TRANSACTIONS OF SOCIETY OF ACTUARIES
1974 VOL. 26 PT. 2D NO. 75 AB

CONSEQUENCES OF ADJUSTED EARNINGS

1. What is the effect of GAAP on
   a) Pricing and profit objectives?
   b) Agents' compensation?
   c) Project priority and corporate planning?
2. What are possible tax law implications of GAAP?
3. What is the effect of GAAP on communications to
   a) Company personnel?
   b) Stockholders?
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4. (Montreal only) How do Canadian GAAP developments compare to those in the United States?

Dallas Regional Meeting

MR. BOB J. BOLIN: We designed our current ratebook at Southland Life before the American Institute of Certified Public Accountants published its audit guide for stock life insurance companies. In setting our profit objectives, we used the Anderson method (James C. H. Anderson, "Gross Premium Calculations and Profit Measurement for Nonparticipating Insurance," *TSA*, XI, 357) of providing a fair return on shareholders' investment of capital.

After the AICPA published its audit guide, we determined what our profit margins were on a generally accepted accounting principles (GAAP) basis, that is, what our profit was as a level percentage of the premium using the same assumptions we had used under the Anderson method.

In reviewing the results for three typical plans (whole life, limited payment life, and retirement income) under a level percentage of premium method as compared with the Anderson method, we found that the two methods could not be compared directly, since each method varies in accordance with those factors that are sensitive to profitability.

Generally we can state that under GAAP the percentage of premium margins decrease as the investment risk increases, except for highly competitive term contracts and high-minimum ordinary life policies. Under the Anderson method the shareholder's yield rate generally increases as the investment element in the plan of insurance increases.

By issue age, percentage of premium margins decrease as the age at issue increases until about age 55, then tend to increase slightly after age 55. There is a sharp dip in the 20–25 issue-age range because of the high withdrawals that are characteristic of this age group. Under the Anderson method the shareholder's yield rate generally increases with issue age.

In comparing the two methods, we found that the Anderson method is highly sensitive to first-year expenses. In fact, when there is no surplus drain in the first year, as, for example, with some term insurance, the Anderson method loses all meaning. The percentage of premium profit method is much less sensitive to first-year expenses, but it is more sensitive to interest rate changes than the Anderson method, since under the latter the profits in later years are heavily discounted at the shareholder's yield rate.

In establishing pricing objective under GAAP, each company will still have to think through its philosophical questions such as relative profit rates for participating as opposed to nonparticipating, disability income, term versus permanent, and competition versus growth. Bench marks for product development are necessary and must meet corporate objectives. Profit objectives must still be reasonable in relation to competition and compensation to the field force. We would like our term margins to be higher, but competition keeps them low.

Profit objectives cannot be quantified because margins that are reasonable for one company may not be reasonable for another. For example, two companies may have identical premium structures, one company having low margins and high expense whereas the other has high margins with low expense.

Most companies may require some standard of loading by product, especially on the basic products such as ordinary life and life paid up at 65, with deviations for term business and other highly competitive products. Generally, I believe that the GAAP method of pricing will be communicated more easily to management, since there is a greater correlation between the pricing of products and the profits as measured in the earnings statement. This should lead to management review of product mix. The method is more general in its approach, since the Anderson method has no meaning where the investment risk is small and is very sensitive to expenses allocated in the first year. Profits as a percentage of premium should be understood more easily when compared with other businesses that measure profits as a percentage of sales. Every method of setting profit objectives has its limitations and is finally tested in the marketplace; therefore, most companies probably will continue to look at profits on both a statutory and a GAAP basis. For example, a company might want X per cent on a GAAP basis, provided that the shareholder's yield rate is at least Y per cent.

MR. BARRY L. BLAZER: If 1973 was the year of the GAAP conversion, then 1974 will certainly be the year of GAAP as a management tool—a year in which companies will start to use the wealth of management information generated as a by-product of the GAAP process. One such use will be in setting profit objectives and premium rates. But before discussing the effect of GAAP on pricing and profit margins, let us first consider whether GAAP studies are appropriate at all for use in this regard.

Some actuaries believe that the value of GAAP information in pricing products is questionable. Their arguments usually are based on the proposition that GAAP assumptions are inappropriate for use in pricing because they contain provisions for possible adverse deviation or "deltas." There are many recognized methods used to set gross premiums. Although the degree of technical sophistication may vary greatly from method to method, the actuary invariably provides a margin for adverse deviation. In many instances the actuary simply will use assumptions that are more conservative than expected experience. In other cases, realistic assumptions will be used and a profit and contingency margin will be added to the resulting gross premium. The use of GAAP assumptions with margins for possible adverse deviation is hardly a departure from existing actuarial practice.

Although at present there are no guidelines that enable us accurately to establish appropriate margins for possible adverse deviation, this does not detract from the inherent value and applicability of GAAP as a pricing tool.

In addition to the problem of defining the size of the "deltas," there are other problems that must be resolved, such as the treatment of nondeferrable acquisition costs. The GAAP profit margins could be defined simply as the difference between the gross premium charged and the net benefit and expense premiums calculated using the GAAP assumptions. The benefit premium may be split between its death, surrender, and dividend components. Similarly, the expense premium may be split into maintenance, deferrable acquisition costs, and nondeferrable acquisition cost components. The technical resources available to many companies may not provide for the inclusion of nonlevel expenses that are not deferrable. In such instances, some other means must be found to calculate the nondeferrable expense GAAP premium.

The use of GAAP in pricing is facilitated when the company determines its deferred acquisition costs using the "factor method," since the needed expense rates have already been developed. On the other hand, companies using the "worksheet method" often will have to develop this information.

In what ultimately may be considered the most important development of GAAP, we find that the actuary responsible for product pricing now has a new means for more effective communication with management, as has been mentioned by Bob Bolin. When GAAP is used to price policies, management will have the ability (1) to anticipate the effect on earnings of various pricing decisions and (2) to measure the effect on earnings of differences between actual experience and the assumptions made in setting premiums.

In the past, it was often difficult for the actuary to illustrate clearly the financial effect of an assumption. For example, the use of a slightly higher lapse rate was difficult to explain, particularly when lapses in the earlier durations produced statutory gains. With GAAP as a communications tool the actuary will have no problem illustrating financial implications.

If there is to be effective communication with management concerning pricing considerations based on GAAP assumptions, it is essential that we develop a practical means for establishing the margins for adverse deviation. Just how these "deltas" should be established is not yet clear. The Joint Committee on Theory of Risk of the Society of Actuaries and the Casualty Actuarial Society has been working on this problem for about a year. Since the committee has not released its study note on the subject, actuaries responsible for or contributing to the preparation of GAAP statements have generally used relatively unsophisticated techniques in establishing deltas for GAAP assumptions for the insurance in force at conversion. Hopefully the committee will develop in the near future a practical method of setting deltas which will be consistent with the requirements of the audit guide.

In the interim, although we may not have used advanced principles of risk theory in setting GAAP assumptions, we know that GAAP earnings will emerge from two sources: (1) the profit margins built into the GAAP assumptions and (2) profits resulting from differences between actual experience and the GAAP assumptions.

For any plan and issue age the profit margins built into the GAAP assumptions can be expressed as a constant percentage of the gross premium. A tabulation of the profit margins so expressed, for representative plans and issue ages, will generally show substantial variations. To the extent possible, considering competitive considerations, some companies will try to minimize the fluctuations, particularly for similar plans. Other companies may deem such fluctuations acceptable. Elaborating on Bob's comment about interest in product mix, management will comprehend readily that a shift in the distribution of sales toward plans with lower profit margins will have an immediate negative impact on GAAP earnings. The ability of the system to provide management with this type of information is what makes GAAP such an ideal management tool.

CHAIRMAN JOE B. PHARR: The effects of GAAP on life insurance company pricing and profit objectives are to make such processes more realistic and rational in terms of (1) profit margins on sales (premium revenue) and (2) rates of investment return on adjusted (GAAP) net worth. This should make both oral and written communications of life insurance company earnings better understood by such interested parties as company management, company financial personnel, and members of the public. The ability to reproduce reasonably, and in the aggregate, a company's GAAP earnings by the appropriate application of reasonable profit margins to premium revenue and an investment rate to net worth should facilitate greatly the communication of (1) the results of actuarial pricing procedures to management and (2) management's pricing goals to the shareholders. Knowing the life company's sources of earnings in terms of margins on premium revenue and investment rates on net worth, in conjunction with the calculation of a company's rate of return on common equity, will have widespread meaning in the life insurance industry, as do such calculations of return on investment in other industries.

One may view life insurance company problems in financial terms from two extremes. One of these extremes is the life insurance company which has a tremendous marketing capability and produces increasing amounts of premium revenue but which does not have the proper capital structure to continue to operate under state insurance department solvency laws. The other extreme is the life company which has much more capital and net worth than it can utilize economically, since its marketing results in the form of premium revenue are low in relation to the source of earnings on net worth. With adjusted earnings, or GAAP accounting, it is a relatively straightforward matter to analyze a company's source of GAAP earnings in terms of its rate of return on net worth and profit margins on premium revenue and, by judgment or otherwise, to attempt to estimate optimum sizes of its two primary sources of earnings—net worth and premium revenue.

Although the expression of profit margins in terms of a function of premium revenue, as opposed to the Anderson method of profit margin determination as a rate of return on statutory investment, probably lends itself better to analysis under GAAP accounting, it is still worthwhile to consider rates of return on statutory investment received by a life insurance company, particularly since dividends to shareholders cannot be paid out of GAAP earnings but must be paid generally from statutory retained earnings. Furthermore, the rate of return on investment approach espoused by Anderson probably will continue to be utilized in the framework of surplus investment and future book profits under statutory accounting methods.

MR. BLAZER: GAAP will affect agency compensation in many ways. We can expect changes in compensation patterns to fall into one of three categories:

1. Changes in both the incidence and present value of compensation. These will be designed to produce desired profit margins and will have a direct impact on GAAP earnings.
2. Changes in the incidence but not the present value of compensation. These generally will involve the acceleration of renewal payments but will not have a direct impact on GAAP earnings.
3. Changes which affect neither the incidence nor the present value of compensation. These will be designed to minimize the amount of acquisition costs ineligible for deferral.

The first type of change may occur after companies have reviewed the GAAP profit margins in the current portfolio if substantial variations by plan are revealed. A smaller company, whose rates were modeled on those of a larger insurer rather than on profit margin analyses reflecting the expected experience of the company, is likely to find many low-profit spots in the portfolio. Because of competitive considerations, a larger company also will find plans with small or no profit margins.

Small increases in premium rates could correct most situations, but competitive considerations may make such actions difficult. Alternatively, although often equally difficult, commission scales may be revised. Increasing commissions on plans with particularly rich margins could offset the field's response to reductions on plans with thin margins. In many instances, commission scale changes will be coupled with general premium rate revisions.

Adjustments in commission scales could lead to a more profitable mix of sales. It is not unusual to find an unhealthy distribution of issues by plan when there are wide fluctuations in the profit margins. When neither premium nor commission adjustments are feasible, sales of marginally profitable plans might be limited somewhat by artificial means—for example, by reducing convention credits.

After considering the implications of changes that affect GAAP earnings, many companies will consider seriously the second type of change noted above, namely, the adoption of commission scales that involve greater acceleration of renewal commissions. New commission scales can be developed that pay higher commissions in the early years, and lower or no commissions in later years. Occidental announced in early 1973 a plan that calls for the "heaping" of renewal commissions in the first renewal years.

Accelerated renewal commissions may be important in attracting brokerage business or in developing new agents. The Occidental arrangement should also improve policy persistency, since the agent has a greater financial interest in preventing termination during the critical renewal years. It is important to remember that, although acceleration of renewal commissions does not affect GAAP earnings, it clearly will increase the statutory surplus strain from writing new business. Smaller companies should project the impact on statutory surplus before considering such changes.

In the third category, we can expect compensation changes that will be only cosmetic to the agent but which will allow the company to increase the amount of expenses that may be deferred for GAAP purposes. The audit guide requires that an acquisition expense be deferred only if it both varies with and is primarily related to the production of new business. This definition gives rise to a category of expenses that is neither deferrable nor related to annual maintenance.

Commissions and commission-related expenses clearly are deferrable. Other agency expenses which may not vary with production, such as salaries of branch office supervisory personnel and some expense allowances, fall into a gray area. Many companies were prohibited specifically by their auditors from deferring such "gray" expenses. Those companies could decide to revise their agency contracts in order to qualify these expenses as deferrable in the future. This could be done without any increase in the total cash outlay to produce a given level of new business. However, in an effort to increase sales or productivity, some companies will increase the amounts payable if they can be deferred. Those changes that do not increase the total cash outlay, while not having any statutory significance, will produce increased GAAP earnings.

Any questions concerning the consistent application of accounting principles from year to year probably will not preclude a company's making such changes. Creating a new set of GAAP assumptions when the prior assumptions are no longer applicable is required by the audit guide. Accountants cannot deny the propriety of adopting new assumptions if the change in the manner of compensation clearly changes the status of the expense from nondeferrable to deferrable. One limiting factor, however, is recoverability. Obviously, for such expenses to be deferred, the company must satisfy its auditors that the expense is recoverable.

CHAIRMAN PHARR: On changing the basis of agency-related compensation, it seems likely that management will reconsider the compensation pattern of branch managers and regional managers who are compensated by salary plus a percentage of premium revenue. More of their compensation will be a direct function of the measures of production of new business, that is, premium revenue. This may even be appropriate for home office marketing or acquisition expenses where the emphasis of the company on the production of new business may be expressed by the compensation of the top home office marketing directors being a percentage of new business. The facility for the deferral of agency acquisition expenses under GAAP could also have an effect on the financing of new agents.

Life insurance company project priority and corporate planning will be affected significantly by the reporting of earnings on a GAAP basis. GAAP earnings should provide management with better, more realistic and rational information and with a better picture of earnings by line of business or by internal policyholder groupings. Companies will become more interested in measuring results by line of business. This will have a corresponding effect on the techniques for allocation of investment income by line of business, for better records of expenses or better methods of expense allocation by line of business, and for the very complex and important area of the allocation of federal income taxes (including deferred taxes) by line of business.

As methods of deferral of acquisition expense and the calculation of GAAP benefit reserve factors become more mechanized and routine, management will want information on the causes of variations of earnings by line of business and the actual sources of earnings by line of business. Actuaries will be requested to provide more detailed information on the sources of earnings, at least between investment income and profit margins on premiums, and eventually expected costs due to mortality, surrender, and expenses.

The ability to report earnings on a GAAP basis should provide management with better management tools and will probably bring a closer corporate look at the cost justification for continuing certain lines of business and certainly for entering any new or additional lines of business.

MR. NORMAN E. HILL: The tendency will be to refine and expand GAAP valuation systems into management information systems. One use for such systems will be to analyze current annual profit margins on business in force. This can be derived from the excess of gross premiums in force over GAAP net premiums in force. With this as the base, total current earnings before tax equal annual profit margins plus interest on capital and surplus plus variances between actual experience and that assumed in GAAP reserves.

Furthermore, these systems can provide a framework for projections based on certain levels of production. Future earnings can equal the assumed annual profit margin on business then in force plus the other two items mentioned above.

Benefit reserves and deferred acquisition costs will be split into various pieces, such as deaths, surrenders, commissions, other expenses, and so on. With this information, it will be easier to analyze the sources of variances between actual and expected experience.

As for priorities, management will become more conscious of earnings per share in the future. Older business in force will become a less important source of future earnings than under statutory accounting. Therefore, management must watch carefully the earnings generated from newer business in force.

The life insurance industry is concerned that, to the extent to which adjusted earnings are higher than statutory earnings, federal income taxes may be imposed on those higher earnings. At the present time the law is interpreted to mean that the Internal Revenue Service cannot impose tax on any amounts except those presented in the annual statement (with certain adjustments).

The advent of adjusted earnings will make companies more "earnings-conscious," that is, more watchful of earnings per share, not only on an annual but also on an interim basis. They will watch earnings on a profit center basis. This will mean that the allocation of federal income tax by lines of business on both a statutory and a GAAP basis will become more important.

Companies will spend more time projecting earnings on a GAAP basis. To derive a meaningful figure, they will have to project GAAP taxes.

that is, deferred tax as well as the actual tax. Old and new methods for tax allocation will be studied and analyzed.

The basic approach in computing GAAP taxes is to leave tax on investment income the same as the tax return but to compute the gain from operations on an "as if" GAAP tax basis. However, there are various areas and issues that are less completely defined.

When companies have been able to demonstrate that their actual tax position is and will be only tax on investment income, they have been able to avoid setting up deferred Phase 2 taxes. Just what constitutes a "demonstration"? Should a company be able to show that it will retain a tax position ten years from now? Twenty years from now? What rate of new-business growth should be included in such a "demonstration"? This approach entails the risk that, if the company's tax situation should change in some future year so that it is taxed on gain from operations, the entire deferred tax would represent a current charge against earnings at that time.

