEL: It seems to me that determining the actual first-year expenses and amortizing them are more accurate than using a preliminary term method from the standpoint of determining the actual amount of initial strain to be amortized. Any reserve method can only approximate the excess first-year expenses. As far as the period of amortization goes, a modified reserve method would be more accurate, since the amortization would follow more closely the persistency of the business.

One trouble with the analysts' formula is that the amortization period does change from year to year, depending on changes in the lapse rate. This is in a sense a change in accounting method from one year to another, which I do not think is desirable. It would be better to pick one period and stick with it.

There is also the disadvantage that a young company will normally have a higher lapse rate than an older company, even though the expenses should probably be amortized over the same period.

CHAIRMAN ROBERT G. ESPIE: If you are going to make these adjustments, should you actually set up an asset in the balance sheet for unamortized first-year expenses?

MR. BICKEL: We might have some tax problems if we did that. Theoretically, yes, I think we should have an asset for the unamortized expenses.

MR. BARTLETT: I guess I would not agree, since the balance sheet is really more for purposes of demonstrating solvency. What we are talking about here, in discussing earnings, grows out of the concern of the finan-

cial analysts to get at what are "true" earnings. They really are not too concerned with the balance sheet, so the question of what to do with the balance sheet is not uppermost in their minds.

MR. WILLIAM H. AITKEN: I would like to make one more comment on the analysts' method. It seems to be a fairly rough-and-ready formula, and I do not think that it would matter too much whether you amortize over a period which depends on the lapse index or over a uniform period for all companies. One difference that we have ignored is whether the company is on modified reserves or net level. In the actuarial *Accounting Practices* textbook it states that most of the initial expenses are amortized by using modified reserves; so, if the analysts suggest spreading the first-year expenses, I think it can only be after an adjustment is made to net level reserves. In converting from modified to net level, there is the American tax formula based on 2.1 per cent of the amount of risk. Some recent Canadian tax work suggests that 1.3 per cent of the amount at risk is a better formula.

MR. W. HAROLD BITTEL: In this matter of trying to determine the expense factors, there was a suggestion given the Blanks Committee last year of having a split of the life column in the gain and loss exhibit into first year and renewal, implying at least that the expenses in that column would be split on some reasonably reliable basis.

MR. BARTLETT: I would say that makes all kinds of sense, because I think it overcomes the major weakness of the security analysts' formula that Bill has already mentioned. The security analysts' formula attempts to identify all first-year expenses but then completely ignores the reserve valuation method. It does not pay any attention to the difference between NLP and preliminary term reserves.

They will willingly admit that they realize this is a weakness in the formula, but they feel there is nothing that they can do about it because they cannot persuade the companies to give them more accurate information. I think that splitting the gain and loss column between first-year and renewal items would allow the security analysts to identify exactly what is the strain of first-year business. You could still argue about what is an appropriate period for amortizing it, but at least you would be starting out with a figure to amortize which will be much more accurately determined than would be the case under the security analysts' formula.

CHAIRMAN ESPIE: In our own company we are planning to put into a statistical supplement to our shareholder report a split of first-year life

expenses between first and renewal. What is the advantage of having it in the NAIC statement?

MR. BITTEL: It would make it subject to our instructions for the allocation of expense. It would not permit any wild methods of allocating expenses to show specific results.

MR. AITKEN: Are there not three types of expenses: first-year, renewal, and development?

MR. MELVIN L. GOLD: There really should be another suggestion on the possibility of having a corporate column, which would contain interest on capital and surplus as well as development expenses. This would clarify the situation.

MR. BITTELL: We also considered that, but it was discarded because of the difficulty of deciding what would be proper information to put in such a column.

MR. H. RAYMOND STRONG: From what has been said, it seems to be implied that first-year expenses are all acquisition expenses.

I would suggest that this is not true. There are both acquisition and maintenance expenses in the first year, and for the purposes of the analyst perhaps they should be divided.

MR. BICKEL: I think that is definitely true. The analysts felt, I believe, that they were not using all the first-year expenses anyway, so that the error involved would not be too great.

That points up some of the difficulties we would have in splitting the ordinary life gain and loss columns between first year and renewal. Allocating expenses would be quite difficult and would be subject to individual judgment. There would be quite a lot of pressure on young companies to show a gain on the renewal side. We would need guidelines of some sort.

CHAIRMAN ESPIE: This problem is not new. The casualty business for many years has had to split its expenses into "acquisition" and "other," and I do not think there is a real uniformity in the definition. The problem in the casualty lines, I think, is much simpler than it is in the life business.

Furthermore, most companies are probably fairly well aware of what the strain is of writing new business, but there is a difference between being fairly well aware that your new business strain last year cost you a

million dollars and having to put out a figure of $975,683 to support it.

The idea of what new-business costs can be, expressed approximately, may be useful for management purposes, but it would be very dangerous to publish that approximation.

MR. AITKEN: We should keep in mind that there are really three points of view. There is the statutory statement, the statutory statement adjusted, and, at the other end of the scale, the concept of gross premium valuation. It might not be very hard to get a program on a computer which would run through the entire company's portfolio and do a gross premium valuation. Such a concept would recognize current interest rates, current mortality and actual gross premium and expense levels; assets would be valued at market.

CHAIRMAN ESPIE: This is a reasonable approach, to my mind. I have always felt that the problem of adjusting earnings is that the reserve we set up is unrealistic. If the reserve at the end of each year were realistic in terms of the assumptions on which the premium was based, there would not be any need to amortize first-year costs.

What about using the premium assumptions to determine how much expense is amortizable? Instead of setting up unamortized expense as an asset, if you deducted it from your reserve you would achieve the same effect and would come back to a sort of asset share.

MR. ALAN RICHARDS: I have another comment on this matter of amortizing excess first-year expenses. It is my understanding that accountants strive to equate expenses with income. Would it not be appropriate to evolve an amortization formula whereby the amount of excess initial expenses amortized from year to year would be related to the ratio of (*a*) the current year's premiums to (*b*) the total premiums to be expected for the total life of that block of business? This is not a new idea. I understand that it is being used by a sizable company in the Southeast and is acceptable to the SEC.

MR. BERNAUER: I would like to touch on one part of the problem of adjustments that looms very large, and that is this: management!

The financial analysts can make guesses as to what adjusted earnings are all day long, and they can use every kind of formula; they may gain customers and they may lose customers in terms of how accurate their formulas may be. But, when we are talking about adjusted earnings that are going to be certified by the accountants, we cannot overlook the fact

that these financial statements are the financial statements of management. Management has the responsibility for devising appropriate adjustments that will produce meaningful earnings figures. At that stage of the game, the accountants' responsibility starts to come into play as to whether or not they are also satisfied that the net income is fairly presented.

CHAIRMAN ESPIE: Should adjustments to earnings be made by the use of supplementary statements, or should they be made integrally in the balance sheet?

MR. BERNAUER: There are really two separate questions involved. The first, of course, is, What will the regulatory authorities allow you to do? The second is, What is better understood by the reader of those statements?

Some strong arguments can be made that it is more understandable to the readers for these adjustments to be made integrally than that they be made as a supplementary schedule, or as footnotes, or outside the statements themselves. By the same token, everyone has to be sensitive to the regulatory problem, so a practical solution has to be devised.

I would hesitate to say at this time which argument is more persuasive.

MR. BARTLETT: I think that until there is some kind of consensus it would be inappropriate to do it other than through a footnote.

CHAIRMAN ESPIE: We might take up another element of this problem, which is the question of consolidation. Is it appropriate to consolidate the statement of a life insurance company with that of a property and casualty company or with a company that is not in the insurance business? Are there regulatory obstacles to that?

MR. AITKEN: There does not seem to be a clear rule as to when one should consolidate and when not, but there are some guidelines. One of these is that consolidation is usually done only when the parent owns more than 50 per cent. Another guideline is continuity of ownership. If Company A takes over Company B, and the Company B shareholders receive cash or disappear from the scene, consolidation would not be as appropriate as if Company B shareholders continued to hold shares in the joint venture. Similarly, continuity of the management of both companies suggests consolidation.

The alternative is the purchase method. The purchase type of state-

ment would be indicated if the purchaser company is planning to abandon part of the business, or if the shareholders in Company B are ceasing to have an interest, or if the purchased company is very small in relationship to the purchaser company, or if the line of business is very different. You may not want to integrate in a consolidated statement the oil and insurance business.

MR. BERNAUER: There is a presumption in the accounting literature (which we like to refer to as "generally accepted accounting principles") that, when a business enterprise is conducted through more than one entity, consolidated statements should be prepared and that they are more meaningful in terms of reporting to the shareholders the results of operations and, of course, the financial position.

This same literature, however, indicates that if consolidation would be less meaningful than showing the statements of the individual companies, you should not consolidate.

Now, of course, the concept of what is more meaningful and what is less meaningful is not an objective concept. It is fairly subjective, and, of course, different people can come to different conclusions. As a result, you will find that Sears Roebuck—which has a very successful retailing operation but also a very large insurance operation—does not consolidate its insurance operations with the retail operations in reporting to its shareholders. Transamerica management, on the other hand, finds it possible to consolidate its various business enterprises into an operating statement in such a manner that, in its opinion and in the opinion of its accountant, the statement is a meaningful display.

CHAIRMAN ESPIE: In doing this sort of thing, how do you solve such problems as realized capital gains which are part of the operating income of a casualty company on the NAIC basis and which are not in a life company? Do you bring them into the operating earnings for all companies in the group, or do you leave them out for all companies, or do you add together apples and oranges to get the operating earnings?

MR. BERNAUER: I think you must go back to a fundamental concept: in order for your financial statement to present fairly the results of operations and the financial position, the C.P.A.'s would say that the financial statements should be put together in accordance with generally accepted accounting principles.

I would say, in looking at the accounting literature, that there seems to be ample authority and basis for including realized gains in net income.

MR. BARTLETT: I understood that the Accounting Principles Board was on the verge of issuing an opinion relative to the inclusion of realized gains and losses in life insurance company statements. Can you bring us up to date on that point?

MR. BERNAUER: They are studying this problem of intercorporate investments. An opinion is not imminent, but there has been a considerable amount of research done in this area, and the accounting profession really finds itself on the horns of a dilemma at this time because of some fundamental concepts which underpin the postulates of the accounting principles. We tend to recognize gains and losses in consonance, or at the same time that there was actual realization. Of course, the definition of realization is a key item. Up to this point, at least, accounting literature and accountants have defined it rather narrowly. Generally, you do not realize a gain or loss until an actual transaction has taken place.

The definition of realization has taken cognizance of situations in which there has been a controlling interest in a subsidiary. When the subsidiary has developed an operating gain or loss for the year, that event has been considered to be a realization which may be, and should be, reflected in the financial statement of the parent company. This same concept has been suggested as a method of recognizing some realization in other intercorporate investments where something less than control is involved. There are some practical problems involved with that approach, but that is one of the concepts which has been suggested.

Another approach is the idea of a yield concept, whereby unrealized gains and losses would be put into the same pot with realized gains and losses and would be amortized over some period of time. Of course, the hang-up here is, What is the appropriate period? And, in fact, does the quoted market price on the New York Exchange really represent a realizable value for a block of 10,000 shares or even a larger number of shares?

At this time, the Accounting Principles Board is not ready to make a pronouncement regarding investment gains and losses.

MR. AITKEN: This question of when to realize and when not to realize has always bothered me. As good a solution as I have seen came along earlier this month when the Canadian government put out a white paper. They plan to introduce a capital gains tax in Canada in 1971, and the idea is to pay capital gains tax when you realize your capital gain or at the end of five years, whichever is earlier.

If the Canadian government can collect a capital gains tax after five

years, this may have an effect on the accounting of insurance companies and other companies toward putting unrealized capital gains into the income at the end of that five-year period. This would overcome the problem of undervalued securities where the market value after, say, fifteen years is two or three times the book value.

CHAIRMAN ESPIE: There is another question: How do you put together assets in a consolidated statement when they may be valued on different assumptions in the various components? I am thinking, for example, of a case where you may have a life company with common stocks at market and bonds at amortized. You may have another company which is not in the insurance business where stocks are at cost and bonds are at market.

How do you handle this kind of problem?

MR. BICKEL: I think that most companies just go ahead and add them together. We have gone through a transition at my company on this type of problem. We are consolidating casualty companies and life companies, so the difficulty is mainly in preferred stocks' being at cost in one place and at market in another.

We once had a short footnote that said all assets were carried at NAIC values, which are "generally" market values. Then we started to say that this does mean cost for the life companies and market for the casualty companies. Now we have gone almost all the way, and the footnote actually does give the alternative values for both companies.

It is interesting that, in the statements that we file with the SEC for proxy statements, we have not been allowed to add apples and oranges; we therefore show the life assets on one side of the page and the casualty assets on the other side without ever adding them together. In some cases, we have shown both cost and market values for preferred stocks for both companies, thus passing the burden of consolidation on to the investor.

CHAIRMAN ESPIE: This may illustrate the fact that we have more questions than we have answers. Even in the SEC treatment there is a surprising lack of uniformity in what various companies do when they consolidate. Steve has pointed out that his company has not been allowed to add apples and oranges together. Our company has.

As a matter of fact, the SEC has a rule that you cannot consolidate a life insurance company with any other company, but we do and they ac-

cept it! This is a very unsatisfactory state of the art, but that is about where it is.

MR. WALTER KLEM: Is there any philosophical reason why there should be different treatments of realized gains in the two statements?

MR. BERNAUER: We have asked the same question. The response that we have received from representatives from your industry is that it is an accident of timing. At one time the life statement of operations did include realized gains and income. But, when it was revised in 1951, there seemed to be very little activity in security trading. Many of the life companies had very little investment in equity securities as a percentage of their total assets, and, therefore, both realized and unrealized gains were put into the surplus statement.

On the other hand, fire and casualty companies historically have had a fairly substantial part of their investments in equities, and there seems to have been more activity in trading; so, when that statement was put together, it was deemed appropriate to show the realized gains as a part of net income, and it has never been changed.

MR. BITTEL: Initially, I think that the reason the life statement did not show realized gains was that life companies were not subject to taxation at that time as were fire and casualty companies.

CHAIRMAN ESPIE: What would you think of a company, a life insurance company, that went into the mutual fund business and wanted to count its mutual fund receipts in with premium income?

MR. BARTLETT: I am not sure that I feel strongly one way or the other, because it seems to me that we are trying to communicate to potential investors or stockholders certain information, and I think that they are primarily appraising stocks on the basis of past earnings and projected earnings.

Personally, I would say that it would not be appropriate.

MR. AITKEN: I think it should be included in premium but on a separate line. In other words, there should be one line for "Premium for Insurance" and another line for "Premium for Mutual Funds."

I look upon it as I do upon capital gains—the statement is more useful to the reader if he sees the item in the income statement but on a separate line.

SOCIAL SECURITY AND EMPLOYEE BENEFITS IN WESTERN EUROPE

I. *Social Security*
   A. What are the significant current trends in the scope and structure of social security in Western Europe?
   B. Do any of these trends foreshadow a similar evolution in the social security systems of the United States and Canada?
   C. To what extent are expanding social security benefits in some European countries pre-empting areas heretofore covered by voluntary action?

II. *Employee Benefits*
   A. In what countries, and in what benefit categories, is there a clear need for employers to provide supplemental benefits? To what extent are such provisions being made, either unilaterally or through collective agreements?
   B. What are the major problems encountered by American and Canadian employers in providing supplemental benefits for the local national employees of their European affiliates?
   C. What special problems are encountered in providing satisfactory benefits for "expatriates" and "third country nationals" working for overseas affiliates of United States and Canadian employers? Is this a growing or a diminishing problem area?
   D. What insurance and other facilities are available in European countries for the financing of employee benefits, especially pensions? Is there any real need or justification for North American life insurance companies to extend their group operations into these areas?

III. *Consulting Actuaries*
   A. In what countries are there consulting actuaries operating on a professional basis? In what ways do their practices and responsibilities resemble or differ from those of consulting actuaries in the United States and Canada, especially in relation to pensions?
   B. What special problems may be encountered by American and Canadian actuaries serving clients abroad, either from their home bases or from branch offices in Europe?

MR. ROBERT J. MYERS: One of the basic characteristics of social security systems throughout the world is that they never stand still. Changes are constantly under consideration, and frequently they are made. Many changes, however, are not real liberalizations and expansions into an ever diminishing area held by the private sector in the economic security field. Instead, they are made merely for the purpose of keeping the system up to date with changes in economic conditions. This is not to

say, however, that those of the expansionist philosophy in the social security field are not constantly striving to have governmental programs take over the lion's share (i.e., all) of the economic security field.

Accordingly, with all the changes that are in the wind, it is not possible to describe with any brevity what are significant current trends in the scope and structure of Western European social security programs. Instead, I shall devote my time to what I believe to be the two most important items at the moment—the proposed sweeping reform of the British system and the financial difficulties of the West German system.

Great Britain was one of the pioneers in establishing a national pension system and for years held to the basis of what was essentially a uniform flat pension for all eligible persons. Supplementary pensions graduated according to earnings and based on cumulative earnings were introduced in 1961. At the same time, provision was made for private plans to contract out from this supplementation.

Now the British government has proposed sweeping changes which are of such a detailed nature that only a broad summary can be given here (for more details, see the *Social Security Bulletin* for May, 1969). Under this proposal, the existing system would be phased out over a period of twenty years and a new system, completely earnings-related, would be introduced. Furthermore, the new system would contain automatic-adjustment provisions so that the maximum taxable and creditable earnings base and the past earnings credits would vary with changes in the general earnings level, while the pensions in course of payment would rise at least in line with prices.

The earnings base applicable to workers is to be set at $1\frac{1}{2}$ times the average earnings of adult male manual workers in manufacturing industries. In 1968, this would have yielded a ceiling of about $4,100 a year. Considering all the different factors between the two countries, this seems to be at about the same relative level as that in the United States program. It is interesting to note that the ceiling on contributions does not apply to employers, who instead pay on their entire payroll. To offset this, however, the contribution rate for employers is appropriately lower than it is for employees, so as to produce about the same aggregate effect.

In the beginning, the contribution rates for pensions are to be $4\frac{1}{2}$ per cent for employers and $4\frac{3}{4}$ per cent for employees. This rate is expected to be increased in the future—in fifteen years, if there is no contracting out and a shorter period depending upon the extent of contracting out.

The primary benefit, for retired workers, is to be computed from lifetime average earnings from 1972 on, with each year's earnings being revalued at the time of retirement according to changes in the earnings

level. The basic benefit is to be determined from a weighted benefit formula, namely, 60 per cent of average earnings up to one-third of the maximum earnings base and 25 per cent of the remainder of the average earnings. Thus the maximum pension is to be 36.7 per cent of the maximum creditable wage, which is not too far different from the corresponding figure of 33.5 per cent under OASDI. It should be noted that there is an important similarity between this British proposal and the basis that has been followed in an ad hoc manner under OASDI in the past; under both, adjustment of benefits after retirement is in accordance with changes in the cost of living.

The West German pension system, which is virtually completely automatically adjusted for changes in earnings levels (as it is under the British proposal), had certain financial difficulties in 1967–68. The primary reason for this was the slowdown in the economy, so that contribution receipts did not rise as rapidly as before, whereas the benefit increases arising from the automatic-adjustment provisions, which have a lag of several years, were continuing at a rapid pace. This problem was solved in two ways. First, the economy began to speed up again in 1969. Second, contribution rates were increased more than had been previously scheduled—for the employer and employee combined, to 16 per cent in 1969 and 17 per cent in 1970, instead of remaining at 15 per cent. Furthermore, an increase to 18 per cent will occur in 1973. Quite obviously, the benefit level of the West German system is significantly higher than that under either OASDI or the proposed British plan.

As to whether these trends foreshadow similar evolution in the social security systems of the United States and Canada, I would say that there is no strong direct effect. Those who plan the American programs do, of course, study what goes on in the rest of the world, but by this time they are knowledgeable enough to develop their own plans from their own experience. In any event, insofar as automatic-adjustment provisions are concerned, Canada moved strongly into this area when the Canadian Pension Plan was enacted several years ago. Now, in the United States, President Nixon has proposed automatic adjustment for the maximum taxable earnings base and the earnings (or retirement) test according to changes in the earnings level and in the general benefit level according to changes in the cost of living.

I can hardly give any authoritative views on the extent to which expanding social security programs in European countries will pre-empt areas heretofore covered by voluntary action. I believe that the British proposals are not particularly of an expansionist nature but are rather a reorganization of the program at about the same general level of benefit

protection. The complexity is introduced, however, that the automatic-adjustment features may make it difficult for private plans to integrate as closely as is called for by the contracting-out provisions.

It has always been my personal belief that the British approach of contracting out is not really either desirable or feasible. Rather, the only way to have peaceful coexistence of public and private efforts in the economic security field is by a distinct and clear subdivision such as we have in the United States and Canada, where the private plans build on top of social security instead of trying to integrate with it at a parallel level.

In this connection I believe that private pension plans in the United States will be able to live quite well, side by side, with the social security program as it would be modified by the President's recent proposals. These proposals are definitely not what I would call of an expansionist nature, such as would curtail the role of private pension plans—such possibility, however, being very much the case under some legislative proposals that are currently being made.

CHAIRMAN JOHN K. DYER, JR.: As Bob Myers pointed out, social security even on the proposed basis in the United Kingdom is by no means pre-empting the entire pension area, and, therefore, there is plenty of room for voluntary private plans. Probably there are more voluntary private plans there in proportion to the number of employers than there are in the United States.

In the United Kingdom the unions still have not shown any great interest in benefits, so the plans are for the most part developed by individual employers on a unilateral basis. Hence, there is a tremendous variety of plans.

In Germany social security is at a higher level than it is in the United Kingdom, but, before it reached that high level some ten or twelve years ago, private plans were very wide-spread, and they have continued those plans by simply moving up the objective to meet the new conditions. In other words, the reason for the plans there is not so much because of a tremendous social need for supplemental plans as there probably is in the United States, Canada, and the United Kingdom but for reasons of tradition and compensation.

The competition for labor, of course, is very great in Germany because of its rate of industrial growth.

In the Netherlands there is also a clear need for supplemental benefits, and most employers have in one way or another provided them. Many of the employees in the Netherlands are covered under various multiem-

ployer plans. When I last looked at the figures, probably twice as many employees were covered under multiemployer plans than under single-employer plans. There is a considerable variety of approaches both as to benefit structure and for supplemental benefits.

In Belgium most employers do some supplementing of the social security for their salaried employees but not for their hourly employees, at least up to now. There used to be some fairly important differences between the benefits provided by the social security system for salaried people and for wage earners. Those differences are being phased out, however, and how that will affect provision of supplemental benefits in the long run remains to be seen. It might be reasonable to predict on a purely theoretical basis that this would result in the spread of supplemental plans to hourly-paid employees.

Switzerland has a social security system in effect which was, as of the beginning of this year, fairly liberalized. It is still at a fairly moderate level, however; probably at a lower level than it is here in the United States or in Canada. Therefore, there is plenty of room for private supplementation, and there are plenty of private pension plans.

In France there is a social security system upon which has been superposed a very extensive development of industry-wide plans on a modified pay-as-you-go basis, which leaves room for supplementation only at the highest salaried levels.

Some of you might be familiar with these French supplemental plans. They are a very interesting thing to study. They have been highly successful so far, and no one in France apparently really believes in what they call "capitalization." In other words, they have had enough inflation to know that saving money for the future is simply no good.

There are a good many group life insurance plans in France, and the most recent development has been compulsory profit-sharing, which became effective this year. All employers in certain categories have to have a profit-sharing plan. The plans are privately administered, but they have to meet certain government specifications. An interesting sidelight on these is that employers get a double deduction for their contributions to profit-sharing plans. They get one deduction this year and another deduction next year, adding up to 100 per cent of the amount contributed.

In Italy the very high cost of social security leaves neither a need nor a desire on the part of employers to do any supplementing whatsoever, so the voluntary benefit picture there is just about nonexistent.

In Spain there is a very confusing situation at the moment. Spain finally got around to implementing its social security law a few years ago, a law that had been on the books for a long time. This was in the form of

an amendment, however, and even the government could not figure out what the amendment meant for about three years. The government passed a series of decrees that presumably explained the law, but nobody has yet figured out what the decrees mean. The social security law has a basic part and a voluntarily supplemental part. There is a contracting-out of half of the benefits, except possibly in reverse. Some people read the decrease as saying that, before you can put in any private supplemental plan outside the social security system, you must bring your employees into the full voluntary section of the social security law. There are other people, however, who say it does not mean that at all—that you can go right ahead and forget about social security and have your employees in under the minimum and put your voluntary plan in effect. You find that most of the people in this second category are selling insured plans.

In Sweden they have the basic plan plus the supplemental earnings-related social security plan that was put in effect about ten years ago. On top of that, there is a third layer which is a privately funded, privately administered supplement. It is mandatory upon practically all employers in Sweden by virtue of the fact that it was established through a collective agreement between the employers association and some of the unions. This layer applies only to the salaried employees.

The main problem which United States and Canadian companies have in setting up benefit plans in Europe is that they are Americans and Canadians, and they must realize that they are trying to solve pension problems in very different climates than those to which they are accustomed. Also, there are many uncertainties in these local situations in Europe. Social security changes, for instance, in general are not developed by a long drawn-out or loudly publicized legislative process, as they are here and for the most part in Canada. They appear rather suddenly, sometimes without any well-defined transition provision. Another uncertainty frequently encountered is that the rules on the tax and other aspects of private benefit plans are not clearly stated in writing but are often based on traditions and practices and are sometimes subject to individual negotiations. We find cases in which one employer has been permitted to do something in a certain way and another is prevented from doing the same thing.

An illustration of this can be found in Belgium, where there is really no facility designed to fund a noninsured pension plan. There is something known as the ASBL, established primarily for the purpose of funding charitable foundations, which has been widely used for pension purposes. People have been claiming for years that such a use of an ASBL is illegal, but they go on using it anyway. The chief critics of the device, the insur-

ance companies, have recently retreated from their own arguments, and a couple of the big insurance companies in Brussels have now set up an ASBL fund of their own, which is something like a pooled trust fund for their group and other clients.

Another illustration, which I think may become more evident in the next few months, is that, unknown to most people and carefully hidden by those few who did know it, it is perfectly possible to finance a pension plan in the United Kingdom by setting up book reserves. It has always been widely held by most people that you must set funds aside irrevocably before you can get a tax deduction for them, but that apparently is not true at all.

There is also a lack of dependable information on what other employers are doing. The Europeans for the most part are very secretive. This is not the case in the United Kingdom. I have had no trouble in obtaining information on what at least the large employers do, not only in their general plans but also in their so-called top-hat schemes for their higher-paid people.

In Switzerland it took me quite a few visits and discussions with a lot of people before I discovered the real reason behind the apparently low-salaried cutoff level—a feature of most of their pension plans. Of course, all the companies have top-hat schemes for their higher-paid people which cut in where the basic plans cut out. They do not tell anyone about those, however. The situation is similar in Germany.

MR. G. ASHLEY COOPER: The kind of expatriates referred to under II, C, are United States citizens employed by a United States corporation but sent abroad to work for a foreign subsidiary or affiliate company.

Generally speaking, group insurance benefits present little or no problem. It would, perhaps, be more accurate to say that most United States corporations handle these coverages in such a way that no problem appears, although on a strict, legal basis, there may be a potential difficulty. In any event, the usual practice is for most United States companies merely to keep the expatriate employee on the list of covered personnel for group insurance purposes. Both the insurer and the employer overlook the complications that might be inherent in terms of tax deductibility of contributions and unlicensed practice of insurance business.

Pension benefits represent a much more complex problem for a number of reasons, principally (1) because pensions are a long-range benefit, (2) pensions cost more than group insurance, and (3) pension plans are more strictly regulated from the tax point of view in the United States and in most other countries.

Before proceeding to consider the various approaches to private pension coverage, I would like to bring up the question of United States social security.

We generally recommend that United States social security coverage be maintained for United States citizens sent abroad, because it is assumed that these employees will return to the United States at or before retirement.

Under section 3121 of the Internal Revenue Code, the company may arrange with the United States Treasury for United States citizens working for a foreign subsidiary to continue participation in the United States social security system. Note that the company may choose *which* of its subsidiaries come under this arrangement but that *all* United States citizens working for a chosen subsidiary must be covered.

The term "foreign subsidiary" is defined as (1) a foreign corporation not less than 20 per cent of the voting stock of which is owned by the (domestic) parent; (2) a foreign corporation more than 50 per cent of the stock of which is owned by the foreign corporation described in item 1.

Once an agreement is made with the Treasury, the parent is responsible for making all returns and paying all contributions, although the company may, of course, obtain reimbursement of the usual employee contributions from the employee himself.

It should be noted, however, that in nearly every country continued United States social security coverage does *not* exempt the employee from coverage under the local system. Contributions paid to the local system, except for such short-term benefits as death and disability are, therefore, largely "wasted" if the employee returns to the United States in a short period of time. The usual course is to consider the "wasted" contribution as a form of tax and as a part of the cost of doing business abroad.

There are various approaches actually used or frequently considered for providing private pension plan coverage for United States expatriates. These approaches all have as their objective granting to the expatriate pension benefits equal to those he would have had if he had remained in the United States. A few companies follow different policies, but it is by far the most prevalent practice to try to provide "stateside" benefits.

The four approaches that I personally have seen most commonly used and discussed are the following:

1. *Maintenance on the United States payroll.*—Probably the most common procedure is to continue carrying the employee on the parent company's payroll (at least in part). This system, however, is under attack from the Internal Revenue Service and may expose the parent company to the charge that it has a

branch and is therefore taxable in the foreign country. The IRS objection to this practice is that the parent company is claiming tax deductions for salary and benefit costs with respect to a person who, strictly speaking, is not an employee of the parent.

Our opinion, therefore, is that this procedure is *not* to be recommended, even though it is widely used at the present time.

2. *Utilization of sections 406 and 407 of the Internal Revenue Code.*—It is becoming increasingly common to handle the preservation of retirement plan coverage for United States citizens under the provisions of section 406 (for foreign subsidiaries) and section 407 (for domestic subsidiaries operating abroad) of the Internal Revenue Code. This approach operates as follows.