For the special deductions in computing the gain from operations in Phase 2, some companies have used GAAP figures and GAAP limitations. For example, in determining the maximum deductions for dividends to policyholders, some companies have used a limitation based on GAAP income rather than the statutory figure. In computing the special nonparticipating deduction, some companies have used the increase in GAAP nonparticipating reserves rather than the statutory figure (subject to the percentage of premium limitation). The only justification for such use of GAAP figures is that eventually their effect will reverse.

The original intent was that the GAAP tax should be computed as if the company had been on GAAP since its inception, and, therefore, any tax loss carry-forwards would be generated only from losses on a GAAP "as if" basis. However, several arguments have been advanced to the effect that the benefit of actual tax loss carry-forwards should be considered in computing the GAAP deferred tax.

Should the interest assumption in computing reserves make allowance for the deferred tax? An argument has been advanced that, for a closed block of business, distortions in earnings after taxes will appear unless the tax rate is considered in computing the long-term interest rate. How do you allocate the GAAP federal income tax to a closed line of business? Should the allocation be based on a separate-company approach as though the line of business stood on its own, or should it be based on a total-company approach (where the inclusion of other blocks of business in determining the total tax is likely to produce a different GAAP tax rate)?

CHAIRMAN PHARR: It is difficult to predict whether congressional reaction to GAAP earnings will produce desired changes in the tax laws. A prediction that such congressional action will probably take a considerable amount of time is not too risky.

Any reopening of the life insurance tax question could possibly be beneficial in that the tax structure could be considerably simplified. For example, consideration could be given to taxing life insurance companies directly on investment income or possibly as a percentage of sales in the form of a federal premium tax similar to that now imposed by state insurance departments.

As long as solvency depends upon statutory earnings, it does not seem likely that the tax will be based on GAAP earnings. Such a method of taxation could very quickly bankrupt smaller and medium-sized companies that have just been revitalized or are just entering the life insurance market.

MR. BOLIN: Initially the reporting of life insurance earnings on a GAAP basis was held as a breakthrough for life insurance analysts, since it was felt that many investors who shied away from life insurance stocks because of the difficulty in evaluating their earnings would consider GAAP to be a real plus for investing in life insurance stocks. In view of recent challenges to GAAP in financial and insurance industry publications, it is now more important than ever that GAAP be adequately communicated to stockholders, policyholders, and the financial community. In addition, some insurance departments have ruled that showing financial results different from those filed with the insurance commissioners is clearly confusing, misleading, and legally false. Such departments have stated that any financial statement on a basis other than the statutory method should indicate clearly that the financial condition has not been reported in accordance with statute and must contain a reconciliation showing the method of adjusting the various items to statutory values. In my company's 1973 annual report to shareholders, it was stated that our previous earnings had been reported on the basis of standards prescribed by the state insurance regulatory bodies, but, beginning with the year 1973, earnings were calculated in accordance with GAAP. The message from management also stated that a separate booklet entitled the *GAAP Earnings Supplement* had been prepared and was available upon request. It explains in more technical detail the methods and assumptions used in making adjustments to the GAAP basis.

The supplement contains a brief message from management which states that life insurance companies deal with expected or average values due to the long-term guaranteed nature of the contracts written. Whereas statutory accounting deals with the balance sheet and liquidating values, GAAP accounting has a concern for income and the recognition of the going-concern concept in order to associate appropriately costs and premium revenues so that profit emerges as revenues are received. Under statutory accounting, a new insurance policy produces a substantial loss in the first policy year, but thereafter it produces sufficient earnings to provide the original profit contemplated after recovery of the first year's loss. On the other hand, the supplement states that GAAP accounting is designed to release the profit each year as a uniform percentage of premium, with year-by-year variations depending on whether deviations from assumptions occur.

Summary of operations adjustments described in the supplement include policy reserve adjustments. The interest, mortality, and withdrawal rate assumptions used for benefit reserves are given for each issue year. There is a similar table of assumptions for individual accident and health insurance. Acquisition expenses are defined, and the amortization periods chosen for the various issue years are listed. Other adjustments, including deferred federal income taxes, are discussed. Finally, all operations adjustments are summarized and reconciled to the statutory statement.

Balance-sheet adjustments described in the supplement cover the differences between statutory and GAAP asset accounting for stocks, nonadmitted assets, deferred policy acquisition costs, deferred premiums, and other items. With respect to liabilities, the supplement lists the major adjustments, such as policy reserves, deferred income taxes, mandatory securities valuation reserve, and other items. In the description of capital funds it is pointed out that the surplus of the company stated on the new GAAP basis is larger but that only statutory earnings surplus is available for current dividends. Finally, the statutory balance sheet is reconciled to the GAAP balance sheet.

CHAIRMAN PHARR: Discussions of the effect of GAAP on communications to company personnel, policyholders, stockholders, and the public usually run the gamut from statements of confusion to statements that much better measurement of earnings by line of business are available.

There seems to be considerable apprehension as to the effects on GAAP accounting of different levels of new-business production and as to the reasonableness and rationale of GAAP accounting in the face of fluctuations in earnings which are traceable either to significant changes in economic conditions or to natural causes.

From the viewpoint of shareholders, there could very well be pressure for increased dividends. Shareholders also are not so likely to accept management's rationalizations of poor earnings and references to the stringencies under statutory accounting.

The public, in the form of policyholders, could even pay more attention to the earnings statements of life insurance companies in making their own decisions as to which life companies are in the "low cost" category. Disclosure to the public on the profitability of life insurance companies could have some effect on the sales of life insurance contracts to the same public.

The failure of a marketing effort to produce new business could actually result in better statutory earnings, whereas, under GAAP accounting, such a failure is likely to be reflected in rather flat GAAP earnings or possibly even lower earnings. There will be a high degree of marketing emphasis or attitude permeating all life insurance company personnel as a by-product of adjusted earnings, since failure will be less acceptable.

Better management information will be available, and it will be more difficult to hide management failings under GAAP accounting.

Communication of GAAP earnings to shareholders is very important, but probably it will take a considerable amount of time before GAAP earnings are generally accepted and understood by such shareholders.

MR. THOMAS K. PENNINGTON: One effect of the adoption of GAAP on the companies using the Anderson method to develop premiums undoubtedly will be a change from application of the Anderson method in terms of a return on invested surplus to a modification of the method which will embody a return on invested cash flow. Undoubtedly the yield sought on cash flow will be somewhat higher than that sought on invested surplus.

The results of the Anderson method, even when applied to invested surplus in the traditional manner, need to be tested against the surplus recovery date, against a reasonable profit return measured against premium flow, and against risk assumed by the company to adjust for those situations where surplus investment is minimal or nil. Since some policies are written with a positive cash flow expected from date of issue, the results of a modified Anderson method applied to cash flow will have to be watched even more closely by use of these yardsticks.

MR. ROBERT C. TOOKEY: As has been pointed out by Mr. Blazer, GAAP accounting enables a company to make major revisions in its agents' compensation system. Since commissions in excess of the ultimate renewal rate are capitalized as they are paid, a company can telescope its commissions without a commensurate reduction in GAAP profits. Thus a company which pays to the writing agent 70 per cent first-year followed by level 5 per cent renewal commissions for all renewal years might change its scale to 70 per cent first year, 25 per cent second year, 15 per cent third year, and 10 per cent for the fourth and fifth years, with nothing payable thereafter. The rationale is that, with computerized service, the agent performs very little service after the fifth year, and the policyholder has apparently made a commitment to maintain his contract, since he has been paying on it for five years. One company employing such a compensation scale reports a dramatic increase in production from established agents because of the incentive provided by the high early renewal commissions. Other advantages of telescoping commissions include improved persistency and a reduction in financing costs for new agents.

Mr. Blazer mentioned that heaping of renewal commissions might endanger the solvency of a small company because of its limited resources and traditionally higher lapse rates. Many, if not most, such companies have for years been heaping commissions by simply paying a very high first-year commission to the personal-producing general agent. I have seen first-year percentages ranging from 90 to 135 per cent, with renewal commissions usually 5 per cent. Such a company should not feel competitively compelled to telescope commissions, since it is already paying such a large first-year commission.

The effect of GAAP on communications to the public often will depend upon whether GAAP earnings are higher or lower than statutory earnings. When they are higher, there is a tendency for glowing announcements to appear in stockholders' reports stating that, since acquisition costs are now deferrable, current earnings will be higher. In the reverse situation, one report to stockholders glowingly praised the statutory method of accounting, stating that this is the only one acceptable to all insurance departments. It then casually stated that the GAAP method is required by the Securities and Exchange Commission in reporting financial statements but emphasized that insurance departments require the use of statutory accounting principles for determining solvency under applicable insurance law.

The impact of GAAP on Wall Street has been mixed. A rather strong negative opinion appeared in the April 29 issue of *Barron's* which implies that the stock analyst's job has become much more exacting, since a great deal of latitude still exists in determination of adjusted earnings. I heard of one company that capitalizes issue costs of $250 per policy and another one that capitalizes only about one-fifth of that amount; apparently both approaches can be justified by the AICPA guide.

CHAIRMAN PHARR: I will try to summarize our discussion as follows:

1. There are many positive aspects of a better understanding by management as to earnings potential by line of business and the almost instant ability to measure actual earnings in the form of GAAP profit on sales and the related investment margin on GAAP net worth.
2. The sources of life insurance earnings in the form of margins on premium revenue and investment return on GAAP net worth are likely to be revealing not only to life insurance company management but also to the public, and, to this extent, the life insurance industry can be evaluated in the same fashion as many other businesses are evaluated.
3. There will be encouragement, or possibly even inducement, to change commission schedules and other compensation patterns, especially of marketing personnel, to a more direct function of new-business sales in order to qualify such compensation for deferral as acquisition expense.
4. Considerable uncertainties exist as to the possible effects on federal income taxation.
5. Communications to company personnel, shareholders, and interested parties in the financial world should be considerably enhanced by the availability of financial statements on a GAAP basis, although it is likely to take some time before they are generally understood and accepted by the public.

Montreal Regional Meeting

MR. JAMES D. LAMB: In choosing assumptions for the setting of ordinary gross premiums, many companies use pricing assumptions with margins included for adverse deviation. This practice adds an element of conservatism which may be desirable, particularly if the company's traditional profit margins are low. In my company we have been grading interest rates downward by duration ever since the late fifties, since it seemed that rates current at that time and now were higher than could be sustained over a long period of time. Most companies make no provision for adverse mortality in their gross premium assumptions, since past experience has shown a general decline in mortality rates. While this decline may not continue, over the long run actual mortality rates should not exceed those found in a currently realistic mortality table. Companies may or may not have used gross premium assumptions for some cost elements that superficially resemble those used in generally accepted accounting principles (GAAP) reserve assumptions—that is, realistic, with margins for adverse deviation.

GAAP reserve requirements will not have much effect on the choice of assumptions for pricing, except where premium deficiencies with respect to GAAP premiums exist. Ideally, for pricing purposes, we should make use of most realistic assumptions, with any additional margin for adverse deviation covered by an annual charge for all risk elements combined. This is essentially the way it is done by the companies that price with realistic assumptions, except that this risk charge is now an undeterminable part of the profit margin.

Since the magnitude of the margins for each element will always be a judgment item, and the separate risks are recognized to be interdependent, we will not want to complicate our pricing assumptions by replacing one judgment item by a range of others. But we should have some actuarial foundation for an adequate risk charge.

The only immediate impact GAAP will have on pricing assumptions is in the determination of expense factors. We have a need for expense factors which reflect the variability and incidence of expense more realistically than would be the case for most companies at present. We price most products on a unit basis as if we expected all expenses to vary directly with volume, but we know that a major portion of the expense is invariant.

It is in the area of profit objectives used in pricing that GAAP will have more impact. Traditionally, somewhat arbitrary goals of present value of profit at issue, excess of asset share over reserve at some duration, or rates of return on initial investment have been used to determine acceptable premium levels. Premiums usually then were set for each plan independently. Because GAAP earnings will be accepted as a meaningful measure of the performance of a company, these traditional methods will be used secondarily in conjunction with the annual incidence of GAAP earnings. Individual plan pricing will not be completely discarded, but we will see a trend toward pricing an entire ratebook as a single unit and projecting, year by year, the profit generated by an entire ratebook. Primary profit objectives may be stated in terms of earnings or earnings growth, and ratebook projections will be used to tell whether a given rate structure could meet the goals.

With this kind of profit objective, more attempt will be made in pricing to generate profits more evenly between plans and ages. This requires realistic expense analysis. Plans which contribute nothing to profits will have to be eliminated. In the past, since statutory earnings were viewed as unrealistic, volume production was considered a good measure of a company's performance, and the production of a large volume of profitless business was impressive to company management and outsiders. The trend will be toward measuring performance by premium generated and GAAP earnings. We will see rate structures such that variations in sales mix by plan and age will have little effect on these measures.

Occidental's 1973 agents' contract change moved commissions to earlier durations more than is traditional in the ordinary life business. Although we had enough statutory surplus to allow us to change our commission scales, we probably would not have done so had we not been on GAAP accounting. The new contract is expected to cause a leveling or a slight decline in statutory ordinary life earnings and surplus.

This is only one possible effect of GAAP accounting on agents' compensation. GAAP would permit complete flexibility in compensating the field force, provided that statutory surplus is sufficient. Because of GAAP variability requirements for deferral, we will not see a trend toward nonvariable compensation, or, if we do, it will not be GAAP-inspired. Also, the field force probably would not accept any equivalent contract which defers payment to a later date than under the current contract. Therefore, if any changes in compensation are made, they will probably follow a pattern similar to the one whe have chosen.

Because of the section in the audit guide allowing deferral of development expense, and the introduction of GAAP earnings which tend to improve with the amount of business a company has on its books, I expect to see greater efforts in the areas of field expansion and agent recruiting. This may include higher financing levels for new agents and greater payment for recruiting and training and for the establishment of new offices. Without saying whether the GAAP stimulus toward these developments is good or bad, the ability to defer expansion expenses must ultimately lead to such growth.

While companies, at any time in the past, could have stated earnings internally on any basis desired, there was not much attempt to consider any basis other than statutory earnings. Management was aware that earnings were poor in times of heavy production and good during times of low production. The effect of this was to cause high earnings to be viewed favorably, due to psychological considerations, and low earnings to be considered even more favorably, provided that these could be explained by high production. Since GAAP earnings are becoming accepted as real, earnings considerations will have more effect on a company's thinking, even to the point where they may be the sole consideration. GAAP accounting has led to the necessity of planning for profits and will increase the demand for credible projections. If adverse results are forecast, steps will be taken in advance to improve the situation by the introduction of more salable and, where possible, more profitable products and by the institution of more rigid controls over expenses.

GAAP accounting will stimulate the improvement of mechanization in those areas where long-term gains can be proved. Where long-term utility exists, initial outlays for development can be deferred in a company's financial statements for a number of years.

The increased importance of expense saving under GAAP will also lead to more thorough analysis of home office activities. Each will be measured for its effect on company objectives. Priorities will be given to those activities which are shown to have the greatest long-term benefit.

In the past, where a company had a choice of two courses of action, each might have been measured for its ultimate effect on statutory surplus, and the one chosen, surplus allowing, might have been selected for subjective reasons. Under GAAP accounting, the two courses of action will be measured with respect to their statutory surplus and GAAP earnings effects. Surplus allowing, the choice will be influenced by projected GAAP earnings.

MR. CHARLES B. H. WATSON: I will discuss the implications of GAAP for relations with the external public. By "external" I mean combining externality with respect to the insurer and externality with respect to the actuary. Hence I will be talking about those publics that are external to us both as employees and as professionals. By way of preamble, I should point out that these remarks obviously represent only my own personal opinion.

In large measure, GAAP is of importance with respect to our relations with external publics because GAAP is regarded as being "new." It is believed generally that GAAP will tell, for the first time, the real truth with respect to the earnings of the life insurance companies. Consultants have long been aware of a deeply felt need or desire for the whole truth about company earnings. We have been approached at one time or another by a stock analyst asking us to tell him how to determine the real earnings of a life insurance company, or what the company was really worth.

Even though many persons may believe that GAAP tells the truth, it does not really tell the whole truth. Under GAAP we are dealing with reserves that are "satisfactory" only up to a certain confidence level, and the earnings that emerge are conditioned by the choice of confidence level. This creates a major problem of communications.

The primary art of communications always is to eliminate or minimize the noise or static that confounds the underlying message. The major task of the actuary will be to minimize the static about earnings that inevitably will result from the introduction of GAAP.

In the United States we have all heard over and over the reasons why the introduction of GAAP is viewed as necessary. I will not reiterate these reasons. In the afterdawn of GAAP, the major responsibility of the actuary, as an employee and as a professional, will be to reconcile what appears to be the new view of insurance companies as "earnings machines" with the traditional one of insurance companies as providers of security services to the general public.

Consider the various publics that are involved. First, as always, there is the government. Governmental concern with respect to GAAP has two aspects—solvency and taxation.

Solvency considerations relate to the recognition that will be given to published GAAP statements as compared with published statutory statements. At the very least, it will be necessary to achieve some form of reconciliation between GAAP and statutory figures, and certainly to make cautionary statements if GAAP reserves are less than statutory. This sort of reconciliation may be difficult to achieve in view of the different emphasis for the two types of statement. GAAP emphasis is on the income statement, whereas statutory emphasis is on the balance sheet.

Here is an opportunity for the actuary. We have all recognized that statutory requirements are not defined clearly in a number of areas and perhaps even are inadequate in some. If an actuary, for the purposes of GAAP, constructs reserves for the major statement items on a basis which is adequate up to a certain confidence level, it then behooves him to carry out the same type of exercise for the entire range of actuarial items.

The problem posed by taxation is obvious but very uncertain of resolution. Federal authorities, both in Canada and the United States, presently accord a somewhat special tax position to insurance companies, based on a rather artificial definition of taxable earnings. Now, if GAAP does what it is supposed to do and advances earnings so as to produce higher "real" earnings in the early years, will there not be pressures for the government to obtain its "fair share" of these higher earnings? There could also be pressures from the tax authorities to expand GAAP to mutual companies.

The second obvious public which will be concerned with GAAP figures is the stockholders and potential stockholders. After all, the entire GAAP exercise was carried out largely on their behalf. From the stockholders' standpoint, GAAP will serve to focus attention even more on the apparent emerging earnings of the company. Earnings are in large measure the purpose of any economic enterprise, and, at least traditionally, higher earnings have led to increases in stock prices. However, earnings are not the entire story for any economic enterprise, and certainly not for an insurance company. The operations of an insurance company do depend to a certain degree upon the public trust, and hence every insurer must offer services that repay that trust. In the case of an insurance company, the actuary is to my mind the guarantor of product safety. He is the one who must be concerned if too much emphasis on earnings obscures the interest in the repayment of the public trust.

Earnings usually must be distributed in order to be appreciated. I suggest, therefore, that there is a danger of insurers being induced to distribute too much surplus in the form of dividends. Obviously, surplus cannot be distributed below the level of reserves required for statutory purposes. However, if on a GAAP basis a substantial amount of surplus is being reserved to meet statutory requirements, there may be many who feel that it is enough to hold only that surplus and to ignore the need for general contingency reserves.

With respect to a third audience, the policyholders, GAAP has a somewhat different impact. Higher earnings for an insurer may lead to increased investor interest in that insurer. However, an astute policybuyer may direct his attention to the source of those earnings. Up to the present, there has been no need to focus upon earnings, because they have in large measure been disciplined by the requirements of the regulatory authorities. In the future, however, GAAP earnings will in large measure be considered "free," and it will not be surprising if policyholders as well as stockholders look more closely at them. High earnings of an insurer will not necessarily be a positive disincentive for sales but will be a new element entering the sales equation. How do you persuade a reluctant buyer that an apparently high margin of earnings is not in some manner contrary to his interests? The policyholders who react in the manner indicated usually will be the more sophisticated policyholders who in the long run represent the best market for the insurer.

Another problem GAAP may create with respect to policyholders can be found in the possibility of pressure for higher early dividends. If earnings are apparently higher in the early years, why should not these earnings be returned in some manner to the policyholder?

A fourth public to be considered is the company's agents and, in this instance at least, the interests of agents are, I believe, closely related to those of policyholders. An agent naturally enough wishes to sell policies, and higher emerging earnings for the insurer may not be a sales plus in his eyes. This may be of particular importance in the case of brokers who can shop around for the most appealing contracts.

A fifth public for whom a correct emphasis on the meaning of GAAP will be of extreme importance is the personnel of the company itself. Completely aside from any consideration of the extent to which there will be greater pressure to base salaries and bonuses upon apparent emerging earnings, the interrelationship between earnings and service that must be the hallmark of a good insurer will need careful attention. Certainly an emphasis on earnings can be an excellent discipline, leading to improved efficiency and elimination of waste. However, service has also long been an important characteristic for an industry which is so involved in the general interest. Too much emphasis on earnings therefore can adversely affect the morale of those employees who have considered that an important part of their role is to provide service.

The general public will show many of the same concerns as company personnel. The persisting view of the general public has been to regard insurers, like banks, as service industries. Thus too lavish an attention to the earnings results of insurers could in the long run lead to a lessening of the public standing of the industry and perhaps to more governmental controls.

I will turn now to the impact of GAAP on the professional relations of the actuary. In the area of the relationship of the actuary with the accountant, the problems and opportunities that exist are obvious. It is my view that the thrust of the accountants has been, intentionally or otherwise, to extend their sphere of responsibility and, by so doing, potentially to diminish the sphere of responsibility of the actuary. The audit guide in the United States does suggest that actuarial expertise will be needed by the auditor and in fact urges the use of this expertise. However:

1. The auditor is to be the sole judge of whether an independent actuarial opinion must be obtained.
2. The auditor is to be the sole judge of whether he is satisfied with the actuarial material he has received.

3. Since the auditor is to be solely responsible for the correctness of the statements, the actuary cannot be mentioned in the auditor's opinion paragraph, and can be mentioned at best tangentially in the scope paragraph.
4. There is no requirement, no urging, not even a suggestion, that it would be useful for an actuarial statement to be published as part of the statements of the company.

As a perceptive foreign observer recently pointed out, the audit guide refers to the use of the actuary much as we might refer to the use of a computer or of commutation tables. A committee has been established to discuss relations between accountants and actuaries, and this committee will undoubtedly play a very useful role. A diminution in the significance of the actuary's role within the insurance industry seems inevitable unless immediate steps are taken.

The last of the publics I wish to consider is ourselves, the actuaries, as professionals. The fundamental problem is for us to recognize ourselves as professionals and to recognize the responsibilities that this entails, not just to ourselves and our profession, but to the public as a whole. In this area the actuaries of Quebec have given us a fine lead.

The introduction of GAAP, with its emphasis on earnings performance rather than security performance, will force us to emerge from behind the shelter that the statutory requirements have long given to us and to look more closely on what we are and what we are doing.

GAAP will force us to focus on the true nature of the statistics and parameters we employ. In other words, it will force us to see them as maximum likelihood estimates lying in a range of possibilities, rather than as single-valued assumptions. If the goal of our profession is to assist in the making of wise financial decisions in the face of future uncertainty, this cannot be anything but an important step forward.

GAAP will force us to define and codify those actuarial principles and practices that are appropriate to the work of our profession within the insurance industry. If we are to gain any credence in the eyes of the accounting profession or, for that matter, in the eyes of the general public, we must have such definitions and codifications. The Recommendations and Interpretations promulgated by the Committee on Financial Reporting Principles of the American Academy of Actuaries make up a body of "generally accepted actuarial practices" which are meant for the guidance of our profession.

GAAP will force us to come to grips with the ticklish question of independence, for this is the other nettle that the accountants have thrust upon us. Who is independent? When is an independent actuarial audit needed? What should be the final use of the certificate resulting from an actuarial audit? These are all questions which we can no longer ignore.

Finally, GAAP will force us to pay more attention to our responsibility for preparing sound figures that pay proper attention to the divergent interests of policyholders, stockholders, and all our other publics and to our responsibility in making certain that these figures are indeed used and are not misused.

Fundamentally, this means that we, as professionals, bear a heavy responsibility to ensure that, in all the welter of communications about GAAP, the voice of the actuary is heard loud and clear in the land.

MR. ROBERT M. ASTLEY: I will give a brief history of Canadian developments relating to financial reporting, comparing it with the United States experience, and will touch on those issues which currently seem to me to be of fundamental importance in Canada, following with some thoughts on the consequences for the Canadian actuarial profession.

Developments in Canada have been discussed at several concurrent sessions. For background information see the "Adjusted Earnings" discussion of Derek Eckersley (*TSA*, XXIII, D687) and of our chairman, Michael B. Hutchison (*TSA*, XXIV, D741). Four significant conditions in the Canadian environment which differ from those in the United States and which will have a major impact on the ultimate course of financial reporting in Canada are as follows:

1. There has been a relative absence of pressures for unqualified audit statements prepared in accordance with GAAP from stock exchanges, the SEC financial analysts, and even stock company management.
2. The role of the actuary in the preparation of financial statements is more firmly established.
3. Supervision of the insurance industry in Canada has been more centralized and somewhat more flexible.
4. Mutual companies are relatively more important in the Canadian market, and the types of business issued by Canadian stock and mutual companies are similar.

The Canadian Institute of Chartered Accountants has issued its research study on financial reporting for life insurance companies. This study does not carry with it the same sense of urgency as an exposure draft and may be regarded as more of a "trial balloon" designed to generate discussions and further study. The CIA Committee on Financial Reporting last month presented to the Institute's Council its report, which was approved for publication and discussion. The Canadian Life

Insurance Association has also published its report. The stance adopted by the CICA research group was quite similar to that of the American Institute of Certified Public Accountants audit guide, with the notable exception that their proposals would apply to both stock and mutual companies.

There are three fundamental issues within the whole question of financial reporting in Canada. The CICA research group recommended that no reference be made in the auditor's certificate to the utilization of actuarial expertise, and that the auditor giving an opinion about the financial statement as a whole be required to satisfy himself as to the appropriateness of the actuarially determined items. It was suggested that the auditor might need to utilize the services of consulting actuaries in his review of the statement. The CIA committee took the position that the actuarial items in the statement are solely the responsibility of the actuary. Consequently, it proposed that the actuarial certificate be published and that the auditor be encouraged to refer to the actuarial certificate in his report. In order to make this approach feasible, the actuarial certificates would be amended to shift the emphasis from "sufficient" policy reserves to "appropriate" reserves. The proposal was also made that the actuarial certificate should render an opinion as to whether the operating income and retained earnings were properly and fairly stated. This, in effect, would require the actuary to take all elements of the financial statements into consideration.

An unbiased view of the situation would suggest that both professions have good arguments. It is earnestly to be hoped that the discussion on this topic does not degenerate into a squabble between the two professions and that the abilities and responsibilities of both parties are taken into account.

This controversy over the auditor's opinion has an interesting parallel in actuarial valuations of pension plans. The Committee on Private Pensions of the CIA has developed a recommended actuarial certificate for submission to provincial pension authorities and tax authorities. An early draft of the certificate stated that the valuation was based upon data supplied by some party (typically the employer). No opinion was called for regarding the suitability of the data. The final draft of the certificate, which has now been accepted by the Council, states: "On the basis of data which I consider sufficient and reliable, I hereby certify. . . ." The point I am making is that auditors are in the same position in giving an opinion regarding life company financial statements as pension actuaries are with respect to actuarial certification. Both must take responsibility for all aspects of their opinion, and I believe that the actuarial profession realistically cannot expect the auditors to issue "unclean" opinions.

On the question of policy reserves, the CICA study recommended that net level premium reserves be held, with deferred acquisition expenses held as an asset. Acquisition expenses eligible for deferral would be those recommended by the Life Office Management Association, namely, commissions and medical and inspection fees. On the other hand, the CIA committee recommended that the policy reserve system effect a complete matching of income and expense, with all acquisition expenses being eligible for deferral if they are deemed to be recoverable. In their suggestion the expense element of the policy reserve would be an integral part of the reserve calculation. The committee also put forth the suggestion of an appropriation of retained earnings which they termed "solvency safeguards," in the amounts necessary to ensure the company's ability to meet its obligation.

The third area, which in my view has not received sufficient attention in the United States or in Canada as yet, is the question of asset valuation and recognition of investment income. The CICA study recommended a continuation of present book-value practices, with realized capital gains and losses being taken immediately into income. The CIA committee suggested that this area required further study and that a broadly based committee with representatives from all the interested parties be charged with the responsibility of recommending an appropriate valuation basis and appropriate treatment of capital gains and losses. It is interesting to note that the AICPA audit guide was unable to come to grips with this question and presented several acceptable alternatives, "until such time as generally accepted accounting principles for investments are more clearly defined by an authoritative opinion of the Accounting Principles Board or its successor." The accounting treatment of all aspects of the investment operations has such a major effect on the entire financial statement that it is most important that this subject be researched adequately before general changes in financial reporting are put in place. The actuarial profession has a responsibility to see that this is done and that proper recognition of the relationship between the two sides of the balance sheet takes place.

Let us now look to the future. Most would agree that significant changes in life insurance company financial reporting will occur in Canada within the next five years. Stock and mutual companies will probably report in similar fashion, and much more information will be disclosed. Arbitrary and hidden adjustments by management on a year-to-year basis will probably disappear. There appears to be a good probability that a single statement will be the rule, with appropriations of surplus to meet regulatory requirements or to satisfy management or the actuary spelled out in the statement.

Whatever reporting standards emerge, actuarial research probably will receive substantially more attention. Answers to perennial questions such as, "How much surplus is enough?" and "Are premiums adequate?" will be sought after, stimulated by the transition to GAAP statements with their apparently large surpluses and deferments of acquisition expenses in some form or another. In this regard, corporate models will probably become a more frequently used tool.

Actuaries will be forced to give more attention to the balance sheet as a whole in order to make intelligent decisions about the issues. More attention will be paid to the sensitivity of balance-sheet surplus to economic conditions. This is an area where life company actuaries can learn from consulting actuaries, many of whom have been heavily involved in recent years in investment performance measurement, adjusted asset values, and cash-flow matching of income and disbursements. For those actuaries who are interested in the relationship between the two sides of the balance sheet, I highly recommend Irwin T. Vanderhoof's paper entitled "The Interest Rate Assumption and the Maturity Structure of the Assets of a Life Insurance Company" (*TSA*, XXIV, 157).

One of the more positive impacts of the changes which are likely to result is the stimulation of thought and dialogue on the question of independence of the actuary. In the past there has been very little thought given to conflicts of interest which might trouble the in-house actuary. A shift in emphasis from sufficient reserves to appropriate reserves, as one example, will cause some difficult questions to arise. In any case, insurance company actuaries will find themselves in the position of being required to explain and justify their actuarial assumptions and methods to outside parties.

The actarial profession in Canada should have no fear about the changes on the horizon. The somewhat constricting effect of statutory accounting has in the past inhibited imaginative and professional work on financial reporting, and the opportunity to participate in these changes should be welcomed.

MR. DAVID A. WRIGHT: Is there a feeling that the GAAP surplus, with its distributable and nondistributable portions, constitutes a backward step with respect to the disclosure of useful information?

MR. ASTLEY: The worst thing that could be done in the change to GAAP statements would be simply to replace the traditional statements without adequate explanations of the inferences to be drawn. The real challenge in the transition will be to communicate effectively with our publics.

MR. DANIEL F. CASE: We have seen some examples in recent months of corporations in other industries omitting a shareholders' dividend for the first time in decades, following which there has been sudden widespread concern and the price of the stock has plummeted. Perhaps if there had been fuller disclosure of these companies' liquidity or cash-flow problems, the sudden panics could have been avoided. There may be a parallel with disclosure of statutory figures in the life insurance business.

QUESTION FROM THE FLOOR: The report of the CIA Committee on Financial Reporting strongly recommends the use of a single set of statements and a single reserving system for all purposes. Would someone care to comment on the probability that this desirable goal will be achieved?

CHAIRMAN MICHAEL B. HUTCHISON: I hesitate to speculate on such subjective probabilities. However, the most significant factor which may lead us to the achievement of this goal is the fact that all the parties involved seem committed to it.

Whereas in the United States statutory accounting was virtually discarded from the very beginning, in Canada all parties seem to be agreed that a single set of statements is the only result that would have any credibility. The CIA committee, the CLIA committee, and the federal superintendent of insurance have all strongly urged the use of a single statement. The accounting profession is perhaps less definite, although the chairman of the CICA study group has cited as patently ridiculous the publication of the GAAP statement at the top of the page, the statutory statement at the bottom of the page, and the auditor's certificate in the middle, claiming that they are both right. As long as we all share this goal, compromise among differing views is possible. In this regard, the federal superintendent of insurance has taken the initiative by recommending at a meeting of the CLIA last week that a committee representative of all points of view be established to seek that compromise. Perhaps Superintendent Humphrys would like to comment on this.