In essence, section 406 specifically allows for continued participation in the parent company's pension or profit-sharing plan by an expatriate working for a foreign subsidiary, under the following provisions:

a) The expatriate is a United States citizen.
b) The foreign subsidiary is defined as above.
c) An agreement is signed with the Treasury to provide for continued participation by all United States citizen employees of the subsidiary in the United States social security program (as described above).
d) The parent company's United States pension plan specifically provides for coverage of these employees.
e) No other plan provides similar benefits. (Participation in the foreign subsidiary's local plan would, therefore, be prohibited.)

In much the same way as for social security, the parent may pick and choose subsidiaries to be covered but not individual United States citizen employees within a subsidiary.

3. "*Service pick-up approach.*"—What I call the "service pick-up approach" operates along the following lines:

a) At the time of transfer abroad, benefits accrued to date in the parent plan would be "frozen."
b) Upon transfer back to the United States, the retirement board may, at its discretion, recognize service abroad with the subsidiary or affiliate.
c) If such foreign service is recognized, there would be an arrangement for deducting the actuarial equivalent of benefits for the same service that may be payable under any other private plan of the parent, subsidiary, or affiliate.
d) There would also be a provision for offsetting the equivalent of any foreign social security (or other statutory benefits, like severance pay) to the extent that such benefits exceed the amount the employee would have been entitled to if all service had been in the United States.

4. *Transfer of assets.*—Finally, it is worth considering a system that transfers plan assets backward and forward as an employee is transferred. In practice, this approach seems to be more frequently discussed than acted upon, but it does

have certain advantages. The disadvantages are fairly obvious and can be summarized:

a) There may be legal problems, for example, with the IRS in the United States and with other regulatory bodies abroad, in getting approval for release of reserves from a qualified plan.

b) A special IRS problem that might arise is the withholding of tax on transfers abroad, on the basis that payments are being made to a nonresident alien.

c) Exchange control difficulties inhibit transfers from many countries.

d) In practice, other restrictions on the free transfer of reserves often arise; for example, insurance companies that will give a surrender value only with a cost penalty.

e) Actuarial inconsistencies are likely, because the reserve released from one plan will not support the "frozen benefits" under the actuarial assumptions of another plan.

f) In some countries there may be no plan to act as the depository for transferred reserves.

Each of these four approaches does in fact have its merits and drawbacks, so it is not possible to state definitely that one is superior to all others in all cases. On balance, however, the 406/407 procedure is the one that is gaining in popularity, and that is likely to be found satisfactory more and more frequently in the future.

A "third country national" is defined as an employee of a United States corporation, or a subsidiary, who is working in a foreign country and whose citizenship is of a third country (not of the United States or of the country of employment). As an example, a German citizen working for a United States company's subsidiary in France would be considered a third-country national.

Before getting into details, let me make a general statement on the whole third-country national problem. It is a problem area, but the volume of discussion, publication, and brain power devoted to the question is completely out of proportion to its gravity. To add some perspective, it would be reasonable to say that the average United States or Canadian company with, say, 10,000 employees and a world-wide setup might have twenty-five third-country nationals.

The first task is identification of those employees who present a problem, at the same time analyzing the nature of the problem. The principal considerations follow:

1. *World-wide pattern of benefits.*—Most North American companies with substantial operations overseas have already developed and are further developing a world-wide pattern of benefits with the following chief characteristics:

a) United States citizens working abroad continue to participate in the United States benefit programs that would be appropriate if they were employed in the United States. We have already discussed this.

b) Separate benefit programs are adopted on a country-by-country basis, depending on the conditions in each country. This means that a pension plan is instituted in Germany, for example, because conditions in Germany, including local practice, render such a plan desirable. In other countries, Italy, for instance, a pension and life insurance program will *not* be adopted, because social security and other statutory benefits are sufficiently generous and because it is not common practice to have such a plan in Italy.

In general, these local plans are conceived for local nationals, that is to say, for Germans working in Germany, and are designed to be consistent with local practice. They are, however, frequently written so as to cover citizens of other nationalities who may be working in the country concerned.

2. *Types of third-country nationals.*—There are really three different categories of third-country national employees:

a) An employee sent by a subsidiary to another country for training, for experience, or for other reasons, with the definite intention of returning the employee to his country of origin. The principal characteristics are (1) the foreign assignment is *temporary;* (2) the assignment is probably of *short* duration; and (3) there is a definite plan to *repatriate* the employee. This category of third-country national will be designated as a "Type A" employee.

b) An employee who works on a regular assignment in a country other than his home country but who may ultimately retire in his home country. The characteristics here are (1) there is *no clear plan* as to where or when the employee may move in later years and (2) the employee has considerable *mobility* and may work in a number of countries. (This mobility gives rise to the peculiar problems of third-country nationals and is discussed further in paragraph 3.)

This kind of employee will be designated as "Type B" and is, in effect, the true third-country national for whom it is extremely difficult to arrange employee benefit coverage.

c) An employee working on a regular assignment in a country other than his home country but with little expectation of transfer to jobs in other countries and perhaps with little desire to retire to his home country. This type of employee is, therefore, largely *static* and is designated as "Type C."

3. *Mobility.*—In the preceding paragraph, we have defined Type C employees as static. For example, a Dutch citizen may be hired by the company's subsidiary in Germany, be employed continuously in Germany, and retire and die in Germany. He would, of course, enjoy the statutory benefits payable in Germany and would, under normal circumstances, participate in the company's German pension program. This situation appears to us to be entirely satisfactory, and we recommend, therefore, that the various local plans continue to

cover employees of foreign (other than United States) nationality. The only special consideration that may be required is the facility to pay benefits abroad if the employee decided to retire in his home country. This may be subject to exchange control and other restrictions but otherwise would probably require no amendment to existing plans.

The Type A employee may move but, by definition, each transfer is temporary and short and will be followed by repatriation to the home country. The obvious answer is, therefore, to continue the employee in the benefit programs of the country of origin to the extent that this is possible. If the transfer abroad is clearly denoted as temporary and if the employee can be classified as "on loan" to the subsidiary in the other country, this should be possible for periods of up to two or three years.

It is the extreme *mobility* of the Type B employee that gives rise to real problems in benefit coverage. The difficulties caused by the mobile employee can be summarized as follows:

a) Most countries will *not* allow for continued coverage under a local pension plan of employees permanently transferred to another country and another subsidiary. There are some notable exceptions to this rule; for example, France, which allows continued coverage under public and semipublic programs for French citizens wherever they may reside.

b) He may retire in another country, possibly his country of origin, and exchange control restrictions will prevent his receiving all or a part of any local retirement benefits.

c) Part of his service may be in countries where the company does not operate a private pension plan. There will, therefore, be a gap in pension accruals.

d) Unless the various local programs provide to the contrary, transfer from one country to another may be interpreted as termination of service with forfeiture of prior accrued benefits. This tends to widen the gap still further.

e) Rapid movement from one country to another, before or after retirement, can cancel all or a part of social security entitlements. For example, many countries require ten or fifteen years of contributions before any social security retirement benefits are due, and some countries will not pay social security benefits to nonresident aliens.

f) It is extremely difficult to predict in advance which employee will become a Type B third-country national and how long he will remain in that category. For instance, a United Kingdom citizen could remain for many years a local national employed by the United Kingdom subsidiary. He might then be transferred to Australia, at which time he becomes a third-country national; if he were transferred back to the United Kingdom, he would revert to local national status.

Before considering, in detail, the feasible solutions to the problem of benefit coverage for third-country nationals, it appears worthwhile to list all the available options, even though it will be seen that some of them are not viable. The alternatives may be summarized as follows:

Local plan coverage.—It would be possible to take no action and allow third-country nationals to participate in local plans, where they exist, in those countries where the employee may be working. As described above, we believe that this is perfectly satisfactory for the static Type C employee, but it leaves gaps for any employee with mobility.

Home-country coverage.—This approach will normally work satisfactorily for Type A employees (on temporary transfer), but it is our experience that there are severe legal problems involved in applying it to Type B employees, who are permanently transferred and mobile.

United States plan coverage.—A possible approach would be to include third-country nationals in the company's domestic (United States) benefit programs. As far as pension coverage is concerned, there would be definite IRS qualification problems. It would be ruled discriminatory if some but not all of a subsidiary's employees were to be covered under a United States pension plan. Therefore, unless the employees can be considered in some way as being on the United States company payroll, this is *not* a viable solution.

Individual treatment.—Each third-country national could be treated individually, possibly under an annuity policy. This is an expensive procedure, unless there are only very few (perhaps two or three) employees concerned. Moreover, there are legal penalties in some countries (for example, Venezuela) if coverage is effected with an insurer not registered to transact business. We, therefore, reject this solution also.

Separate TCN program.—It would be possible to establish a separate program for those third-country nationals (mainly Type B) that present a problem. Many types of benefit formulas can be designed, and funding could be through an offshore trust, company book reserve, or other medium.

Employment of another foreign program.—It would be possible to arrange for third-country nationals to be covered under a single foreign program—for example, in Switzerland. This is definitely feasible from the point of view of the Swiss authorities, but there are other substantial problems in regard to (1) plan design, (2) remittance of contributions from other countries, (3) tax deductibility in the country of residence, and (4) legal restrictions on foreign insurance.

Regional approach.—In some areas of the world, for example, Western Europe, employee benefit practices are sufficiently uniform for a regional plan to be considered. There are, however, two obstacles to this approach, at least at the present time. In the first place, social security, even in the Common Market, differs widely from country to country, although "harmonization" is a distant goal. Second, multicountry funding has not developed adequately: some insurers offer a facility that has some of the desired features, but there is inadequate flexibility and rates tend to be rather high for small groups. On a global basis, the operations of many companies are too widespread for the approach to be feasible.

My suggestions for a solution to the problems raised earlier involve the establishment of a separate international plan designed specifically for

mobile third-country nationals, particularly comprising those in Type B. The main features are along the following lines:

Coverage should be sufficiently flexible to cover only those employees who are identified as true mobile third-country nationals.

The *benefit formula* should be developed by consideration of the *total* benefits appropriate, including any social security, other governmental benefits, and private plan benefits that might be accrued in the course of the employee's career.

Simplicity should be emphasized at all points.

The funding of an international plan of this type presents severe problems, and this is the area where an unusual amount of discussion is prevalent. To cut a long story short, the position as I see it is as follows:

1. *Media available.*—There are many different alternatives available, including both insured and self-administered trust vehicles in the United Kingdom, Bermuda/Bahamas, Switzerland/Liechtenstein, and the United States.

At my firm we have conducted considerable research into this subject, and, briefly, our conclusions are as follows:

a) *No* medium offers all the desired characteristics.
b) In general, insurance contracts do not offer sufficient flexibility.
c) A United Kingdom trust fund (established under section 21 of the 1961 Finance Act) offers the best combination of advantages but is still *not* satisfactory.
d) Essentially, any one funding medium in any one country suffers from two major impediments: (1) likely loss of tax deductibility, since virtually all countries insist on local funding to obtain the benefits of tax advantages, and (2) exchange control restrictions, particularly with regard to any transfers from less developed territories.

2. *Proposed solution.*—These obstacles are so significant that we recommend that the international plan *not* be funded with assets outside the company. Viewed in another light, this could be considered as "self-funded."

The procedure would operate as follows:

a) National contributions would be retained by the company and the actuarial liability for pensions be set up in the form of book reserves only.
b) Benefits, when due, would be paid directly by the parent corporation and a tax deduction claimed at that time.
c) It may be possible to devise a system of cross-charges to the relevant subsidiaries in order to allocate costs equitably.

By not funding in the normal manner, the company is losing certain advantages, and the employees are giving up a certain degree of security. It is, however, our opinion that the adoption of an appropriate and equitable program is of more importance to the employees and to the company

than the funding, especially since it is envisaged that the amounts of money involved would be relatively small. Moreover, if conditions should change in the future in such a way as to make funding economically feasible, there would be no difficulty in switching to a formal financing method.

MR. JOHN N. MILLER: In general, the facilities available in European countries for financing employee benefits are similar to those in the United States. Life insurance is used to a large extent, although the basis is often the individual level premium policy rather than group annuity or deposit administration. The latter, however, where not prohibited by law, appears to be growing in popularity. There is also a lively interest in equity funding. Mutual funds are becoming increasingly available in most European countries, although they may take somewhat different forms. In Germany employers are permitted to fund pensions through book reserves and obtain tax credits comparable to those under insured or trusteed plans. In France there is very little funding of pensions, most of which are on a modification of the pay-as-you-go method, called "repartition." The life insurance companies, however, are doing a very extensive business in writing group term life insurance related to the repartition schemes.

In most of the European countries the relative growth in group insurance has exceeded that of individual insurance in recent years. In addition to pensions and group life insurance, there is an increasing interest in long-term disability benefits for employer-employee groups. The premiums for such benefits are usually established on a level premium basis rather than on yearly renewable term. Because of the comprehensive nature of social benefits covering hospital and medical care, there is little if any market for group benefits in this area in most of the countries of Europe.

The North American life insurance company's extension of its group operations into Europe provides the home-based employer with the advantage of dealing with a single insurer in its international operations. There is also the advantage of providing through its international plan for the continued coverage of transferred employees who become uninsurable.

The insurance company domiciled in Canada or in the United States has available at least four methods of providing a group coverage on an international basis.

First, in most countries it is possible for a foreign company to become registered as an admitted insurer. Prior to World War I, a number of leading companies on the North American continent operated extensively

in many countries overseas. While the Canadian companies in general continued their international operations, most of the United States companies withdrew during or after World War I. While some domestic United States companies have long conducted an overseas business and some others have recently extended their operations, relatively few now operate outside the United States and Canada.

Second, there is the method of providing group or pension service on an international basis by establishing an arrangement, usually by reinsurance, with a company which is registered in a number of foreign countries and which can write the benefits desired for the overseas employees of the parent employing corporation.

Third, a similar arrangement may be developed with a number of companies, each of which operates in one or more of the foreign countries where underwriting facilities are required. There is no necessary relationship between the foreign companies with which the North American company makes its arrangements or reinsurance treaties, each treaty being independent of the others.

Fourth, the North American company may make an arrangement with a consortium of companies overseas which are interrelated for the purpose of providing a coverage in a number of countries.

It is possible for a company to use different methods in different countries or groups of countries, and conceivably a single company could employ, concurrently, all the methods enumerated.

MR. COOPER: It will come as no surprise to hear that consulting actuaries, at least in the pension and employee benefits field, are more commonly found in those countries where there are considerable numbers of noninsured plans.

This truism allows me to develop three different categories of Western European countries according to the degree of development of the so-called trusteed pension plan and therefore the degree of prevalence of consulting actuaries in the pension field.

The first of these categories contains those countries where private pension plans have not, for one reason or another, developed far at all. Countries of this type are France, Italy, Portugal, Spain, and Sweden. There are, of course, many distinguished actuaries in these countries, but their activities are very largely outside the consulting field, particularly as it relates to pensions.

My second category comprises those countries where private pension plans are well developed but the vast majority of them are insured. The other Scandinavian countries—Denmark, Finland, and Norway—are

typical of this group. There is some consulting work performed in each of these countries, but there are virtually no full-time consulting actuaries in the pension field. Some of the leading actuaries in life insurance companies or government service are available for consultation and may also act as representatives of state supervisory organizations.

Finally, there is the category of countries where private noninsured pension plans are common. The best examples are Austria, Germany, the Netherlands, and the United Kingdom (if I may be allowed to count the United Kingdom as being in Western Europe). Two other countries, namely, Belgium and Switzerland, are really halfway between categories two and three, since the majority of private plans are insured, but I have preferred to place them in the final group.

The rest of my remarks in this area will be devoted to consulting actuaries from this last category of countries.

As far as practices and responsibilities are concerned, at the policy level there are very few differences from conditions in the United States and Canada. In general you will find the following:

1. Consulting actuaries are organized in partnerships.
2. The standard of professionalism is extremely high. Insurance commissions are not accepted, and all work is on a fee basis. In the United Kingdom, for example, the code of professional conduct is both strict and strictly followed, more so than it is in North America.
3. Professionalism extends to what is essentially a veto on advertising and solicitation of new business. In fact, it is not always easy to find a consulting actuary when you want one.
4. In Austria, Germany, and the United Kingdom, there are legal definitions of the term "actuary" but not in the other countries.
5. In all six countries there are active and flourishing actuarial societies.

At the detailed level, practices do, of course, differ from country to country, sometimes quite widely.

The problems that may be encountered by American and Canadian actuaries serving clients abroad are really somewhat obvious. It may, however, be helpful to gather them together and summarize them.

Apart from the well-known, but in my opinion exaggerated, difficulties of adjusting to a foreign country, particularly if he is living there, the United States or Canadian actuary will be faced with the following problems:

1. *A major language barrier.*—This is a particularly aggravating problem, since it takes a long time to develop fluency beyond "kitchen" level. Some foreigners *never* reach the point of being able to discuss technicalities or to draft a document in a foreign language.

I might add that translations can be extremely confusing, since terminology varies from place to place. For example, the British use the phrase "government stock" to mean government bonds, and the Belgians use the term "group insurance" for all insurance on groups of employees.

2. *A sense of nationalism.*—From my peculiar position, I view *every* country as nationalistic, and it seems wise to acknowledge the fact.
3. *A completely new set of laws.*—This is especially true in the tax area. This is, in my opinion, less of a problem than the language and nationalistic barriers, but it demands a certain flexibility of outlook.
4. *Much greater secrecy in business matters.*—In Europe it is not always an easy matter to find out the provisions of a company's pension plan. Nor is it easy to meet the people you want to meet.

On the other hand, many features of life and work in Europe are similar to those with which we are familiar. The structure of a pension plan, for example, is amazingly consistent.

Let me end with one difference on the plus side. Looking toward Washington, where I live, I can say without hesitation that in every foreign country with which I am familiar the tax regulations and the tax authorities are kinder and more co-operative than they are in the United States. That is a major consolation.

1. What new developments are there in medical expense coverages? What benefit amounts are being offered for hospital, major medical, and other medical care coverages? Can additional benefits and higher benefit amounts be made available to existing policyholders to allow updating of their coverage?
2. On what basis is medical expense coverage being written for impaired risks? Under what circumstances should the premium rateup, the waiver, the reduced benefit, and combinations thereof be employed? What is the claim experience? What is the persistency experience?
3. What are the current trends in major medical experience? What steps are being taken in product design to minimize the effect of future increases in medical costs? What has been the experience with the variable deductible policy, from the standpoints of field reaction, administration, and claim savings realized?
4. When companies have been forced to increase premium rates on existing policies, what has been the policyholders' and agents' reactions? Have lapses been abnormally large? Is there evidence of antiselection by persisting policyholders? What steps have been found to minimize adverse effects of increasing premium rates?
5. What have been the developments in underwriting rules for medical expense insurance, e.g., nonmedical, inspection, attending physician's statement, guaranteed issue?
6. What are the trends in agent compensation for medical expense policies? Is there a trend toward reducing first-year commissions to lessen the surplus drain and improve persistency in renewal years?
7. What is the experience under group conversions? What types and amounts of benefits are offered?

MR. JOSEPH C. SIBIGTROTH: The one factor that has exerted a predominating influence on the developments in medical expense coverages has been the very rapid and continuous increase in the cost of medical care.

The cost-of-living index has been given a lot of attention lately because of its rapid rise. This index, however, is a slow performer when compared with the increase in the cost of medical care in recent years. For example, the average daily cost of caring for a short-term patient in a general hospital has risen from $58 in 1967 to $65 in 1968, to $71 in 1969; it is estimated that this daily cost will be $79 for 1970 and close to $100 by 1972.

We are familiar with the factors that have given rise to this trend. New

government programs, particularly Medicare, private health insurance programs, progress in new drugs, new operations, and new treatment facilities have added materially to the cost of hospitalization. One of the most important factors has been the tremendous increase in wages for hospital personnel.

The public has rapidly become sensitive to these increasing medical care costs and has been purchasing policies with increasingly larger benefits. In general, the industry has responded by providing substantially higher benefits, by expanding areas of coverage to new methods of treatment, and by providing ways under which policyholders can update their existing coverage.

First, companies are revising their medical expense policy portfolios to provide higher benefits and broader coverage. Under basic hospital policies, just a few years ago $25 was the maximum daily room and board benefit offered by practically all companies. Today, a great many companies offer benefits as high as $50, and a few companies have gone considerably beyond this amount. Miscellaneous hospital expense benefits, which are generally a multiple of the DHB, have increased accordingly. Surgical schedules providing a maximum of $1,500 for a particular operation are not uncommon today as opposed to $500 a few years ago.

CHAIRMAN NIELS H. FISCHER: I suppose that these higher costs have a particularly important effect on major medical limits?

MR. SIBIGTROTH: Yes. In the early 1960's, these policies generally provided maximum benefits of $10,000, with inside limits of daily hospital room and board ranging from $15 to $35 per day and surgical benefits of $1,000. Today it is not unusual for major medical policies to be issued with maximum benefit amounts of $25,000 or more, daily hospital room and board benefits of up to $70, and surgical benefits in excess of $2,000 for the most complicated operation.

CHAIRMAN FISCHER: What about changes in the types of benefits, particularly the trend toward ambulatory care?

MR. SIBIGTROTH: There is also a definite trend today toward medical care policies that provide more inclusive coverage. Most of the policies now being issued include coverage for posthospital confinement in a nursing or convalescent home. The benefit is generally 50 per cent of the daily hospital room and board benefit and is payable for 30, 60, or 100 days. Many policies also include specific benefits for home nursing care or

outpatient treatment. Some companies provide a special benefit for confinement in an intensive care unit, usually twice the amount of the room and board benefit.

Dental coverage seems to get a lot of publicity these days, but, as far as we can determine, in the individual health area it is still in the talking stage. As far as we know, this coverage is currently available only in group policies. However, with charges for dental work going up at about the same rate as those for other medical expenses, there is no question that there is a need for health coverage in this area.

With the advent of Medicare three years ago, practically all companies revised their medical expense portfolios so as to be compatible with this new program for senior citizens. Most companies replaced their lifetime hospital and major medical policies with policies providing coverage to age 65. Some companies introduced programs available to people aged 65 and over to supplement their Medicare benefits. These policies reflect a wide variety of approaches to the problem, ranging from small policies which provide benefits when Medicare runs out or small additional benefits to comprehensive policies of major medical design, which provide a wide range of benefits to supplement Medicare.

CHAIRMAN FISCHER: Granted that new policyholders can buy these higher levels of benefits and new types of benefits, but in what position does this put the existing policyholders who bought policies years ago that are inadequate today?

MR. SIBIGTROTH: Many companies have developed programs which permit policyholders to update and modernize their existing medical expense insurance. A few companies offer a "built-in" modernization through a guaranteed purchase option, which enables the insured to increase his daily hospital room and board benefit at specified intervals. Other companies have programs for updating coverage by using riders which may be added to in-force policies.

New York Life has two riders which may be added to our regular hospital expense policies. One provides benefits for medical care, convalescent home care, private duty nursing, and various laboratory services, tests, and treatment up to an over-all maximum of $5,000. The other rider allows the insured to increase the daily hospital room and board benefit in his policy up to an over-all maximum of $70. While the sale of these riders got off to a slow start, our recent experience in adding these riders has been very encouraging, and we anticipate a sizable volume of

business from this program as more and more people become aware of the program.

We also have a rider which may be attached to in-force major medical expense policies. This rider enables the insured to increase the inside limit on daily hospital room and board charges up to a maximum of $70 per day.

The rapid increases in medical care costs in recent years have forced us to move from policies which had relatively low premiums to policies with premiums that are as large or even larger than the premium for the average life insurance sale. In view of this, and in the light of future increases in medical costs, we feel that it is essential to provide our policyholders with the opportunity to update their coverages to meet changing conditions.

MR. JOHN J. GIANINO: Do you think that maternity benefits will be reduced more and more and finally eliminated, or just where do you see the trend going?

MR. SIBIGTROTH: This is an individual company problem. It is closely related to how the company's agents feel about the markets that they sell now. There are two different approaches: one is to minimize or eliminate benefits and the other is to keep liberal benefits in the policy. In my company we favor the latter approach. We feel that this encourages sales where an agency force is life-insurance-oriented. It builds up the premium at the young ages. While we know other companies have taken a different attitude toward maternity benefits, our reaction is that we can price it if people want it.

MR. JAMES J. OLSEN: You are talking about higher limits on daily hospital benefits. I wonder whether you have the reverse also; if there is a prevailing semiprivate room cost in a particular area of $50, should we allow the agents to sell $20, or should we allow a second policy to be issued on top of another one, which will cause overinsurance?

MR. SIBIGTROTH: I think we should have a minimum size for a policy. We have gradually increased our minimum, and I think it is now $10 a day.

MR. OLSEN: Will you sell $10 to someone, if that is his only policy and the average hospital room costs $50 per day?

MR. SIBIGTROTH: Yes. It is part of our over-all philosophy of selling the same hospital plans country-wide.

MR. OLSEN: We use an 80 per cent rule—80 per cent of the semiprivate room rate—and will not go below that.

MRS. ANNA M. RAPPAPORT: We have a rider which will allow people to increase their room and board benefits. This rider can also be used to supplement our major medical, which has an inside limit on room and board of $35 per day. We used to go to $50 a day, in the days when that was considered high. I think our present limit would be considerably higher and vary by geographical area.

MR. ANTHONY J. HOUGHTON: Some of my clients use the limit rule of semiprivate room charge plus $15 a day from all insurance sources.

MR. DANIEL J. McCARTHY: With respect to these updating riders, what underwriting approach do you take? I ask in part because of underwriting expense associated with this relatively small additional premium.

MR. SIBIGTROTH: We are a little more liberal than we would be on a new issue. We never would automatically get medical evidence of insurability for these riders.

MR. ALFRED L. BUCKMAN: We offer an increase rider for daily hospital benefit only to policies on which no claims have occurred during the past two years; we have a time limit for enrollment, too.

CHAIRMAN FISCHER: Was there adverse reaction to that system from policyholders or your field force? Was it considered to be "postclaim" underwriting?

MR. BUCKMAN: No, I have heard of no such reaction.

MR. WILLIAM A. FEENEY: Given the broad range of benefits usually provided in a major medical policy and the rising costs of medical care throughout the nation, it is to be expected that the trend of major medical claim experience is upward. This is particularly evident since the advent of Medicare. It has more frequently become necessary to institute periodic premium increases in trying to keep this line of business solvent. There are a number of practical difficulties in doing this, as will be discussed later in the program.

When companies first introduced this type of coverage, the idea was to insure against the *infrequent* illness or injury which resulted in large medical bills. This was done on the basis of a deductible amount, usually

established at the level of $500. Today we see more and more hospital confinements for minor impairments which result in major medical claims.

Several approaches have been taken in an attempt to minimize the impact of the medical cost increase.

1. Inside limits have been adopted for hospital room and board, surgical, and private duty nursing benefits. There is no question that such limits help to control claim costs. There is a drawback to this approach, however. With the pace at which costs have been increasing, inside limits could quickly produce the effect of inadequate coverage. If a family has to pay half of what may be termed a catastrophic medical bill, it may still be a financial catastrophe for the family. As Mr. Sibigtroth has indicated, some companies have gone to considerable lengths to provide updated coverage to meet these increasing medical costs more adequately.

2. Another approach has been to expand the coverage of major medical policies to include convalescent nursing home care. Benefits are usually provided for some limited period after a hospital confinement and at a rate of benefits in line with costs in such homes. This could have a beneficial effect in encouraging earlier termination of regular hospital confinements and in substituting less costly nursing home care when the medical condition permits. In the same framework, it might make sense to provide higher hospital benefits, for treatment in an intensive care unit of a hospital, than for routine care.

3. Another fairly recent development, but one which has caught on widely, is the introduction of a major medical policy with a variable deductible amount. As most of you know, this type of policy provides benefits which take account, through the deductible-amount provision, of the other medical expense coverage the insured has. At the Equitable, our policy pays 75 per cent of the amount of covered charges in excess of the deductible amount. The deductible amount is defined as the greater of a basic deductible (such as $500, $750, or $1,000) or the amount paid by the insured's other medical expense coverage. Our policy does not contain inside limits on hospital room and board or surgical benefits. This sort of benefit structure avoids overlapping and duplication of coverage with base plans, and the resulting lower claim cost permits substantial maximum benefits to be provided, at an economical premium.

The policy has been sold on a nation-wide basis and has been very well received by our agency force and the public. The Equitable has been issuing such a policy since August, 1962, and we have paid over $15,000,000 in claims on close to 90,000 policies in force.

Claim administration has been a bit more difficult than was true with the older type of fixed-deductible policy, but the difficulties are nowhere

near the magnitude that we anticipated when the policy was first developed. Occasionally questions arise involving policyholder misunderstanding of the benefits. The latter is the exceptional situation, however, and we believe our success with this policy and the remarkably few complaints arising have been due to the rather extensive efforts we are making to assure complete understanding at the time the sale is made. The nature of the deductible amount is clearly spelled out in our sales literature, in the application, and in a special notice of claim form included with every policy issued.

MR. SIBIGTROTH: Do you think you really get reliable information about other coverage at the time you write the policy?

MR. FEENEY: I believe we do. We get this information on the application. We also have a special notice of claim form which provides current information, and the proof of loss forms ask the doctor and hospital what other insurance the claimant has.

Claim administration has been a bit more difficult than it was with the fixed-deductible policy. Our claims people say that average claim handling takes about 15 per cent longer.

CHAIRMAN FISCHER: What aspect of claim settlement would explain the extra time?

MR. FEENEY: Several aspects. First, determining what other coverage is in force. You must check the notice of claim form and the doctor's statement on the proof of loss form, the hospital statement, and the insured's insurance application. Then you have to figure what the other coverage pays.

Oftentimes, the insured himself does not know what the other coverage pays. If you get a general description of the other coverage, the claims people estimate what the other coverage will pay. This could produce problems in a place like New York City. There are several types of Blue Cross plans, with different levels of benefits. Therefore, in the absence of a precise description of the Blue Cross plan, claims men assume the most liberal plan. They estimate the settlement on that basis and say, "We do not have a full description of your plan but are making the initial payment of your three-year benefit period on the assumption of such-and-such a plan." If the insured notifies us that benefits are other than what we assumed, we make an adjustment. So, it is checking with the insured himself as to what coverage he has and going back occasionally to other

companies to get a better-defined description of the plan, which takes time. Incidentally, our claims people say that they usually get a good response when they go to another company to ask for coverage information.

CHAIRMAN FISCHER: How does this affect claim costs?