MR. RICHARD HUMPHRYS: In any discussion of financial reporting for life insurance companies, the Department of Insurance finds itself inevitably involved, both because of statutory requirements applicable to valuation of assets and liabilities and the requirements concerning the form of statement to be submitted to the department for supervisory purposes. We in the department think it is desirable to have one statement form for all purposes, if this can be achieved; we are still hopeful that a suitable solution can be found. The main problem is one of disclosure so that the reader can understand clearly what is going on and make his own interpretation of the facts. A great deal of work has now been accomplished in this direction on the Canadian scene, and it should be possible, by pooling all the ideas of those who have applied themselves to the question, to find an appropriate solution.

It is to be emphasized that the discussion concerning earnings is one of presentation. Some of the earlier remarks would lead one to think that the matter at issue was a change in the earnings of life insurance companies. However, nothing that can be done in the way of financial reporting is going to change the actual earnings of the company; we are dealing only with a question of presentation.

In connection with a presentation of earnings, one of the earlier speakers mentioned the discussion that is now going on in relation to accounting in other types of companies, particularly in regard to problems caused by inflation. I think that this presents a fascinating development, particularly in the context of the discussions that we have been having concerning the presentation of earnings of a life insurance company. It seems to me that moves in relation to so-called inflation accounting are exactly in the opposite direction to those that are being advocated concerning life insurance accounting.

One of the problems being explored in connection with inflation accounting is the effect on earnings that arises where the inventory is carried at cost price but is being sold at current market values. The result is a large profit where values have risen sharply because of inflation. This is a real profit, since it represents the difference between what was paid for the goods and what the goods were sold for. However, it may not be representative of the profit in future years, because the inventory will have to be replaced at a much higher value; consequently, the profit being shown in traditional accounting methods is very large and can be misleading if shareholders and others take it as being representative of a continuing pattern. As a consequence, it is proposed to report earnings not on an actual basis but on an adjusted basis in order to avoid misinterpretation of the apparent high earnings. In talking about reforms in life insurance accounting, it seems to me that the move is in the other direction. The pressure is to report what are considered to be actual earnings, regardless of the fact that these are not available for distribution and may mislead some people concerning the earnings that must be held back to meet the exigencies of the business.

THE ACTUARY'S ROLE IN MARKETING

1. What are the panelist's experiences as to the role of the actuary in marketing efforts?
2. What characteristics of a company and its markets determine the nature of the distribution system (e.g., PPGA, managing GA, full-time agent, career/managerial, brokerage)? What are the financial commitments required by the various marketing organizations?
3. How are ongoing marketing costs and field office development costs differentiated, and what are the proper ways to handle each
   a) Generally?
   b) In pricing the product?
   c) In accounting treatment (as in GAAP)?
4. What possible approaches to the financing of new agents have been encouraged by the advent of GAAP?
5. What techniques have been or are being developed to determine the profitability of individual agencies? Has the profit-center concept been implemented successfully in any field compensation agreements?
6. What techniques have been or are being developed to determine the profitability of individual lines of business?

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MR. WALTER S. RUGLAND: If I may be allowed to define marketing as all of those processes which take place between the creation of the product concept and the payment by the buyer for the delivered product, I think we have a great situation for circular reasoning, rationalization, or what have you. That is why I think this issue in question 2 of our program outline is so important. Let me rephrase the question: What do you need to know to decide what distribution system is the right one?

Let us start with the premise that there are many types of distribution systems, and all of them can work. What is the circular aspect of the issue? I think it is simple—given the distribution system, I can build a company and identify its markets. Given the markets, I can design a distribution system and probably provide a company. Given a company, I can then suggest markets which might fit the company and the subsequent distribution system.

I feel personally that a company needs to examine its philosophy and its long-range goals and aspirations in order to determine the markets it wishes to penetrate and the method of operation it wishes to use.

Some of these goals and strategies would include the profit objective, the range of products or services it wishes to sell, its pricing strategy and risk-taking capacity, its need for recognition, its own self-image, its location and expense commitments, its financial resources, and many more.

Let us start at the other end. Let us look at distribution systems. I classify distribution systems into two types: those which are primarily "seller"-oriented, where the desire to buy is kindled by the seller, and those primarily "order writer"-oriented, where it is kindled by the buyer.

The seller-oriented distribution systems can be split into two types: those where the sellers are home-grown and those where the sellers are purchased. Home-grown seller distribution systems are basically well controlled, exhibit loyalty to the nurturing mother organization, and seem to exhibit a philosophy of "sales and service." They recruit, hire, train, motivate, and support the salesman. In life insurance this is done through nurturing of career life insurance men either as agents or as representatives doing "consulting" work for sales partners who have provided the prospects. This type of seller can be managed in several ways, for example, through the company-controlled branch office system or through the locally controlled general agencies which have franchise agreements with life insurance companies.

The basic strategy of a distribution system which features "purchased sellers" is to find and recruit mature, developed salesmen. The offerings made to these men may vary, but they touch primarily on four areas: product uniqueness and flexibility, competitive price, meaningful support, and high income possibilities. We see this type of distribution system within the life insurance business in the personal producing general agent (PPGA).

A distribution system geared to order-writing builds its market penetration on a third-party correspondent, broker, or sponsor or, in some instances, on an external requirement which forces purchase of the product. The market target for this type of system is this third party. The success of the approach depends on the ability to attract the attention and therefore the business from him. This is done primarily through price or product or convenience or some or all of these. Normally, each sale is independent of any other activity. There is seldom loyalty or a dependable relationship among the buyer, the broker, and the company. One of the toughest aspects of this type of distribution system is trying to identify where the company role ends and the buyer role begins. The insurance broker is in the middle of this debate—does he represent the company or the buyer? Also, does he create the need for the sale, or does he respond to a request from the buyer?

MR. MARTIN L. ZEFFERT: Sometimes a choice of a distribution system is not exactly a negotiable item. My own company, Fidelity Mutual, which pursues a total financial planning sales philosophy, has spent the last ten years shifting from a general agency to a career agent managerial type of operation. The very significant investment in salaried staff, including professional staff at the agency level coupled with the cost of the physical plant, offices, equipment, and the like, would seem to preclude any other choice of a distribution system for us. No general agent has the money to go this route, nor would he be likely to if he did, since the payoff seems too far away. In terms of dollars and cents the decision I am talking about is probably the second most important decision my company has ever made, and, from where I sit, the jury is still out as to its success. There are encouraging signs, but you wonder how a high-overhead operation can keep ahead of the cost inflation we have experienced.

A new company would evidently lean to a PPGA operation. My view is that the PPGA is likely to be the most economical way of securing business for a new or established company, but the business that is produced is not likely to be heavily concentrated in employee benefit plans and more involved business-type cases. The average size of policy issued will be smaller than that of a total financial planning operation, but here you have to weigh the disadvantage of unit cost against the relatively large over-all acquisition cost. My own experience with the managing general agent has been that he secures the best of all worlds. He obtains the prerogatives of a general agent, especially vesting of commissions, and is busily negotiating subsidies to take care of the drain of start-up costs, training and development expenses, and so on. I recall being surprised when we were a general agency company to learn that what had been a "successful" agency for over twenty years was still receiving a "new organization expense allowance" supposedly given only to new, starting-up general agencies. It may be that the agency management of our own company historically has not been as efficient as those of some other companies, but I suspect strongly that they are representative of what goes on in all too many full-time general agency operations.

Probably one of the more encouraging signs in the general agency field has been the move over the last year or more of one large company that set up a sales corporation which in effect becomes a partner of every one of its general agents; if this works, it is likely to be one of the most significant changes we have ever seen.

I have not said anything about a brokerage operation, perhaps because my own company does very little brokerage. Brokerage seems to require a highly competitive ratebook and a skilled group of brokerage sales representatives. Breaking into the brokerage market is not an insignificant investment, and we determined long ago that we did not have the funds to try it even if we wanted to.

Nothing has been said about nonagency operations for distribution of life insurance and its companion products, but there have been significant developments in mass marketing by a number of companies over the last five years, and I do not know what will happen here. It seems apparent that you can sell very large quantities of low-premium life insurance, term and otherwise, especially under the sponsorship of a third-party affinity type of organization. What the limits of this activity are, if any, I do not yet know. I would think that the development of the high nonmedical limits used today, the availability of paramedical facilities, the growth of health maintenance organizations, and other factors should lead to a breakthrough in the problem of securing some evidence as the attempt is made to market larger amounts through nonagency methods.

MR. C. DAVID SILLETTO: I would like to use two specific company situations which illustrate how the characteristics of a company and its markets can determine the nature of its distribution system. The first example is that of Lincoln National Life itself. Until last year the company had been essentially a traditional general agency company. In 1972 we initiated an over-all review of that general agency system in the hope that we could make some significant improvements that would generate additional sales growth in the coming years. This led to an extensive reorganization of our general agency system that was announced in June, 1973, and implemented between then and the end of the year.

In reviewing the existing system, we found two basic shortcomings or difficulties in it. The first was that a traditional general agent's contract was an inefficient mechanism, both from the company and the general agent standpoint, for providing sales management revenue when it is needed and on the most effective basis. At the one extreme, a new general agent, particularly if he is effective, needs substantial revenue to build his agency long before it is provided by the renewal stream of a typical general agent's contract. The only way to circumvent this is to loan money to the general agent, and this creates problems for both the company and the man. At the other extreme, an established general agent with a mature contract has almost no incentive to invest further money in building his agency. In fact, he can generally live comfortably on his renewal income even if new business is declining. Ironically, this often happens when his business experience and reputation in the community would make him most effective, if only the financial motivation were there to continue expanding his operation. The problem is compounded at retirement, when his status as a sole proprietor makes it difficult for him to take advantage of many of the tax-favored security provisions that exist today for corporate employees.

In addition, we found that the traditional general agency system was at best a cumbersome way to provide for the kind of support and service that are needed to market our complex products effectively in the current environment. Very often the general agent himself was either unable or unwilling to finance the necessary marketing support with his own money. To compensate for this, we provide the support with company money but, for obvious reasons, retain the control of that support. During our review we realized that since World War II we had not developed a single new product line where the basic control of the marketing effort was in the hands of the general agent. In each case, we had built a staff of market specialists financed and controlled by the home office. This would apply to such important product lines as group insurance, pensions, and variable annuities.

In an attempt to solve these problems, we reorganized our complete marketing structure. We began by setting apart the entire direct marketing operation of the company in a separate sales corporation. This sales corporation has executed a general agency contract with the life insurance company, which, after a transition period, will become an exclusive contract. All general agent overriding commissions now flow to the sales corporation under the terms of that contract, along with all home office marketing costs inherent in the rate structure. That sales corporation then jointly owns incorporated local sales agencies as a partner with the former general agent. The latter serves as the president of that local corporation, earning an incentive formula salary much the same as a branch manager's salary. During his active career we own 80 per cent of the corporation and provide the capital and revenue to operate it. In return for his efforts and a token capital investment, he owns 20 per cent of the agency. This 80 per cent ownership enables us to consolidate all the agencies with the sales corporation for tax purposes.

At retirement, however, the agent is guaranteed a buy-out of his ownership in the agency for $2\frac{1}{2}$ times its book value, or 50 per cent of the total.

The revenue flow of overriding commissions and expense allowances goes from the life company to the sales corporation as premiums are received. That portion of the expense allowances needed to operate the sales corporation itself is used accordingly. The overriding commissions and the remaining expense allowances flow down to the local agencies on the basis of premiums generated. In addition, the sales corporation, using capital contributed by its parent holding company, adds a discounted value of the renewal commissions to the first-year commissions, so that the local agency receives all its revenue in the year of sale. The local agency becomes an easily measurable profit center, and at no time does its financial position depend on a deferred income asset. This revenue flow is complex but is managed by a sophisticated computer-based system.

At the other extreme, our New York subsidiary was found to be in quite a different situation. Attempts to build sophisticated career agencies had proved relatively unsuccessful when compared with the cost. For various reasons, a broad product line was either unavailable or unwise. For example, regulatory problems made it difficult to include equity products such as variable annuities. Underwriting losses were incurred on group insurance that made it seem imprudent to continue that line. Accordingly, we have narrowed the product line to individual life and health coverage and focused our marketing efforts on personal producing and brokerage general agencies. We have added sales support facilities in the home office for the product lines we offer. The results have been gratifying, with both sales volume and earnings improvement.

MR. RUGLAND: I feel that there is no general way to handle marketing costs and field development expenses. Likewise, on a generalized basis, I do not feel there are any proper as opposed to improper ways.

The approach to differentiating marketing costs from development costs varies over a broad spectrum. At one extreme, all costs are treated as normal expenses, charged year by year and budgeted on a recovered expense basis. At the other extreme, as much of the marketing expense as possible is capitalized. (The fact of the matter is, however, that there is no such thing as actual capitalization, since the statutory accounting requirements determine the surplus of a company and that surplus seldom is allowed to go below zero. Therefore, you must have a surplus to spend before it can be spent.)

Let us clarify the situation somewhat. The basic issue seems to me to be what portion of total field expenses, both operational and developmental, is going to be ignored in the current-year budget. In other words, what dollars are going to be charged against future income flow hopefully generated by the investment of those dollars in this year?

Some companies attempt to build them all into the current-year budget. These companies have mature field forces; the expense is basically to maintain them at their current level with normal growth. Other companies may be attempting to establish new markets or new distribution systems, and this one-time expense, an attempt to accelerate their growth, is capitalized logically for recovery in later years from the income flow generated by the expense.

How does this budgeting consideration flow through to the product pricing? I think it is fundamentally a question of how much of the total operational and developmental expense should be recovered in the premium-per-thousand charge to the current buyer. Should the business we sell this year generate enough expense dollars to pay for the expenses we incur during this year, both operational and developmental, or should a portion of the developmental expense be allocated to business to be sold in future years? If the latter is true, what interest charge should be assessed against the portion of current-year expenses not recouped on business produced in this year?

I have heard it said that the market determines the price. I think that this is true if the market is well defined in terms of the buyers and the distributors involved and the over-all environment surrounding the confrontation between seller and purchaser. If the market is defined as the price established by other companies for similar products, I do not think that market necessarily has to determine the price. If that were the case, then everyone's price would be the same. One of the concerns I have is that we are spending more time currently on competitive prices, and one of the incorrect assumptions that we have made is that all markets are similar. If this trend continues, we will find ourselves narrowing in on a single market with a single price; large segments of the population may be unserved by the life insurance business, because price will end up determining our markets rather than markets determining our price.

MR. ZEFFERT: An easy answer to the question of how to handle ongoing marketing costs and field office development costs is to allocate properly and handle accordingly. The problem is that we still are not able to do this correctly. Although it is quite easy to sort out salaries for new agents, fringe benefits, and the like, it is an almost insurmountable task to distinguish between ongoing marketing costs and field office development cost when it comes to salaried personnel supervising these people, rent, clerical salaries, telephone, postage, and so on, as well as field costs allocated out of the home office. There is the further complication of distinguishing between direct sales costs and so-called service costs, and I have not learned enough in my own company to advise others on this problem. Since the late 1960's, we have used the Life Office Management Association Functional Cost Studies, and each time we do we learn a little more and obtain greater insight into the problem. These functional cost studies do not dig deeply enough into field offices to really tell us the answer to this question. I have hopes that as these studies evolve and as better accounting systems become part of the insurance operation, we will know better how to allocate these costs. Right now we simply take the total LOMA functional cost results, spend considerable work in allocating them between first-year and renewal, and then translate them into per-policy and per-premium expense factors which are fed into our premium profit programs for each line of business.

Most of our field expenses are still couched in terms of first- through third-year commissions, and these functional costs are converted into that parameter as well, for the convenience of our marketing division. We break out field costs, home office marketing, and other home office costs along the way. I cannot contribute anything to GAAP developments, since I am with a mutual company and my interest is that of an onlooker and not a participant.

MR. SILLETTO: In light of our marketing reorganization, we had to give considerable thought to the handling of marketing costs on both a developmental and an ongoing basis. Ongoing marketing costs are covered by the flow of expense allowances from the life company to the sales corporation. These are determined by formula, separately for each line of business, and essentially related to first-year premiums. These marketing expenses are equivalent to those built into the premium rates themselves for the various product lines.

We will also be providing other funds for developmental purposes at the local agency level. In designing these programs, we became aware that we were really investing retained earnings in sales growth and not incurring expenses that can be supported out of competitive premiums. If these expenditures do not result in greater sales growth than we would otherwise achieve, then we have invested the money poorly. While these are difficult concepts, we have attempted to measure these things as carefully as possible, and we have instituted controls that will enable us to monitor the results in some detail.

The accounting treatment of these various transactions is complicated, but they have been discussed in some detail with our auditors. Some expenses flow directly to the bottom line. Others are amortized over the life of the business acquired in the year the expenses are incurred. A few items in the sales corporation are considered purely developmental and will be amortized over a five-year period. Beyond that, generalizations are difficult to make.

MR. RUGLAND: Techniques for determining profitability are related directly to the use made of the resulting determinations. I can list at least four distinct possible uses for profit results, and I am sure there are others:

1. When does a piece of business no longer create a loss when it surrenders? Here we need to look at the fund as compared with the available cash surrender value. The fund could be calculated with or without interest charges for initial surplus invested in the business; the calculation with interest charges would reflect the shareholders' position with regard to the surrender. I think that this can be an important calculation because in some instances the profits may be large at the later policy durations, and the size of those profits may belie the extent of the losses in the early durations—a change in the surrender assumption could easily undo the apparent profitability of a piece of business.
2. What is the average charge retained by the company (after expenses) for the risks assumed under the piece of business? This is the old direct margin calculation. We take the assumptions, calculate a net premium, then add a margin loaded for percentage expenses. The margin should vary by age, but we may approximate an average margin per thousand at risk and apply it to our total book of business or to the various pieces of that book. This is a good rule-of-thumb calculation. However, we must remember that it does not take into account the incidence of the profit or the value of any deficit financing undertaken in generating the profit in future years.
3. How well are we growing profitwise as a line of business? Here we need to develop an index—an aggregate index, probably—which relates the potential profit of the current-year production to that of the prior year and years before that. The present value of future profits calculation using an Anderson-type formula as a base can provide this for us. The important thing is to treat it as an index rather than as an actual value and to utilize it in that respect. It can be applied to a total book of business or to portions; but when it is applied to segments of the book of business, it must be done in relation to a standard that relates to that particular por-

tion to which it is applied. This is an ideal measure to use in performance evaluation of the operation and its officers. It can transcend the growth-oriented functions such as sales, actuarial and planning, and marketing, as well as measure the man who sits on the top.

4. How should we allocate the available surplus we have? How well are we using our surplus in our life operation? Here calculation of the internal rate of return on the investment in our business is appropriate. The formula ingredients are similar to the present value of future profits calculation, except that we solve for the interest rate that makes the present value equal to zero. In this period of great demand for one-time expense, company management should be extremely interested in the return-on-investment calculation because it helps determine the value of competing projects.

I feel that all these examples (and I am sure there are others) need to be considered by management as ways of determining profitability of individual lines of business. The real management job is deciding on the weighting that should be assigned to each in any given situation.

MR. ZEFFERT: The technique that my company uses to determine the profitability of our individual lines of business is based on the paper "The Measurement of a Life Company's Expected Profits," by Stuart A. Robertson. This paper was presented at the spring meeting of the Actuarial Club of the Pacific States, June 10, 1964.

The basic approach in this profit analysis is to determine the expected operating gain for each policy year, per thousand of insurance issued, discount that gain back to the date of issue, and then sum those discounted values. In addition, it provides similar treatment for each of the components of the operating gain. Thus, for any required number of years, we will have the present value, at the date of issue, of expected premium income, expenses, claims, surrender-value payments, cash-value or reserve increases, and so on. The accumulated gain per unit of insurance still in force, in other words, the asset share surplus, is also produced.

By varying the assumptions (face amounts, mortality, expenses, lapses, interest rates, tax rates, etc.), the basic approach serves as a useful tool in the determination of price, once a profit objective is chosen, and the determination of profit, given a gross premium, for our ordinary, pension, and term products. The health insurance profitability is determined in basically the same way as the other profitabilities; however, there are some differences due to the nature of the health insurance claims that necessitate a special modification of the basic approach.

The health insurance profitability model breaks down claim costs into those that are short term and those that are long term. Life insurance profitability need consider only immediate claim costs. The nature of health insurance claim costs requires that assumptions be used for the estimated value of a claim as well as for the probability of a claim, and this makes internal calculations more complicated.

Regarding assumptions, both the basic profitability program and the health insurance profitability program use special lapse, mortality, morbidity, tax, and expense assumptions. All expense assumptions are the result of the internal application of the LOMA Functional Cost Studies.

We have been involved in trying to set up a system for determining the profitability of individual agencies. Our principal reference source has been the LOMA Report No. 19, entitled *An Approach to Measuring Profitability of Field Office Operations of a Life Insurance Company*. There was also a supplement to this report, No. 19A, handling some questions and answers. For those not familiar with it, the report is in two parts: Part 1, "Profitability of Current Year's Business," and Part 2, "Increase in Capitalized Value of Agents." The theory is that a successful agency does two things: it produces new business which presumably will be profitable eventually, and it develops new men who will produce such business in the future and hence make their development a profitable operation. There is always the question of the servicing aspect of an agency, and the report does not go directly into that element of an agency's operations but tries to cover it effectively in the two parts. We are trying to implement Part 1 of the report this year and so far have confined our efforts to an application on a Systems III computer facility. Our idea is to do Part I and then, if we are successful, attempt Part 2. Currently we envision this as a guide that we would provide each director of agencies, showing the relative success of his agencies, not as a direct determinant of managers' compensation.

No matter how one looks at it, a successful implementation of this report would give an evaluation of management performance, be of help in determining management compensation, provide some guidelines for field office expenses, and supply some evaluation of return on an agency operation, with an eye to expansion or contraction.

Part 1 is implemented by calculating modified asset shares using all general-overhead factors but specifically ignoring direct and allocated field office expense. Involved are persistency rates, product mix, mortality, and other factors. We have chosen to use company-wide mortality for each agency but each agency's own persistency rates. We are essentially using Anderson's method as outlined in his paper in the *Transactions*. Our reason for not putting the agency expenses directly into the calculation of these asset shares is the admitted inability to distinguish properly between ongoing marketing costs and field office development costs.

Part 2 of the report, which we hope to tackle next year, refers to the value of the sales people developed by the agency, and there one has to consider such factors as class of agent, type of contract, experience, age, productivity, agents' survival probabilities, average profit per thousand of business produced, and so on.

Theoretically, after you do Part 1 and Part 2, you then subtract from the sum of the two the expenses applicable to the agency, direct and allocated, and come up with what has happened in that agency over a year's operation.

I am not advocating this approach or criticizing it, but it is a viable way of determining the costs of an agency system. Consumers and regulatory authorities are demanding that we be more specific, and work on this aspect of our business is essential. Obviously Part 2 of the report is the more volatile, and in that respect the more dangerous if evaluated by an untrained critic. Agency operations in one locale hardly create meaningful averages and statistics in the way of manpower development. Recruit and train one good agent, and the average agency looks like a hero; lose one good producer, and the figures go to pieces. We are aware of these aspects of the report, and they are discussed quite openly in the questions and answers published, but, when viewed properly, the report still has much validity.

I know of at least one company that is implementing the profit-center concept in its field compensation agreements, and I suspect there are others as well. We are trying to develop the LOMA Report No. 19 numbers, but at the same time our company is engaged with the Life Insurance Marketing and Research Association in a procedure which hopefully will produce a new managers' compensation contract. With several of the same people participating in both operations, it is not surprising that many of the ideas used in agency profitability are appearing in suggestions for our new managers' contract. There is certainly a learning process at work, and we hope the implementation will be valuable to us.

MR. SILLETTO: Historically, at least in my company, the actuary's role in marketing was confined to product design and pricing. Perhaps his closest involvement with the marketing effort itself was that of reflecting properly the field compensation costs in the construction of the rates themselves. This often merely amounted to measuring in a relatively crude way such things as agent turnover in order to build in some reasonably accurate measures of the costs of renewal compensation. As to home office expenses, marketing costs were considered along with everything else and included in the general expense loading.

In more recent years, we involved actuaries in much more detailed studies of our expenses, categorizing them wherever possible on a functional basis, in order to add precision to our rate-making assumptions.

The tremendous expansion of product lines in more recent years has broadened further the role of the actuary in marketing efforts. Many of the products that can be classified broadly as relating to "advanced underwriting" necessarily do require more actuarial involvement. Pensions are an obvious illustration of this involvement.

In my opinion, this trend toward more actuarial involvement in marketing efforts has only begun and will expand greatly in the future. As both our product lines and our distribution systems become more complex, both the need for and the opportunities for actuarial involvement will increase greatly. In fact, I would suggest that, if the actuaries do not feel this obvious need, then others will.

MR. ZEFFERT: My own experience as to the role of actuary in marketing efforts includes the following:

1. Individual and group product design, pricing, philosophy, and underwriting.
2. Design of general agents', agents', and managers' compensation contracts, including fringes and subsequent negotiation with the New York Insurance Department under section 213.
3. Involvement in sales interviews with agents and prospects over a long period of years, especially in the employee benefits area.
4. Serving as the negotiator for the actuarial department on all marketing questions.

I was involved in this type of activity from 1948 through 1963, when I left the actuarial department to head insurance operations but continued some work along these lines, since group and pension activity was part of insurance operations. Since rejoining the actuarial department in 1971, my involvement with marketing is greater than ever.

Montreal Regional Meeting

MRS. ANNA M. RAPPAPORT: Why are actuaries interested in a panel on "The Actuary's Role in Marketing"? What has changed, and why? Typically, in the life insurance business, selling was the other side of the house, and marketing as we know it today was a dispersed and scattered function.

An article from the May, 1974, *Dun's* gives us a clue as to what is happening. It is titled "The Remaking of the Marketing Man: Planning for Profits Is Industry's Mandate for the Marketing Executive." I believe that the key to the actuarial involvement lies in the interest in profits; today the marketing man or the product line manager must be interested in the business in a number of different perspectives:

1. His customers and their needs must be defined.
2. A product must be supplied to meet those needs and in many cases must be developed.
3. Channels of distribution and service must be maintained to get that product to those customers and to see that the customers get the service they need.
4. The financial result of the total operation must be satisfactory.

When the functions of the marketing man are viewed in this total sense, then the actuary has a very important contribution to make.

It was possible to separate and diffuse these functions for many years. There are several reasons why this separation worked out reasonably well in the past, but these same reasons give us a clue that it may not work well in the future. The attributes of the business making this possible include the following:

1. The "life cycle" of our products is relatively high. Our basic products have changed very little over time.
2. Because there has been little innovation, there has been little competitive necessity to bring about change or innovate.
3. Our perception of our customer's needs has been quite stable. However, their needs probably have not been quite as stable as we think they have.
4. The method of selling and distribution has been stable.
5. Although internal service functions have been automated, the definition of service functions as between the company and customer has remained unchanged. Essentially we have automated those functions which we were doing manually, but we still relate to the customer in much the same way as previously.
6. The sale of the product frequently has been based on the personal relationship between the agent and the customer and on the services and advice provided by the agent, rather than on specific product characteristics or attributes.
7. Regulation has made change and innovation relatively difficult, and, in so doing, it has provided us with a rationalization for not trying to do more.

Working in this environment, the traditional pattern has been to build a sales management which is responsible for day-to-day production and for recruiting and training new salesmen. The sales management provides the support needed at the time of sale. Separate departments administer existing business, process new business, develop new products, and perform financial analysis. The responsibility for these functions comes together only at the level of the chief executive officer.

A number of forces operating outside the business have, however, brought pressure to bear and have caused many people to re-examine some of the "accepted" underlying assumptions. Some of these forces are indicated below:

1. Consumerism. The consumerists are asking us whether the public is being served well. They are questioning the methods of big business in all spheres.
2. The changing shape of the family. The two-income family as well as the single-income family is becoming an accepted way of life. The customer need is changing along with the different pattern of family life.
3. The economic climate is different. Inflation is an accepted fact of life.
4. Provision of more benefits by the United States government through the social security system. Some people feel that virtually all of the needs of some segments of the population are being met that way.
5. The fact that agents in some cases are having a difficult time earning a living. This results from many factors, including inflation and a shift to lower-premium forms of insurance.
6. The decrease in the share of the savings dollar going to the life insurance industry in the United States.
7. The fact that in many situations it is no longer economically feasible to provide for the needs of the average- and especially the lower-than-average-income citizen via the traditional distribution system.

Various predictions have been made concerning life insurance marketing in the future. The opening panel at one of the 1973 regional meetings was devoted entirely to that subject. I submit to you that the job of the actuary is to plan for the future, in order to move us from where we are now to where we want to be in the future. The predictions for the future involve a split in the distribution system between one appropriate for the sophisticated high-level markets and one appropriate for the upper-lower and lower-middle economic classes. This split will not be implemented simply by having two groups of agents. Rather, we are talking about two groups of customers with different needs and resources. We should be doing the research needed to understand these differences, so that we can meet both sets of needs with the available resources.

The life-cycle client account has been pointed to repeatedly as the expected dominant future sales vehicle. Implementation of this concept involves differences in product, method of distribution, service, and agent compensation. Actuaries should be planning the first steps needed to implement this concept. I know of only one company which to date has tried to implement this concept.

The two-income family is an accepted part of the American way of life. More than 40 per cent of the wives living with their husbands today are working. Regardless of this fact, how many companies are still gearing their products and approaches to family programming that recognizes families with one income only, and, in so doing, are neglecting the actual situation in many families?

These are examples of areas where the actuary should be active today. Given that we recognize the world is changing, it seems to me that the actuary should be part of a team that can work out alternative scenarios for the future and, having once worked them out, find the means to reach the desired objectives, being mindful at all times of (1) customer needs and how we meet them, (2) how we get the product to our customers, (3) what customer service is needed, and (4) how we can put the picture together on an economically feasible basis.

There are some problems to which actuaries should be addressing themselves at the present time:

1. Developing a method of handling a stop-and-go life insurance contract.
2. Developing a method of handling flexible payments in a life insurance contract.
3. Developing better tools for analyzing the trade-offs, and the costs and benefits of marketing life insurance, using various distribution alternatives.

MR. CHRISTOPHER S. MOORE: My company's viewpoint has been a fairly narrow one when it comes to marketing. We operate primarily through the branch office system, and we have done so as long as I have been there. Nevertheless, our viewpoint is not really that different from most of the large Canadian mutual companies and, in fact, from many of the United States mutual companies as well.

During the past few years as a marketing actuary, I have come to see the absolute necessity of a marketing actuary within each of our three major marketing divisions—Canada, the United States, and the United Kingdom.

Before we created the positions for marketing actuaries and separated them from their actuarial confreres, we had a distinct line drawn between agency officers and actuarial people. Every difference of opinion seemed to result in a battle rather than a discussion. It was quite common, and in fact I think it was quite understandable, for us, the actuaries, to gloss over our reasons for various decisions, simply to avoid those long-protracted arguments with agency officers.

The result of the change in our own company has been a more honest exchange of ideas between actuaries and agency officers, a better understanding on the part of both of each other's problems, and a much faster resolution of conflicts. Of course, much of this improvement may be the result of other factors, such as the personalities involved or the industry developments, but personally I would attribute much of the improved relationship in our company to placing actuaries in a marketing environment and encouraging greater agency involvement in actuarial matters as well.

I can see that there is no such thing as a *typical* marketing actuary. Marketing actuaries' roles range from the position of chief agency officer within a company right down to the actuary who occasionally addresses a group of agents or branch managers in order to explain products or practices within his own company.

Most marketing actuaries, however, find themselves with a multiple reporting relationship. To some extent everyone has a multiple reporting relationship, but I think marketing actuaries have it to a much greater extent, and they have it along with all the attendant problems of identity. I find that we are expected to act in the best interests of policyholders, agents, the company as a whole, and regulatory authorities, as well as to follow our own consciences and professional guidelines or ethics—not necessarily in that order. The actuary, with his broad insurance or pension background, is in one of the best positions to act in this capacity. He has been educated through his background and, particularly, through his experience to consider *all* implications of a problem or situation arising in the insurance business. Needless to say, he also has to have some kind of personality. Our own marketing people still like to talk about or refer to the traditional "codfish-eyed" image of the actuary, but I can assure you that they will not talk with one for very long—and they will not let their daughters or sons marry one!

Let us face it—the marketing actuary is almost in a position of a union-management negotiator. The only problem is that he also plays the role of the expert, which makes his bargaining position extremely difficult. In our own company, we have tried to alleviate that problem to some extent by moving some of the responsibility for technical expertise into a planning and control division, but, needless to say, the marketing actuary still has to be on solid ground from a technical point of view.

Sometimes I see the marketing actuary's role as that of a scapegoat. If rates or products are uncompetitive, then he becomes the whipping boy of the agency officers, the marketing departments, and the field force. On the other hand, if our rates are too competitive, we are in trouble with the actuaries in our planning and control division—in other words, in trouble with those actuaries whose primary responsibility is the profitability of the product and the solvency of the company. If the *policyholders* are dissatisfied, complaints from government authorities, consumerists, or even the policyholders themselves usually find their way to the marketing actuary's desk. Fortunately, as a result of our multiple reporting relationships and our very broad educational background, most of these situations are not clear cut, so probably we are in an excellent position to make the best possible decisions.

I would go so far as to say that the marketing actuary's real role is to act as the conscience of the company or the division—to balance the various interests as fairly as possible and to assist in establishing a sound marketing organization. In the March edition of *The Actuary,* Frederick Randall stated his opinion to the contrary, but I still insist that the marketing actuary must often act as the conscience of the company. That conscience, of course, as Jack Moorhead has suggested, would be "conscience without arrogance."