MR. FEENEY: This type of co-ordinated coverage has a significant effect on claim costs. When we developed the policy, we anticipated that the deductible amount in a claim settlement would often be higher than the policy's basic deductible. At that time we estimated that, if we had not included this feature, we would have had to charge premiums 20 per cent higher on the average than those we did adopt. Our experience so far fully justifies this estimate. Almost half of our claims are settled on the basis of a deductible amount higher than the policy's basic deductible.

When the policy was developed, we thought that this sort of benefit structure would extend the period for which the premium scale could be used without upward adjustment because of rising medical costs, even though such periodic adjustments are a fact of life in this time and cannot be avoided for an indefinite period. We are still selling the policy at the premium rates introduced in 1962. Claim costs, however, are going up, and premium adjustments will no doubt be required to keep pace with the rising medical costs.

MR. HARRY L. SUTTON, JR.: Do you have to vary the rates of deductible depending on the admitted base plan that a person may have when he applies, or is it really up to the agent?

MR. FEENEY: We have rules of thumb. In New York, for example, we recommend at least a $750 basic deductible because, generally, the Blue Cross plans pay a large part of the hospital bill.

MR. ROBERT N. HOUSER: We have had such a policy for years and recently submitted another. We ran into state-approval problems. One requires telling policyholders every year that they can change their deductible amounts. There is a mechanical problem in doing this.

Another requires that co-ordination of benefits begin only after the insured has been reimbursed for every dollar he is out of pocket. In other words, the coinsurance element must be 100 per cent until that time.

MR. FEENEY: New Jersey and California require notice of the right to change the deductible.

I think this is not a bad idea, at least every several years, to send a notice to the policyholder reminding him of this privilege, in case his other coverage has been increased.

I have heard that Kansas is the state with the special co-ordination requirement. It definitely destroys incentive to keep medical costs down. The 25 per cent coinsurance that we have is important, particularly in a policy without inside limits. I do not see how we could observe the Kansas rule without increasing premiums in that state.

MR. GIANINO: The major medical policy with an integrated deductible may well satisfy the insured's needs if it has no inside limits. Where inside limits are present, however, I feel that the type of integrated deductible included in most policies provides unsatisfactory coverage. Regardless of the amount of his basic hospital coverage, the insured will end up paying out of pocket for any excess of charges over the major medical inside limit. For example, if a claimant incurs a daily room and board charge of $65 and he has a major medical policy with a $40 inside limit and a basic hospital policy with a $30 daily limit, he will not be fully covered. He will have to pay at least $25 out of pocket, since the $30 benefit from the hospital policy will be deducted from the $40 benefit on the major medical policy before the major medical claim payment is made. On a large claim, this excess could easily amount to more than $1,000 out of pocket, even before any further restrictions are imposed.

CHAIRMAN FISCHER: If there are inside limits, they have to be kept up to date.

MR. FEENEY: Some companies with inside limits pay 100 per cent of that limit on room and board or on surgical, and coinsure the balance of the charges.

MR. SUTTON: If you find at claim time that a man has purchased other coverage, would you recommend that he raise his deductible or do you force him to?

MR. FEENEY: The agent doing his job should encourage the man to raise his basic deductible. We do not require it.

CHAIRMAN FISCHER: I believe one danger in requiring a higher deductible is that claim situations can arise where the claimant is paid nothing by his basic insurance because he is not hospitalized, but the condition requires constant medical attention, drugs, and private duty nursing. In

these instances, the insured must meet the entire deductible out of pocket. Such instances are, admittedly, rare.

MR. HOUGHTON: During the 1960's many insurance companies that issued medical expense policies were forced to increase premium rates. This was especially true with respect to major medical-type policies where there were few or no inside limits. On these open-end policies, the necessity of increasing rates periodically should have been, and probably was, anticipated, since it would have been impossible competitively to include in the gross premium calculation an increase factor which would anticipate the secular increase in medical costs. And, of course, the extent of the increase during the last five years is probably greater than most actuaries would have predicted, even had they attempted to make provision in the gross premium for such increase.

There has also been occasion for some companies to increase premium rates for basic hospital and surgical plans with inside limits for various reasons.

When the need for such increases arises, often it is the task of the actuary to make known to the management and agency department the need for the increased premium scale, the explanation for the requirement, and the extent of the increases. At that time the questions of policyholders and field reaction are considered.

The questions run something like this: Will the lapses be very heavy? Will the healthy policyholder lapse in a much greater proportion than impaired lives? Will the proposed rate increase actually cause adverse experience which will result in a worse financial position than maintaining the current rates? Should the proposed increases be scaled down to a level which is lower than desired but which is anticipated to cause minor lapses and few complaints and little antiselection? How should the field force and policyholder be notified, and how should the explanation be phrased so as to retain the maximum amount of confidence and to minimize complaints?

When a company first experiences the necessity of making a rate revision, the above questions are generally approached with a pessimistic attitude with dire expectations, and often the company compromises the required increase so much as to fail to achieve the financial relief required.

In my experience with companies with which I have been employed or retained as a consultant, the actual experience following a rate revision has been much more favorable than one would anticipate. If the original premium rates were reasonable to begin with and revisions are not too large—20–30 per cent—there has been very good acceptance. Even in-

creases of 40 per cent appear to be accepted. But, when the increases are of a magnitude of 80–100 per cent, there is quite a marked change. In this last case, complaints are much more frequent, and the charge is made that the company has demonstrated a complete inability to calculate rates and has impaired the confidence of policyholder and agent. The agent feels embarrassed and vulnerable. The agent suspects that the policyholder will believe he has been lured into a very expensive contract by a patently deficient initial rate.

The regular lapse rates vary so much by company that any absolute estimate of the extra lapses due to rate increases is impossible, but typical of the experience I have encountered is an increase of 50–100 per cent of the regular lapse rate. For example, if the company had a 15 per cent lapse rate on a block of business prior to the rate revision, the lapse rate for the year when the policies are being renewed at the higher rate might be 25 per cent.

CHAIRMAN FISCHER: The question that comes to most of our minds as actuaries is the question of antiselection by the healthier lives. How do you determine this?

MR. HOUGHTON: That is, of course, what everyone fears. My studies indicate that lapses represent an average cross-section of risks. We found some individuals lapsing who had eight or nine claims in the prior five-year period. You could not attribute any lapses to the fact that people did not anticipate future claims.

Some were, no doubt, not in a position to pay the rate increase. Some might have lapsed in any case. It is hard to tell.

There are several methods of obtaining the best results and avoiding the adverse effects of a rate increase.

1. Explain the situation to the field force in a letter or through meetings, and emphasize that the policy is still fairly priced in relation to competition and actual cost. Let the field force know a covering letter will be sent to the policyholders to inform them of the necessity for the increase so that the field force will not be completely responsible for explaining the situation. Both agents and policyholders are well aware of the increasing cost of medical care because of the publicity given to the subject.

2. Make sure that the rate scale is reasonable and defensible and that the increase is justified by experience to date and experience projected, based on statistically significant data. Make sure that the increase on one policy form is consistent with the rates and benefits of similar forms.

3. Make the decision to revise the rate structure promptly enough that the increase can be kept within an acceptable limit. In the case of a policy which will by nature require an increase every four or five years, do not reduce the current increase to such a low level that the next required increase will place the company in an intolerable situation.

4. In designing benefits, setting premium scales, and selling policies subject to increasing costs, anticipate the revision of premium rates so that management, the field, and the policyholder will understand and accept the revision.

5. When the rates are changed on a currently issued policy form, the company has policyholders in force one month, one year, and so forth. If possible, it is desirable to hold the initial rate until the second anniversary. This may be accomplished either by reference in the renewal provision or by administrative decision where there are no legal impediments.

With respect to item three, which concerned prompt recognition and correction of inadequate premiums, the company is occasionally challenged by an insurance department that views the past experience as tolerable and does not recognize the potential future losses. In the case of a policy form which has a substantial select period and a steep morbidity cost by age and possibly an increasing cost in line with medical charges, the ratio of actual experience to expected experience is more significant than the absolute claim rate. A major medical policy form with claim ratios of 25, 37, 48 per cent on combined duration experience may be in real trouble, whereas some other type of policy may have similar claim ratios and be in very sound financial condition. The company must stress the prospective nature of any rate revision, while, of course, utilizing any surplus already developed in determining a fair future rate.

MR. BUCKMAN: Two years ago, my company found it necessary to increase premium rates by 30 per cent on a policy form providing basic medical coverages. Management was concerned about the high lapse rate that could follow such a rate increase and the resultant antiselection. Before imposing a general rate increase, we decided to test policyholder reaction to an increase in rates of 10 per cent in one state, 20 per cent in a second state, and 30 per cent in a third state. The results of these increases, surprisingly, showed practically identical lapse rates of 15–20 per cent on the first premium due following the rate increases. This convinced us that the rate of lapse following a rate increase of up to 30 per cent was independent of the amount of increase. We, therefore, increased the rates 30 per cent in all states, and the resultant lapse rate on the entire book of business was in the same range as that in the tests.

MR. FEENEY: Most companies today writing any substantial volume of individual health insurance are experimenting with coverage for impaired risks.

Instead of turning down an application or requiring an exclusion rider, we would all like to be able to issue the coverage applied for, if this can be done on a sound basis. More and more, I believe, an attempt is being made to provide full coverage at an extra premium for those risks which can be classified as insurable on some basis. As underwriters and claim experts gain experience, they are willing to go further in providing full coverage, although it should be appreciated that a cut-back in benefits is still preferable to an outright declination of the application.

In the area of impaired risk medical expense insurance, companies have been a bit more cautious than they have for life and disability income insurance. A debit-point structure, similar to that for life insurance, is often employed, with the classification depending upon the total debit points assigned. For any impairment, the debit points may vary, depending upon such factors as severity, duration, and frequency and type of treatment. For example, for an applicant with abnormal blood pressure, the debits assigned may depend on age, build, current blood pressure reading, highest reading in the past five years, current and past treatments, and the presence or absence of any other cardiovascular or renal disorders.

In compiling Equitable's debit-point manual, we attempted to cover as many impairments as we thought we reasonably could. A comprehensive list of medical disorders and impairments was divided into three categories. The first category included those health problems customarily treated by elective surgery, such as inguinal hernia, hemorrhoids, and bunions. This category was considered to require an exclusion rider as long as they existed.

The second group included impairments regularly treated by nonsurgical methods. This category, in the case of major medical coverage, was further divided on the basis of anticipated expense for treatment of recurrences. When the incidence of recurrence and the anticipated expense involved for each recurrence could reasonably be expected to be covered by one of our extra premium classes, a rating was applied to the impairment and a debit-point weight assigned. When the incidence of recurrence and the expense likely to be involved were expected to exceed the amount covered by extra premiums, it was necessary to apply an exclusion rider, and, in some cases, also to increase the premium because of the increased possibility of related impairments.

The third category is made up of those impairments which have

systemic characteristics, that is, they tend to involve multiple organs of the body with a wide variety of problems. Multiple sclerosis and a few of the other central nervous system diseases are examples. These are characterized by a slowly progressing severity of the disease with complications relating to various parts of the body. Our underwriting in this area is necessarily more cautious, and we usually have to decline.

What is needed in this field is a systematic study of the claim experience for major categories of impairments. I would think this could best be done through the Society's Committee on Experience under Individual Medical Expense Policies. Because of the small volume that falls into these categories, our own studies have necessarily been made only with the broadest groupings. They indicate that our experience to date is not out of line with the extra premiums we have been charging, and we are encouraged by this to pursue further experimentation in this field.

RESERVES AND RELATED PROBLEMS FOR VARIABLE ANNUITIES AND COST-OF-LIVING BENEFITS

1. What sort of reserves, if any, should be held for:
   a) Return of premium death benefit during the deferred period?
   b) Guarantee of minimum maturity value at end of deferred period?
   c) Expense and post-retirement annuitant mortality guarantees?
   d) Contingency reserves?

   Should these reserves be carried in the general account or the separate account? Should the earnings on such reserves be used to increase the reserves or to adjust the unit value?
2. In connection with nonqualified variable annuities, is it necessary to maintain a reserve for capital gains taxes? Should any reserve reflect only realized capital gains or all capital gains? Should this reserve be carried in the separate account or in the general account?
3. What sort of minimum cash value and reserve requirements should there be in connection with cost-of-living life insurance?

MR. DALE R. GUSTAFSON: The typical death benefit guarantee in a variable annuity is the return of gross considerations if that sum is larger than the accumulated value of the contract as of the date of death. This is quite analogous to the typical death benefit under a conventional fixed-dollar deferred annuity. Traditionally, no reserve is held for this benefit under fixed-dollar annuities, the reserve for the contract being simply an accumulation of the net premiums at interest. It has been argued, when the question came up in the past (which was very seldom), either that the interest only accumulation was an approximation of what the true reserve would be, or, more commonly, that the actuarial cost of this death benefit guarantee was, as the lawyers would say, *de minimis*, and thus any costs incurred in making good this benefit should be considered as charges against surplus.

For the most part, similar arguments and conclusions have been used in dealing with the death benefit guarantee in the variable annuity, although some companies are setting up some form of one-year term reserve for the amounts at risk as of the statement date with varying degrees of precision and approximation in the computations, and a few companies are setting up something more substantial.

It is easy to see that the two situations are not completely analogous. Under the fixed-dollar annuity the amounts at risk are determined and unchangeable. Under the variable annuity the amounts at risk depend on

the investment results. If, under the variable annuity, an assumed investment return, AIR, of a nominal rate such as $2\frac{1}{2}$, 3, or $3\frac{1}{2}$ per cent is used, and the actual investment results match the AIR, the pattern of death benefits would be very similar to the pattern under a conventional annuity. If the actual investment results are higher than the AIR, the death benefits diminish more quickly and amount to very little. On the other hand, if the actual investment results are lower than the AIR, a problem develops. If zero interest is assumed, the amount at risk increases as the contract matures, and, if the investment results are negative, it is obvious that the amount at risk can be quite large.

If the past is used as a guide, not to predict the future but in an actuarial sense to estimate that over the next n years the number of ups and downs and the statistical pattern they display will bear a resemblance to the observed patterns of the past n years, a calculation can be made as to the reserve level such a statistical analysis would produce. A number of studies of this nature have been made completely independently by actuaries at different companies. The studies, almost without exception, show very similar results, with such theoretical reserves being quite nominal.

Certain insurance departments are considering requiring reserves for this death benefit that, in effect, assume very substantial negative investment results for the future, thus developing very substantial reserves.

At this time this relatively small question is not completely resolved, with the possible reserves ranging from zero to the accumulation of $1\frac{1}{2}$ per cent of total premiums. If unrealistic reserves are required, it will not remain a small question.

I first came in contact with the problem of reserves for guaranteed maturity benefits about ten years ago when, as a part of a team, I helped develop the ill-fated United Benefit flexible fund annuity. This contract was an equity-based contract something like a variable annuity during the pay-in period, with a fixed-dollar payout and a level of minimum dollar termination guarantees during the pay-in period. It was ill-fated not because most people in the insurance industry were still opposed to involvement in equity-based contracts; not because virtually everyone felt at that time that it was improper to include any sort of minimum guarantee in an equity-based contract; but because it was carefully designed to meet the tests laid down by the Supreme Court so as to avoid SEC jurisdiction. Unfortunately, the Supreme Court did not interpret its own decisions as we had. At that time the company was committed to not submitting to the SEC regulation of this contract, so a generous settle-

ment was made with each contractholder and the contract was withdrawn.

During the succeeding ten years, many changes have taken place. Opposition to equity-based contracts has virtually evaporated. Many of the people who ten years ago felt that minimum guarantees had no place in equity-based contracts are now busily studying doing it in their own shops. On the other side of the coin, the United Benefit is no longer adamant in refusing to submit to any regulation by the SEC. It is active with both mutual funds and variable annuities and is probably as involved as most other companies in studying other equity approaches as well. So much for the past. I could not resist prefacing an answer to this question with a real life story of change and progress.

If guarantees of some sort are to be put in equity contracts, how shall they be reserved? I gave my answer away in discussing the first question. The kind of information we have about the investment market in the form of the various statistical averages and other historical data is far more comprehensive and sophisticated than mortality data were when the basic actuarial techniques for life insurance were being developed in the eighteenth and early nineteenth centuries. You may recall from your study of the development of life insurance that there were loud cries at that time that mortality was totally unpredictable. To try to predict it was sinful and evil. In fact, laws were passed against life insurance on these grounds. It was argued that mortality was not predictable because only God knows what is going to happen. It was argued that mortality was not predictable because of wars and epidemics, and the insurance industry has had some bad moments from these two sources. Nevertheless, virtually no one argues any more against the validity of actuarial science. We do not argue that the techniques of actuarial science apply only to mortality either. Accident and health insurance is a widespread application. In another arena I have been led to believe from reading that these techniques proved effective in developing submarine hunting techniques during World War II.

In any event, I no longer have to feel so defensive as I used to about my conviction that the providing of guarantees in equity-based contracts can be tamed by the application of actuarial techniques. At this meeting there are several papers and discussions being presented that are directly pertinent to this concept.

Certainly, we agree fully with the SEC that it is neither valid nor proper to base a salespitch on the supposition that the next ten years will be like the past ten. But it is an entirely different thing to study the pat-

terns and frequencies of ups and downs of the past and to make some reasonable assumptions for the future therefrom. To be specific in a quite rudimentary way, usable stock indexes exist over a period of time going back to the mid 1800's. It is true that only annual figures are known for the early years, but usable monthly or daily figures can be developed by statistical methods for the entire period. Then certain specific questions can be tested, such as, What would the cost of a guarantee at the end of ten years of 100 per cent of considerations be in the aggregate if a uniform amount of a certain contract containing such a guarantee had been issued in each year over the entire period?

In the case of the United Benefit contract the guarantee started at 50 per cent of the amounts allocated to the separate account at the end of the first year, grading up to 100 per cent at the end of ten years. While it was felt that this guarantee could be granted with a separate account based 100 per cent on equities, actually a balanced approach was used, with about one-third of the account invested in bonds. I have forgotten the exact figures, but, if my memory serves me correctly, we felt that a one-half of 1 per cent charge against the fund each year would cover the cost of the guarantee, the return of premiums death benefit, and profits. The only reserves that we contemplated would be to set up actual aggregate deficiencies of the seriatim accumulated values against the guarantees as they developed.

In any event, while I personally have not had the skill or opportunity to go beyond the very rudimentary type of analysis just described, I know that far more powerful statistical and computer techniques are available and probably are being explored in some companies right now. These, I believe, will lead to a relatively rapid development of new types of contracts embodying the "shot at the alley" of the equity-based contract combined with the traditional guarantees of life insurance. Whether or not some form of reserve should be accumulated out of the risk charge included in premiums for whatever fixed-dollar guarantees are provided is a question still very much at the tentative development stage. My guess is that no pat answer will develop but, instead, a range of possibilities depending on the immediacy, scope, and nature of the guarantee provided.

I do not know of any reason for dealing any differently with the long-term annuity and expense guarantees in equity-based contracts from the manner in which we have always dealt with them in the contracts that we have been used to working with. When it becomes known that the guarantees in a given series of contracts will produce losses, then some

systematic funding for these deficiencies must be established, just as we do now with old annuity and settlement option guarantees.

Where should reserves be held—in the regular accounts or in the separate account? Generally, most present thinking and the construction of most presently used contracts require that the reserves for the various guarantees and guaranteed benefits be held in the companies' regular accounts. I do not believe that this can be stated as a general rule for all time, however. I would suggest that the nature of the guarantee might indicate in some cases that the reserve should be held in the separate account and be backed with equity dollars rather than fixed dollars. For example, when an annuitant mortality experience deficiency becomes apparent, it may well be more appropriate to establish and accumulate reserves for this deficiency in equity dollars in the separate account than it would be in fixed dollars in the regular accounts. I am sure that some of the contracts now being developed will contain guarantees and benefits that will make an answer to this question more difficult than the specific benefits with which we are already familiar. For example, how about mortality deficiencies in fixed-dollar settlement option guarantees contained in variable insurance contracts under which both the face amount and the cash values reflect directly the investment experience of a separate account?

The draft variable contracts law that will be presented to the NAIC next month by the industry through its associations is very broad and would permit the maintenance in a separate account of reserves for variable contracts as well as reserves for (1) benefits guaranteed as to dollar amount and duration and (2) funds guaranteed as to principal amount or stated rate of interest. However, the maintenance in a separate account of reserves for (1) and (2) would be subject to approval of the commissioner and subject to such conditions as to investments and other matters as he may prescribe.

It was felt that, while a high degree of flexibility is desirable, the model law should not suggest the use of a separate account to avoid the limitations otherwise imposed by law on the investment of reserves for fixed-dollar guaranteed benefits.

For contingency reserves, my answer is very simple. An analysis of the contingency to be reserved against must be made in order to tell whether the reserve should be held in fixed dollars or equity dollars or some combination.

MR. P. WILLIAM FORESTER: Mr. Gustafson, most companies are charging between $\frac{1}{2}$ and 1 per cent for mortality and expense guarantees,

and this money is just flowing back to surplus. Should you be putting aside this ½ to 1 per cent?

MR. GUSTAFSON: In my mind I draw an analogy—and I emphasize imperfectly—to the traditional life insurance product. By analogy, there is a risk charge in the conventional life insurance premium. In the event that our guesswork on mortality and expense has been wrong, we have put a risk charge traditionally in the premium. It has never occurred to us in the past that this should be reserved, so it has always flowed to surplus. I am not sure that we are going to come to that same conclusion with the variable product, but I think we will. My thought would be to resist accumulating this reserve charge as a liability until it is adequately demonstrated that it ought to be.

MR. HARRY WALKER: I feel impelled to make a statement which is relevant both to this discussion and to a comment Mr. J. Ross Hanson made in his discussion of Mr. Biggs's paper.

The statement Mr. Hanson made, if I interpret it correctly, is that the charge Prudential is making of ½ to 1 per cent of the investment fund for mortality and expense guarantees is excessive. I suggest that there is a relationship between the risk charge and the table of mortality used for the mortality guarantees. If you use an ultraconservative mortality table, you can obviously use a minimum risk charge. However, if you use a table with no projection for mortality improvement, your charge should be much greater. You cannot divorce the two. I suggest we leave to the judgment of the actuary what is a proper risk charge in relationship to the mortality guarantees. There is danger in trying to legislate or rule in this area.

MR. DONALD D. CODY: I stand in awe of the casualty actuary because he deals in determination of premiums with very large standard deviations. Mr. Samuel H. Turner in his powerful paper yesterday brought this out. He developed in a straightforward fashion a network of premiums that, with my feeble understanding of risk theory, I could see no reason to doubt. But there was a caution at the end of the paper on the tendency to vary.

My understanding is that the casualty actuary uses data to determine a starting point, then triples or quadruples for premiums. Sometimes he makes money, and sometimes he does not. A commentator from Great Britain yesterday pointed out that he had serious doubts about the ability of life actuaries to arrive by reasoning at a reserve that is on a proper

basis. I think that reserves for these risk-type situations are more in the area of the casualty actuary than the life actuary. Mr. Gustafson, you spoke with some assurance on this point. I wonder if you could set my fears at ease.

MR. GUSTAFSON: I did not interpret my remarks as implying a high level of assurance—rather the contrary.

MR. CODY: That was the point I wanted to bring out.

MR. GUSTAFSON: Mr. Cody has made a valid point in bringing in the casualty actuaries. As he mentioned, they triple or quadruple what the analysis shows, and they make money or they don't. With the ill-fated United Benefit contract, we ran an empirical analysis on the computer. It showed that the proper risk charge—I have forgotten the exact figures —was about three-fourths of 1 per cent of the premium. Where the casualty actuary would have tripled, we life actuaries with a euphoric past cut it in half.

MR. ALBERT GUBAR: In my discussion of question 2, I am assuming a separate account used only for nonqualified variable annuities, which excludes qualified variable annuities entirely.

I have a simplified example (see Table 1) which shows the transactions of two relatively wealthy friends—Joe and Mike—during the course of the year. This simplified arithmetic is helpful in arriving at some understanding of what is happening.

I believe that the question of whether or not reserves should be held for capital gains in a nonqualified separate account arises because mutual funds need not hold such reserves. For my example, I have assumed a mutual fund which pays all income and realized capital gains to its shareholders. The mutual fund, therefore, never pays any taxes. However, nonqualified separate accounts will be paying taxes on long-term capital gains without regard to the way in which they calculate their unit values and without regard to whether or not they maintain a tax reserve or a tax liability account. This is a significant difference.

In a mutual fund, each participant will, sooner or later, surrender his shares. If he does not reinvest the amount of income and capital gains passed through to him, the basis of his shares does not change, and, on redemption, he pays tax only on the excess of the amount he receives over his cost, having previously paid taxes on the amounts passed through. If he reinvests the amounts paid to him, his cost basis changes. Therefore, the total amount which has become or becomes taxable to him on sur-

render will always equal the excess of the amounts he receives over his cost. The incidence of his tax, however, may not be related at all to his own increases in value. For example, there may be no change in his unit value since his purchase, but he may have to report income and capital gains passed through from the mutual fund.

The position of an individual in a nonqualified separate account, however, is very different from his position in a fund, and some anomalous situations can arise. The separate account pays taxes on long-term capital gains as they are realized, and the manner in which these taxes are handled for calculations of unit values can affect an individual's gains and taxes. If a participant never surrenders and takes an annuity at retirement, he may not receive a tax treatment similar to that just described for a mutual fund.

Let Table 1 illustrate this difference. On January 2, Joe invests $100 in each of three different mediums—a mutual fund; a nonqualified separate account (Account 1), which does not hold either a tax reserve or a tax liability; and a nonqualified separate account (Account 2), which does hold both a tax reserve and a tax liability. I am assuming that the unit value is $10 in each of these mediums. Joe therefore buys ten units, and the assets of each of the funds at this point are $100.

By July 1, the value of the assets has doubled. The unit values in the mutual fund and in Account 1 are both $20. The unit value in Account 2, however, is only $17.50, because $25 has been set aside as a tax reserve in the account for the $100 of unrealized capital gains. (I have assumed a 25 per cent capital gains tax rate for simplicity.) The remaining assets are $175, applicable to Joe's ten units. Mike then invests $200. In both the mutual fund and Account 1, Mike buys ten units, and the assets applicable to participants in each of the accounts are now $200. In Account 2, however, Mike buys $11\frac{3}{7}$ units. The assets of this account are also $400, but a tax reserve of $25 is being held, so that the net assets of the account applicable to participants are $375.

By July 6, with no market change since July 1, Joe surrenders his units. He receives $200 from the mutual fund, leaving assets of $200 applicable to Mike. The same result occurs in Account 1. But, in Account 2, Joe receives $175, leaving gross assets of $225. The tax reserve of $25 reduces the assets applicable to Mike to $200.

By July 29, with no market change since July 6, $200 of assets in each of the mediums are sold, realizing $100 of capital gain. In the mutual fund, I have assumed that the pass-through is instantaneous and the unit value drops to $10. Mike reinvests $100, restoring the assets in the account to $200. There is no pass-through for Account 1, so that nothing seems to

TABLE 1

Date	Transactions and Other Facts	Mutual Fund	Nonqualified Separate Account: No Tax Reserve or Liability Held	Nonqualified Separate Account: Tax Reserve and Liability Held
January 2.....	Joe invests $100	Unit value: $10 Joe buys 10 units Assets: $100	Unit value: $10 Joe buys 10 units Assets: $100	Unit value: $10 Joe buys 10 units Assets: $100 Tax reserve: $0 Tax liability: $0 Net assets: $100
July 1.....	Market has doubled since January 1. Mike invests $200	Unit value: $20 Mike buys 10 units Assets: $400	Unit value: $20 Mike buys 10 units Assets: $400	Unit value: $17.50 Mike buys 11$\frac{3}{7}$ units Assets: $400 Tax reserve: $25 Tax liability: $0 Net assets: $375
July 6.....	No market change since July 1. Joe surrenders his units	Unit value: $20 Joe receives $200 Assets: $200	Unit value: $20 Joe receives $200 Assets: $200	Unit value: $17.50 Joe receives $175 Assets: $225 Tax reserve: $25 Tax liability: $0 Net assets: $200
July 29.....	No market change since July 6. $200 of assets are sold, realizing $100 of capital gain	Unit value: $20 Assets: $200 After sale: Unit value: $10 Assets: $100 Mike reinvests $100 of capital gain pass-through to buy 10 units Assets: $200	Unit value: $20 Assets: $200	Unit value: $17.50 Assets: $225 Tax reserve: $0 Tax liability: $25 Net assets: $200

TABLE 1—*Continued*

Date	Transactions and Other Facts	Mutual Fund	Nonqualified Separate Account: No Tax Reserve or Liability Held	Nonqualified Separate Account: Tax Reserve and Liability Held
December 31.....	No market change since July 29	Unit value: $10 Assets: $200	Paid tax of $25 A. Unit value: $20 Assets: $175 B. Unit value: $17.50 Assets: $175	Paid tax of $25 Unit value: $17.50 Assets: $200 Tax reserve: $0 Tax liability: $0 Net assets: $200

Assumptions

1. Unit value on January 2 is arbitrary.
2. No income other than capital gains.
3. Each separate account pays taxes as if it were a separate company (based on an allocation method).
4. Mutual fund pass-through of capital gains concurrent with gain.
5. Capital gains tax rate of 25 per cent.
6. Tax payable on December 31.

Questions

1. If Mike surrenders on December 31, what does he receive? What is his own tax position?
2. If Mike does not surrender, but remains until retirement, what is his tax base?
3. Has individual equity been served?
4. How should the income, if any, on the tax reserve be treated?
5. How should unrealized losses be handled?
6. How should changes in tax rates be handled?

occur in that account. In Account 2, the tax reserve vanishes and a tax liability is set up for $25, so that the net assets remain unchanged at $200.

I have assumed that the tax will be payable on December 31 and that, by that date, there has been no market change. The mutual fund, having passed through its capital gains, is not liable for tax. Account 1 pays a tax of $25 and now has remaining assets of $175. It could be assumed that no change is made in the unit value, a rather odd assumption, because the account has ten units worth $20 each for $200 of liability compared to assets of $175. Or it could be assumed that the unit value on that date decreases to $17.50, so that the ten units times $17.50 is equal to $175 of assets in the account. Note that no market change occurred and that there was no income of any kind to the account. This sudden change in the unit value might prove inexplicable to a participant. Account 2 presents no problem. The account pays a tax of $25 and takes down the tax liability. The unit value remains at $17.50, and the assets applicable to the participant remain at $200.

To summarize, a reserve is maintained for taxes on unrealized gains. A liability is set up for taxes on realized gains. When a gain is realized, the reserve decreases and the liability increases. The unit values are completely continuous.

The Equitable, in presenting its method for handling taxes for a nonqualified separate account, which we call "Separate Account C," recognized the need for these reserve and liability items. In addition, peculiarities may arise among the general account and various separate accounts that I find intriguing. I do not wish to go into them at this time, except to point out that they are closely related to the subject of reserve for unrealized capital gains.

With respect to the question of where the reserves for unrealized gains and the liability for realized capital gains should be held, I again treat these two as separable. It seems clear to me that the reserves for unrealized capital gains should be held in the separate account, so that the reserve itself will rise or fall automatically as the assets of the account rise or fall. This reserve might be thought of as being a participant in the separate account. On the other hand, the liability to be held for later payment of taxes on capital gains which have already been realized is a fixed amount, and as such it seems appropriate to me that it be held in the general account and transferred to that account when the gains are realized. I do not believe that it is wise to submit a determinable amount of liability to the significant market fluctuations which might occur in the separate account.

MR. PAUL A. CAMPBELL: Mr. Gubar, taking your example just a bit further, let us say at year end the company as a whole does not have a capital gains situation; what do we do about that reserve we have accumulated in a separate account, and what, in your opinion, would be the SEC's reaction?

MR. GUBAR: We have suggested a method of allocation which treats each of the separate accounts as if it were being allocated taxes on a separate-company basis without regard to the position of the company as a whole. I must admit that the SEC got stuck, as far as I could determine, on exactly the same point on what to do when the company as a whole is not paying a capital gains tax, and I do not know how that will be resolved.

MR. JOHN MACARCHUK: Our company is in exactly this position. We have a wholly owned subsidiary in a loss position, and we expect it to be for some time to come. The question arises, What do you do for charges on nonqualified business? Our position at the present time is to make no charge, since such a charge would be inequitable. If you make charges for taxes, your company will never pay on nonqualified business, you will be in a rather untenable position.

The theory that backs this view is that you charge at the tax rate that your company is currently incurring. It seems to me that, when you do this, you must consider the tax rates on your nonqualified business as being dependent on the tax rates of the whole company. Our tax rate currently is zero, so we charge nonqualified business at the zero rate.

MR. THOMAS K. PENNINGTON: It strikes me that we all have bonds we could unload at heavy losses. When we have capital gains, we follow this practice. If a company has a separate account whose gains it is offsetting, it is taking a loss in the life company in unloading these bonds to avoid paying the capital gains tax. It would seem that the ordinary line is entitled to some adjustment on the tax rate for taking these losses.

MR. GUBAR: One of the exhibits that we furnished to the SEC shows that making different kinds of investment decisions in the general account as to when you sell securities can affect the unit values in your separate account. This was one of the reasons our presentation attempted to insulate entirely the separate account from the general account.

MR. CODY: Mr. Gubar, would you explain the implications of a negative net tax reserve starting off in a falling market?

MR. GUBAR: If you have an unrealized gain, you have a positive tax reserve. Given an unrealized loss, what do you do? We had contemplated an increase in the asset value ascribable to the participants to the extent of the tax credit eventually available from the unrealized capital losses when they are realized. This approach depends on the theory that ultimately the separate account will produce gains and that over a period of time it will have to pay taxes.

MR. LAWRENCE A. EHRHART: Mr. Gubar, in your participating tax reserve, the tax on unrealized gain, I think that you should carry the reserve in the separate account so that you do not have to make daily transfers between the separate account and the regular account for unrealized taxes.

MR. RAYMOND L. CRAPO: I would like to make several comments. The first is a very practical one concerning whether the investment gains or losses on tax reserves should accrue to the company or to the participant. I know that the different branches of the SEC have different attitudes, but they all seem to indicate that they will not recognize any filing where such gains do not accrue to the participant. That is, the company cannot make profits from the reserves for taxes and expenses it holds in a separate account.

I would like to add to the discussion between Paul Campbell and John Macarchuk about capital gains occurring in a separate account when the company is in a loss position. It seems to me that the gain normally operates to reduce the tax loss carry-over and therefore results in an actual loss to the stockholder if no charge is made against the separate account. In other words, if you do not make the charge against the separate account, you are simply borrowing money from the stockholders that will never go back to them. On the other hand, if you follow logic and try to make the charge in full, you will run into problems with SEC. The SEC staff takes the position that the life insurance company with a registered separate account in filing its tax return is in a joint venture that it cannot profit from and, further, that it cannot make a charge against the separate account for an expense it does not incur. (See section 26[a] of the 1940 Act, which is applicable because of section 27[c].)

Harry Walker in his discussion emphasized the effect of mortality assumptions on risk charge required. The assumed investment rate is also quite important, since a low assumed investment rate will substantially increase the long-term loss under variable annuities if the investment result is highly favorable.

MRS. LINDA B. EMORY: Last year at about this time, Life Insurance Company of Georgia introduced the first permanent life insurance plan where level, guaranteed premiums provide insurance protection which increases with the rate of inflation in our economy and which has guaranteed cash values which comply with the Standard Non-Forfeiture Law. For some time before this product was introduced, we struggled with the same problem—what sort of cash values and reserves should there be in connection with our cost-of-living life insurance?

Cost-of-living life insurance incorporates a new contingency which is not recognized by our present laws. This contingency is a measurement of the effect of inflation upon the value of the dollar. In our cost-of-living policy, the measurement used is the percentage change in the consumer price index published by the Department of Labor. On each policy anniversary the percentage change in the CPI since issue is to be computed, and, thus, the cost-of-living benefit for the next policy year is determined. Our first cost-of-living policy, which was issued last December with a face amount of $5,000, will have a death benefit for the second policy year of $5,290—this is a 5.8 per cent increase in coverage. We know that the CPI has increased an average of 2.9 per cent each year since 1935, but we do not know at what rate it will increase in the future. Thus we do not know what the death benefit will be at each duration under the policy, just as we do not know the rate of interest we will earn on the policy reserves or the average mortality rates which will be applicable to this class of policies.

When our cost-of-living policy was being developed, we felt that an assumed 3 per cent increase in the policy benefit each year would produce cash values and reserves which would be reasonable, equitable, and in line with our other products. If these values had complied with the Standard Non-Forfeiture and Standard Valuation Laws, we would probably have felt them to be the cash values and reserves that should be provided in connection with our cost-of-living life insurance. Unfortunately, the Standard Non-Forfeiture and Standard Valuation Laws make no allowance for assumed increases in a cost-of-living benefit. The Standard Non-Forfeiture Law requires cash values to be shown in the policy at issue. It also requires that these cash values be at least as great as a set of minimum cash values on the basis of a stated interest rate, mortality basis, and equivalent level amount of insurance determined from the death benefit at each policy duration. The calculation of minimum reserves also requires that the amount of benefit at each duration be known. Since we do not know what the amount of death benefit will be at each duration at the

time the policy is issued, it is impossible to calculate the true "minimum" cash values or reserves which comply with the law.

In order to comply with the current laws, then, it became our task to calculate what might be considered to be the largest possible "minimum" values that different sets of assumptions as to increase in the consumer price index would produce. No single set of assumptions as to increase in the CPI will produce the maximum value at each duration.

The method developed for calculating our cash values and reserves for the cost-of-living policy, known as the "change of state method," was developed by David Stonecipher, assistant actuary of our company. This method requires that a minimum and maximum amount of insurance be known at each duration of the policy. Therefore, an upper limit of twice the initial face amount was established on the total amount of death benefit payable under our policy. We had already established a minimum limit of the initial face amount. Cash values and reserves are calculated by use of the traditional prospective reserve or cash-value formula but changing assumptions at each duration to assume minimum past benefits and maximum future benefits. This assumes no increase in the consumer price index until the point in time at which the value is being calculated, that the CPI will double at that point, and that the coverage will remain at the maximum level thereafter. This assumption produces cash values or reserves at each duration which will comply with the Standard Non-Forfeiture or Standard Valuation Law no matter what pattern of benefits actually evolves. This method is perfectly general and would be applicable to any benefit which will vary in the future but which has an established minimum and maximum benefit.

In the calculation of minimum cash values by the change of state method, it is interesting that the expense allowance at issue is larger than other assumptions as to benefits might produce. At a few early durations cash values produced by our method are more negative than minimum cash values calculated based upon other assumed patterns of death benefits. Since all minimum values are negative at such durations and all values are considered to be zero, there is no practical effect on the cash values though, and our method holds up. These values are not the largest possible, since there are many methods of calculating values which would be larger. These are simply the largest of the set of possible "minimum cash values" or "minimum reserves" at each duration as could be defined by the Standard Non-Forfeiture or Standard Valuation Law.

Normally, we calculate cash values and reserves based upon a 3 per cent interest assumption. Values calculated by the change of state method at the 3 per cent interest assumption seemed somewhat excessive and out of

line with our other products. Therefore, to keep the values at an equitable level and to place more emphasis upon the protection portion of the policy, we reduced these values by upping our interest assumption to 3½ per cent. This produces values very much in line with those we had originally computed at a 3 per cent interest assumption and assuming a 3 per cent increase in the consumer price index each year.

Perhaps some consideration should be given to a change in the Standard Non-Forfeiture and Standard Valuation Laws to allow an assumption as to increase in the cost-of-living benefits. Since cash values and reserves are larger the larger the percentage increase assumed, any such law should probably set some conservative minimum limit (such as 2 or 2½ per cent) on the yearly percentage increase to be used for cash-value and reserve purposes. Another possibility would be to increase the maximum interest assumption in the valuation laws to allow minimum values to be calculated at a rate higher than 3½ per cent. A higher rate would seem to be justifiable for any policies being issued today, considering investment earnings which are being contemplated for the future. It is especially justifiable for cost-of-living benefits where logically the assets will be invested at higher rates and where use of the change of state method produces rather large cash values and reserves, even where a 4 or 5 per cent interest rate is assumed. After all, variable annuity calculations allow an assumed investment return of 5 per cent, which seems to imply that this is a conservative estimate of the average rate which will be earned on assets associated with these funds. Perhaps other methods can be considered which would be more equitable in the calculation of cash values and reserves. I suppose the ideal cash value would depend on the actual amount withheld each year for this benefit decreased by the expense of the actual protection which the benefit has provided to each policyholder. It might be possible for the Standard Non-Forfeiture Law to be amended so that values do not have to be calculated in advance for the varying portion of the policy, but this would involve calculating cash values and reserves for each individual policy on an annual basis and probably would be too expensive to administer and control to be of any practical value.

My comments thus far have been limited to a cost-of-living life insurance benefit where level, guaranteed premiums are charged and cash values are required. The only other cost-of-living life insurance coverages of which I am aware are term benefits of short duration or those which require application of dividends or extra premiums or both to provide any increase in the amount of death benefit. These are either of the term variety, where the duration is ten years or less and thus cash values are not required, or of the variety where premiums, cash values, and reserves

increase in the same proportion as the death benefit. These particular coverages seem to pose no problems in satisfying present minimum cash-value requirements. I am not sure how reserves are being calculated on the two term benefits with guaranteed premiums that I know of, but these both have upper and lower limits on coverage so our change of state method would be applicable. Perhaps representatives of companies with cost-of-living products have encountered cash-value and reserve problems that I have not thought about—obviously they designed their products so as to avoid the cash-value problems inherent in our cost-of-living policy.

MR. DONALD S. GRUBBS, JR.: I would like to call your attention to Mr. Robert Tookey's paper surveying the wide range of cost-of-living products that are available and being developed. I was amazed at the variety. When we come to the question of reserves and nonforfeiture, we see the need for greater flexibility in the requirements. I feel we have to have some changes in laws which give the insurance departments more flexibility to establish requirements that are more reasonable for any particular product, since in this field there is simply no way to define appropriate requirements in laws to meet the variety of plans available.

TOPICS FOR CONSULTING ACTUARIES

1. What are the relative advantages and disadvantages professionally, personally, and financially of the following:
   a) Being a solo practitioner?
   b) Association in a local partnership?
   c) Being a partner in a national firm of consulting actuaries?
   d) Being associated as branch of an accounting firm or brokerage firm?
2. Are pension consulting firms advising their clients on group insurance, deferred compensation, thrift plans, profit sharing, key man insurance, restricted stock option plans, and other forms of executive compensation? Should consulting actuaries provide expert counsel in these areas?
3. What are consulting actuaries doing in the field of management consulting, either for insurance clients or corporate employers? Are they making use of nonprofessionals? Are they using computers, simulation techniques, and/or game theory? Are consulting actuaries developing management information systems? Should consulting actuaries take the lead in these areas?
4. Should consulting actuaries provide adjusted-earnings figures to their insurance company clientele? Should this be done routinely? Should consultants get together to provide a systematic approach or guidelines for use by the profession in deriving adjusted earnings? What are the responsibilities of the profession to the public in this regard?

MR. WAID J. DAVIDSON, JR.: The sole practitioner has many advantages; among them are the following:

1. He can set his own hours, work for whom he pleases, and set his own fees.
2. He is not responsible to anyone except himself for his activities.
3. He has complete personal identification with all his work.
4. He has a minimum of corporate, organizational, and personnel problems.
5. He is building his own business, which can be either sold or used to merge with other consultants or firms.
6. He acts solely for himself, and he need not concern himself with the effect of these actions on others in the firm or be concerned about the effect of the actions of others in the firm.
7. He need not concern himself about conflicts with clients of other members of the firm.
8. He is the recipient of all the fees which he collects and need not divide this income with anyone else.

Among the disadvantages of a sole practitioner are the following:

1. He does not have a research staff available.
2. He does not have access to specialists in various actuarial fields within his own organization.
3. He has difficulty in obtaining computer services and other types of services so necessary for servicing clients today.
4. His income is based on the number of hours he works for his clients. Therefore, his income tends to be limited by the total number of hours that he personally can work. In a larger firm, it is possible to have many people working at various hourly rates, and profits can be made on others, so that the more advanced actuaries in the larger firms can create profits from supervising others and delegating work to lower levels.
5. He must be an expert in every field in which he engages as a consultant. In the larger firms, various individuals specialize in different areas, such as accident and health insurance, group insurance, computer programs, acquisitions and mergers, pension work, and so on. The larger firm can thereby provide a wider range of services.
6. He does not have the ability to handle large jobs where it is necessary to have several people working on the job at the same time. And, also, his usage of copying equipment, of libraries, and of supporting personnel, such as secretaries and calculators, is inefficient.
7. He must do a number of jobs which could be relegated to those at a lower level. In such cases, the sole practitioner must work for a low hourly rate or overcharge the client.
8. He has difficulty in taking vacations or extended trips, in that he cannot refer clients to someone else to handle during his absence.
9. He must personally put in the time in order to earn his income. It is difficult for him to engage in such activities as research, the preparation of Society papers, serving as an officer of the Society, of engaging in extensive work on Society committees. These same limitations would apply to other professional organizations. A larger firm can subsidize these activities.
10. He has difficulty in modifing his work schedule as a result of advancing age or in the event of partial disability.
11. He is less able to take advantage of the benefits of incorporation and tax-free group benefits.

It is obvious that there are advantages and disadvantages in being a sole practitioner and also in being employed by a national actuarial firm. There are various compromises between these two extremes.

Within the national firm there may exist autonomous offices where the smaller office retains some local identification with the principals in the office. This compromise does not completely answer the question of personal identification and freedom of action. Another compromise between the two extremes is for the sole practitioner to enter into a partner-

ship or form a corporation with one or more other local actuaries. This may, again, permit a partial solution to the problems, eliminating some of the disadvantages of the sole practitioner. Another solution to the various problems is for the actuary to become associated with some other type of organization, such as an accounting firm or one of the large insurance agencies accepting brokerage commissions and providing actuarial services.

Association with an accounting firm provides many advantages in the area of size, the ability to specialize, and the availability of a large group of prospective clients. One drawback to this association is that the actuary is a principal in a group of professionals where it is normal for full partners to be required to be C.P.A.'s, which, thereby, excludes the actuary from partnership. The code of ethics of the accountant is more restrictive than that of an actuary, and this can result in some restriction on the actuary associated with an accounting firm.

The actuary who associates himself with the large general agency will have to come to grips with the problem that a portion of the income of a general agency is from commissions, and there is some feeling that this acceptance of commission may adversely affect the professional status of the actuary. These firms also may employ nonprofessional salesmen who sell a variety of things, including the services of the actuary. Many of those in control of these agencies are not actuaries.

MR. MELVIN L. GOLD: We have five actuaries, so I do not have to do all the routine work; we do not, therefore, have that disadvantage. We have specialized in insurance company work and management consulting, so we are not experts in employee benefits. We can make our own decisions; we do not have to go to some group or board of directors. It has given us a great deal of freedom. We have had some time to write papers.

MR. DONALD R. ANDERSON: It is not quite so disadvantageous as was suggested. An actuary in the role of a principal of a firm of C.P.A.'s can have the same status within the firm of C.P.A.'s. He can have the same role in decision-making processes if the firm allocates him that role, and, by the same token, a partner in a firm of C.P.A.'s could have virtually no role in decision-making if they decided to run it that way. It is not as black and white as that.

In Canada we have formed two partnerships—one a partnership of accountants and the other a partnership of management consultants. I was able to be granted a partnership on a full, equal basis with other management consultants. As far as earnings are concerned, there can be

all sorts of arrangements on this. I feel that the association with a firm of chartered public accountants has been extremely helpful in many, many ways.

MR. GOLD: I have a gut reaction against actuaries' working for brokerage firms where their services are simply being sold. This does not sound professional to me. I react to a lesser extent to actuaries, being principals in accounting firms where they cannot be partners. I think I am more in tune with the British approach, which, if I am correct, does not permit it.

MR. JOHN G. IRELAND: I think the question of optimum size depends on the nature of your practice. A firm which spreads itself into both the employee benefit area and the insurance company consulting area requires the actuaries to, from time to time at least, make decisions as to which areas they are going to operate in. This presumably, therefore, requires more actuaries in order to more properly service their practice. If you are exclusively an employee benefits consulting firm, your optimum size as far as actuaries are concerned would be smaller than it would be if you are in both areas.

I think remuneration has two aspects. I spent ten years in the life insurance business, and I guess I was compensated adequately or at least competitively. I feel the same way so far as money is concerned in the consulting business. I do not know where I would have been in the life insurance business had I continued in it, but I can tell you one thing about the consulting business. The degree of freedom, which is an important element in compensation in my opinion, is just in a different league from the life insurance business. I am talking about freedom to think independently; I am talking about freedom to go where you want to go when you want to. I made a commitment to play golf in Scotland a year and a half before the event. If I had still been with the life insurance company, it would have been a tentative commitment. I did not regard it as such in the consulting business. There are personal and professional commitments.

MR. ANDERSON: There is freedom only in one sense, but your clients do get on your back sometimes. You plan a vacation, and suddenly it just does not work out. We have all had experiences like that. I think what John is saying is that you have a little more say in how your freedom is exercised, and I think this has been a satisfying thing to all of us who have been in consulting work.

I have analyzed it this way, by types of practice. Either you can be affiliated or unaffiliated, or you can be sort of in between—loosely affiliated.

When you have an affiliation, it can either be on an unintegrated basis or on an integrated basis. If you are a member of a firm that is engaged in some other line of work than actuarial, it can be that you have an actuarial practice that is either practically an island by itself in that firm, just as if it were a separate company, or in some way or other integrated into the life of that other type of company.

As to types of affiliation, I have put them into three categories—insurance, professional, and technical. In insurance, you can be either affiliated with life brokers, or be affiliated with general insurance brokers who may have life brokerage and typically do, or be in a life company head office. And on that last, there are two subdivisions—either you are working on a moonlighting basis or you are working through the life company you are working for; in other words, providing consulting services through that.

On the professional affiliation type, it can be with management consultants, chartered accountants, certified public accountants, or lawyers. The last is one that I have not seen very much or heard very much of, and I would be interested in knowing whether this is something lawyers have looked at. I ran into a law firm not too long ago that was thinking of getting into employee benefit work with the necessary experts.

The third type of affiliation is one that has not been explored too much. This is the affiliation with technically oriented companies, such as computer service companies, that is, some type of organization that is technically oriented but is not professionally oriented in quite the same sense that lawyers and accountants are. And there are advantages to each of these. I was with an insurance brokerage firm for two or three years, and I found that there was substantial conflict between what they were trying to do and what I was trying to do. It seemed to me that it depends upon relative size to a great extent. If the brokerage income is very large in relation to the actuarial, you are not going to have very much of a voice.

MR. GOLD: There are two aspects of consulting work that I find most advantageous. One is that I learn so much more than I would in a company. When I think of the tasks I get into that have nothing to do with our syllabus—acquisitions and mergers, retirement of mutual companies—I find it simply fascinating. From this I have gotten involved in Wall Street, which also has its interesting aspects. Educationally it has been tremendous. Since I am a consultant for small companies, I have invested in some of them, which has worked out well—except when I wanted to get out and the president wanted to know why I was selling, what did I know that he didn't know?

MR. ANDERSON: May I ask about the problems of working as a consultant in an insurance company? This could relate to a number of situations, and that is that you have the right numbers for the wrong questions sometimes. The problem as formulated, as it comes to you, may not be the right problem on account of the isolation between the actuary working on the figures and the client who may be a thousand miles away. This can happen in many types of practice, not just for the actuary in the insurance company. My own recommendation is to make sure that there is a first-hand understanding of the client, his basic way of making money, and what his interests are.

One other thing about the reason for affiliating. It would be very nice just to have a small shop of a comfortable size, but, after you live in that environment for a few years, you discover that something rather interesting happens. You never run into a firm where everybody is exactly equal; they are all at different levels in their own personal development. You might have a young chap whom you just brought in and others a little older than he and others further along. Everybody likes to be part of something that is growing; the minute you stop growing, the people begin to wonder: Do I have a future, can I see something growing under me, or am I going to remain doing what I am doing for a long period of time? So growth almost becomes necessary for life.

MR. DAVIDSON: My office recently increased from three to five. It is quite true that a good professional organization will grow from its own history. The clients start to come, the work builds up, and then you add people to handle the work. There is a terrific reluctance to turn down work, to simply say, "I cannot do that work because I do not have anybody to do it." We have always felt, though, that you do not hire the people and then try to find work for them to do; rather, you find the work and then find the people to handle the work. But an organization that is not growing would cause one to become very suspicious and ask himself what the cause is.

MR. IRELAND: Our problem has essentially been, at least in my experience, that the work has come faster than we can provide the people to do it properly. I think growth logically has to end somewhere; we cannot all grow forever, ad infinitum. The legal profession seems to have coped happily with this problem, although in recent years they too have grown a lot. But it is rather a population-related growth or economics-related growth, and I think we can participate in that. But the consulting ac-

tuarial firms have grown unnaturally according to those criteria in the last ten years because of the increasing demand for their services and the increasing complexity of the problems with which they deal.

CHAIRMAN WILLIAM A. HALVORSON: We can probably best typify our organization as a sort of franchise organization, an association of independent actuaries, as we have stated in our firm objective. We are an association of independent actuaries banded together for the mutual benefit of our firm, for our clients, for our principals, and hopefully for the actuarial profession. I say that because each of our principals is a Fellow of the Society of Actuaries, and we have no principals who are not Fellows of the Society of Actuaries.

We have a great deal of freedom. The idea really works, and this is, I think, why the firm has grown as it has. Our problem from this growth is one of financing; of course, we are starting to pay back our loans, so it is working out fairly well.

In the accounting firms they have what they call professional review committees, which review the work that is done by their C.P.A.'s throughout the firm. Our organization has tried to work in this direction, and we do rely very heavily on the experts in the firm who may be located in other offices. I am not saying that we have perfect quality control, but I know that we are going to be able to improve it. Part of this is the natural selection of those whom you choose to have affiliated with you, and this is where you have to be most careful.

MR. DAVIDSON: That was one of the main reasons for our not operating in that way; we operate as a unit, as opposed to what you may call franchising.

MR. ANDERSON: Could I say something on quality control? We have done a number of things that I think would be useful in any consulting firm. The idea of having your engagements reviewed by somebody outside your own locality or your own group is something that we practice quite extensively. We will bring in a man from an entirely different geographic location and have him spend a week in our office reviewing things that we have done recently and checking on them for quality. It is a very refreshing thing; he is almost a consultant to us in a real sense, and we budget for this in our work so that there is enough time in our estimate for a review.

CHAIRMAN HALVORSON: Does taking a stock position or an equity position in your client restrict your freedom?

MR. GOLD: I now buy stock in street names so the clients do not know it. With respect to compensation, I would estimate that the financial compensation of consultants is of the same order of magnitude as actuaries who become insurance executives—at a pretty high level. Consultants would not work for less, because they are verbal and outgoing.

CHAIRMAN HALVORSON: We do not have stock option plans because our stock is not traded. This may make a substantial difference. Many attorneys do take stock positions in their clients and serve on boards of directors of their clients, and some feel that this is their ace in the hole as far as long-term capital gains are concerned. Our own firm feels that we cannot take that position professionally—we must remain independent and objective.

MR. GOLD: I have decided not to be on any board of any company, but I have invested in some of them and have been equally critical of all of them.

MR. HENRY BLAGDEN: Would you care to have any discussion on basis of compensation? There has been a great deal of talk about how much the compensation should be and so forth, but I have another question: Are people paid a salary, or are they paid on a production basis, or how are they remunerated?

CHAIRMAN HALVORSON: I am positive that we will get at least five different answers from the five of us here. I found that, since you are your own boss, you can work just as hard as you want, which means that you usually work just about as hard as you can, and you will only do that when you are being compensated for the time and effort that you spend. There are all kinds of formulas for going on from that general principle, but is that a general principle that others can attest to?

MR. ANDERSON: To my mind, the problem of compensation in an employee benefit consulting firm is very little different from the problem of compensation for any other firm in which you are trying to motivate and reward individuals in relation to their contribution to the success of the firm. There are many, many different systems. It is a huge subject in itself, and I shall not take time this afternoon to explore this subject as much as I would like. We have thought about several different formulas, for example (1) straight salary plus a flat bonus paid annually, (2) bonus based on chargeable hours, and (3) bonus based on profit of the over-all firm distributed through units to the individuals.

MR. DAVIDSON: I think that the very nature of consulting requires that you have some way to tie in performance to salary. This gets complex when you try to operate as a unit and you get down to some of the service operations supplied by the consultant. I think this is one of the essential differences between insurance company work and consulting. In an insurance company you are required to put in the hours. In consulting you must also produce something that you can sell in order to pay your salary.

CHAIRMAN HALVORSON: In our firm, with twelve or thirteen offices, each office has to operate at a profit in order for that manager to be compensated as he would like to be compensated. There is a strong incentive for controlling his own time and directing his activities in a manner which will make him the most productive. At the same time it has to be rewarding to him professionally and personally.

MR. IRELAND: In the compensation area, I am happy to report that our firm does not compensate people on the basis of some kind of measurement of their direct production; otherwise I would starve to death. It seems to me that the subjective determination of productivity or value to the organization has to be made somewhere along the line and compensation determined accordingly. I do not think that it is any finer a science in our business or any less scientific than it is in the life insurance trade.

MR. CONRAD M. SIEGEL: I was a sole practitioner, and because I became busy I now have a partner. There are some advantages in being small in terms of being able to tailor employee benefit plans more directly to the small type of situation. I would like the panel to comment on the asset value that is created on obtaining a new client, say, an employee benefit client. In a sense you can look at this as almost the present value of an annuity with a future fee as long as you do your job reasonably well. How is this reflected in the ownership and transfer of ownership within the actuarial firm?

CHAIRMAN HALVORSON: This is a very difficult question to come to grips with. Each organization will come to its own conclusions as to whether or not, in the first place, there is a value created at the time the client has given you some initial work. We have not attempted to attach any value at that point. The problem that we are now trying to grapple with is the problem of putting a value on it once the practice has been firmly established, when we are dealing with different generations of principals.

In other words, within our organization when a senior actuary retires his practice in many cases can be transferred to other principals; sometimes, however, his practice is the kind that he could not transfer to another principal whether he wanted to or not. Then how should we compensate him for the sale of his business to succeeding generations?

MR. DAVIDSON: Theoretically, all you are doing is collecting time charges, and assuming that everyone is busy. You have not created anything by adding a new client. If you are not working on that client, you are working on something else which is billable.

MR. ANDERSON: I think our approach is not to put any cash value on what I call good will. When we acquire other firms, typically it is on the basis of a merger without cash payment, and we feel this is a good way to work. If you tie up too much of your money in payments and good will, you are going to start a continuing service of that client.

MR. SAMUEL B. ECKLER: I think it is a very critical question in terms of rearranging the portions of compensation that go to your partners or to your principals, it is very important in terms of mergers, and it is fundamentally a question of appraising the good will. It is the same kind of problem that any legal firm, accounting firm, or any kind of firm has when the proprietary interest or shares in it are changed. Fundamentally, you must determine how much is added to that firm in good will by the acquisition of that particular client, and that obviously is a very difficult thing to determine. An estimate, I suspect, could be made on the basis of the fees you get from it and on the basis of the profit that you may expect to get.

CHAIRMAN HALVORSON: I think we probably can agree that this is the kind of thing that should be carefully considered by any organizations that are on the merger trail or dealing with retiring or terminating members. This should be discussed well in advance of the actual occurrence. Good, reasonable men will get together and make decisions, and this is probably the only way that it can be done.

MR. IRELAND: It is well nigh impossible to restrict a practice to purely actuarial aspects of employee benefits. The degree to which firms expand their activities beyond these aspects varies, but all firms that I know of do provide expert counsel in all the problem areas of traditional employee benefits, including thrift and profit-sharing plans. And we should be doing

so. Our training and experience equip us better than any other group to be experts in these fields, and we should grab the opportunity to consult in them.

I believe that a consulting practice covering the whole range of employee benefits constitutes an environment of information and experience which leads logically to the ability to extend our expertise into areas of direct compensation. This is just another numbers game involving consulting techniques similar to those required for employee benefits. My firm has taken this step. I think we have been successful not only because our employee benefit background is there but because there is a real dearth of skilled people in the field. Maybe if we pursue the qualitative broadening of our practice, we shall end up being experts in everything.

CHAIRMAN HALVORSON: Do you consider yourself fairly well trained in legal and tax matters with respect to these employee benefits?

MR. IRELAND: Yes, in many aspects of them I consider myself much better trained than many people in the legal profession. That is not said with any view to blowing my own horn or anything, but certain aspects of the interpretation of statutes and so on can be done better in these areas anyway by an actuary than they can by a lawyer.