MR. GEORGE ALEXANDER: During the era in which I was the agency officer, the actuary was also the general manager and, therefore, my immediate boss. When I approached him with various proposals, such as agents' contracts, new financing plans, the opening up of new branches, a desire for new products, and the typical demands that seem to emanate continually from the agency officer, I could at least prevent him from giving me actuarial mumbo-jumbo as to why things could not be done. On the other hand, he was in the delightful position of being able to say to me that, while he recognized my duty, I really should know better than to suggest proposals that were not mathematically sound.

My experience did give me a very sympathetic concern for the problems which face the officer who is charged with producing the results. In our profession we are trained to look at all facets of a problem, to measure as best we can the probabilities of an event happening or not happening, and to take a very long view of things. After all, we are expected to guarantee certain values for thirty or forty years into the future. The agency officer frequently cannot afford to take a very long view. First, he is dealing with people on a very emotional basis and not with cold statistical facts. Second, he is under tremendous pressure to perform in his job and to perform in a short time. This tremendous pressure is on him all the time. The point I want to make is that the first role of the actuary in marketing efforts is to acquire sympathy for, or at least an acceptance of, the milieu in which the agency officer lives.

A further reason why I think the actuary should become involved, and I mean deeply involved, in marketing efforts is that he will quickly derive increased job satisfaction. It is quite a thrill to have a major role in designing a plan of insurance or a variable type of contract, working with the agency officer in seeing how this is presented to the field force, helping to promote the product, and then finding that within a very few months, sometimes even weeks, it becomes a resounding success. This is much more fun and much more satisfying than having to wait thirty years to see whether by some miracle the mortality and interest assumptions were even close to actual.

If a company's chief actuary and its chief agency officer can work together, knowing that they have essentially the same interests (and this is not too difficult in a smaller company), then many of the old conflicts which we have heard about simply do not arise.

Every once in a while our vice-president in charge of marketing gets a little rough with our actuary and makes almost impossible demands for improvements in product design or increase in commission structure. This is probably a good thing, for self-evident reasons. On the other hand, we put our actuary in a position where, when necessary, he has some ammunition with which to needle the marketing vice-president. He is supplied with regular production, recruiting, and persistency reports. It must be apparent, from my remarks, that I see the role of the actuary as involving a personal relationship as well as a technical contribution.

I have one suggestion to make, and, regrettably, this is in direct conflict with the slogan of our Society. In your efforts to contribute to the marketing operation of your company, you take into consideration the fact that, from a sales point of view, appearances and impressions are sometimes much more important than facts and demonstrations. Your new plan may be the best in the world, but, if it is going to be sold, it must look good. I am not suggesting that you mislead people, and you certainly must not prostitute your profession, but I ask you to remember this—emotion sells a lot more life insurance than does logic.

Finally, any role that an actuary wishes to play in this area can best be accomplished by his being placed physically in the marketing division of his company, where he can think, talk, eat, and sleep sales and sales promotion. I am quite confident that the traditional conservatism and mathematical precision of his background and training will always be there to act as a brake on any temptations he may have to promote wild ideas.

What do I see as characteristics which may determine a marketing or distribution system?

1. History and habits. Either the companies just grew that way, or many years ago a decision was made which proved to be satisfactory. So why change a distribution system which is achieving the desired results?
2. Corporate affiliation—the growth of the conglomerate, usually an alliance of fire and casualty companies with life companies. The idea of the "one-stop shop" is still being pursued rather vigorously, with the distinct characteristic of the corporate affiliation aimed for marketing.
3. The type of group loosely referred to in the United States as the Farm Bureau companies. In this case the company embarked on a deliberate policy to recruit captive, full-time salesmen selling life insurance and the personal lines of casualty insurance for one employer. This idea never really caught on in Canada, but in the United States the growth of this venture, beginning about fifteen years ago, has been absolutely staggering.
4. The formation or acquisition of a life company by a corporation in another sales or financial services line. I am thinking now of finance companies, department store chains, mutual fund distributors, tax service companies, and, almost surely in due course in this country, the trust companies and possibly even our chartered banks. These organizations are already doing business of a personal financial nature with millions of satisfied and loyal customers. The urge to be able to offer life insurance to this partially captive market must be irresistible.
5. The interest of the "pure" life companies in forming various subsidiaries in order to market some of the skills which they have acquired in areas other than life insurance. Many of our companies have had considerable success with equity-linked policies where the primary benefit depends, subject to minimum guarantees, on the performance of a segregated equity fund. Clearly all we are selling here is our investment expertise, and the life industry has a good deal of it. This is a first-class example of the role of the actuary in marketing. He gets full credit for designing a product which not only competes successfully with mutual funds but also carries the inherent guarantees which built the public reputation of the life companies over the last one hundred years.

   We have seen life companies forming data processing subsidiaries. Presumably the prime customer of the data company is the life company, but we do know these computer services are being sold to others and perhaps in due course will make a substantial contribution to the profits of the life company.

   Looking ahead, I would like to see the day when the life insurance company gets into the trust business. Our agents do a good job of estate planning and life insurance programming for their clients, all of which seems to suddenly stop at the point of death—certainly we find little, if any, use being made of our settlement options. It annoys me to see the executor or the beneficiary demanding cash from us in the settlement of a claim, following which he or she crosses the street to deposit the money in a trust company. Surely we are equipped to handle the family financial program after death equally as well as we plan for it prior to death.

6. Hunger for growth. The medium-sized or smaller company can, in its urge to grow, be more willing to experiment with and adopt two or more distribution systems simultaneously. In our company we depend on the branch manager/career agent system for the hard core of our sales but we also get between 25 and 30 per cent of new business through the good offices of our fire and casualty affiliate, by putting a trained life underwriter, preferably one who is most skilled at closing, into the fire and casualty branch office to encourage sales from the general insurance agents doing business with that office.

As to the second part of this question, I believe it is generally accepted that the financial commitment is heaviest in the branch manager/career agent system and probably lightest in the personal producing general agent (PPGA) system. Other methods of marketing are probably somewhere in between. I understand, however, that there are very few factual data on this subject, probably for the reason that it would be statistically inaccurate to compare the costs of company A's career agent distribution system with company B's general agent (GA) distribution system. Valid comparisons, I think, could be made only within the company, and this means, of necessity, the adoption of more than one system by a specific company. We have been performing a detailed cost analysis during the last two years to see how the new business acquired via the fire and casualty affiliate compares with that from our career force. Currently, the career system is the cheaper of the two, but remember that the other distribution system has existed only for four years, so that it is relatively immature. Had we compared that with just the new branches we opened in the last four years, I am sure the results would be quite different. We do know that the costs of acquiring new business are dropping each year and hopefully will in due course be equal to those of the career agent division. Again we have a problem in validating the data, since we do not think that the fire and casualty division could possibly be self-supporting on its own. Currently it has the advantage of being a marginal operation, since our existing head office plant and branch office services are already available and already self-supporting.

MRS. RAPPAPORT: There are a number of possible objectives for a field operation or agency. These include the production of new business, persistency, hiring and development of new agents, economical operation, and growth.

The compensation patterns of managers and GA's vary widely and, in terms of management behavior, probably reflect the strongest statement possible as to the company's opinion of what its objectives are. By your compensation system you are telling people what you really want them to do. Objectives may conflict—growth, hiring, and development of new agents are often in conflict with economical operation and with persistency.

The emphasis in full-time branch office companies probably has been most strongly on production of new business and on hiring and development of new agents. The GA, because of the type of compensation paid, has a much greater stake in economical operation and in persistency than does the branch manager. The management of the GA's company will determine how much emphasis is put on the development of new agents.

The PPGA is an independent businessman who will depend for his earnings on production of new business, economical operation, and persistency. He can, over time, produce growth in his earnings either through good persistency and renewals or through increasing levels of production. The brokerage GA is concerned with similar objectives, except that he will be providing the product through brokers rather than directly to his customers.

FUNCTIONS OF HOME OFFICE MANAGEMENT VIS-À-VIS THE SELLING ORGANIZATION BROKERAGE

The home office management must continuously provide a product line which is reasonably competitive as to price, agent's compensation, and service. There is little loyalty involved in the broker's method of doing business, and he can always decide to give his business to somebody else, so that the company, in effect, has to "earn" the business on a continuing basis.

The company must do a regular job of "promotion" of its products. The company must support its GA's in their attempts to solicit brokers. Training, other than specific product orientation, is minimal. Motivation is important, so that the company should try to provide any extras that it can, such as deferred compensation plans and conventions, in order to keep the interest of the brokers.

PPGA

The home office must select and recruit PPGA's. The product line is less important than in brokerage. The PPGA needs a full line of support materials for dealing directly with his customers. PPGA's usually are recruited after some experience in the life insurance business, so basic training is not needed. Information and support services on advanced markets and on pensions are needed. The job of the PPGA is selling, and not recruiting, management, and so on. This type of operation is relatively well suited to working with a diversity of people in different kinds of operations.

Managing GA

The managing GA who is running a career agency has a new dimension added to his job. He is expected to find, recruit, train, and develop new agents. Depending on how his agency is organized and on the number of new agents, this can be a very substantial part of the GA's job. The company management needs to provide all of the support needed for the PPGA and, in addition, guidance as to recruiting and materials for training of new agents. Support personnel and the organization of the agency office remain the responsibility of the GA. The company must finance the recruiting and training of new agents.

Branch Office with a Manager

This type of operation differs from the managing GA in that the support personnel in the office are employees of the company. The company management must be concerned with standards for selection of new agents, with training of new agents, and also with the management of the support personnel. The expenses of the branch are the direct responsibility of the company. The manager is paid a salary and has no vested rights on termination.

FINANCIAL COMMITMENTS

The company assumes the greatest financial commitment in the case of a branch office. In that case, the company is directly responsible for paying all expenses of the agency, such as rent, telephone, clerical salaries, printing, and stationery. It is also responsible for controlling these expenses. As the total agency operation usually is geographically dispersed and the managers are rewarded on the basis of factors other than economical operation, this can be a substantial problem. In addition to commissions to the agents, the company must pay compensation to managers and assistant managers. The managerial compensation usually is based on a formula which includes overrides on business plus factors tied to the various objectives which the company expects the manager to meet. These factors may be related to hiring and developing new agents, to persistency, and to expense level. The company pays the cost of financing new agents directly, and may pay all or may share with the managers the losses on financing unsuccessful agents.

Financing costs are a substantial part of the expense. Four-year retention rates range from well under 10 per cent to a high of almost 30 per cent for United States companies. The average is around 11–12 per cent. New-agent financing is likely to be in a range of $600–$800 per month. It is not unusual to have an investment per successful agent in excess of $50,000.

In addition to the normal costs of running an agency, a manager in a new agency may have to be paid a salary over and above the amount provided by the formula because the formula provides inadequate compensation at the early stages of operation.

The commitment to a managing GA is likely to be quite different in form. He is paid compensation on the basis of a formula. He is expected to run his business from that compensation and, if he runs it well, to be well rewarded. If he runs it poorly, then he suffers in terms of what is left over for him. There will also be a subsidy in the early stages of a new operation.

The PPGA and the brokerage GA are not recruiting and training new agents. The PPGA is an experienced salesman and should have a developed method of doing business. He needs some financing at the beginning because he has no renewal account, but he should be producing at a satisfactory level within six months to a year. The financing may take the form of advances against first-year commissions, or it may be handled through direct payments of a development allowance. First-year commissions plus expense allowances for a New York–licensed company are typically in the 90–96 per cent range for whole life. The financing of a new PPGA is likely to be in the range of $5,000–$20,000 in the first year, grading down thereafter. The new PPGA is likely to be inexperienced at organizing and running an office and needs some support with that effort. The financing period should probably extend for about five years. The production potential is limited to what one or perhaps two or three agents can produce.

The brokerage GA also begins without any renewal account. He may have already developed sources of business, or he may have to work to develop them. He needs to call regularly on accounts which may develop business or to have brokerage supervisors who can assist him in doing this. It may take a somewhat longer period of time to reach a satisfactory production level. First-year commissions plus expense allowances are typically in the 90–96 per cent range for whole life. Financing may be in the $12,000–$20,000 per year range at the outset and will grade off gradually over a five- to ten-year period. There are performance criteria at various steps along the way. The production potential of one general agency working with several brokerage supervisors is theoretically very large.

The discussion above has been developed as if the various types of organizations were entirely separate and different types of operations. In practice, there may be various combinations. A GA may start as a PPGA, and, if he is successful, he may then go on to develop career agents or to build brokerage business, or he may do some of each. The established GA is an independent businessman paid for performance, and the company with whom he is working has relatively little control over how he runs his business.

COMPANY CHARACTERISTICS AND THE NATURE OF THE DISTRIBUTION SYSTEM

The full-time career agency force with the company training the new agents from the beginning is the preferred method of operation among the larger companies. These agency forces may be based on branch offices with managers or on managed general agencies, but in either case the companies are exercising a substantial degree of control over the agencies. Many people believe that this is the only way to build and maintain a large and stable field force which will regularly renew itself, one over which the company can maintain adequate control. Whether the company is on the branch office system or a managed general agency system is probably more a result of the company's history and how the operation evolved than of a rational initial choice made on the basis of knowledge of the two systems. Most companies during their development try a number of arrangements, and their current methods are based on what worked and on other methods used in the history of that organization.

For a company that is starting to try to build an agency force today, the PPGA system offers the quickest return for the lowest investment. However, its total potential per agency is limited, and the number of people who can be successful PPGA's is also quite limited.

The brokerage general agency can also be started with a relatively limited investment and can begin to pay back initial investment in it relatively early. However, the company must offer products and services that appeal in the brokerage market. Additionally, this source of business is relatively unstable, so that the company, in order to maintain it, must continue to offer products and services that appeal in the marketplace. Furthermore, the total amount of brokerage business is essentially limited, and there is already a great deal of competition for this business.

The career agency is looked on as the best source of stable and continuing business, and the one with essentially open-ended potential. However, the investment and management required to start are very substantial. It is also unlikely that a new career agency will succeed unless there are some successful agents present.

In terms of market, the company that is looking for a specialty market either can try to develop brokerage business or can set up PPGA's who are essentially specialists in the market. There are several market areas which are worked most successfully by specialists. The outstanding example is the pension market, where a wide variety of special support services are needed at the distribution system level. The employer-employee–sponsored market is another example. This market requires teams at the selling level, with a specialist who is able to sell the employer and with other people available who are able to help sell the employees. The general agency system is probably better suited to specialty marketing than is the branch system, because the specialty marketer may have needs different from those of the balance of the company. Since the GA is more able to run his own shop, he can adapt to the specialty needs. Furthermore, the specialty marketer will often not be interested in broad based recruiting and training. If he is recruiting new agents, it will be to incorporate them into a selling team in his specialty operation. Such selling teams usually provide a period of time when the new agent can work as a junior team member.

It is very possible that one of the developments of the future will be more definition of specialty marketing areas, and building up of agent teams who have organizations set up to work those particular market areas.

MR. MOORE: I agree with both George and Anna that the most important quality that determines a company's distribution system is tradition—the fact that it is where it is.

A second factor would be a geographic one. In the United States our own company has a much greater emphasis on brokerage business than in our Canadian division, where brokerage business has developed primarily as an adjunct to our own field force's business and in a limited number of our branch offices.

A third factor, related closely to the preceding one, is the presence of legal restrictions. In Canada our company is almost forced to concentrate on the full-time career agent distribution system, at least until the present requirement of single case agreements is lifted.

A fourth point influencing method of distribution is the competitive factor. If 95 per cent of the companies are operating through their own field forces, it would be a difficult matter for a company to establish a substantial amount of brokerage business.

Our distribution system is also affected by how much homogeneity is expected throughout the organization. In some cases it is simpler to concentrate on one or perhaps two methods of distribution throughout a company rather than to try to set up a different system for each territory or product line.

A company will also be restricted by certain financial parameters relating to the different costs of different distribution systems. The lower compensation involved in brokerage business, and the subsequent savings in branch office overhead, may be factors influencing a company's emphasis on that type of business. It must be kept in mind, however, that lower compensation usually means a lower level of service to policyholders or higher operating costs to the company. Like most companies, we spend considerable funds developing brokerage contacts and promoting brokerage business.

Today, in Canada at least, external forces are a greater factor than ever before; for example, our compensation basis and our method of distribution are feeling the effects of competition from trust companies, mutual funds, Canada Savings Bonds, and banks. This factor has been made even more important by the increasing popularity of registered retirement savings plan business and, more recently, income-averaging annuity business offered on a no-load or very low load basis through trust companies.