MR. WILLIAM A. DREHER: Apart from whether or not the actuary is competent to provide this service or get away with it without offending the domain of other professions, in terms of the profitability of the different services, should they be provided? To what extent will the market value add a certain premium aspect to the services which we might provide?

MR. ANDERSON: The thought I had on this is that actuaries like to think of themselves as being experts in a wide range of things. In actual fact, however, the degree of expertise is not always uniform and, if you do not do anything, say, in group insurance for a year or so, you get pretty rusty; you do not know what is currently running. We might think that we are pretty good at evaluating estates and that sort of thing; if, however, you have not been doing it currently and there is nobody in your firm that has, you can spend a lot of time, as you say, running up fee accounts and familiarizing yourself with something somebody else is doing so much of.

This very largely goes back to our first topic—the type of practice: If you are tied up with an insurance brokerage firm that has a lot of group

insurance, you are very much tuned in. It is very hard to turn away work. If somebody asks you to review his group insurance, are you going to say that there are other firms that can do a better job than you can on this? It is very unlikely that you will say this, but it may be an honest answer.

MR. GOLD: We have found that we are most efficient and make the most money when we do the work in which we are experts. Calculating reserves is boring and not highly technical. Therefore, if I have clients that need it and can hire an associate full time to do it, I am happy. I am not afraid that they are going to take it away from us, since I prefer that they do the reserve calculation.

CHAIRMAN HALVORSON: I think it inevitably ends up that we only agree to do those things which we feel are natural extensions of our ability and specialties. We try to bring in the experts that we know are truly experts in those specialized fields whenever we can, whether they are within the firm or from outside the firm. I am sure that each actuary in this room is familiar with a number of experts in each of these various areas that we have mentioned, such as profit sharing, deferred compensation, thrift plans, key-man insurance. We will do our best to bring in those experts, because we are ultimately responsible for having a client who ends up with a satisfactory and rewarding product that serves his interest. That can best be handled by someone who is a professional in that field. But, if we really do feel that we are at least as qualified as most other people in the area, we do not hesitate to offer our services. I think that over half of the new plans that we have installed during the last year in Milwaukee have involved either thrift plans or profit-sharing plans and, at the same time, generally involved a modification of the pension plan in order to accommodate these new or additional benefits.

MR. ECKLER: I want to raise the old chestnut again on this particular question, too. Some of the areas are very much involved with whether or not the consulting firm will accept commissions. I just do not see how the noncommission consulting firm can really get involved in key-man insurance, unless it is a very large case or continuing client or in a small group insurance plan, say.

MR. IRELAND: We are licensed to accept commissions on group insurance and, in my experience, since we offset them against fees, this has never raised a problem, because our fees are so large and the commissions are so small. It really is relative, and the commission-paying insurance

vehicle in the field is a thing of the past. So, while I think it probably could have been a problem some years ago, it has not been in the last ten that I know of, at least not in my experience.

MR. DAVIDSON: We do not accept commissions, and we do aid clients as a part of our complete employee benefit service in all these areas. In the group insurance area, we will analyze the bids for them to show them which one they ought to take, and, of course, those without commissions tend to result in lower retentions. It could very well be that that would be the one they will select. We do not normally care to work for very small corporations where a fee just would not make any sense to them; however, we have worked for them where we have set up a profit-sharing plan, or something of that nature. We would probably then direct them to a life insurance company to buy their group insurance. We think it makes sense for us to charge them a fee to place it for them.

MR. ANDERSON: There is another approach to this business of key-man insurance and small group, and I think that our solution to it is not too bad. Because, very typically, a small employer facing problems of this sort will talk them over with his auditor. It almost has to go through that route anyway, and, if your auditor is fairly caught up on the technical aspects or knows that he can call you for a twenty-minute consultation on the key points to the thing that he just wants to check out, this provides the economical service that is needed, and the auditor becomes the focus of advice.

CHAIRMAN HALVORSON: When I first got into consulting, I was worried that we might have a problem since we were not able to take commissions, not being licensed as agents or brokers. But, in dealing with potential clients and factually telling them that we would not and do not offset our fees by commissions, I have not found this to be a disadvantage in the thirteen years that I have been in consulting.

MR. JOHN B. MASSEY: I have a question for Mr. Ireland. Have you had any problems on the no rebate laws that are on the state books, and, if so, how would you handle them?

MR. IRELAND: No. My interpretation, and it may be wrong, is that we are not rebating any commissions because we do not give any back to them. We are entitled to charge whatever fees we like. We do feel, however, that we have to account for the commissions we receive, and the way

we happen to account for them is to reduce the fee that we might otherwise charge by the amount of the commission. The authorities are quite well aware of the practice, so far as I know.

MR. BLAGDEN: Mr. Davidson mentioned assisting the employer to choose the insurance company with which he places his group insurance. I would like to ask whether many consulting firms feel that they should act in two areas—(1) helping the employer choose the financing agent for a pension plan and (2) the extent to which they feel they should ride herd on the performance of whichever financing agent is chosen. I am talking fundamentally about pension plans.

MR. ANDERSON: Perhaps I can answer that. We have been involved in exactly these two types of exercise—assistance in the choice of funding agent and the analysis and interpretation of performance. This investment performance analysis is becoming a very big thing these days; everybody is in the act. We try to provide an objective view of the probable performance of certain funding vehicles. We know it is an area full of subjective considerations that, perhaps, are the predominant ones. It is very easy to develop an easy series of figures that represent past performance in a given trust, but that might be totally irrelevant because they have had a change in management and the future performance is bound to be different.

MR. IRELAND: I think it is proper that a consultant should participate in the decision on the type of funding medium to be used and, within the classification decided upon, which of the several alternatives should be chosen on the basis of subjective and objective considerations. As for riding herd on the performance thereof, I think you can only ride herd to the extent that the performance is disastrous. It is very difficult in most of the vehicles available, I think, to point a finger at mediocre performance because of all the subjective and other considerations involved in making these judgments. Bankers have been working on some kind of investment performance analysis for a long time, but I do not think anybody is satisfied with the result, except perhaps the bankers.

CHAIRMAN HALVORSON: We make a differentiation between the measurement of investment performance and what constitutes a desirable level of investment performance. I think that the actuary is well qualified to measure performance; he can select a method, or three or four different methods, of measuring this performance which he can then present to his

clients to keep a running tab. For instance, we have a computer program to measure investment performance on three different bases, and we try to keep this up to date for those who need it. I know we are very reluctant to hold ourselves out as being any kind of investment adviser or analyst. We cannot put ourselves in the position of pretending to be investment counselors, as I see it. Sometimes we would like to do this—personally, I would like to do it, but I do not see how I can. I do not think I am qualified, and I do not know any other actuaries who are.

MR. FENTON R. ISAACSON: About two years ago we did the analysis-type work in selecting funding agents which ended up being a split situation in a $40 million pension fund divided between several banks and an insurance company. Our service has been welcomed by the board of trustees, who have charged us with the responsibility of watching over the over-all performance, and we quarterly compute the results of performance. But, beyond that, I presonally feel that I would not want to touch the problems involved in selecting investments and in advising the client regarding investment detail, which are properly the function of the trustee.

Returning to the question of attorneys, I would be much more concerned with my relationship with the trustees, including here the insurance companies with their funds. I do, therefore, feel quite strongly that the proper role of the consultant in this area is to confine himself to computing the rates, informing the client what performance actually is. How to achieve better performance—this is something for the expert investment counselor, trustees, insurance company investment people; this is their bailiwick.

MR. GEORGE B. BRUMMER: Since actuaries are neither investment specialists nor experts, they should probably avoid finding themselves in a position where they recommend one investment medium or another. Many actuaries, however, provide a complete service. They not only design a pension plan but also assist in the preparation of the necessary documents, help communicate the plan to employees, explain it to management, perform annual valuations, compute estimated costs, participate in the day-to-day administration of the plan, and so on. Such a complete service must necessarily include at least an explanation of the various investment mediums available. Moreover, from the client's viewpoint, he will generally expect the complete service to include a recommendation of investment medium as well, even though other considerations of a corporate financial nature will often influence his decision. In

short, we must be prepared to meet his request, regardless of the consequences.

After the choice of investment mediums has been made, some measurement of the success of the medium chosen is often requested. An accurate computation is expensive and time-consuming, and most clients prefer to avoid it. Nevertheless, year-to-year comparisons of approximate yield rates similarly derived are valuable and should be included in periodic reports. When it comes to the relative success for his investment medium, the client does not always ask, "How well am I doing?" He is more likely to ask, "How well am I doing compared to others? Is the trust department of my bank doing as well as that of other banks in my area? Are the earnings on the deposit of my administration fund on a par with those maintained by other life insurance companies?"

MR. BLAGDEN: One point I have in mind is that you either advocated this particular bank or acquiesced in its choice. Are you going to be embarrassed to tell your customer that this bank is doing a lousy job at it?

MR. DONALD S. GRUBBS, JR.: We have all seen examples of choice of a funding medium on bases that no actuary would have made. We have also seen examples of insurance companies each calculating the costs of pension plans under various assumptions and an employer choosing one because it came up with a lower cost on the basis of a higher interest assumption. The actuary certainly knows better than anyone else what questions to ask and can analyze them for the employers. He can best give some guidance to the employer, steering him to a wise choice.

CHAIRMAN HALVORSON: Maybe the answer is that this is a field in which we should be a lot more active, but we are so busy doing other things that we cannot qualify ourselves to provide investment services.

MR. ANDERSON: Management consulting is a growth industry. Its level of involvement in our economy is typically at the vital rather than the peripheral area of any given problem. It is goal-oriented rather than technique-oriented, although it uses many, many techniques. The economy of major Western nations has typically passed through industrial revolution into the mass-production age, and now the mass-production age is fading into the background to give way to what is called the post-industrial age, where the focus is on the application of resources to achieve goals—national, social, and corporate. Management consultants are riding this wave.

I detect some confusion of terms in the usage of "management consulting." I think many of us would say that we are in the management consulting field because we do provide consulting services and management to the client. If that is not management consulting, what is? I think, however, that management consulting is a much bigger field than this and that, if you define it simply in terms of consulting services for management of the sort that we do, you miss a big part of the point. Management consulting is an interdisciplinary multifaceted, multi-industrial consulting service. It covers the public and private sectors of our economy, and its general use lies in synergism on the opening of new doors and applying new ideas in areas where they had not previously been applied.

In this management consulting field, I feel that actuaries are being left behind. Their orientation is on techniques. Some of these techniques are even obsolete in relation to the problems to which they are being applied. Being largely in the life insurance industry, the actuaries are to some extent isolated from the rest of the corporate world. After all, life insurance is technique-oriented, and most established life insurance companies have an inverse success factor; in other words, failure to grow brings, at least temporarily, an increase in profit. If something is wrong, you may not feel the pinch very soon.

So I would like to turn now to just the management problem with which management consulting deals. The concerns of top management in a typical company include finnace, sales, production, purchasing, inventory, general management, planning systems, controls, information, communications, and human-resource management. In that context our management, our actuaries, provide a management consulting service. The participation of actuaries in these areas includes the following: (1) those areas in which the actuary alone or virtually alone is qualified—for example, pension plan costings; (2) those areas in which his unique qualifications make him better able to approach the work than other specialists (although not always)—for example, benefit plan reviews; (3) those areas in which an actuary could easily become involved if he acquired additional qualifications—for example, compensation studies and labor relations; (4) those areas in which an actuary with additional training could serve as a useful member of an interdisciplinary task force—for example, operations reviews, that is, a review of the entire operations of the company to determine profit potentials; (5) those areas in which the actuary's mental qualifications and outlook are likely to make him amenable to becoming qualified. This depends on his own personality, but it is likely to include financial management, budgeting, operations research, and computer technology. The way in which you distinguish consulting actuaries

as traditionally conceived and actuaries in management consulting work is largely a matter of focus, the degree of concern with the over-all management problem.

I have often wondered whether the traditional practice, although it is thriving and doing very well, may be somewhat obsolete in terms of the world of the future. I think this has considerable implications on the education and training of actuaries. I am very interested in what we are really doing. We are producing a person who, at the time of qualifying for Fellowship, has spent a good number of years pursuing a rather limited range of activities with all his efforts, to the exclusion of communication activities and to the exclusion of, to some extent, his family and his friends, or anything else that could serve to broaden him. When he gets through, highly motivated, and racing down a railway track, he is going to keep going straight ahead.

It is unfortunate, because actuaries end up thinking that they have a great deal to offer the world. I believe that they have but that they must broaden. Let us consider, for example, offering management consulting services to an insurance company. Yes, the actuary can do a fairly good job, but, when you look through his qualifications, has he ever managed anything other than an insurance company; has he ever managed an industrial company or some other kind of financial institution? This is a vital question, and very few of us have had any experience, other than with one or two types of industry. The management consultant can come from managing a foundry, for example, and say, "I ran into certain types of problems there; I wonder whether I am going to run into the same problems with an insurance company." Of course we all raise our hands in horror and say, "No, we are different; we do not have the same problems as the foundry." He says, "Oh, look, the more I hear you talk, the more it does sound the same." Suddenly you have a new insight into your business. Instead of being isolated from the rest of the business world, you become tuned in, and the management consultant does provide that way of tuning in.

I think, therefore, that there is a possible changing role for the actuary here, if he can become aware of the opportunities for service and can gear his training and his scope of thought to a wider approach. My conclusion is that the actuary's role in management consulting will be peripheral unless the actuary does a lot of adapting and uses his talents to master new fields.

Our question, "Are actuaries making use of nonprofessionals?" is stated in rather odd phraseology. In my own management consulting work, I would hesitate to call the men with whom I work nonprofessionals. They

represent a wide variety of professional disciplines. What you do is to assemble the kind of task force where each of them has a contribution to make to the problem; he knows something about it, or you think his skills could cast some light on it. So, certainly, we are using what you might call nonprofessionals; we are using other disciplines.

"Are they using computer and simulation techniques and game theory?" Most certainly, yes. In fact, I find myself being thrown in against a group of people who had been using these computers and game theory and so forth long before I heard of them, and they have a lot to teach me.

"Are consulting actuaries developing management information systems?" When there is a management information problem, my tendency is to bring in a man who does little else than management information systems and who has done quite a few of them. I inform him of the particular problems of the company and say, "I would like to follow what you are doing, but you are the expert." Perhaps the actuary could participate in it, but he should not necessarily do the whole job.

"Should consulting actuaries take the lead in these areas?" I feel that they should, to the extent that they can. At the moment, however, we seem to be trailing well behind. I think, though, that there is a very interesting challenge to our future here.

MR. GOLD: I deal mostly with smaller companies, and it is easy to know the role of the actuarial technician when dealing with asset shares, premium rates, and reserves. Most of my clients do not retain management consultants as such to help them operate more efficiently. We get very much involved, however, in what I consider management consulting when we are asked by a client to consider a whole new area, such as sales. We do not simply go ahead, but first we question them for the reasons for wanting us to consider sales. I may argue with them. I try to look at return and equity. In that sense I consider myself in management consulting because we are dealing with the president and trying to help him steer the ship.

CHAIRMAN HALVORSON: One of the problems that cannot be avoided by a consulting actuary for insurance companies, I find, is sizing up the talent and the resources that the company has, including its management. So, before you can start doing any effective job at all with the client, you must know what the client's particular abilities happen to be. We are, therefore, inevitably involved in management consulting, when we are working for insurance companies as their consulting actuary.

I would like to know whether actuaries are finding that they can use their talents or the awareness that they have for marketing problems, organization problems, administrative problems, for organizations outside the insurance industry. I think Don Anderson's partnership is doing a broad consulting. What type of projects do you get involved in, Don, just to give us a few other things to talk about?

MR. ANDERSON: Quite a range of things. We have gone the route that John Ireland has gone in terms of total compensation and in terms of human-resource management. That is the area that is immediately adjacent, and you get involved in executive search and the over-all question of taxation and fringe benefits. What is sometimes very exciting is to get involved in a project which one would not ordinarily think of. At the moment I am engaged in reviewing our future in the education industry, with regard to the manpower needs of the education industry. I don't know why I am qualified for that; sometimes I don't know whether I am, but that is not the question. The fact is that the problem is there, and you put together a multidisciplinary task force to try to produce something that is fresh and that others have missed.

I have been involved in land-use problems, which have nothing traditionally to do with actuarial work. Also involved are operation reviews, where you try to discover profit potential for a company, whatever the field would be, whether it is in production scheduling, sales, inventory control, or the like.

MR. SCHUYLER W. TOMPSON, JR.: I have a particular interest in operations research. I have a lack of knowledge in this area, and I am trying to fill this void. I do not think, however, that I should be presumptuous enough to think that I can compete with a man who has a doctorate in operations research or anything like that. The actuary should be familiar with the basic principles, and he should understand operations research, but I do not think that actuaries should be operations research experts.

MR. BLAGDEN: It does seem to me that the actuary has one basic qualification, and that is that he is trained to have a very healthy skepticism; he is trained to lift up the stones and look for the bugs underneath. It seems to me that that kind of attitude can be most helpful in handling management problems of time and motion studies and such matters, which would fit right into the management consulting field.

MR. CHARLES V. SCHALLER-KELLY: For a young actuary it is extremely rewarding, broadening, and enriching to be part of a multidisciplinary team. The Social Security Department of the United Auto Workers is something like that. Most of the men of the thirteen-man staff have at least two degrees each, and, among them, they have worked or studied in eleven countries on five continents. Backgrounds range as far afield as social work and econometrics, not to mention the former employee benefits manager of a major international agricultural implements firm and the administrator of Italian social security for the allied military government. Participation in such a team both enlarges an actuary's horizon and makes him a more valuable adviser when he has to take sole responsibility.

MR. FREDERICK P. SLOAT: I would like to express concurrence, as an older actuary, with the thought just expressed that there is great value in working side by side with nonactuaries. I have done this in the three stages of my actuarial career of over forty years. The first was as an employee of an insurance company, the second as a partner of a consulting firm, and the third as a principal (equivalent in our firm to a partner) of a large accounting firm.

An actuary working for a life insurance company is drawing upon his special expertise side by side with persons having other areas of training and competence, often working together on the same activity. This is a broadening experience for the actuary and increases his knowledge and perception beyond the matters of actuarial technique. In the same way, I found my experience as part of a consulting firm, whose partners and members were both actuaries and nonactuaries, stimulating and challenging.

The final stage of being part of an accounting firm has been further stimulating and broadening while, at the same time, retaining the full autonomy of the two professions. It is only as a sole practitioner, or as a member of a firm comprised only of actuaries, that an actuary is limited to practicing his profession solely with others of like training and background.

When I was working in a life insurance company, I found it very satisfying to contribute actuarial competence side by side with those with other competencies. Likewise, in the consulting field, I have found it stimulating to apply actuarial competence side by side with those with other types of competence toward a more comprehensive approach to problems and activities in this field.

MR. GOLD: There is no question in my mind that life insurance companies would be better off if they routinely calculated adjusted earnings or the increase in net worth. This could be done by their own actuary or by their consulting actuary, but in any case it certainly should be done. Otherwise, it is difficult to judge performance of a company vis-à-vis prior years or similarly situated companies. Adjusted earnings changes the emphasis from how much business is being written to how much good business is being written.

Actually, when we talk about adjusted earnings, it is a complex question; we have been rather pre-empted, the analysts in New York having devised their own approach, which *Best* is now adopting, and the accountants having come up with what are called "generally accepted accounting principles." We have, as it were, been left behind. I think it is a shame. We should get into the act—and the sooner the better. I certainly think that we have an obligation to the public, in the sense that our certification to a company's adjusted earnings should instill confidence.

About 90 per cent of my clients are subsidiaries, and in a number of places we have to calculate adjusted earnings according to what the accountant will accept. This we do. But, when I give my actuarial report to management, I devise my own approach, which sometimes deals with the increase in net worth or return on equity or even a different approach to adjusted earnings. In one company they simply capitalize certain expenses and do not recompute reserves; in another company they recompute reserves. So there is no standardization. I follow a rather dual track—I give the accountant the numbers they want me to give them, and then I do my own thing.

Sometimes we try to figure out how a small company would look using the *Best* approach. One thing I will say about financial analysts—they are with hat in hand; if we come up with a better method which they can accept, they will take it. They have been forced to arrive at a solution, and, since we have not helped them, they have gone along with their own. They are dealing with the annual statement, so they do the best they can, on the basis of information that is readily available. The analysts do not have any choice but to use the statement.

CHAIRMAN HALVORSON: In our own work as professional actuaries, how would you identify our obligation? Is it primarily to the public, or to the management of the insurance company for which we are consulting, or to the policyholders?

MR. GOLD: To the policyholders, in the sense of solvency and equity. It is also to management, to help them do well. And certainly to the public, in the sense that, when we certify something, it means something. Of course, there are conflicts here. I had a problem where the company, I knew, was not solvent; I kept telling the president so, but he would not do anything about it. I finally wrote a letter to every member of the board. I felt that was my obligation. I suppose we have an obligation to our client but, even more important, to the profession.

It is a trickier question if management is not going well, and many companies are not going well. I am not sure what my obligation is. Some companies will not let me report to the board; they are afraid of the questions that might be asked. I really think that the company actuary should be on the board, or the consulting actuary should report to the board, and I feel strongly about this. I think that Hamilton Life, which went bankrupt, had an audit that did not prove a thing. The assets and liabilities did not say where they were going. I think, really, that the actuaries should report to the board, no question about it.

If I were to try to come up with one simple formula for communicating to the board of directors how they are doing, I would try to break down the annual statement into a couple of parts—the interest on the capital and surplus would be one thing and the second would be to break down the gain from operations into investment in new business and gains from renewal business, because in today's era of 10 per cent money or more it is very valid to question how much money you should invest in new business.

It is not at all apparent that you should make these tremendous investments in agency financing and the like. Top management on the board should have some say about what they want to do; they should realize how much they are investing in new business and know what the return on this equity is. If they are good businessmen, they can understand it. Unfortunately, they generally are lazy or just do not want to pay attention.

CHAIRMAN HALVORSON: Are these the kinds of things that could be incorporated into the annual statement?

MR. GOLD: Of course, you have the question of how to break down expenses into new business and old business; that is a problem. I certainly think, however, that companies should do it themselves, even if there is no place in the statement, just to see how they are doing. On other approaches, you might determine the investment in new business and com-

pare it with the increase in net worth or look at your return on equity. These are all devices to see how good a return you are getting on what you have.

MR. DAVIDSON: If you report true adjusted earnings, you do not have to worry about all those details, because the interest on capital and surplus is automatically taken into account.

MR. GOLD: Yes. If by adjusted earnings, however, you mean capitalized first-year expenses, I am somewhat lukewarm about that approach. First of all, I assume that you mean just capitalizing those new-business expenses which are explicit in the rate, so that, if the company goes hog-wild, we will not capitalize everything.

MR. DAVIDSON: There has to be a limit. Under basic accounting principles you can postpone posting gains but not losses.

MR. GOLD: Of course, there is a question of what the relationship between this investment in new business is and what you are getting in return for it or compared to what you might get elsewhere on the same investment. I can see coming out with adjusted earnings because all companies seem to be interested in adjusted earnings per share, and so on, but I think a lot can be said for evaluating the increasing net worth.

MR. DAVIDSON: It seems to me that the problem with the increase in net worth is that it is very difficult to explain to people who are not insurance-oriented; in other words, they understand earnings. And for the conglomerates that are acquiring life insurance companies, the name of the game for them is earnings per share. It does not require any additional explanation, provided the adjusted earnings are properly calculated. There is an obligation here to make sure that the formulas at least are reasonable and correct. The accountants do not seem to have any problem understanding expense capitalization. The difficulty usually arises in deciding what to do with reserves, and you certainly cannot ignore reserves if you are going to adjust earnings.

MR. GOLD: Different accountants have different approaches. For one company, we simply capitalize first-year expenses; we do not touch the reserves. For another company, we do.

MR. DAVIDSON: Of course, you can overstate your earnings. For example, if CRVM reserves are used when you capitalize initial expenses, you show a large profit in the first year, and therefore they have to work together.

MR. GOLD: In this case we capitalize those expenses which are encompassed by the rate and which are not in excess of premium loading.

CHAIRMAN HALVORSON: The adjusted-earnings concept can mean so many different things to so many different parties who are looking at insurance companies from either a management point of view or from an investment point of view that I have felt, in reading the discussion of Mel Gold's very informative article last year and the discussion that ensued, that perhaps we actuaries are getting hung up on this term "adjusted earnings." Perhaps we ought to concentrate our attention on good reporting to management on how they are doing. In this area it seems to me that we are almost obligated to deal with the prospective value of what this management has done this year in comparison with the expenses they have expended to get this business. Would it be possible to separate the question of adjusted earnings from the question of management reporting on how the company is doing from a prospective value point of view?

MR. DAVIDSON: No, I do not see how you can separate it.

MR. GOLD: And yet you have the problem of two companies investing the same amount in new business, but one writes $100 million and the other writes $50 million. They obviously have not done the same.

MR. DAVIDSON: This again will be reflected in adjusted earnings; we have to assume that the adjusted earnings are correct.

MR. GOLD: Even if you are capitalizing first-year expenses, you may be writing very profitable business or business that is not so profitable and still have the same capitalization.

MR. DAVIDSON: It depends on the punch of your report. If I am a stockholder of the corporation, the thing I am interested in is the pattern of earnings, because that determines what my share of stock is worth. The pattern had better be up, or I am not going to get a decent price.

MR. GOLD: We get boxed in here. If it is a publicly held company or a subsidiary interested in earnings or adjusted earnings, the accountants are interested in what they call "adjusted earnings." Yet I think that we have to have our own areas; I agree with you that we must also talk of return of equity and net worth.

CHAIRMAN HALVORSON: Many companies and boards of directors do not get the kind of reporting to management which does compare the increase in the net value of the company with the expenditures for that business. It seems to me that there are many instances, especially in new stock companies, where this seems to be essential information to the board of directors, as well as to management and perhaps to the department of insurance. If there were general agreement in the profession that this was needed, Mel, let me ask you whether you think it would be proper for the actuaries to move in the direction of trying to get this reporting to be a requirement of new companies to provide to boards of directors.

MR. GOLD: I think insurance departments could much more efficiently look over the newer companies by having the consulting actuary report once a year to the board and give his report to the department also, because we are talking here about solvency. I do not think that insurance departments are particularly competent in this area. If they had the consulting actuary report to the board or the department until solvency is completely assured, this would be a good way of doing it—and so much cheaper than those examinations which go on interminably.

MR. ANTHONY J. HOUGHTON: I think there are two concepts, and sometimes they are used synonymously when they are not the same thing. One talks about getting adjusted earnings to reflect what actually happened to the company that year as accurately as possible. The other is getting adjusted earnings that will put the insurance company's accounting as close as possible to the regular accounting of other commercial firms, so the accountants will not be having the special accounting problems of life companies. Those two things are not exactly the same thing. You can make a lot of adjustments so that the accounting systems of life companies are quite close to commercial companies, but that may not be the type of adjusted earnings that most profitably tells investors what has happened to the company for that year.

MR. BRUMMER: I would like to pose this question to the panel: To what extent is the method of calculating adjusted earnings influenced by

the recipient of the results? Do you use something different for the brokerage houses (because they are concerned from an investment point of view) from what you use for management (who are concerned from a going-concern point of view) or for yourself as actuaries, or for someone else?

MR. GOLD: There is no question about it. If you are preparing this for the accountant who is certifying to the parent company, you must do what he is going to accept. You may argue back and forth, but you are, unfortunately in this case, assuming you can buy it, doing what he wants.

MR. BRUMMER: Going beyond even the restrictions that may be imposed on you by good accounting practices as described by the Accounting Principles Board and supposing that a set of rules does not exist, would your methods be different for different people, for different parties?

MR. GOLD: Yes, in certain ways, depending on the situation and on what I am trying to prove or to show.

MR. ANDERSON: When you are trying to report the earnings of a steel company or an automobile manufacturer, you do not end up with four sets of earnings, depending upon whom they are for. This is exactly what we should strive to attain in this type of thing—something that strikes, possibly, a middle ground between all these conflicting pressures and can get them all to agree.

MR. ECKLER: You can get four sets even for a steel company; you can even get ten sets. There is no such scientific objectivity. Somebody makes all kinds of decisions here, including the accounting principles. It is custom and want the community wants. I cannot believe that, even in the case of the steel company, you have the kind of objectivity that you are searching for here.

MR. GOLD: No question about it. The accountants are not scientists; they move with the wind, like everybody else, and they have a lot of arguments among themselves.

MR. DAVIDSON: Ideally, when we speak of adjusted earnings, we should speak of a defined term. These are reasons that so many of them have grown up. The accountants expect to define adjusted earnings a little better than they have so far. They have written a general description in which they have hit on all the areas, but they have left it up to the

individual auditor to decide how he wants to define the details, and the details can make quite a bit of difference in the result. As I understand it, they are going to nail some of these things down. The financial analysts, of course, have a different problem; they do not have access to the information, and there is no way to force all these companies to go to a standardized adjusted earnings. The New York Stock Exchange is forcing any company that is listed or has a regular corporation with a substantial life insurance as subsidiary to now report on an adjusted basis; in other words, they must have a clean opinion out of the accountants, and, to have a clean opinion, they must go to adjusted earnings. At first the SEC said it would not allow adjusted earnings, but it has compromised and will now approve the prospectus if the accountant will certify to it.

MR. TOMPSON: I wonder whether this is one of those situations in which there is not necessarily a unique solution to the problem. To my own mind, I have an analogy between this situation and the situation in the pension area in which you are calculating a contribution for a pension plan and you have all sorts of assumptions that you can make on interest, salary scales, and several other variables. I do not think that a person can say that one set of assumptions is the only set that can be used. If I change my assumptions, I actually get a different answer. Maybe this is not a direct analogy, but it seems similar to me, and I don't know whether you have a unique solution to this sort of thing.

MR. GOLD: It is more than just assumptions; we do not have agreement on method.

CHAIRMAN HALVORSON: I would like to see the actuaries have a position in this area in which they can serve the needs of good management by proper analysis of the company's operations through better reports along the lines suggested by our panelists.

PROFIT AND OTHER OBJECTIVES IN GROUP OPERATIONS

1. *Profit Objectives*

   What are sound profit objectives for a group operation?

   a) Is profit the best single measure of the performance of a group operation? Why?

   b) Can group profit be accurately measured and described in an easily understood, meaningful way useful to management? Is an adjustment of annual statement figures necessary to determine "true" profit?

   c) Should separate or combined group profit objectives be established for life, health, and pensions?

   d) Do measures of profit or objectives for mutual insurers differ from those appropriate for stock insurers?

   e) What are the fundamental factors that contribute to the attainment of group profit objectives?

   f) How can group operations be justified that do not show a profit?

2. *Other Objectives*

   What is the relative importance of objectives for a group operation with regard to the following:

   a) Contribution to the corporate mission?

   b) Satisfaction of the life, health, and pension needs of the commnuity?

   c) Assistance in agency building and development of improved marketing methods?

   d) Other objectives?

   e) Have objectives of group operations changed in the past ten years? What will be the impact of the following on group objectives: Mergers and conglomeration? Changing social attitudes and values? Changing management philosophies?

CHAIRMAN GEORGE N. WATSON: This session should be of particular interest, because it is certainly a rare thing to have a session of the Society of Actuaries devoted to a discussion of what the real objective in a group operation is. The group business for many years has been proceeding at such a furious pace, with so many new ideas and innovations and with such a demand for coverage on all sides, that too often the objective has been attainment of production goals without sufficient attention to the subject of profit or other desirable objectives that the company wishes to obtain.

When we think of profit objectives, we immediately realize that we have insurance companies that are stock companies and other insurance

companies that are mutual companies. A mutual company is certainly a nonprofit organization, and the question whether a mutual company should be seeking a profit is one that we have to dispose of at an early stage.

Let us say that a mutual company must make sure that it does not operate at a loss. In order to do that, it is reasonable to assume that business written shall contribute to its growth of surplus. It is this growth that we will refer to as the profit objective of a company, whether a stock company or a mutual company.

MR. WILLIAM CUNNINGHAM: Sound profit objectives will vary from company to company, and each must set its own goals. At the Pacific Mutual, we establish profit objectives using four criteria:

1. *Investment risk.*—This is the charge made for the guarantee of principal and investment income. For products or accounts where the risk is not assumed, no charge would be made. Separate accounts or variable annuities are an example of no risk assumed.

2. *Investment management.*—This is the charge made for your investment services, and these can be compared to the charges made by an investment counselor.

3. *Insurance risk.*—This is the charge made for the guarantee of mortality and morbidity. If a risk is not assumed, no charge is made. A cost plus benefit or a case in which only administrative services are performed is an example of no risk assumed.

4. *Insurance management.*—This is the charge made for your insurance services.

I will not attempt to define how these should be determined, since it is up to the management of each company to determine their own standards and what each is worth. When I apply these criteria to my company, however, almost 90 per cent of our pension profit comes from the investment risk and investment management areas and 10 per cent from insurance risk and insurance management. In our group life and accident and health operations, the reverse is true.

Today, profit is almost a dirty word in business. Our youth, our union leaders, and many of our legislators find willing listeners in our apparent era of destroy, tear down. This is even supported by the actions of many in the insurance industry. Never do we measure the industry in terms of profit yardsticks, such as return on investment, profit to sales, price-earnings ratio, and the like. Instead we use volume measurements, such as assets, business in force, ratio of surplus to assets, and so forth. Many critics maintain that our managerial, nonentrepreneur elite no longer set

profit as the prime objective. Instead the elite are more concerned about personal security and power. They satisfy their stockholders by returning a modest profit and, above all, a continual growth pattern. To achieve this, they are compelled to put prevention of loss as their main objective—not maximization of return.

I will agree with those who argue that profit should not be made merely for profit's sake. There are many purposes for profit besides a return to stockholders or policyholders. Each of us recognizes the need for contingency reserves for investment, mortality, and morbidity fluctuations. There is also the need for surplus funds to invest in opening new territories, in research and development of new products or new systems, and, very important today, as a contribution to the total company surplus for diversification. There are other reasons for being in the group business, and some of these are set forth on page 520 of the *Group Insurance Handbook*. It is my conclusion that the only measure of performance is not profit, but, if one measure is to be assigned top billing, it must be profit. Without profit, little else is possible. With profit, much is possible.

Question 1, *b*, asks whether profit can be accurately measured and described in an easily understood, meaningful way, useful to management. Having been responsible for the preparation and explanation of our group operating statements for many years, I get the feeling that there must be better methods. The biggest deterrent to accurate measurements, and hence to an easily understood explanation, is our general adherence to the annual statement. It is not too difficult to predict short-range future profits. Knowing that today's profit results are the product of decisions made some time ago, I assume that most of us combine results of three to five years to explain the whys and wherefores of our annual statements. What is lacking from management's point of view is the age-old question "What should have been expected? How did the actual compare to this?"

What is needed is a standard of measurement from which to measure results. Actuaries are accustomed to setting mortality and morbidity standards and to measuring actual to the expected. Why can the same not be done for profits? It is my proposition that this can be accomplished. Our accounting systems are traditionally of the custodial type. Their uses are for the annual statement, reports to policyholders or stockholders, and federal and state tax purposes. Under the custodial type of accounting, we match on an accrual basis revenues with costs associated to produce these revenues, and our figures are period-oriented. As stated earlier, results of today are the product of decisions of prior periods. While the accounting for programs in which the revenues and costs occur differently in multiple time periods is of secondary concern to the ac-

countant, it is of prime concern to management. What I am proposing is that we need managerial accounting. The uses of this type of accounting are for decision-making and for measuring performance. Under managerial accounting, we match revenues and costs without regard to a fixed time period.

This subject is a very broad one and is receiving a great deal of study in today's modern business schools, as managements of all businesses, not just those of the insurance business, are very interested. The techniques are varied and use both computer and noncomputer methods. The actuary, by training, education, and experience, is fully equipped and already does use many of the techniques.

In order to understand fully the profit impact of a decision, management needs to know the effect on true profit of market performance variations, which can be analyzed by volume, price, mix, and budgeted expenses. Performance accounting will measure actual against planned performance by responsibility center. By "responsibility center" I refer to expense centers, profit centers, or investment centers. The important thing is that an information center must be set up which is user-oriented. My definition of the centers is as follows:

Expense center.—Measures the expenses incurred but does not measure the monetary value of its output; it has no revenue.

Profit center.—Measures both revenue and costs incurred.

Investment center.—This is the ultimate extension because it measures not only revenue and costs but also the assets that are used.

Under custodial accounting methods, group operations incur expenses either directly or allocated, and we look at many of these expenses as being incurred from an expense center. Many of these expense centers should, in reality, be profit centers or investment centers. As an example, let us use the computer area. Under custodial accounting, we charge off the lease price and software development as they are incurred. Under managerial accounting, I suggest that you charge the product line based on usage. This creates revenue to the computer investment center area, and a true return on the investment can be determined. At the same time, the product line does not have distorted profit figures. Table 1 illustrates the difference—assuming $100,000 computer rental per year and $500,000 software development and a five-year useful life. The product line will be charged and thus will charge its policyholders $250,000 per year for years two through six. Profit figures for management are not distorted. Table 1 illustrates the concept of the computer area being an investment center and the product line a profit center.

Since the value of the services sold within the company is not established by a market transaction, a transfer price must be established. If market prices exist, these can be used. If no market price exists, a mechanism for establishing this transfer price, allowing for a profit margin, must exist within the company. This theory sounds fine, but the fun begins when the product area can prove that maybe they can get the job done more cheaply on the open market.

TABLE 1

Year	Computer Rental	Software	Total
	Custodial Accounting		
1.....	$ 0	$500,000	$500,000
2.....	100,000	0	100,000
3.....	100,000	0	100,000
4.....	100,000	0	100,000
5.....	100,000	0	100,000
6.....	100,000	0	100,000
	Managerial Accounting		
	Revenue	Cost	Profit
1.....	$ 0	$500,000	−$500,000
2.....	250,000	100,000	150,000
3.....	250,000	100,000	150,000
4.....	250,000	100,000	150,000
5.....	250,000	100,000	150,000
6.....	250,000	100,000	150,000

NOTE.—$\$500,000 = \$150,000 a_{\overline{5}|}$; $a_{\overline{5}|} = 3.3$; return on investment, 15 per cent (approximately).

While the theories of responsibility centers and transfer costs can give answers to management for expenses incurred for services rendered to policyholders, how do we handle costs not associated directly with any particular product line? There is no scientifically correct way to split them up among time periods, among cost centers, or among product lines. Examples of these are in the law department, corporate advertising, training expenses, industry association expenses, and the like. For the purpose of my discussion, let me call this "overhead." In overhead I have also included those items which are incurred as a result of management decision and other costs that would be incurred even if you had zero volume; that is, those costs that a company would incur in order to be in

a position to serve. The objective of custodial accounting is to allocate each product line its fair share of the total costs incurred. This it can do and do very well. But does it tell the truth, or is the profit distorted?

Table 2 illustrates a comparison of custodial and managerial accounting. Custodial accounting implies a profit of 3 per cent on $100,000 of sale. Managerial accounting implies a profit before overhead of 25 per cent on the same sales volume. Thus an additional $10,000 of sales increases profit by $2,500, not $300. Similarly, if sales decreased $10,000, profits decrease by $2,500, not $300. Accounting in this form can tell management the value of incremental or marginal sales.

TABLE 2

	Total Company	Individual	Group
	Custodial Accounting		
Revenue	$100,000	$40,000	$60,000
Costs	97,000	36,000	61,000
Profit	$ 3,000	$ 4,000	−$ 1,000
	Managerial Accounting		
Revenue	$100,000	$40,000	$60,000
Costs excluding overhead	75,000	25,000	50,000
Profit before overhead	$ 25,000	$15,000	$10,000
Overhead	22,000	.....	.....
Profit	$ 3,000	.....	.....

I have just touched the subject of managerial accounting. I think that it has answers which we have never been able to give properly to our management. Personally, I think we should do more of this. It will simplify our job of informing management of true profits or losses.

In my discussion of sound profit objectives, I believe that a case was made for separate profit objectives for life, health, and pensions. Each product line should stand on its own feet. In my company, and I believe this is true in most companies, life and health are sold as a package, and thus their objectives and profits should be considered on a combined basis. Because of annual statement requirements, they will be looked at separately, but I would suggest that managerial accounting methods be used, as the allocation of most expenses is arbitrary.

The sale and administration of pensions are generally distinctly separate from life and health, and separate objectives are usually set. The training of a pension man is long and technical. His results are often less than spectacular. However, many of us might be very surprised if we used techniques such as present-value method to measure the ultimate profitability of pension versus life and health.

MR. EDWARD A. GREEN: The determination by an insurance company's management of an appropriate profit objective for its group operations is a complex matter involving many considerations, both theoretical and practical. These include but are not limited to such things as the nature and extent of risk undertaken and the reward for taking such risk, product mix according to risk characteristics, maturity of the group operations, relationship to growth, marketing and other objectives for both the group lines and the total company, and the limits imposed by a competitive market.

I believe that profit objectives for group operations in a mutual company should be closely related to surplus or contingency fund needs. These funds must be supported at an adequate level to provide for variations in mortality, morbidity, and expense levels and to provide any needed working capital. They should be sufficient to assure group policyholders of the ability to have continuing coverage at reasonable cost in the face of unforeseen happenings on a basis that does not require any permanent or long-continuing subsidy from other lines of business. To test compliance with this principle, it is desirable that internal records of surplus by line be maintained.

The types of variations for which surplus is needed in the group lines of an insurance company can be separated into short-term or concentrated hazards and long-range hazards. The former affect short-term coverages, where the benefit is fixed in value and settled at the time of or shortly after the occurrence of the event establishing the claim. The latter affect long-term coverages, where the benefit is continued over a period of years and its ultimate cost is related to contingencies during those years. Historically, group term insurance in the life and accident and health lines with premium rates subject to adjustment each year has fallen in the short-term category and group pensions in the long-term category. However, with the introduction of survivor income and long-term disability benefits into the insurance lines and the introduction of contracts with very limited guarantees into the pension line, the demarcation is becoming less clear.

This distinction between coverages involving short- and long-term

hazards has some bearing on the base to which surplus needs can be related. For straight term coverages, the net premium, that is, gross premium less dividends or experience refunds, appears to be a reasonable measure of the risk against which to measure surplus needs. For the long-term risk, the reserve seems to provide a better base.

Today I am going to talk about term insurance, which still constitutes the bulk of the group life and accident and health lines. Surplus funds are needed here to cushion against short-range hazards, such as the effect of catastrophic accidents, epidemics, and economic recessions on mortality, morbidity, and expenses, and to provide working capital for financing expansion and innovation and absorbing accounting and underwriting variations.

Most of these items are such that they do not lend themselves to a precise scientific development of a proper surplus level. The determination of this level is more a matter of judgment than of mathematical analyses. The judgment will consider such things as the general degree of conservatism in company management, total company surplus from all lines, underwriting policy, level of gross premiums and dividend margins, composition of business by product line, and constraints imposed by the competitive market.

A few years ago in an informal discussion at a Society meeting I outlined some rough guideposts which might be used in considering an appropriate surplus level. From these guideposts and consideration of the contractual right of annual premium adjustment, I concluded that an ultimate surplus goal of about 50 per cent of a year's net premium would be reasonable for a mature block of group life business and that for group accident and health the goal might be somewhere between 25 and 50 per cent. This conclusion was, of course, more subjective than objective but did seem compatible with the guideposts and with prior discussions in supervisory and actuarial circles. It was broad brush and did not have the refinement of an experience-rating formula which recognizes many size and case characteristics affecting risks and the effect mix of business might have on surplus needs.

Since surplus needs are not susceptible to a precise scientific development, it may be interesting to take a look at operating results as shown in the annual statements of several major group-writing companies. While these annual statement results do not show surplus by line, they do show operating gains and growth in net premiums. Since there is a direct mathematical relationship among operating gain, growth, and surplus, when measured in terms of net premium, it is possible to determine an "implied ultimate surplus level" from any pair of growth and operating

gain rates. This is the surplus level approached if such operating gain and growth rates are maintained for a long period of time, and non-operating gains and losses balance out over the years. Illustrations of the relationship among operating gain, growth, and surplus appear in the discussion on page D512 of Volume XIX of the *Transactions*.

With this relationship in mind, let us look at the weighted average of the "implied ultimate surplus" of eight of the largest group-writing companies over the five-year period 1964–68, as shown in Table 1. "Implied ultimate surplus" is the surplus level which would be approached if

TABLE 1

	Gain	Growth	Implied Ultimate Surplus
	8-Company, 5-Year Weighted Average		
Life and A&H combined	1.7%	10.3%	18.2%
Life	3.3	9.2	39.2
A&H	0.7	11.0	7.5
	Company Spread (Life and A&H Combined)		
Company A	3.2%	13.2%	27.4%
Company B	1.5	6.8	23.6
Company C	2.0	10.1	21.8
Company D	1.4	6.9	21.7
Company E	0.9	6.8	14.1
Company F	1.5	16.5	10.6
Company G	1.1	12.3	10.0
Company H	1.1	13.4	9.3

a particular pair of operating gain and growth rates were maintained over an extended period of time.

Combining life and accident and health insurance, growth has been at an annual rate of 10.3 per cent and operating gain at an annual rate of 1.7 per cent. Entering these figures into the table on page D513 of Volume XIX of the *Transactions* shows an "implied ultimate surplus" level of 18.2 per cent. This is considerably below the subjective level mentioned earlier.

These are, of course, the combined results of life and accident and health insurance. When they are separated, life shows a growth rate of 9.2 per cent and an operating gain rate of 3.3 per cent, which, in com-

bination, produce an "implied ultimate surplus" level of 39.2 per cent. This is in "yahooing" distance of the suggested 50 per cent. However, accident and health insurance, with a growth rate of 11.0 per cent and an operating gain of 0.74 per cent, carries an "implied ultimate surplus" level of only 7.5 per cent. This is so far below the suggested 25–50 per cent range that it looks ridiculous. The only justification that can be made for this low accident and health ratio is that the coverages are part of a group insurance package and are usually combined with the life insurance for experience rating.

It is informative to look at the individual company spreads within the combined life and accident and health averages. Company A, with the highest "implied ultimate surplus" level of 27.4 per cent, had the third-highest growth rate and by far the highest operating gain rate. However, close behind it was Company B, with the lowest growth rate and an operating gain rate below average. At the other extreme was Company H, with the second-highest growth rate and the third-from-lowest operating gain rate. It will be noted that Company F, with the highest growth rate, and Company E, with the lowest operating gain rate, had intermediate "implied ultimate surplus" levels.

This analysis leads to an answer to question 1, *a*, which reads, "Is profit the best single measure of the performance of a group operation?" It seems to me that the answer should be "No." While profit or operating gain is a vitally important part of performance, equally important is the maintaining of a proper balance between operating gain and growth so as to provide an "implied ultimate surplus" level which would permit the sound continuation of group operations under both adverse and favorable conditions. This, obviously, requires advance planning as to control of growth as well as of operating gain.

So far we have been talking about the desirable surplus level for a mature block of business and the "implied ultimate surplus" level expected from a combination of growth and operating gain rates in an established group-writing company. The problem for an established company just entering the group business is different. It must rely on the surplus created by other lines to support the rates of growth and operating gain it can experience in a highly competitive market for a number of years. Furthermore, it does not have the advantage of any operating gain generated by investment income until the assets of the line build up. In its planning and setting of objectives, however, it can look at what it considers to be a desirable ultimate level of surplus for its business when it matures and the implications of annual growth and operating gain on this ultimate level. Presumably it will want to so balance its growth and

operating gain objectives as to fit in with the level of its existing surplus and the possible calls on this surplus from other lines.

A rapidly growing group operation has some of the same problems that a newly established one has. In a consideration of its surplus needs, distinction must be made between a necessary minimum and a desirable ultimate level. The necessary minimum level is even more a matter of judgment than the desirable ultimate level. It involves some of the same factors, such as the amount of risk which management is willing to take and the extent to which surplus arising from other lines can be made available on a temporary basis in event of catastrophe, epidemic, or violent fluctuations.

In the evaluation of surplus needs, recognition can be given to certain items which present a first line of defense against the contingencies for which surplus might otherwise be required. These include the dividend or experience-rating margins inherent in a policy rate structure, any retroactive premium provisions which come into play in the event of an unfavorable claim experience under a policy, and any claim fluctuation reserve held to iron out chance or cyclical variations in claim rates under a policy. In general, these items are not transferable from the policies under which they are held to meet contingencies under other policies and, hence, do not have the same flexibility as unallocated surplus or contingency funds. At a recent brainstorming session a few of us came to the conclusion that an arbitrary weight of one-half was not unreasonable to reflect the lack of transferability of these items in measuring minimum surplus needs.

Unfortunately, information concerning experience-rating margins of stock companies and retroactive premiums or claim-stabilization reserves of all companies is not available in published annual statements. Therefore, we cannot get an intercompany measure of these items as we did of the "implied ultimate surplus" level. The annual statements of the four mutual companies included in the eight-company study do show dividends incurred. During the five-year period 1964–68 their weighted average was 8 per cent of net premiums. This figure is the composite of 14.4 per cent in the life line and 3.3 per cent in the accident and health line. Thus, in addition to having an extremely low "implied ultimate surplus" level, the accident and health line has considerably less margin in the premium structure for case-by-case variation than does the life line.

Before closing, I would like to comment on question 1, *f*, which reads, "How can group operations be justified that do not show a profit?" In my opinion, they cannot, except possibly for a very temporary period as the result of an unusual growth situation or in the event of a contingency for

which surplus is held. However, there are some advantages, other than directly financial, which might justify a profit or operating gain level somewhat below what is necessary if group is to stand entirely on its own. I would like to mention a few of these, hopefully without poaching on Mr. Hill's discussion of other objectives.

Group operations can promote the sale of individual insurance by:

1. Providing the agent with a solid prospect list for business and personal insurance from a clientele of group policyholders;
2. Providing commission dollars for agents, general agents, and managers to help meet their financial needs;
3. Sharpening up both management and field forces in all areas by its intensely competitive nature; and
4. Contributing to over-all company strength through its sharing of overhead expense and adding a reasonable amount to total surplus.

Under conventional accounting techniques the concrete value of these items may not show up directly in the line's profit column. However, along with a judgment decision as to the desirable ultimate and necessary minimum levels of surplus and a projection of growth rates, they are all important elements to be considered by a management in determining what, for it, is a sound profit objective for group term operations.

MR. WILLIAM C. WIRTH: I am associated with a medium-sized stock company whose group insurance and group annuity premiums represent approximately 22 per cent of total company premiums. For the past several years we have considered our group lines profits to be satisfactory if they compared favorably with the average profits of the larger group carriers as reported in the various gain and loss exhibits.

Increasing expenses of operation and increasing returns which stockholders expect on their investments have recently caused us to conclude that we should attempt to establish a more meaningful profit objective. Although many companies have undoubtedly done a better job than we have in this area, companies which have not previously given much thought to this problem may benefit from reviewing our current thoughts on this subject.

To begin with, we have outlined our basic profit objective in general terms to be as follows:

To earn a profit from the group insurance and group annuity lines which represents a reasonable rate of return on investment after due allowance for investment in future growth activities and for the contributions, if any, which the group lines make to the profits of other lines.

It was necessary to define our profit objective in general terms because of what we felt were inaccuracies in our gain and loss exhibit profit figures and because of the difficulty of determining stockholder equity in the group lines, contributions to other lines' profits, and other factors. It is, however, our intention to establish a measurable profit objective as rapidly as possible. To accomplish this, we will have to first measure the existing group lines profits more accurately and then determine whether those profits represent a reasonable rate of return on investment.

Determining accurate figures for the profits from group lines will require us to determine interest credits to the group lines on an investment-year interest basis, excluding the company surplus line, establish reserves on a realistic basis, and more accurately allocate expense charges to the group lines.

Determining whether this profit is satisfactory will require us to establish the rate of return on investment expected from the group lines, decide what the investment in the group lines actually is, establish a means of allowing for investment in future growth activities, and estimate the contributions which the group lines make to the profit of other lines.

Naturally, if the above work shows that current profits do not represent a reasonable rate of return on investment, we will have to take steps to correct the situation. In this connection we believe that a determination of the profit (or loss) attributable to the various experience factors will be helpful. For example, in the group insurance lines the major sources of profit arise from interest earnings in excess of interest credits to cases, expense charges to cases which exceed line expenses, "pooling" charges which exceed "pooling" credits, and risk charges which more than offset total increases in negative balances on cases.

MR. W. GILBERT COOK: If the annual statement shows a negative profit but the amount of overhead which has been included in expenses exceeds that negative profit, is this not possibly a desirable situation still?

MR. GREEN: This is one of the pluses that I tried to indicate, the carrying of some of the overhead as a valid group objective. I believe your point would show up in Bill Cunningham's system of managerial accounting.

CHAIRMAN WATSON: Suppose that you incur a substantial loss and have been assigned certain expenses, such as agency development and charitable donations. If you were running your own show, you certainly would not make charitable donations, in the face of a considerable loss, so that this should be taken into account.

MR. CUNNINGHAM: Management should be aware of this. In the managerial type of accounting that I proposed they would be informed.

The profit line by product actually excludes overhead, and it is after the contribution by product line has been made that the management can look at the total profit of all product lines in order to cover all overhead. So you do not allocate any part of your overhead to any part of the product line.

CHAIRMAN WATSON: There is a great deal of validity in this, because any new line which is suffering from its heavy investment in getting started or because of some setbacks can hardly be expected to help the company share some of the receptionist's expenses and those of the personnel department, and so on.

MR. ALDEN W. BROSSEAU: You referred to the return on investment. For mature group operations in business for a number of years which have essentially funded their growth out of their own profit over that period of time, how do you tell the shareholder what the investment is in group in order that he can figure the return on investment?

MR. CUNNINGHAM: In the early years your investments, of course; are the losses that you have incurred under the managerial type of accounting. I think that any company is going to incur losses when it starts a group line, simply by setting up group offices around the country and by hiring and training. You will probably show some very substantial losses, for, if you are going to recover all of them from your policyholders the first year or two, I don't think that you are going to sell any business. So you look at the long range. That becomes your investment. The ultimate return is what you gain from there on out. We take a look at this every year. Some companies might find that they would have done better to buy government bonds with the few million dollars they invested in group.

MR. ROBERT F. LINK: To what extent is your management-accounting method used as a guide to actual managerial decisions in your company?

MR. CUNNINGHAM: We are management-accounting for decisions and for measuring the importance.

MR. DONALD M. PETERSON: I am curious about how Mr. Cunningham under managerial reporting regards federal income tax. Is this allocated to group specifically, or is it lumped?

MR. CUNNINGHAM: I imagine that for a hundred companies there are a hundred different ways of allocating income tax. In our particular company, because we are a mutual and because of our activity, we end up with a zero Phase II. But we do have Phase I taxes and charge them to the product line. That is the result of the investment income that the group operation has, so we do charge it in our managerial accounting system.

MR. ROYAL A. JOHNSON: In analyzing your profitability, have you tried to assess the present value of future profit or the current net worth of the business on a projected basis? It seems to me, especially in a stock company, that this becomes a very important question, and it also raises the question of the rate of return on investment.

MR. CUNNINGHAM: In decision-making, I think it is proper to use the present-value method. A $50,000 profit on something you might do in the next six months is a much better return than a $100,000 profit that might be five years down the road with a heavy investment to start on. I think the present-value technique is tremendous in making decisions.

MR. JOHNSON: Do you go beyond the standard approach of unamortized acquisition expense, or do you use book value in determining the present value?

MR. CUNNINGHAM: I believe that, if you are going to use present value, you must use cash flow.

MR. GREEN: The problem of determining future earning power depends in part on persistency. In an ordinary line, of course, where you have level premium insurance with cash values and so on and a very high first-year commission and considerably lower renewal, your earnings probably have a more solid base and continue over a period of years longer than the group. If you begin amortizing your group expenses too quickly, you will find that your business will disappear and somebody else will get the benefits of amortization.

CHAIRMAN WATSON: The program talks about profit objectives, and the panelists up to this point have devoted themselves to that subject. I think, however, that we certainly must keep some time for methods of attaining profit objectives. It is all very well to say that our profit objective is this or that, but, if we have no idea of how to attain objectives, nothing very much is gained. It is easy enough to point out that the group

department can very easily make a profit because so much of its business is written with a one-year rate guarantee. If it turns out that the rate has not been cast at the right level, it can be adjusted one year later to what it ought to be.

You would therefore think that there is no real problem in attaining a profit objective in a group department.

In fact, you might argue that it is easier than it is in the ordinary department, because the premium rate can be adjusted in this way. This is an oversimplification, because there are two elements that make it difficult to attain this objective. The first is that the risk itself is a dynamic one. It is changing both in the nature of the risk and in the percentage covered. If we think of hospital insurance, we have all seen the situation in which one month our risk is based on payment to a hospital at the rate of $35 a day and a few months later the same hospital can be charging $50 a day. We have had no opportunity to change the premium rate, yet we must pay claims at this level. This is a well-known example of how the risk changes.

Our underwriters spend a lot of time developing formulas for the risk, the claims, and the costs of health care. Sometimes, despite their efforts, these factors are underestimated, and it consequently becomes a difficult thing to develop a profit in this particular climate. If matters were static, this would be very easy indeed, but that is not the case and, as far as I can remember, has never been the case.

Toward the end of last year there was a heavy flu epidemic, and this brought such a heavy incidence of claims that many companies were underreserved in the health line at the end of last year. This is another example of how things can change very rapidly in the group business.

There is another factor having to do with the attainment of desired profitability, however, which, if ignored or forgotten, will cancel out all efforts in this direction which are concerned only with development of satisfactory claim ratios. This is the factor usually referred to as "persistency." In group operations we all know there is a decided tendency for business to be transferred from one underwriter to another. In some groups and some brokerage houses this is a fairly regular occurrence. I believe that persistency or lack of it is one of the greatest contributors to profit or losses that we can discuss.

If we calculate the investment we make in writing a particular type of group case and if we assume that the initial first-year cost is amortized over a five- or ten-year period, we can easily determine a persistency rate which, if not attained, would guarantee that a loss would be suffered by the company on every piece of business written, even if the assump-

tions as to expenses and claim levels implicit in the premium rates were exactly met. If, therefore, the business is conducted in such a way that this persistency rating is not obtained, the group department cannot possibly make a profit except by accident.

In simple terms, if, on the average, cases do not stay in force long enough to repay the initial investment, the business must develop a loss over all.

It is very instructive to work out the break-even persistency rate based on your first year's cost and renewal cost; you can be quite frightened about it because it is not that high, and you can be facing disaster although you do not realize it.

This situation is not as clear-cut in the ordinary department, because the ordinary department largely depends on permanent life insurance and the interest that this type of coverage affords helps pay initial expenses and cover the risk and still leave a cash value. Generally speaking, there is a loss on ordinary insurance on lapses occurring in the first year, and consequently the objective is to minimize the first-year lapse rate.

On the contrary, in the group department there is liable to be a loss on any case which lapses in the first five years or so because of initial expenses and because the group department is not in the happy state of collecting a level premium and thus recovering the first year's investment in possibly the first or second or third year. In the group department, therefore, persistency must be a fundamental objective. If the group sales organization is not highly oriented toward persistency, there is no way a profit can be made under normal conditions because of the natural tendency to transfer business. In addition, a group department cannot rely on the profit objective being attained by earning a high rate of interest on its reserves. It is true that interest earnings appear in the statement, but they are not nearly so high as they would be if the group life business had been sold on a permanent plan rather than a term plan.

I have examined the 1968 statements of the ten largest Canadian life insurance companies and analyzed these separately from the standpoint of individual and group life insurance, not health insurance. In total, the net investment income is 54 per cent of the revenue premium income for the individual business but only 9 per cent for the group business. The profit for the individual business was 10 per cent of the revenue premium income. For the group business it was 2 per cent. Evidently a better profit result can be achieved on the group side if the net investment income is increased.

It is interesting to observe that the profit being developed in the individual business arises largely because of the considerable investment

income rising from excess interest earnings. I have calculated, by considering the total results of these ten companies, that the profit on the individual side would be reduced to zero if the net rate of interest earned on the assets were reduced by a little over 1 per cent, or about 18 per cent of the net earnings. If the interest rate went down 18 per cent suddenly and the company took no remedial action, there would be no profit in total for those ten largest Canadian life insurance companies.

Lately, as you know, the Canadian government has put in an investment tax of 15 per cent. That was applied suddenly, but, unfortunately, only to participating business, not to nonparticipating business. Nevertheless, that 15 per cent comes as a single blow, and, until the ordinary department remedies its dividends to policyholders or increases the rate of yield by 15 per cent or by taking some other action, there is no way that they are likely to make any profit. This, I think, is a very important thing to stress at this stage.