A company's distribution method will be influenced to some extent by its product mix. Looking at our own case, for example, the fact that traditionally we have been a strong annuity company in Canada, albeit under increasing attack from other Canadian companies, has assisted us in the development of our brokerage business. In fact, more than 95 per cent of the business sold through agents and brokers outside our own field force is annuity business. On the other hand, it was our strong branch office organization that led us to the decision, rightly or wrongly, not to set up separate group field offices, which has undoubtedly reduced the amount of group business coming to our company through brokers.

CHAIRMAN RICHARD B. SIEBEN: One comment on this subject: The broker is someone who produces for you only part time and, therefore, produces the majority of his income from somebody else. His loyalty is as thin as Anna described it. He finds the services and needs of his particular client and comes to you. If you have it, he goes out and sells it. The point here is the response that he is communicating to the company regarding what it is that is needed in the marketplace to do the job. Either you have it or you don't have it—either you deliver or you can't deliver. Your job in doing brokerage business is entirely different from the job in any other kind of business. That is the point I am making.

MR. MOORE: We make only a very rough allocation of branch office costs into marketing and administrative costs. Thus our allocation of marketing costs into ongoing and developmental is almost nonexistent. In fact, the only type of developmental cost that would be treated separately would be something like establishment of a new branch office.

Our head office costs are defined more accurately by a detailed breakdown of expenses on an account and work area basis. Once development costs are defined (for example, new products and promotion, new rate manuals, new proposal service, and so forth), it is a fairly simple matter to separate those costs that are defined to be part of our ongoing operations.

What about the question of profit centers? Until recently, Manulife has been considering the possibility of operating each of its marketing divisions as a separate profit center. Because we felt that the two operations are really tied together—they are not separate businesses, even though the clients and territory differ—we elected not to do so. On the other hand, in a branch office operation such as ours, we have always treated each *branch* as a "pseudo" profit center.

We have the usual elaborate system of related incentives and disincentives that are intended to increase the profitability of the branch's operation. For example, our effective management bonus is an important part of our branch managers' compensation because it provides a substantial additional bonus tied to recruiting, controllable expenses, product mix, production, and conservation. It does almost everything. For that matter, two years ago we introduced a detailed budgeting procedure which has proved to be effective in reducing our ratio of expenses to production.

As I have mentioned, this approach is only a "pseudo"-profit-center approach, in that not all income and outgo items are considered. Many of those that are included are simply rough approximations. On the other hand, we feel that the desired effect is achieved. We have a more efficient and effective branch office operation as a result. We are continually on the watch for undesirable side effects or loopholes in those incentive bonuses. So far they have not materialized. In fact, our advance accounts by agents have been moved from a substantial debit balance to a credit balance, our direct financing costs of first-year terminators have been halved, and our controllable branch expenses have been reduced substantially by about one-third in relation to production.

What techniques have been, or are being, developed to determine profitability of individual lines of business? Until recently, our company's top marketing priority has been the quantity and quality of new business, and of course the conservation of existing business. Provided that our business was profitable on an over-all basis, and new rates for individual products were based on reasonable assumptions, we had little time or resources to concern ourselves with a detailed breakdown of historical developments. Now, however, the picture has brightened in our company.

We are currently in the throes of developing what we think is a meaningful profit and loss statement by line of business within each of our marketing territories. Until now we have simply monitored our profit and loss position on the Ottawa Annual Statement basis within each territory, along with rough adjustments to reflect items such as new-business strain and conservative reserve bases. Of course, each of our products was priced on a self-supporting basis to begin with, using an asset share or model-office approach, along with what we consider to be realistic premium assumptions.

This new statement will provide a realistic profit or loss statement for each product line within each marketing division. Unfortunately, it will probably be a few years before we can begin to monitor results for a particular block of issues unless it happens to encompass *all* issues of a particular product line. As a result, the equity of our dividend scales, for example, will still be limited to fairly broad groups of policyholders.

MRS. RAPPAPORT: There are three basic approaches to measuring the profitability of individual agencies:

1. Measurement of actual versus expected expenses and measurement of actual versus average lapses.

2. Calculation of present value of profits on this year's new business.
3. Calculation of present value of future profits on all future new business of an agency, that is, the capitalized value of an agency.

The measurement of actual versus expected expenses has been included automatically in general agency contracts, in that the GA is paid a maximum based on the expected. If the actual exceeds the maximum, he pays. If he is paid on an expense reimbursement basis, he may, however, not profit by any saving over the expected.

Expense and persistency factors in managerial compensation reflect profitability in that sense. In the branch office company, these factors are likely to be very much subordinate to production of new business and to the hiring and development of new agents. These measures are actual versus expected, and the persistency and expense factors and compensation have been relatively well accepted for many years.

Currently there is a great deal of interest in the more sophisticated measures. Present value of profits on this year's new business is probably a quite useful tool for management, particularly for a company with various product lines which have different profit levels. Development of numerical values for this type of present value is a complex and expensive job. In theory, this type of approach enables a company to reward its field management more in line with bottom-line results. I believe that most of the work on this type of approach is still in the research stage, but I expect that there will be applications over the next few years.

The capitalized value of an agency has proved to be an interesting theoretical concept, but one that is subject to very wide swings with small changes in the agent population and with small changes in the assumptions. The values produced are very large and volatile, and in the face of current turnover rates, and of substantial variability in the various assumptions needed to produce these values, there would seem to be limited practical application of this method at the present time. I am very skeptical about the practical usefulness of the capitalized value.

MR. ALEXANDER: Many years ago we established a detail cost record of all agency expenses. These data were tabulated monthly on an accumulating basis to provide annual figures. The same form provided for tabulation of premiums, broken down into first-year, renewal, and commissions. We devised a formula relating the expenses to premiums and provided a cash prize for the branch manager who ran a profitable office from the control and expense point of view.

This worked very well for many years and made many of our branch managers quite expense-conscious. Unfortunately, in recent years, the rate of change has been so rapid—changes in average size of policy, changes in the productivity of the agent, the ins and outs of good agents in the branch—that it has been almost impossible to establish a reasonable target on which to base the products. The branch manager was either grossly over or grossly under the target, which made our formula look rather ludicrous. So, we had to abandon the prize concept. We still keep the data, however, and our marketing vice-president does look at the figures and he does take appropriate action where he finds mismanagement of certain expense accounts. The existence of the data also helps our marketing people to make decisions on such matters as expanding a branch, changing its location, redecorating it, increasing or reducing the number of telephones, and things of that nature.

This is not very scientific, nor do I think it really can be, because you simply must tabulate, item by item, the things you spend money on. We had to abandon the prize concept because there was too large a variation between the results and what we had expected; however, the data have been useful in that, when a variation occurs, we can quickly find the reason for it.

I mentioned earlier that we do compare costs of ordinary business arising from our two principal sources of marketing. Not very long ago —less than five years—we decided to enter the group business on a meaningful basis—not group health, but group life, group annuity, and group pension in various forms. We keep a detailed record of the costs and experience of the group division, and the manager of that division, who is also the group life and group pension actuary, knows that his area of responsibility is expected to be self-supporting.

I would like to mention here that the group actuary does become involved in sales, frequently right at the point of sale. In fact, we sometimes think he is our best group representative.

On ordinary business our actuary produces each year a detailed analysis of surplus. He has been doing it for many years and attempts to trace, by line of business, the actual experience in each year. Surprisingly enough, the sum total of his pluses and minuses comes incredibly close to the net change in our surplus account for each year.

MR. PAUL M. BAILEY: What techniques have been or are being developed to determine the profitability of individual agencies?

Our studies of agency profitability are based on the general concepts outlined in the February, 1971, Life Office Management Association publication entitled *An Approach to Measuring Profitability of Field*

Office Operations of a Life Insurance Company, prepared by the Cost Analysis and Profitability Studies Committee of the Financial Planning and Control Council and otherwise known as Financial Planning and Control Report No. 19, or Report No. 19 for short. In this report the general approach to profitability is predicated on the use of profit measures developed from asset shares. The report is in two parts: Part 1 on the profitability of the current year's business and Part 2 on the increase in the capitalized value of the existing agency force. My remarks will be confined to Part 1.

We are using as our basic measure of profitability the present value at date of issue of the fourteenth-year asset share margin (asset share less cash value).

We wanted to measure the effects of the following variables on the profitability of an agency's business: (1) mix of business, (2) average size of policy, (3) lapse rates, and (4) field expense rates.

Retaining mix as an agency variable required calculation of asset share valuation factors for each distinct combination of plan, age, sex, and mode. All business was assumed to be issued standard, but medical and nonmedical issues were valued separately, as were certain amount groups with special characteristics. For our test year we calculated factors for some 4,143 cells.

Recognition of average size of policy was accomplished on an exact basis by splitting the asset share calculation into two parts for each cell: one incorporating all per-thousand elements, such as the basic premium, death benefits, cash values, dividends, and per-thousand expenses, and the other incorporating all per-policy elements, such as the policy fee and per-policy or per-transaction expenses. In our initial testing we prepared and used separate per-thousand and per-policy asset share programs; however, in our production runs we used our regular composite asset share program and calculated asset shares for each cell based on two different amounts. We then determined the per-thousand and per-policy factors by solving two simultaneous equations. In the valuation process the per-thousand factors were multiplied by the number of thousands and the per-policy factors by the number of policies in each cell of an agency's issues. The results of the per-thousand and per-policy calculations were maintained separately in our records. To determine the aggregate profitability of an agency's production, we simply added the two parts.

To incorporate the effect of agency lapse experience in our profitability measures, we computed ratios of actual to expected first-year lapse rates by agency and interpolated between asset share factors based on 40, 100, and 200 per cent of company average lapse rates. For renewal years the first-year ratio of actual to expected was graded linearly to 100 per cent for the sixteenth and later years. Agencies with ratios under 40 per cent or over 200 per cent were assumed to have actual ratios of 40 and 200 per cent, respectively.

To calculate the effect of agency expenses, we used two sets of actual-to-expected ratios: one for unit expenses (i.e., per-thousand, per policy, and per-transaction expenses) and the other for percentage of premium expenses (which, incidentally, did not include commissions but did include expenses expressed as a percentage of commissions). Asset share factors were calculated based on three different sets of expense assumptions—the first incorporating company average expense rates, the second using modified expense rates which excluded all field expenses, and the third using modified expense rates which excluded all unit field expenses. By taking differences we were able to isolate the expected (i.e., company average) unit and percentage of premium field expense portions of the profitability measures for all of an agency's business. We then applied the ratios of actual to expected expenses to these amounts to determine the agency's actual expenses. The actual expenses were then deducted from gross profitability measures which excluded all field expenses. The final result was our profitability measure based on actual agency expenses.

Altogether, we calculated some twenty-five different profitability measures for each agency. Company average and agency average assumptions were used for each of the four basic variables: mix of business, average size of policy, lapse rates, and expense rates. The various combinations gave us sixteen different profitability measures. For example, at one extreme we had values for each agency assuming company average mix, company average size of policy, company average lapse rates, and company average expense rates, and at the other we had values for each agency based on its own experience for each of the four variables.

The eight sets based on company average mix were rerun after separating out and recomputing factors for annual, semiannual, quarterly, monthly, and special monthly business. This gave us eight additional sets based on company average mix but reflecting each agency's mode distribution. Finally, we computed a special set of values based on substituting company average size of policy for agency average size in the set that was otherwise based on the agency's own variables.

In addition to aggregate profitability measures, we were able to compute what we have called the components of profitability for each agency.

These are the contributions to each agency's profitability measure arising from differences between company average and agency actual experience with respect to mode of premium payment and the four variables mentioned above.

MR. JOSEPH BRZEZINSKI: I have been working with profitability research for about four years. In this connection I think of a statement that Jack Moorhead made in one of our schools: "If you depend on the marketing people to do your profitability research for you, it will be done wrong, and if you depend on your actuaries to do all of your work, they'll use all of the wrong assumptions."

The panelists have defined the profitability concept as the value of an agency, or of an agent, but I would define it as a calculation of the present value of the future profit of business that an agent will produce. It is simply an extension of the asset share concept, except that you are working with productivity, agents' expenses, and agents' turnover. Surprisingly enough, in such a value calculation the most volatile element will turn out to be agents' turnover, followed by agents' productivity and then home office expenses and persistency. For example, evaluation of an agency may change considerably from one year to another, since the value of the agent you are thinking of hiring may represent an agency asset which varies from a negative $10,000 to a positive $200,000.

Our most recent research has been to see how we can deal with swings of profitability. Our first approach was to separate the capitalized value of an agent into its component parts. Basically, there are five or six components, depending on how you look at it. One component is related to an agent's retention rate, another to his expenses, a third to recruiting, and so on. Unfortunately, the more accurate the asset share calculations, the more the emphasis is put on the recruiting portion. The following years then will have a very large negative swing when an agent is lost and very small positive swing when an agent is saved or stays with the company an additional year.

Another approach we are trying to use now is one in which, instead of capitalizing the full value of an agent, we will try to work out a capitalized value so that the income the agent produces will be distributed uniformly over his lifetime with the company. This tends to dampen the swings considerably.

PENSION LEGISLATION—UNITED STATES

Discussion of current or pending legislation, including administrative problems, reporting problems, actuarial standards and certification, and effects on plan design, actuarial assumptions, and funding methods.

Dallas Regional Meeting

MR. FRANK D. REPP, JR.: I shall discuss the impact of the pending legislation on plan design and analyze briefly the reinsurance provisions of that legislation. As in the legislation, the term "pension plan" is used in reference to all plans qualified under section 401 of the Internal Revenue Code, including profit-sharing plans and others.

EFFECTS OF PENDING LEGISLATION ON PLAN DESIGN

The pending legislation's impact on plan design can be divided into two areas: (*a*) changes in plans which will be mandated by the pension legislation and (*b*) changes in plans which may be due indirectly to the pending legislation.

The first area where legislation will affect plan design directly is that of determining which employees must be included in the plan. Under the House version, employees aged 25 with one year of service (or employees of any age who have completed three years of service) must be eligible for the plan. Under the Senate version, employees aged 30 with one full year of service must be eligible.

What impact will these eligibility requirements have on pension plans? My experience has been largely with self-administered trusteed plans. In these plans there is no real reason to use age and service restrictions for eligibility, since there is little or no record-keeping cost or additional contributions required for high-turnover employees. This particular aspect of the legislation, therefore, should not affect the self-administered trusteed pension plans.

Defined contribution plans such as profit-sharing plans, even when self-administered, usually do have age/service requirements. Many plans probably will need some minor changes to comply, but these changes should not alter the basic plan design.

Benefits funded through individual policies or group deferred annuity contracts involve considerably more record-keeping than trusteed plans. The legislation may change the complexion of such plans. I will leave it to Mr. Simmons to speculate on what effect these eligibility standards will have on insured plans.

A second area where legislation will affect plan design directly is in the determination of vesting provisions. The vesting problem was one of the more important factors leading to pension legislation. Under the proposed legislation, all employee contributions, whether mandatory or voluntary, must be fully vested, the practice generally in effect today. One change that may result from legislation is that, even if the employee withdraws his own contributions, the accrued benefit allocable to employer contributions must still vest according to one of three options. These vesting requirements have a five-year phase-in allowance for existing plans. Ultimately, one of the three vesting schedules, or a schedule not less liberal to any employee, must be in the plan.

Both versions of the pension reform legislation have certain requirements which apply to the determination of an individual's accrued benefits. These requirements are intended to preclude an employer's circumventing the vesting rules by designing a benefit formula which would weight the benefits toward the older ages. These rules have the effect of making the benefit accrual more level than the plan formula might otherwise seem to imply.

The mandatory vesting rules are one of the more controversial aspects of the pension reform legislation. There have been comments that the costs involved in mandatory vesting will cause plans to cut back on benefits that otherwise would be provided. However, the deferred wage concept of pension plans seems to imply that some type of vesting should be an integral part of good plan design. The trend toward earlier and fuller vesting has existed for some time; it will merely be expedited by this legislation.

The legislation requires all plans to have a provision for a joint and survivor option for married employees. Virtually all the plans with which I am familiar already provide such an option. For those plans that do not, it will be simply a matter of amending the plan. Assuming that the factors used to determine the benefits are consistent with actual experience, this option should add little or no cost to the plan.

The pending legislation would prohibit nonqualified plans, except for those covering highly paid officers and executives. Because of the provisions of *Accounting Principles Board Opinion No. 8*, the practical effect of this prohibition, at least for publicly held corporations, is probably negligible, but it may have an impact on smaller corporations not subject to *APB Opinion No. 8*.

The last of the pending legislation provisions that affect plan design are the limitations on benefits. Clearly, the intent of these ceilings is to limit the benefits of highly paid corporate officers, apparently because

Congress feels they might design benefits for themselves that would be "excessive."

Benefit limitations are placed on defined benefit plans, on defined contribution plans, and on employees covered under both types of plans.