On the other hand, if there were an 18-point drop in interest earnings in the group line, group would still show a profit.

I believe, therefore, that in the long run a successful group operation will have to look to interest earnings in order to stand fully on its own feet and guarantee a satisfactory profit to its shareholders. We may see in the future a greater trend to sale of permanent life insurance than has been true in the past. This is further emphasized because the sale of annuities seems to be limited to separate account and equity investment.

MR. CHARLES G. HILL: First, I shall address myself to the question of the objectives of a group operation in making a contribution to the corporate mission. Quite obviously, before the objectives of a group operation can be determined, the corporate mission itself as it exists at any given point in time must be clearly defined. For example, if maximum profit or contribution to surplus on a short-range basis should be the primary corporate mission, the objectives of the group operation must obviously center around consistent gains from operations. On the other hand, if the corporate mission is to develop further a full-time agency force, with reasonable profits being expected to emerge on a long-range basis, the objectives of a group operation would lie more in the direction of assisting with the development of the agency force rather than of immediate profits or contribution to surplus.

It is my sincere belief that a group operation can establish objectives which will make a positive contribution to almost any sound corporate mission as long as that mission is clearly defined. New business and growth objectives of a group operation will be controlled by the intrinsic

nature of the corporate mission and the contribution which the group operation is expected to make to it.

My own company did not have a really well-defined corporate mission until we entered upon a formal program for long-range planning two years ago. Today our official company mission is "to provide the maximum amount of personal financial security with high quality service on a basis consistent with safeguarding our ability to fulfill our obligations." I think it is quite clear that a group operation can establish sound objectives consistent with such a corporate mission, and this is exactly the basis on which we have established our current objectives, both short-range and long-range. In no sense do I mean to imply that these objectives, once established, should be inflexible as far as such things as new-business production and growth versus financial results are concerned, but rather, regardless of where the emphasis on the various aspects of the group operation itself is placed, they should and can remain consistent with the over-all company mission and make a positive contribution to it.

During recent years there has been increasing interest demonstrated by our industry in making a real effort to contribute to the over-all social welfare of the community as a whole. Many companies are making available the time and talent of key personnel to assist with important community projects and are also making investments in such things as low-cost housing at projected rates of return below those generally available in the market place for new investments. Certainly the role of a group operation is not inconsistent with this general attitude of social consciousness, as I think that, more than any other portfolio of coverages offered by an insurance company, group can effectively satisfy the basic life, health, and pension needs of the community.

Generally speaking, the cost of group coverages is lower than the cost of similar benefits which might be obtained on an individual basis. Moreover, since most group plans involve an employer contribution, the cost of coverage to the individual insured is further reduced, and a feeling of interest in the welfare of the individual by both the insurance industry and the business community is engendered. Perhaps most important of all is the fact that group coverages afford the means of effectively meeting the basic personal security needs of individual groups within the community, because our plans can be tailor-made to meet specific needs which could not be met adequately through a government-sponsored program generally available on a set basis to the community as a whole.

One further thought is that, because of its deep involvement in providing comprehensive health insurance coverage, the insurance industry has

developed a real interest in seeing that a better job is done in meeting the health care needs of the community. This is amply demonstrated through our involvement with hospitals and the medical profession and through our help in bringing to the community the best of medical care at the lowest possible cost. I think it is safe to say that, were it not for the extent to which the insurance industry is involved in group health insurance, this interest in helping plan for and meet the health needs of the community would not exist, nor would we as an industry be so willing to participate in experimenting with new approaches for providing health insurance.

Certain other objectives come to mind:

1. Help with the recruiting and retaining of sophisticated quality agents whose interests and contacts lie in the corporate market. Most of our own people feel that for agents of this type the presence of a complete group underwriting facility is a must and that hence they would have less interest in joining the company which did not have such a facility. On the same theme, another objective of a group operation, particularly in a general agency company, should be to develop solid brokerage relationships through group cases handled for such firms. Such relationships can be a prolific source of additional ordinary business for the company, and many times they lead to the acquisition of competent full-time agents.

2. A group operation places the company in a position to meet more effectively the well-established trend toward the mass merchandising of coverages which satisfy the basic insurance needs of the public. As long as limits of coverage are kept within reason, this will not interfere with the market which more appropriately belongs to individual underwriting, but rather will enhance it.

3. Thinking mostly of pension plans, I would say that one objective of a group operation should be simultaneously to build assets and to improve the company's current cash flow.

4. Another objective, not entirely unrelated to the preceding one, should be to assist in opening good investment opportunities by establishing close business relationships with business concerns whose potentials for growth and above-average earnings are good. This is a two-way street, for, if the investment department gets there first, it helps us and, if we get there first, we help it.

5. Ed Green has already commented on the effect a group operation can have on making the company known to employed persons who might be prospects for individual coverage. I personally believe that this is an extremely important objective and yet, unfortunately, one which most agents simply do not pursue with sufficient aggressiveness.

I think that, for the most part, the objectives of group operations have changed quite significantly over the past ten years. In looking back and doing a little Monday morning quarterbacking, I feel that during the last

half of the 1950's we in the group industry were trying to provide everything we thought the public wanted at a price the public would be willing to pay. Perhaps in defense of ourselves it should be said that we had little or no idea of what was about to happen to the cost of medical care. Today more and more group-writing companies realize that the main objective of a group operation must be to meet the basic insurance needs of the public, but at a price both the public and we can afford. The importance of our objective to provide adequate and comprehensive coverage to a greater segment of the insurable public has not been lessened, but I think that today we are more cognizant of the present and possible future cost of this undertaking.

The effect of mergers on group operations is a question which essentially provides its own answer. A company having a strong business connection with the corporation in financial control of the merger could experience substantial unexpected growth by taking over all the group coverages of the secondary company or companies involved—and, of course, the opposite is equally true. Such things can have a substantial effect on new-business production and growth and can grossly distort the actual results objectives achieved under a program for long-range planning. A decision to retain or to develop separate benefits plans for each unit involved in a merger or each segment of a conglomerate can create some serious administrative difficulties, but this is more of a problem than an objective.

Changing social attitudes and values continue to have an important impact on the group business. Today more people than ever before look upon group coverage as an integral part of their personal security programs rather than simply a medium to provide the funds to bury old Joe. We have seen the development of an increasing interest and more substantial amounts of coverage in the life and health areas as well as more emphasis on continuing benefits, such as survivors' benefits and long-term disability income. Hence, as one of its basic objectives in this changing scene, a group operation must be prepared to offer soundly conceived plans appropriately priced which are much more extensive in scope than was the case in the past.

In the pension area there has been a very definite shift away from fixed-income plans handled through a company's general investment account to variable plans or plans under which the funds are invested in equities. The concept of a separate investment account was an outgrowth of this trend, and now we are seeing even more of an inclination of business concerns to look upon insurance companies as institutions to handle their

investments rather than as guarantors against the risks of mortality and declining interest rates.

In view of these trends, a company must take a different attitude from that taken before toward the surplus objectives of its group operation in the pension field. Although the absence of guarantees does diminish the need for surplus as we used to think of it, the terms of these new investment-type contracts are such that the specter of a serious drain on demand capital is created.

At least in my opinion, there is no doubt about the fact that over the past ten years, particularly, the philosophy of top management regarding a group operation has undergone a significant change. For example, in the case of my own company we established a group department in 1946 for the purpose of having something available in the way of an additional service to general agents and agents. In retrospect, it is quite clear that at that time and for some years thereafter top management did not believe that group operations would have a significant impact on company earnings one way or the other. Our objectives then were to be of service to our agency force and to achieve the best possible results in terms of new-business production and growth. As time went by and premium income increased at an unforeseen rate and the problems of the health insurance business became more acute, management's attitude began to change. Now that group premium income is approximately one-third of the company total, the group division is no longer looked upon as some minor operation, existing for the benefit of our general agents and agents, but as a necessary source of surplus for the company. Growth and new-business production are no longer our only, or even primary, objectives. We now have a plan to move group operations into the position of being a self-supporting entity instead of just a service arm. I think that this is good and consistent with the changing management philosophy of most other major companies.

CHAIRMAN WATSON: What do you think the profit objective ought to be for a group department, bearing in mind, as I said in the beginning, that contribution to surplus is synonymous with profit objective?

MR. GREEN: Suppose that we have an ultimate surplus goal of 50 per cent of net premium for life insurance and 35 per cent for accident and health. That 35 falls between the 25 and 50 that I suggested. If these are weighted in accordance with the eight-company, weighted-average pattern for 1968, it gives an ultimate desired surplus level of about 40 per cent. If it is assumed that a 10 per cent growth rate can be expected, we

can determine what operating profit rate is required to produce an ultimate surplus level of 40 per cent. The table on page D513 of Volume XIX of the *Transactions* shows that the figure is 3.6 per cent. In other words, a 3.6 per cent profit factor with a 10 per cent growth rate would support a 40 per cent surplus. If the existing surplus is less than 40 per cent, then future years would be less but would gradually approach that figure with the 3.6 operating gain and the 10 per cent growth.

Let us assume that there are hypothetical dividends or rating margins amounting to 30 per cent. This is high, but, if we give it one-half credit as I discussed earlier, the effect is to bring the objective down to 25 per cent. This is within the range of the two top companies on the intercompany poll. This 25 per cent, when combined with a 10 per cent growth rate, requires an operating gain of 2.2 per cent.

It will be recognized that these figures are highly hypothetical. They do not have the refinement of a rating formula which recognizes many case characteristics reflecting risk. Nor do they reflect that company surplus can be available to protect all lines from time to time as needed. However, they do give some figures to which we can compare the eight-company, five-year, weighted-average figures of a 10.3 per cent growth, 1.7 per cent operating gain, and 18.2 per cent implied ultimate surplus.

MR. CUNNINGHAM: In citing profit objectives, I talked, you recall, about four areas—the two investment areas and the two insurance areas. Taking the life and accident and health separate from the pensions, you cannot set profit objectives without looking at the entire corporate and group objectives.

In setting objectives for our field force, we have devised certain units of measurement which, in a way, correspond to the concept of a graduated commission scale. Our total premium income of $70 or $80 million of premium income produces about 700,000 of these units, and we expect to make a net profit for our risk of about a dollar per unit. Naturally, you have to charge more than one dollar per unit, because you have to offset losses to produce the net profit.

We do not use anything very refined for insurance management, but, on the basis of the expenses that we incur for services for our policyholders and after eliminating all the overhead and items of that nature, we feel that we should make about 5 per cent. For investment risk and investment management we charge a percentage of about 20 points of the asset base. That is both the combined risk charge and the management charge. Out of that comes the contingency reserves and the investment reserves as well as the charge for any investment losses that are incurred.

On the pension side we have about $200 million of assets, so that the 20-point charge made there produces about a $400,000 profit from that source. Insurance risk charges are based on a purchase. Again we make it as a charge against the asset base. For insurance management we use 5 per cent of the expenses that we charge for services performed for our policyholders. I make that clear because we include the print shop but not necessarily all the president's salary in there.

MR. BROSSEAU: I believe there is a distinction between the definition of profit given by a mutual company and that given by a stock company. I only know of one stock company that does fund accounting to determine what the profit should be on growth. The mutual profit includes interest and perhaps deficit on the surplus contributed to the growth fund, whereas in stock companies the custom is to ignore that in figuring out what the group profit is for the year. So, in making a comparison, you have an apples and oranges situation.

CHAIRMAN WATSON: You may be right, but there are exceptions to that. I know of several companies that use a fund system.

MR. GREEN: Mr. Brosseau, does not the management of a stock company want to know at least what their earnings were, including any interest income on past accumulated surplus?

MR. BROSSEAU: We cannot seem to get the board interested.

CHAIRMAN WATSON: In the interest of truth, I think that you should split it down so that the past profit of the group line shows up where it belongs. There is nothing worse than a deluded management. It may make the group line look very, very good, but, as long as it is the truth, let the truth out.

MR. MARTIN S. FOX: The growth of group operations in many companies was a haphazard affair; it is very difficult therefore to assess the exact expenses given to the group operations and hence what surplus or deficit they have to date.

CHAIRMAN WATSON: You must go back and reconstruct it. Some of the allocation of expenses might not have been done properly. In our company we did this because we are convinced that interest earnings on these funds are essential. No group department can survive without them.

MR. DONALD H. REID: Most of the comments have been related to group life insurance and health care expense insurance. What kind of reasonable objectives are being identified with pensions?

MR. CUNNINGHAM: In my prepared comments I mentioned that 90 per cent of the profit in the pension area comes from investment and only 10 per cent from the insurance. If you do not do the actuarial consultant work, you do not charge for it. Conversely, you do not make any profit on those particular services either. So policyholders should not be charged twice for those services. Similarly, if funds are in a separate account, there is no investment risk charge because the policyholder is assuming the risk.

Incidentally, it is interesting to note what is happening to cash flow. As more and more people are enamored of investment, more accounts are transferred to separate accounts. It is causing some interesting things to happen in our investment department. More new money is going into equity investment in the total corporate view than there is into what you would call the more conventional type or fixed-money type. It will be interesting to take a look at what profits are going to be five years from now, as the money flows over from the guaranteed account to the separate account. There are going to be some interesting results for some companies in the foreseeable future.

For those individually oriented the same thing will happen with the growth of mutual funds. As agents sell more and more term insurance, the reserves of fixed-income base arising out of level premium coverage will decline, and we will have more and more mutual funds. I think there is an era coming in which profits are going to look pretty skimpy.

MR. GREEN: We have noticed in our company that the operating gain from the pension line has been dropping rather steadily in recent years. This is a result of the trend to contracts that do not involve guarantees. I mentioned in my discussion that I thought that on annuity-type coverage the reserve was the best base in which to measure your surplus needs. I hesitate to pin down a figure, because you still have retired lives under deposit-type contracts. You are still setting up reserves and a mortality risk. There are some long-term trends working one way or the other.

MR. JOHN C. ANTLIFF: I am interested in the different surplus results of life versus health. Is this difference due almost solely to the fact that we have had a minimum life rate, or are there other factors that have led into this situation? Are there reasons why you would want a greater

percentage of surplus on life than you would on health? Has there been any noticeable difference in the relationship, and what is apt to happen in the near-term future if the minimum group life rates are relaxed or lowered?

MR. GREEN: I think what I call the ridiculously low operating gain from the accident and health line comes largely from the inability of the renewal underwriting to keep up with health care cost. I know of one Blue Cross plan which incorporated a 7 per cent trend factor in their rate setting. They actually found that over two or three years hospital costs increased 15 per cent, and they were dipping heavily into reserves.

Incidentally, the statutory reserves required for those organizations were one of the guideposts I used in coming to my conclusions. I do not remember the figure, but in Massachusetts and New York they were 25 and 40 per cent, but which figure belongs to which state I do not now remember.

The second part of your question may have to do with risk theory, and I am not much of an expert in this area. I always understood, however, that, when you have a small probability of a happening and a large number of dollars to pay when it happens, you need a larger contingency fund. Your life happenings are about 5 on a thousand, but you can run up as high as $50,000 or $100,000 on a claim. If one plane goes down on a company outing, you can have a terrific amount at stake. On accident and health the claim frequency is greater and the dollar amount considerably less. On double indemnity it becomes even more pronounced.

You probably remember my paper on catastrophe accident. Claim frequency is very low, but when it happens it is very costly; you need to build a surplus. The casualty boys are more familiar with this problem than we are. They have a huge stake in the airline business, and they need more in the way of surplus or contingency funds.

MR. JAMES A. ATTWOOD: How do you handle the question of profit and surplus contributions with customers? All of us here would probably agree in terms of surplus objectives with something on the order of 1–2 per cent of premium; but how do you sell this to customers, and how did you determine that 2 per cent of premium is what is needed in relation to a risk, especially when you are dealing with bigger group customers?

MR. GREEN: I have been exposed to this subject once or twice while talking to a customer, and, when he realized how little our profit is in relation to the profit that he makes in his business, he has been reasonably agreeable.

CHAIRMAN WATSON: Shareholders expect a good rate of return, and in the corporate field generally corporations do not satisfy themselves with 6, 7, or 8 per cent. I think they talk more in terms of 10 or 12. If you are dealing with honest men, I think they can understand your figures, as Ed has said.

MR. CLAUDE G. BOILY: I work for a small company with about twenty million dollars of annual premium income whose particularity is that it is involved only in group insurance. Hence profit objectives in group operations are especially important to us.

No one has yet seemed willing to give anything but wide-ranging theoretical profit objectives for group operations. I will attempt to give a practical viewpoint on this matter. Although, in theory, it would seem desirable to attain an ultimate surplus in the range of 25–50 per cent of annual premiums, practical reasons (such as intense competition and the satisfaction of policyholders, especially in a mutual company) tend to limit any profits which may reasonably be expected to a percentage of about 2 per cent of premiums; with an annual growth rate of 20 per cent, this 2 per cent profit is barely sufficient to maintain our accumulated surplus at a level of about 10 per cent of annual premiums.

MR. C. LAMBERT TROWBRIDGE: Some of you know that I have been interested in surplus objectives for some time. Part of Ed Green's presentation today was taken from his discussion of two years ago, at the same concurrent session at which I presented a paper on surplus in a mutual company.

I have always been troubled by the apparent disparity between surplus objectives in group and ordinary departments. As an example, follow me through a bit of mental arithmetic, starting from Mr. Cunningham's stated objectives in the group pension line. If the contribution to surplus is approximately 20 points on the interest rate and if the assets grow at 10 per cent a year, then arithmetic of the type illustrated by Ed Green will show the ultimate surplus that group pension operations might develop—slightly more than 2 per cent of assets. Compare this with the surplus-to-asset ratio arising from any company's ordinary business, and the disparity will become apparent. It seems doubtful that satisfactory surplus objectives in the group operation can be set until we face up to the differences in group and ordinary surpluses in our respective companies.

CHAIRMAN WATSON: I agree. If you force the issue too much in building up the surplus, you tend to lose business. As I said earlier, there

is no way to make a profit in the group business unless you have persistency which is within acceptable limits. If you force the surplus matter too much, therefore, you lower your persistency rate and guarantee a loss. It is a very peculiar thing—if you try to go up, you go down. Until we find a way of improving persistency, we are never going to change profit results, whether or not we face up to the difference in group and ordinary surpluses.

The manner in which we are attempting to improve persistency in our company is by emphasizing it in the incentive program for the group men and by getting into plans with more substantial reserves and permanent insurance, as the ordinary department has done. That is how to guarantee persistency. There is no magic. The broker cannot make a practice of terminating permanent insurance, although it is very easy to justify terminating term insurance.

MR. JOSEPH W. MORAN: All the people who have commented on the magnitude of the gains from group insurance have been accepting the inevitability of a trivial gain. This may be dictated by competition on large-sized cases, but I am wondering whether anyone has any comment on the question of the extent to which our own overliberality and experience rating on modest-sized groups may be the primary source of the low profit margins on the medium-sized and smaller cases?

CHAIRMAN WATSON: If all companies followed the same pattern, there would be no problem; but, if you are out in left field, there is no way you can keep the business, especially if you do not have your people motivated.

MR. FOX: Most of what has been said comes down to 2 per cent of premium. We have been talking about profit as a percentage of premiums, not as a percentage of surplus. I feel quite strongly that invested surplus initially has been very, very low and that there is a fantastic return on your money in group operations if you realize how much money you spent to get the business. This to me is more important.

LIFE INSURANCE OPERATIONS OVERSEAS—PROBLEMS AND OPPORTUNITIES

1. What are the regulatory problems associated with doing direct business overseas? Are the problems greater or less for branch office operations or locally incorporated subsidiaries? Is it advisable to have a local partner?
2. Is taxation of life insurance companies more or less onerous overseas than it is in the United States?
3. How does life insurance marketing overseas differ from marketing in North America? What special difficulties can be expected in the attempt to establish a marketing operation in another country?
4. How do the products sold in other countries differ from those generally sold in North America?
5. Is competition overseas more or less intense than it is in North America? What are the opportunities for profit in overseas markets?

MR. GEORGE F. S. CLARKE: My experience with overseas business has not been with expansion into new countries but with expansion in the countries in which we do business. At Sun Life we have business in force in over forty countries. At the present time we are writing new business in the United Kingdom, South Africa, and the Philippines, as well as in Canada and in the United States.

In the past the activities of Sun Life and other Canadian companies have been in the Caribbean, Central America, South America, Middle East, Far East, and eastern and southern Africa, but few companies, if any, have written business in Europe, Australia, New Zealand, or northern and western Africa.

My experience has been mainly with traditional individual life insurance and annuity policies; more recently, Sun Life has been involved with equity products in the United Kingdom and South Africa.

As for the general topic, "Life Insurance Operations Overseas—Problems and Opportunities," each country has its own problems and its own opportunities. A company can expect a multitude of problems in any country without having to look for them. The opportunities are there also, but they must be sought out. Life insurance operations overseas are different from those in North America, but they certainly are not dormant in the desirable areas where you might wish to expand.

If we look back fifty to seventy-five years ago, expansion was characterized by very limited competition. Legislation restrictions were simple or nonexistent, taxation was light, there were few currency problems,

there was no exchange control, and emphasis was on high-premium, cash-value life insurance. Under such conditions overseas business was useful for expansion with a minimum of outlay, particularly on a branch office or general agency basis. It was also a profitable operation.

MR. A. HENRY KUNKEMUELLER: I agree with George that overseas business means many different jurisdictions. There are some similarities, but there are also a great many dissimilarities, certainly, in comparison with the various states in the United States or even between the United States and Canada. There is a much greater variety of operating problems, regulations, tax structures, and local customs and conditions.

The American International Organization has roughly four hundred companies doing various lines of business in various countries. It was originally founded in China and actually expanded overseas to the United States and the rest of the world from China. We no longer do business in mainland China, of course.

Thirty-seven of our companies write life insurance and medical insurance. The major areas of concentration are Latin America, the Far East, the Middle East, and Africa. We also do a small amount of business in the United States and the United Kingdom. We have a total of thirty thousand people, including agents.

My background has been primarily in group insurance. The problems overseas are more practical than theoretical. Often you are dealing with a relatively small area and must come to a conclusion inexpensively and implement it. The United States is a very large market which has a great many similarities among states. Differences exist, say, between New York and California, but are nothing compared to the differences, say, between Europe and Latin America.

MR. JOHN C. COSS: I have been a consultant in Australia now for seven or eight years, and before that I was in the United Kingdom. My knowledge of life insurance is confined mainly to Australia, but I have some idea of what goes on in New Zealand and in the United Kingdom.

Most of the questions we are to discuss today relate to a comparison of conditions in North America and overseas. My knowledge of American conditions is quite limited, and, in the main, I shall confine my remarks to the position in the above territories.

There are some forty-five companies operating in the Australian market at present, including professional reinsurers; several other companies are known to be seeking entry into the market. There have been some takeovers of local companies recently, but that avenue now seems to be closed except as a result of overseas mergers.

About 85 per cent of the total business is transacted by the eight largest companies, of which six are mutual. The market is growing rapidly, at a rate between 10 and 12 per cent per annum. Currently, new business amounts to about $4,000 million new sums assured and $95 million new annual premiums.

We have federal legislation which seems to be somewhat less severe than that in New York State but rather more severe than in most other states.

The Australian attitude to overseas enterprises I think, is, that in general they are welcome, but more and more strings are being attached. At the moment, there is an open door as far as new life insurance companies are concerned where, for instance, there is not in the case of banking. There does seem to be a tightening-up year by year.

CHAIRMAN JAMES C. H. ANDERSON: The Abbey International Corporation is a United States-owned and-incorporated holding company which owns a group of locally incorporated operating companies. Operations are conducted through these local subsidiaries in the United Kingdom, the Netherlands, the Bahamas, and Canada.

This group is only five years old. We are engaged primarily in the sale of regular savings plans. I would emphasize regular savings plans rather than life insurance; although our specialty is in the sale of equity life insurance, we still regard ourselves as primarily being in the savings business. We market our wares primarily through full-time agents, men who were recruited and trained by our own personnel.

In addition to its relatively young age, the Abbey International Group has experienced extremely rapid growth, and with this growth have come the specialized life insurance financial problems that are generally familiar to you. Besides the main line of equity life business, we have engaged very extensively in the sale of single-premium business, almost all of which is of a tax-oriented nature.

Our general interest in the overseas market may be attributed to several fundamental market factors. The United States and Canada comprise approximately two-thirds of the life insurance in force in the world. The growth rate of those two markets combined over the last several years has been at a rate of about 10 per cent or perhaps a little less. The overseas market, while representing only one-third of the life insurance in force in the world, has tended to grow more rapidly, and in recent years the growth rate has been 12 per cent or more. It seemed that it would be easier to make a meaningful penetration of the overseas market because it was growing more rapidly and was probably undersold.

A second consideration is that it is possible to establish a relatively

sizable operation in certain foreign countries without major capital outlays and that consequently the potential return on capital is correspondingly increased.

The future of the overseas markets, as I see it, includes two factors that I think bear mention. One of them is a growing trend to the internationalization of financial business of all types. There is constant rumor in Europe, for example, of multinational mergers of important banks. I see life insurance companies from the United Kingdom, from Holland, and from other parts of the world entering other markets. I think this trend to internationalize financial businesses probably is one that is going to continue for some time. The second factor is that savings industries—and again I mean savings industries of all kinds—appear to be in a state of flux on a world-wide basis. There are some fundamental changes taking place in basic savings habits of people in many countries, and in particular there is a shift from a preference for guaranteed savings to variable savings. This general state of flux offers an opportunity to make rapidly a meaningful penetration of these markets.

MR. CLARKE: Regulatory initial registration with guarantees, deposits, and so forth, a mass of financial information and reports, exhibits on the parent company and on your projected local operation for five or ten years ahead, is a major regulatory problem.

Other requirements include financial reporting on a periodic basis. In Latin America this requirement can be for quite detailed information. It is also frequently on a different basis from that in the United States or Canada. This is more of a problem for a company on a branch office system than it is for a company locally incorporated. In the United Kingdom the companies that do business there have to maintain separate records in order to prepare some of the returns which are required.

MR. KUNKEMUELLER: We try to work with the local regulatory authorities to get them to accept either a United Kingdom or a United States statement or a variation of it.

MR. CLARKE: Sometimes the Ottawa statement will help, but this is not the case in all countries.

Other problems, of course, depend on the local life insurance legislation. Local investment can be a problem. Local records may also be a problem. If you have to keep local records, you may have to duplicate some of the records which you keep at your head office.

Another problem can be language, not only in the conduct of your

business but also by pressure or compulsion for forms and advertising in one or more languages. Immigration is another problem. In the Philippines and some of the Caribbean areas there are restrictions on employment of nonresidents. If you wish to bring in a branch manager, you must prove that you cannot get somebody locally that will fill the job. Usually you cannot find the person locally, but you sometimes have a hard time proving it.

In the past a branch office operation was quite feasible as well as desirable in many aspects. It was less costly than a local subsidiary. Expansion on a branch office operation was not particularly difficult. Now, however, companies with branch office operations are swinging to more autonomy at the local level—more autonomy in investments, sales support and promotion, underwriting, product development, claims, administration, and the like.

In favor of continued centralization at the head office versus more local autonomy are improvements in travel and communications and the availability of computers. Computers combined with communications produce an advantage in doing a lot of the administrative work at the home office. The trend to more autonomy, particularly for companies on a branch office system, can be more expensive in comparison with centralization because of improved communications and transportation.

For expansion into a new country now the company would be expected to provide a fair amount of local services and a fair amount of autonomy at the local level. Local incorporation may be the best answer to these problems. You can avoid being put at a tax disadvantage in regard to local companies. I think that local incorporation is probably an advantage as far as competition is concerned. There may be some advantage in being called a local company—you are not necessarily locally owned but you are locally incorporated.

Although Sun Life generally operates on a branch office system, we have set up a subsidiary company in the United Kingdom to do equity-linked business because of tax regulations.

MR. KUNKEMUELLER: Our organization does business through branches and local incorporation. In the Philippines we operate with an independent Philippine company, the Philippine American Life. On the other hand, American Life has been operating on a branch office system in most places. We have found it advantageous to be an American company and to tell people that we are subject to American standards and do an American-type life insurance business.

CHAIRMAN ANDERSON: Perhaps I can add some comments concerning the regulatory climate of the United Kingdom and that of the Netherlands, which is reasonably representative of Western Europe.

There is no requirement for company licensing in the United Kingdom. The only requirement is that certain documents be filed within thirty days after commencing business. By contrast, in the Netherlands it is necessary to have an authorization from the Verzekeringskamer (Insurance Chamber) before operations can commence.

All the countries that I have had experience with require some financial reporting, although this was not true in the Bahamas until very recently.

There is a wide difference in supervision of insurance company activities. Direct supervision in the United Kingdom is minimal. Direct supervision in the Netherlands and much of Western Europe is, on the other hand, comparable to that in the United States. Practically all the countries have some restrictions on the investment activities of the company. The restrictions can take one of two forms—either the requirement that the investment be maintained in local securities or restrictions as to the type of investments, as to the proportion that may be held in equities or the proportion that may be held in real estate, and so forth.

A number of countries in Western Europe regulate the basis of premium rates, and in a few countries, such as Belgium, premium rates are standard for all companies. Most of the countries have requirements with regard to the reserve basis; the United Kingdom is noteworthy as one that does not have a specific reserve-basis requirement.

Agents' licensing is not required in the United Kingdom or in much of Western Europe. Licensing is required in the Netherlands, however.

Capital requirements are generally very much lower than they are in North America.

Various countries have different viewpoints on reinsurance. Some countries require that one reinsure with a locally authorized carrier; in other countries this is not required.

MR. NARINDRA N. HANDA: Singapore and Malaysia are small territories with a total population of just over 10 million people, but the problems of writing life insurance business are as serious as those in any other larger territory. It may be pointed out at the outset that life insurance in these territories has been developed by some companies that have followed the British approach and by others that have followed the North American approach. The current insurance acts of these territories are quite similar and came into operation six years ago in Malaysia and three years ago in Singapore. These acts were drafted under the advice of Mr.

S. W. Caffin, F.I.A., Commonwealth Actuary, Canberra, A.C.T., Australia.

The interpretation of the insurance commissioners in both territories has confirmed the fact that each of the acts applies only to the business written in the territory and the insurance fund associated with it. Consequently, there is little difference between the branch offices' operations or locally incorporated subsidiaries insofar as compliance with each act is concerned. Before any company can be registered to do business, the surplus of assets over liabilities of not less than $1 million in the case of a life insurance company and of not less than $1½ million in the case of a composite company is required. Furthermore, there is a requirement for deposits amounting to $300,000 with respect to life insurance business and over $600,000 if other insurance business in addition to life is to be underwritten.

With regard to having a local partner, it would appear that there may be advantages in having one, but there would be obvious difficulties in the way of procuring a local partner.

MR. KUNKEMUELLER: Italy requires 25 per cent to go to a federal reinsurer. Argentina has a local reinsurer which is also government-sponsored and which must get all reinsurance except in those lines in which it does not care to do a reinsurance business.

MR. WALTER W. STEFFEN: You were talking about regulations in Great Britain. Could you elaborate a little on this point?

CHAIRMAN ANDERSON: The annual accounts of the United Kingdom life insurance companies are kept on a revenue basis. In other words, the accounts trace the cash flow inward and outward and develop a fund balance representing the accumulated net flow into that fund. The company maintains separate funds for its life business, its annuity business, its accident business, and any other specified lines.

Every third year an actuarial analysis is made of the company, and from this actuarial analysis it is determined whether there is an actuarial surplus in the fund. All these documents are available as a matter of public record. They are filed with the Board of Trade. Sufficient information is published in these documents to enable the actuary of the Board of Trade to make an independent determination of whether the company is solvent. The Board of Trade reviews the analysis that has been made. It is the responsibility of the company's actuary to certify that the calculation is proper and that the assets of the company exceed the liabilities. The actuary is free to choose his assumptions as he sees fit.

MR. COSS: I think that the general attitude of the industry in the United Kingdom is that freedom with publicity is an adequate safeguard for the security of the policyholders. They have not followed the United States pattern of regulating on valuation bases, and so forth. Australia follows the American pattern; there is a minimum valuation standard, and most of the larger companies maintain stronger reserves. For a new company the minimum valuation basis is quite stringent.

MR. CLARKE: Every third year in the United Kingdom you have to complete a valuation balance sheet, which takes the life fund shown in the regular balance sheet and breaks it down into policy reserves and surplus.

MR. KUNKEMUELLER: In Pakistan the law is that 90 per cent of the profits is for the policyholders and 10 per cent is for the stockholders. That applies to nonparticipating business also.

MR. HANS R. DIENST: In Germany most of the companies give between 95 and 100 per cent of the profit to the policyholders, but it is not a regulation. Some companies do have a regulation in the bylaws stating that at least 85 per cent of the profit goes to the policyholders.

MR. KUNKEMUELLER: On the other hand, in Mexico the maximum dividends for group insurance are prescribed and are somewhat smaller than the experience ratings which we would expect to give by American standards.

CHAIRMAN ANDERSON: There are other aspects of legislation not directly concerned with life insurance that bear on overseas operations. One of them, of course, is exchange control, which governs the currency in which investments can be made and governs repatriation of earnings and capital. For the benefit of anybody who may be considering the possibility of establishing a foreign operation for the first time, the Federal Reserve System approximately four years ago promulgated a program which restricts on a voluntary basis overseas capital investment by financial institutions. The essence of the regulations now in effect is that there is to be no further increase in direct investments in the developed countries, excepting Canada and Japan, abroad. This covers Western Europe, including the United Kingdom. There are countries which are exempt from the voluntary restraint program and details can be obtained from any of the Federal Reserve banks.

Another problem is employment practices. In the Netherlands it is

necessary to have a license from the government before an employee can be discharged. Our Netherlands company operates on the basis of salaried agents. This means that we require a government license to discharge an agent, and failure to produce a satisfactory volume of business is not necessarily grounds for discharge.

Another comment on the question of branches versus subsidiaries. Branch operations in another country can subject a company to the requirements of both the country of incorporation and the country in which operations are conducted and tend to lead to dual regulation. Naturally, the more stringent of the two prevails.

A final comment on subsidiaries. We prefer this method of approach but with one important qualification. That is that the market must be large enough to justify the formation of a separate company. It is our view that there are perhaps only twelve overseas markets that are large enough to justify a separate company. A good example of this is that we have an interest in forming a company in Australia, but we would not consider forming one in New Zealand. New Zealand would have to be developed as a satellite of the Australian market because of the considerations of viability.

There is one aspect of the local partner question that concerns us a great deal, probably because we are a relatively young and new organization. We find that the American image is a very bad image on the basis of which to do business abroad. It is not an accident that we have an English-type name for our company.

MR. CLARKE: We find that our Canadian connection is an asset to us, particularly in areas where we have done business for a long time.

One other point on the local incorporation. In some countries you may have to incorporate. In South Africa, for example, you now have to go in by way of a subsidiary company.

MR. DAVID A. WEBSTER: So far the overseas markets that you have been discussing are the citizenry of the countries of operation. There is another very large market—American citizens abroad. I would like to hear from people who have some expertise in this area about some of the problems that are encountered by companies trying to sell American dollar life insurance in the overseas market.

MR. KUNKEMUELLER: In some places it is illegal. Another market is the third-country national market, in which a person is not an American and is not from the indigenous population but is living there and does want life insurance.

MR. CLARKE: I have had some experience with this type of business. There is demand for United States dollar policies with United States companies or North American companies. There are various ways of doing it. We have stayed away from it unless we were locally licensed and the local exchange control would allow the United States dollar business.

Frequently we get business on North Americans moving overseas before they go, but it is all done here in North America.

MR. KUNKEMUELLER: One reason for buying a policy in hard currency is speculation against currency change. It may, however, be frowned upon by local authorities.

MR. CLARKE: I do not think that there is very much business sold to local people in United States dollars overseas areas because of the exchange control.

MR. COSS: I should like to comment further on the tax position in Australia, which is the decisive factor in choosing between a branch and a subsidiary company if a company sells permanent insurance as opposed to temporary insurance. The main disadvantage of a branch is that dividends from shares of other companies are taxed, whereas in the case of a subsidiary which is a local company dividends are not taxed. For a company proposing to invest 25 or 30 per cent of its life fund in shares, then, from a local viewpoint the organization should be a local company. Several of the United Kingdom companies still operate as branches, but this is apparently due to the over-all position of the company and the tax position in the United Kingdom.

MR. KUNKEMUELLER: Policy documents cause problems. The usual policy language may not conform with the local law. In Beirut, for instance, local law provides that you not provide war-risk coverage. We have specifically ridered the policy to override this law and provide up to $25,000 of war-risk coverage.

MR. CLARKE: In reference to taxation of life insurance companies, our experience is that taxes are lower in most of the countries than they are in the United States. I have a list of forty countries giving all taxes paid by Sun Life as a percentage of premium income. For the main areas taxation is lower so far as Sun Life is concerned than the United States tax on our United States business.

Taxation on the excess of investment income over expenses is used quite widely throughout the world, particularly in the Commonwealth

or ex-Commonwealth countries. This basis produces a lower tax than the United States income tax basis as long as the company is growing. If a company stops writing new business and expenses drop off, the tax rate can go up considerably.

CHAIRMAN ANDERSON: This important income tax system used in the United Kingdom and in several other countries is not a tax on profit. Basically, the concept of the tax is that the company's shareholders and its policyholders are treated as a single entity for tax purposes. That means that any payments among this group are to be ignored in the computation of the tax, and the only elements of taxable income or deductible expense have to do with payments that are received from or paid to people other than policyholders and shareholders. Thus immediately out of the tax basis has dropped such items as premium income, reserve increase, death benefits, maturity benefits, surrender benefits, and shareholder profit.

The result is that the company is taxed on the cumulative excess of its invested income over its total expense. In the United Kingdom the rate applied to this is $37\frac{1}{2}$ per cent. The method of handling this tax from an actuarial viewpoint is to regard all items of expense and all items of investment income as being represented by $62\frac{1}{2}$ per cent of the anticipated amount; that is, an 8 per cent rate becomes a 5 per cent interest rate and an 8-pound expense becomes a 5-pound expense. This basis of taxation causes a different pattern of premium rates, cash values, and policyholder bonuses from what might be expected by North American actuaries. The net effect is that investment income and expenses are artificially lowered by the tax rate in all calculations.

Another effect is that the policyholder winds up paying the tax on shareholder profits because the shareholders are permitted to distribute profits in an amount approximately equal to the cumulative excess of I over E, less tax paid thereon, without paying any further tax. For most companies there will never be a tax on profits as such. The tax is passed on to the policyholder, just as a premium tax is in this country.

MR. J. ROSS GRAY: A Canadian company doing business in the British Isles has up to now paid tax on a proportion of the interest less expenses. The proportion has been the ratio of British life assurance premiums to total life assurance premiums. This is now changing to the ratio of British assurance reserves to the total assurance reserves. This is a change in British law and the tax treaty between Canada and Great Britain.

MR. HANDA: In regard to taxation of life insurance companies in Singapore, both mutual and stock companies are taxed on the basis of investment income less the management expenses, including commission. If such a company receives premiums outside Singapore, however, the gains or profits shall be the same proportion of the total investment income of the company as the premiums received in Singapore bear to the total premiums received after deducting from the amount so arrived at the agency expenses in Singapore and a fair proportion of expenses of the head office of the company. If the company carries on life insurance business in conjunction with any other business, assessment of gains or profits on which tax is payable shall be in one sum, but the gains or profits arising from life insurance business shall be computed as stated above.

The basis of taxation of life funds in Malaysia was the same as that above, but the Income Tax Act of 1967 has changed this basis. The current basis arrives at the adjusted income by taking the aggregate of amount of gross income for the period from investments made out of any of the insurers' life funds and by deducting management expenses incurred and commissions paid during the period.

It will be seen that, whereas Singapore uses a national investment income figure based on the proportion of premium income in Singapore to world premium income, Malaysia uses the actual investment income arising from investments of the fund. Furthermore, there is no setoff for interest required to maintain the reserves.

MR. CLARKE: There are a number of countries that have the reserve ratio in lieu of the premium ratio, and in some countries you can have a choice of one or the other. I think that this system of taxing of investment income less expenses is really a tax on the policyholder's gain, and in effect the company pays the tax instead of the policyholder.

This should be considered along with another aspect; the policyholder usually gets a tax rebate on his premiums in the United Kingdom subject to certain restrictions or limitations. This is also so in a number of European countries and Commonwealth and ex-Commonwealth countries. In the United Kingdom the net effect is that the tax revenue to the government is from the companies, and this tax is offset by the income tax rebate to the policyholders on life insurance premiums. I do not know whether this was the original intention, as I think the two types of taxes begin at different times, but this is the net effect.

CHAIRMAN ANDERSON: There are, I think, three generalizations that one can make about the policyholder-tax position. First, it is impor-

tant to say that in general the level of personal income taxes outside North America is higher than it is in North America, and hence tax credits have more value. Second, practically everywhere in Western Europe there is some rebate for premiums paid. Finally, to my knowledge only in the United States and Canada are gains under insurance policies taxed.

MR. COSS: In Australia, if the sum assured is paid in installments, the policyholder is taxed on the installments which are treated as income. Perhaps I could mention briefly the general taxation position of life insurance companies in Australia. Federal tax is levied on investment income, and the only expenses allowed as deductions are investment expenses. Dividends received from other companies are not subject to tax, but realized capital gains are taxed. In addition, there is a special deduction which amounts to about 3 per cent of the life fund, to allow a credit for interest on the reserve.

We have rules which are designed to encourage investment in government securities. Because of the way they operate, the pattern of after-tax yields is quite different to the before-tax patterns, and it can happen that a net yield is greater than the gross yield.

The average yield earned by life offices is around 6 per cent before tax, and the tax amounts to about $\frac{1}{2}$ per cent. However, superannuation business is not taxed except indirectly by the requirement that 30 per cent of the fund be invested in government securities. There are also state taxes which broadly amount to 1 per mil of the new sums assured.

In New Zealand the position is rather different. The tax is about 20 per cent of annual profits or, for a mutual company, 20 per cent of the value of the reversionary bonuses. Most policies there are participating, and a specific loading for bonuses is built into the contract so that the greater part of the bonus is not profit in the true sense. Because of the tax basis, bonus rates are considerably lower than those in Australia.

MR. JOHN M. COLE: The first two questions, regulation and taxation, depend upon the country. There is great variation between countries; to the best of my knowledge, no two countries are exactly alike in their regulation and taxation of life insurance operations.

When we consider both questions generally, the most desirable way of doing business overseas is to do it directly. Then comes a branch office; next, a local subsidiary; and, last, a local partner.

Irrespective of the form that it takes, a new venture overseas will require a large initial investment and, often, further remittances into the

country during the early years of operation. Consequently, if the local regulations and taxes are such that the chances of recovery on all these investments are good, the venture should be worthwhile.

The problem of local regulation can be tortuous. For example, in one Muslim country there is no civil law as we know it. Any legal dispute concerning a life insurance policy may be referred to the religious courts, which may rule that the life insurance contract is invalid and that the insurer must refund all the back premiums.

Life insurance marketing overseas is the same as it is in North America. Only the people are different. The greatest difficulty is the enforcement of rules on agents' financing and agents' advances, especially where the agents have not had to satisfy licensing requirements as strict as those prevailing in North America. Any life insurance company starting business in another country should proceed with caution. Mass recruitment of agents will only mean the trouble and expense of weeding out the bad ones later on.

There is less co-operation between agents overseas than there is in North America. There are, however, a few countries that are ready for the complete adoption of the North American agency system. The life insurance agents of one Southeast Asian country formed an association. Their emulation of the North American approach was so detailed that they ended their first meeting by swearing allegiance to the Canadian Life Underwriters Association.

As for the products sold overseas, the emphasis has usually been on the savings aspect rather than on the life insurance coverage itself. Therefore there is a much greater proportion of endowment insurance overseas than there is in North America. However, with the recent introduction of life insurance products combined with mutual funds, less money is going into endowment plans.

Term insurance premium rates are a competitive problem. The premiums for term insurance charged by the typical British company are much lower than the premiums charged by the typical North American company. This difference becomes important in countries having a high rate of inflation, where the prospective policyholder prefers term insurance to whole life or endowment. In fact, a high rate of inflation might mean that there is no market for ordinary life insurance. Instead, a life insurance company might use group insurance to reach those people that want some kind of death benefit. The group insurance coverage usually requires a statement of health, though it might not go so far as to require that the participants all work for the same employer.

The opportunities for profit in overseas markets are extremely varied.

In some countries the law specifies that a minimum percentage of the profits arising each year, sometimes as much as 90 per cent, must be allocated for the benefit of participating policyholders. There may also be a limit on remittances because of head office expenses, which would discourage a branch operation. At least four countries have a national reinsurance agency that compulsorily takes a minimum share of all life insurance risks, and on its own terms.

Other countries are comparatively free from governmental or legal restrictions, and where taxation is not too heavy they are potentially even more profitable than North America.

MR. KUNKEMUELLER: In some territories people do not know about life insurance; you have to explain the whole concept, which makes the agent a missionary as well as a salesman. You may not be able to find an agent in this territory; you may not be able to get an agent who knows what life insurance is or has experience in selling it.

Even worse, where do you get your senior management for the local territory? In many places there is nobody qualified to develop a life insurance sales program. There are several ways of handling the problem. One would be to pick a good life insurance man from outside the territory and send him in. Of course, he has problems with customs, with his connections with the local business community, and perhaps with language. On the other hand, taking a good local man and trying to build him into a topnotch life insurance executive can take several years.

MR. CLARKE: In dealing with marketing of individual policies, our system has been to use North American methods in all areas in which we have operated. I think, in fact, that in the past Canadian companies have expanded to areas where the one-company distribution system could be used. If it could not be used, this was a factor in deciding whether or not to expand there. We even use the same basic training course in all areas but do not use the same advanced courses because of the differences in taxation and legislation.

This North American system of direct solicitation now is widely used. It is used in the United Kingdom, South Africa, Australia, and, I believe, Japan. I think that the North American techniques are being studied more; L.I.A.M.A. now has an overseas committee, and they have at their regular annual meetings and their different management courses a number of visitors from overseas.

Another major problem is the recruiting of qualified sales personnel, particularly the branch manager or sales trainer. He is the key man in the

North American distribution system. Once you get him, you have the usual problems of developing a sales force. One is competition from existing systems, such as in the United Kingdom, with a different established basis of compensation.

Along with the North American system of direct selling, we also use similar commission rates and commission philosophy in all areas. There may be some variation by plan, but it is essentially the same system, whereas in some of the other countries, for example, the United Kingdom and Holland, a different basis of compensation of agents or brokers is used by the local companies.

MR. KUNKEMUELLER: The lapse rates can be higher overseas. The currency might be devalued, and the branch or company might be nationalized. The amount of money you can invest in a new policy should be smaller, because the chances of keeping the policy on the books may be smaller.

MR. CLARKE: Lapse rates depend on the type of business that you do. If you are doing business with local nationals, lapse rates depend on the income level. The effects of the other usual influences on lapse rates are even more dramatic than they are in North America. If you are doing business mainly with expatriate people and also with business people, you can get good business with excellent persistency in all parts of the world.

MR. HANDA: Regarding the question of life insurance marketing overseas, an intimate knowledge of the local conditions is required, and this is likely to take time. The habits of the inhabitants, their attitude toward life insurance, and language difficulties are some of the problems to be faced. Aside from these, the question of training local field staff and the problems associated with their movement from company to company need to be attended to. On top of all of these, the question of understanding on the part of the home office staff is essential, because it is likely that they may not really appreciate these problems from a distance.

CHAIRMAN ANDERSON: In the United Kingdom market, first-year lapse rates of the majority of companies would lie between 5 and 10 per cent. In the Netherlands, the first-year lapse rates are about 10 per cent on a country-wide basis, perhaps a bit higher. We find in the Caribbean that the first-year lapse rates are high, perhaps as high as 40 per cent.

On marketing systems, I would like to sketch briefly our own experi-

ence. We are using essentially the same marketing approach as the Sun Life is using. In the United Kingdom life insurance traditionally is marketed by insurance brokers as well as by solicitors, bank managers, and accountants. United Kingdom companies generally maintain salaried inspectors who seek business from these sources. The Canadian companies have long been the pioneers in the United Kingdom of the North American type of agency organization, and we drew on their experience and personnel to start ours some five years ago.

Over the space of five years we have succeeded in developing a full-time agency organization which just passed a thousand men, and the results from the sales organization have been very favorable indeed. We find that the sales frequency is high, our men average five to six sales per month, and thus the sales results of the company are directly linked to its success in attracting manpower.

In the Netherlands we faced a different problem. There insurance is sold exclusively by licensed insurance brokers; the only exception to this rule is that a company is allowed to have salaried personnel market its life insurance products. We decided to build a direct sales organization in very much the same manner that we used in the United Kingdom. The difficulty was that we could not hire the first man, because there did not exist in the country anyone with experience in life insurance marketing. As a result, we found it necessary to send a man from England to the Netherlands.

During the first year this man developed a sales organization of sixty people; in its second year the organization has grown to one hundred and twenty. I think that this experience points out that it is possible to transplant the direct sales system, which is called the "North American agency system," even to markets where it did not exist before.

MR. COSS: The lapse experience varies considerably in Australia. For the bigger companies the lapse rate in the first two policy years combined would be about 10 per cent. For smaller companies this rate would be between 15 and 30 per cent. There are exceptions to this statement. One of the large companies has a lapse rate of about 25 per cent, and a few smaller companies have rates lower than 15 per cent. Our commissioner regards a lapse rate of over 15 per cent with considerable concern. The lapse rate tends to depend on how the company gets its business and how it pays its agents.

Most companies follow the American pattern of direct agents, but they would be controlled through a branch system rather than by general agents. Most of the commission paid is based on the sum assured, and it

would nearly all be paid in the first policy year. Consequently, there is less incentive for an agent to try to keep a policy in force. A few companies now pay a commission based on the premium and spread this over two or three years to try to encourage persistency.

There are now a few companies making use of their existing fire and general insurance connections to get business from existing clients, but it is too early at this stage to see whether their lapse rates will be any different.

MR. WILLIAM A. DREHER: What about persistency among the agents?

CHAIRMAN ANDERSON: Our experience on that is that we retain approximately 75 per cent of the appointees for twelve months. We are not old enough to establish anything beyond that.

Financing arrangements vary. In the United Kingdom we make an advance for one month and thereafter annualize commissions. In the Netherlands our agents must be salaried, and there is a bonus account which produces the equivalent of commissions. The experience in both countries is that we have relatively low losses on agent financing.

MR. CLARKE: We use essentially the same philosophy as far as compensation of agents and branch managers and financing plans as we do in Canada. Generally speaking, overseas persistency of agents is better than it is in Canada or in North America. I would think that in Great Britain the survival rate would probably be about the same or perhaps a little better than it is in North America.

MR. KUNKEMUELLER: The market tends to be very narrow in underdeveloped countries, so that very small percentages of their populations are realistically candidates for life insurance. This controls what your market potential is and to an extent what products you can sell. The products which my organization has been selling have been traditional cash-value life insurance.

MR. CLARKE: We use the same plans as those used in North America, with more emphasis on investment-type endowments, although we have different rates depending on the mortality, interest, and the like.

Although there has been more emphasis on the higher-premium plans than is true in North America, Sun Life probably sells a higher percentage of ordinary life business than local companies, particularly in the United Kingdom.

In the United Kingdom and the British Commonwealth and also in the European countries, the plans offered by local companies have been influenced by a tax rebate on the premiums leading to more emphasis on investment-type plans; company operations are geared to show good maturity values. This has been aided by the tax legislation and also by insurance legislation, or rather lack of insurance legislation, which allow the company to operate in such a way as to show a good maturity value for investment purposes.

The companies that operate on the United Kingdom system use reversionary bonuses, but we use the regular bonus additions as used in Canada. In the United Kingdom the inflation psychology is more firmly entrenched. Also, there are tax advantages of equity-linked plans with life insurance over straight mutual funds. These several factors have created an interest in equity-linked plans much earlier and much greater than that in North America.

In South Africa also tax laws favor life insurance plans which are linked to equities over unit trusts or mutual funds.

In recent years there has been an increasing diversity of regular plans in different countries. This is due to local conditions, such as taxation and legislation. We are now introducing plans for one country only because of the tax situation.

CHAIRMAN ANDERSON: Equity-linked business is our specialty, representing approximately 90 per cent of our individual sales.

The first equity-linked plan with which I am familiar was developed approximately fifteen years ago in the Netherlands by a company called deWaardye; it is called "fraction insurance." The premium, death benefit, and maturity value escalate and de-escalate in accordance with the published value of the fraction, which is a unit of an internal equity fund. One can describe the plan as an orthodox insurance policy expressed in fractions instead of money. These plans did not prove to be a great success, largely because the Dutch insurance companies chose to establish a level commission on these policies, making them unattractive to insurance brokers.

The idea finally caught on in the United Kingdom about five years ago with a more salable product having fixed premiums and front-end loaded commissions. Today there are three recently organized United Kingdom companies, each of which has achieved a 5 per cent market penetration in the United Kingdom purely on the strength of selling equity-linked products. I estimate that the equity products now represent at least 20 per cent of the United Kingdom market.

In the Netherlands an equity-linked product similar to that being offered in the United Kingdom was introduced two years ago, and practically all the companies now have altered their equity-linked products to provide fixed premiums and conventional commissions. A recent study shows that equity-linked business now represents 15 per cent of the total market in Holland.

Equity-linked insurance fits in with the point that has been made several times throughout this discussion, that life insurance sold overseas tends to be much more investment-oriented or savings-oriented and that the fashion of the moment is the equity-linked plan.

MR. COSS: I think that the Australian pattern is rather different from the North American pattern for two reasons. The main reason is the different taxation basis, and the other is that new products generally take a little longer to penetrate.

As far as taxation is concerned, the first $1,200 of life insurance premiums and contributions to a superannuation fund is completely tax-deductible, and there is no tax on the proceeds of any consequence. Life insurance thus tends to be sold as a tax deduction first and a life cover second. A great number of short-term endowment assurances are sold in the last two weeks of June when our financial year ends, sometimes by single premiums.

Annuities are almost unknown in Australia; the basic reason is that life offices do not encourage this business, since they must set up reserves on a $3\frac{1}{2}$ per cent interest basis.

Disability-income business is just coming in as a result of a change in the taxation basis, which means that companies now can set up adequate reserves before tax.

Equity-linked contracts are at last appearing on the horizon. Our commissioner has recently been around the world studying overseas legislation and has now produced his proposals for Australian legislation. This has put the whole field into a state of flux, and it will be several months before the final pattern will emerge.

Superannuation business accounts for 30–35 per cent of the Australian life insurance market. The practice is to pay lump-sum benefits since there is virtually no tax penalty. A typical scheme would provide a benefit on the order of five times annual salary at death or retirement subject to forty years' service with a proportionate reduction for shorter service. Many people are covered by private superannuation schemes providing similar levels of benefits, and this reduces the need for individual insurance.

MR. HANDA: With regard to the products sold in Singapore and Malaysia, the proportion of endowment assurances in some form or another is extremely high. The recent trends show an increased use of whole life assurances, especially for estate duty purposes. Reducing term assurances are used mainly in conjunction with mortgages of property.

No development of variable contract types has been possible because of two main difficulties: (1) the insurance commissioners do not approve of the idea of a separate fund within the life fund and (2) investments in unit trusts are not considered an approved investment in view of the restrictions placed on the investments of life funds.

MR. JOHN P. TILLINGHAST: Some markets are limited by two factors—the potential for life sales and the possibility of investing locally.

CHAIRMAN ANDERSON: This is a problem that we encountered in Iceland. The life insurance industry in Iceland collapsed as a savings medium because the Icelandic króna has been devalued repeatedly. Public confidence in guaranteed savings has consequently vanished.

For a very brief time in 1967 a United Kingdom–based company operated in Iceland and, in the space of a few months, regenerated the industry. This company offered a plan linked to a United Kingdom equity fund and was exporting the premium income to the United Kingdom. Because of the resultant outflow of funds, the government stopped the operation. Unfortunately, there seems to be no alternative, because there is no local securities market and exchange control will not allow companies to invest in equities elsewhere. One possible solution is a real estate–linked product. Several companies offer a real estate–linked product in the United Kingdom. The difficulty in Iceland is a statutory prohibition on a foreign company or foreign-controlled company's owning real estate.

MR. STEFFEN: I would be interested in additional comments about the extent to which tax deductions on premiums are permitted in some countries and the effect it has on the type of product sold in those countries.

CHAIRMAN ANDERSON: In the United Kingdom the allowance on premiums paid is equivalent to a 16 per cent reduction in the premium rate. There is a limitation of one-fifth of total income. In the Netherlands there is a flat exemption of G500 ($140) per year.

MR. DIENST: In Germany a full deduction of DM. 1,100 for the insured, DM. 1,100 for his wife, and DM. 500 for each child is permitted on life insurance and general insurance premiums, with a further 50 per cent deduction on an additional amount identical to the 100 per cent deductible amount. France has similar regulations.

MR. GRAY: May I add a couple of points in connection with the United Kingdom? The deduction cuts down if you issue an endowment shorter than fifteen years. You cannot get a deduction greater than what it would be on a fifteen-year endowment policy. Equity-based contracts must have a minimum guaranteed death benefit of 75 per cent of the total amount of premiums which could be paid under the policy.

MR. COSS: Just a couple of points about the United Kingdom. The tax relief there does not extend to surtax, only to income tax. The surtax goes up to a further 10 shillings above the standard income tax rate of 8/3 on the pound. The other point is that it is not only tax relief from the premium that is important but also the tax-sheltered investment build-up. Life insurance companies pay tax at 7/6 on the pound on investment income, which can be much lower than the income tax and surtax paid by individuals. The market is very competitive, and advertising places emphasis on the incredibly high gross yields required from ordinary investments to provide the same net return as that on life insurance.

In Australia the position at present is much simpler. The entire premium under a life policy is allowed as a tax deduction subject to a limit of $1,200, which also applies to superannuation contributions. Not many people would use the whole $1,200 allowable, since the average income is about $3,700 per annum. Policies can be surrendered at any time without giving rise to any tax liability.

MR. KUNKEMUELLER: In small underdeveloped territories the expense of entering the market and establishing a sales force is high; a large share of the market is needed to make it worthwhile.

MR. CLARKE: Competition varies among countries, depending upon the development of the local companies and the extent to which outside companies have entered that country. All the desirable countries have well-established local companies. The United Kingdom and Australia have first-class life insurance companies in very strong financial positions, and they have very competitive terms.

Generally the sales force or the distribution system is not as effective, or the sales force may not be as well trained and therefore not as effective. I think that you can be in a good competitive position if you can offer a different product from that which the local companies are offering. We offer guaranteed cash-value life insurance, which has been a selling feature since in certain areas the local companies do not offer it, and, even though they are very strong financially and give good results, our product is different and sells.

If you are going to offer the same products as those offered by the local companies, you obviously have to do it better. Going in on a small operation initially and doing the same things that the local companies are doing—but doing it better—are not very easy.

CHAIRMAN ANDERSON: I share the views expressed by George Clarke on the relative weakness in marketing systems abroad. I think that is the outstanding feature of most of the markets at which we have looked.

I also have the opinion that the profits in overseas markets can be high and may even be very high, subject to one important condition; it is absolutely vital to obtain a meaningful market penetration. Nothing is worse than having an operation in another country with a separate set of regulations and a separate set of problems which remains chronically in less than a viable state because the volume of business does not support its overhead.

My views on profits' being high and perhaps very high derive from five factors, which I will enumerate without enlarging on them. First, rate margins are generally larger than those in North America. Second, the initial capital strains on new business are lower than those prevailing in North America, and, moreover, the recovery of these strains happens earlier. Third, the taxation of life insurance company profits abroad generally is considerably lower than it is in North America. Fourth, the special circumstances of equity-linked plans offer the company a second source of income—sales commissions on the units purchased on behalf of its policyholders. Finally, a multinational operation affords the opportunity to engage in synergistic reinsurance transactions, particularly to reinsurance business from one tax climate into another, often with a very dramatic effect on the financial results of the company.

MR. HANDA: Regarding competition in Singapore and Malaysia, it would appear that it is not as intense as it is in North America. The scope for expansion is still there, because only a very small percentage of the total population is insured at the present time. Furthermore, a large percentage of the population is young and would provide a suitable base for expansion in the years to come. Provided life assurance is operated and sold on a sound basis, opportunities for profit would appear to exist.