The benefit limitation under a defined benefit plan is the lesser of $75,000 or 100 per cent of the employee's three-year average earnings. The $75,000 limit is to be adjusted according to a cost-of-living index, much as social security benefits are to be adjusted under the existing law. The impact in terms of the number of participants it affects is relatively small, so that the provision may not be considered important. However, since a pension plan has always been considered a good way to defer or avoid taxation, the impact on those persons whom it does affect is very meaningful. Another factor which increases the importance of the $75,000 limitation is that it increases only with the cost of living and not with the general wage index. Hence the proportion of employees that will be affected probably will increase in the future.

For defined contribution plans, the legislated contribution limitation is $25,000 or 25 per cent of pay. My experience indicates that this limitation will have little impact on employees, since most defined contribution plans do not call for contributions as high as 25 per cent of pay.

When an employee is covered by both a defined contribution and a defined benefit plan, the limitation is the sum of two fractions, the first of which is the benefit as a percentage of the defined benefit plan maximum and the second the contribution as a percentage of the defined contribution plan maximum. The sum of these two fractions cannot exceed 1.4. We have examined a number of situations where employees are covered under both types of plan, and in every case we have found that if the defined benefit plan limitation is not exceeded, the combination will be within the limitations.

I would now like to discuss the indirect effects of the legislation. Taking the last two direct effects—benefit limitations and prohibition of nonqualified plans—the existence of a maximum benefit limitation on defined benefit plans may lead to an attempt to supplement the limited pension by use of an unfunded plan. This is entirely within the law and would be my first recommendation to a client who was upset by the maximum limitation on benefits.

A more devastating effect of the benefit limitation may be a trend toward plans where the average employee would receive the same percentage of pay as a highly paid employee who is subject to the limitations, thereby causing a general lowering of benefit levels. While I hope that this will not come to pass, evidence in this direction does exist. In H.R. 10

plans, contributions for common-law employees are often determined at the same percentage as that of self-employed persons.

Another side effect of the pension legislation is a positive one. The maximum deductible contribution for self-employed persons has been raised from $2,500 to $7,500 per year, and acceptable defined benefit plans covering both self-employed and common-law employees are prescribed. At the present time, plans covering self-employed individuals have been largely of the defined contribution type. As a minimum, higher limitations will allow self-employed persons to provide themselves better benefits even if they remain under defined contribution plans, which should result in higher benefits for common-law employees. A more salutary effect of the legislation may be the creation of a trend away from defined contribution plans toward defined benefit plans, which by design are better able to handle retirement income needs.

What about vesting? The mandatory provisions will add costs to most plans. However, better-designed plans usually have some vesting provision. The additional costs which result from vesting standards may be sufficiently small that they may not indirectly affect future plan design. Even where such vesting costs are significant, we can hope that the trend will be to meet such costs head-on, rather than compensating by cutting back on other benefits.

The mandatory funding provisions of the legislation have caused some concern. However, if a plan receives good actuarial advice, the differential between a minimum funding cost under current Internal Revenue Service regulations and the proposed mandatory funding provisions will not be large. Since the legislation does provide for the funding requirements to be waived in certain cases, the mandatory funding should not affect plan design.

The only aspect of the pending legislation that makes me nervous is the plan termination insurance provisions. The premium charge, which is nominal, is a minor factor. However, the residual liability which may exist in the event of plan termination is a serious consideration.

Under present legislation, a company with a pension plan generally is liable only for those amounts contributed to the plan. Under pending legislation, a corporation has a residual liability in the event of plan termination which could eat into the assets of the company. This residual liability may limit the company's borrowing power, alter its credit standing, or cause the company's stock to lose favor with investors. These considerations may cause management to curtail some benefit improvements or to limit the growth of new plans. It may be that such termination insurance provisions—especially the residual liability—may cause a shift from defined benefit plans to defined contribution plans or cause a general lowering of benefit levels or the avoidance of desirable ancillary benefits.

In summary, my feeling is that the pending legislation will not have a major effect on the design of pension plans. Hopefully the additional costs will be met directly rather than by curtailing other benefits. Largely because of the residual liability under the termination insurance provisions, a trend back to defined contribution plans may develop, but it should affect only financially marginal companies.

Of course, existing plans have a period of time over which they may be amended to comply with the new regulations. These plans have the option of making the minimum changes required by law or being completely redesigned. Since I do not feel pessimistic about the impact of this legislation on plan design, I think that any redesign would be along the lines that a good pension planner would wish to make even if the legislation did not exist.

New plans must comply with the legislation prior to approval. Again, I do not feel that the legislation, as it is now proposed, has any particularly frightening consequences.

IMPACT OF REINSURANCE PROVISIONS

The bill provides for a reinsurance fund to cover the excess of plan liabilities over plan assets in the event of plan termination. The fund will be financed by premiums based on the unfunded vested liabilities of the plan.

In the event of termination of a corporate plan, the employer may be subject to a residual liability of up to 50 per cent of the net worth of the corporation. Caution already has been expressed with reference to the residual liability aspect.

The biggest question on plan termination that faces us as actuaries is what actuarial assumptions should be used to determine the value of the assets and liabilities in the plans. The law provides that the market value of common stocks must be taken into consideration, with some averaging allowed. Bonds not in default may be valued on either a market basis or an amortized basis. In essence, the asset side of valuation seems to be more clearly defined than does the liability side.

Actuaries are responsible primarily for the liability side of the actuarial balance sheet. In computing the liabilities under the plan termination insurance provision, we are faced with a decision as to what assumptions should be used. We can use the same assumptions regarding interest and mortality as we use for cost determination, more conservative assumptions, or more liberal assumptions, or we can key our determination of this liability to insurance company purchase rates. I feel that realistic assumptions should be used in determining costs and tax deductions, and that realistic assumptions should also be used to determine the termination liability. If traditional actuarial assumptions are used, the client may be assessed too large a premium if an unnecessarily low interest rate is being used in the regular valuation. In order to avoid a disservice to the client, more liberal assumptions probably should be used. However, I think it behooves us as professionals not to alter our interest rate or other assumptions for the sole purpose of reducing or eliminating this termination liability. Rather, I think that in choosing our assumptions we should consider conditions which exist at the time of the determination.

I am assuming that it will be up to the actuary to determine the assumptions which will be used in calculating the termination liability. The legislation provides for the enrollment of actuaries, and it appears reasonable to hope that an enrolled actuary would be given the freedom to choose assumptions. However, the government may promulgate assumptions for this determination; if this should happen, I feel it would be harmful to the professionalism of the actuary. Probably the best way we can avoid such action is to conduct ourselves in so professional a manner in determining this liability that there is no need for government intervention.

MR. RICHARD S. RASKIN: I shall discuss the effects of the proposed legislation with respect to funding of defined benefit pension plans and also shall attempt to make some forecasts of the future of both defined benefit plans and the actuary who serves them.

FUNDING REQUIREMENTS IN PROPOSED LEGISLATION

Essentially both Senate and House versions of H.R. 2 establish minimum funding levels. The approaches of the two bills in this area are remarkably similar. A funding standard account is created. Each year the actuarially determined normal cost is added to the account. Also added each year is the amount necessary to amortize the unfunded past-service liability over a prescribed period which commences on the later of the date of establishment of the liability or the effective date of the act and is basically thirty years with respect to single-employer and forty years with respect to multiemployer plans. Also added to the account is the amount necessary to amortize any experience deficiency by level payments over a period ending fifteen or twenty years after the establishment of the deficiency. Subtracted from the account is the amortization of the experience gain and the decrease in liability from any amendments.

Under the House bill, if the liability for vested benefits exceeds the assets, the net of these additions and subtractions to the account is subject to a minimum net addition equal to the amount required to amortize this excess over a period of twenty years. The account is then reduced by the actual contribution to the plan.

Both bills provide for certain technical adjustments, including combining of unfunded liabilities, valuation of assets, protection against generating additions to the account when for tax purposes the plan may be fully funded, and similar changes. Both bills provide substantial penalties for plans which have an accumulated funding deficit at the end of any plan year.

FUTURE OF DEFINED BENEFIT PLANS

The substantial penalties for deficit funding, together with the consequences of plan termination insurance, will make many employers take a second look at their defined benefit plans. On the other hand, the forces which historically have encouraged pension plans will remain. These forces are the crediting of additional benefits for past service and the adjusting of benefits to retired employees. Employees' desires to bring their benefits under the umbrella of the Pension Benefit Guaranty Corporation will enhance these forces.

Many smaller companies might decide to convert their plans to money-purchase plans. In this regard, it should be noted that the House bill would allow voluntary curtailment of a plan. Under this provision, a plan may be amended so that accrued benefits or vested benefits will be frozen from then on. Such an amendment would not by itself cause a plan termination or invoke employer liability so long as the plan meets the funding requirements for the existing benefits.

Larger companies probably will retain their fixed benefit plans. Those companies providing benefits below the amounts guaranteed by the Pension Benefit Guaranty Corporation probably will expand these benefits. In addition, those large companies which do not have fixed benefit plans will face employee pressure for these types of plans, if their current profit-sharing or thrift plans fail to be as attractive as they were in the forties, fifties, and sixties. If the stock market fails to perform as it did in those periods, the adoption of fixed benefit plans by these companies is a very distinct possibility.

POSSIBLE NEW CONCEPTS IN FUNDING

The re-emphasis on pensions which is being brought about by the legislation, combined with other factors which will mark the economics of the 1970's, may bring new concepts in funding.

A large corporation with a diversified product mix or a substantial market position may feel that it has passed a certain threshold and is not subject to the pressures of business failure. The corporation, for example, may make certain decisions as follows:

1. Funds held in its pension trust, even though tax-exempt, are not as valuable as they would be if retained within the company, so contributions should not be made in excess of the amount required to reach the company's minimum objective.
2. The ideal situation would be to have the fund's assets at market value equal the liability for vested pensions at all times, but, since the market value of the trust's assets can fluctuate, it will be necessary to build in a margin to protect against downward fluctuations.
3. Stocks and bonds might be valued separately. Bonds might be valued on an amortized basis running from initial purchase to earliest call date, if the purchase price exceeds the call price, and running from initial purchase to maturity if the purchase price is below the call price.

Of course, in making a twenty-year projection, it is necessary to value the assets at the end of the line. Almost all of the bonds could be considered at par, with additional income to the fund based on the coupon rate. Stocks will be valued by projecting a least-squares regression line through the Standard and Poor's 500 stock index. The ratio of the index at any particular time to the projection line will be used to adjust the market value of stocks.

The valuation of the assets also will have to reflect future payments from the fund. These future payments should reflect anticipated changes in retirement rates, mortality rates, and benefit levels.

The vested liability at the end of twenty years would be computed by first projecting the population. The corporation's director of manpower planning would be the key person in a discussion of such things as relative increase or decrease in the size of the work force; shifts in age patterns of hiring or retirement; shifts in sex distribution of the work force; the future distribution of unskilled, semiskilled, highly skilled, clerical, and management personnel as compared with today's; plans to relocate which might cause major shifts in the work force; plans to upgrade management and staff by replacing terminated employees with more skilled employees; and so on. After the population is projected, it will be necessary to project the vested liabilities on a basis which would appear to be reasonable over the next twenty years in view of future increases in benefit levels. This basis must be related to the official valuation basis.

Having projected the assets without any future contributions and the liability, the remaining task is to solve for the amount of future contributions required to reach the stated relationship between anticipated assets and projected liabilities.

The valuation produced probably is not suitable for use as an official valuation with respect to tax deduction purposes under current law, funding requirements of proposed law, reporting requirements of proposed or present law, regulatory agencies, and so on. With respect to reporting requirements, I would like to point out that the employer has a real problem—the pressures for him to use a realistic set of assumptions are great but may operate to his disadvantage if these assumptions are made widely available to his employees.

This valuation, however, will be useful in selecting which of the balance-sheet valuation methods the employer should choose for future use under the law.

It should be pointed out that any change in the valuation method to be used to meet the minimum funding standard must be approved. Under the House version such approval must come from both the Department of Labor and the Treasury. In addition, it is necessary to amortize any experience deficiency resulting from a change in assumptions, so that it behooves us to choose carefully both funding method and assumptions.

In setting these assumptions and choosing the funding method, we must interact with those involved in long-range planning for our clients. Gearing contributions to a level percentage of pay may be desirable for those clients desiring to minimize cash outlay; however, other companies may have very different needs. We have to understand their requirements and make sure that management understands what flexibility remains for them.

CHOICE OF ACTUARIAL ASSUMPTIONS

With regard to the various components of the balance-sheet valuation, the actuary is charged under the bills with producing a valuation based on his single best estimate of the anticipated experience under the plan produced on a combined basis. This would seem to imply that it will be permissible to view assumptions as a whole rather than individually.

If the House bill is accepted, however, the actuary may be sitting right on the horns of a dilemma. The secretary of labor will be reviewing the actuary's single best estimate of the anticipated experience to make sure that there is full disclosure to the employees, and thus perhaps will be looking to maximize liabilities; the secretary of the Treasury will be looking at the single best estimate of anticipated experience to make sure that liabilities are not overstated. In order to justify the assumptions, it will be necessary to argue either that they are realistic or that they produce results approximately equal to realistic assumptions and, therefore, are the equivalent of realistic assumptions.

Similarly, the disclosure of information with regard to unfunded liabilities may have an effect on the choice of valuation method. Plan termination insurance, if the premium is related to the liabilities or unfunded liabilities, may also affect the choice of assumptions. Liberal assumptions reduce unfunded vested amounts as well as total liabilities, thereby reducing the cost of insurance. On the other hand, conservative assumptions build up the fund more rapidly.

Will the tendency be to use the highest possible (permissible) interest rate, with the other assumptions (salary scale, turnover, etc.) chosen so that, on the basis of maximum funding, the desired contribution is produced?

MR. MAURICE O. SIMMONS: As an actuary with an insurance company, I have a number of special problems in connection with the proposed pension legislation in addition to those already mentioned. These pertain particularly to California, where pension legislation is being considered by the state senate. The proposed bill is both broader and more restrictive than the proposed federal legislation. For example, the proposed California bill seems to preclude offset plans and may even not allow integrated plans at all, I am particularly keen to see the federal legislation passed as soon as possible so that there will be no need for California legislation. While I am delighted by the prospect of increased business under H.R. 10 plans resulting from the increase in contribution limits, I am concerned about the effects of the individual retirement annuities. I suspect that a great many lower-income self-employed individuals, who currently have an H.R. 10 arrangement for themselves and their employees, will discontinue the H.R. 10 plan in favor of an individual retirement annuity. While such a move is to be discouraged, I doubt that we shall have too much influence on the individual decisions. However, despite the prospects of increased business under H.R. 10 plans, I find myself alarmed by some aspects of the proposed legislation, particularly as it affects life insurance companies.

IMPLICATIONS FOR INSURANCE COMPANIES

The first major problem is deciding what is meant by "fair market value" of assets for funds in insurance company general accounts. Let us consider the unallocated funds with benefits purchased at retirement. Since these funds usually are guaranteed as to principal, I believe that a good argument can be made for taking the value for unallocated funds as the accumulated contributions plus investment income plus experience-rating credits from purchased benefits less expenses. However, this holds only as long as the money stays with the particular insurance company. If the money is transferred in a lump sum to another funding agency, then the fund is hit with any investment losses caused by the transfer. In this case the fair market value is the value of the assets transferred, and I am not sure whether one can consider the investment loss as a loss caused by the trustees' or employer's decision to transfer the money. If one can, then the first definition of fair market value would seem to be reasonable. Of course, we do not know what will be "permitted under regulations prescribed by the Secretary." Hopefully, this item will be covered therein. I do not think that there is a problem with allocated funds, because here there should not be an accumulated funding deficiency, and I am not convinced that a funding account is necessary in such a case. As for unallocated funds with minimum balance requirements (that is, where benefits are not purchased at retirement), I think that we have a situation similar to the "with purchase" situation, provided that the actuarial liability for retired lives is determined using the appropriate rates for purchase of benefits shown in the contract. Most contracts of this type do contain purchase rates and a stipulation that, if the fund is to be transferred to another agency, the benefits for retired lives will be purchased. The proposed legislation does not refer specifically to the situation where benefits are purchased from insurance companies, so I find it very difficult to reach any definite conclusions on this point.

Another problem is trying to decide whether termination insurance will have any effect on acceptance of the insurance company guarantees. I doubt seriously that most participants in "insured" plans know about the guarantees or really know what they mean. By insured plans, I mean fully insured, split-funded, deferred annuity, and immediate participation guaranteed funded plans. I have always felt that the guaranteeing of retired life benefits was misconceived and overemphasized. In the long run the investment yield and the service provided are the most important factors. Over a period of years, the amounts of investment yield among the group of leading life insurance companies will be very similar and, therefore, it is service, or lack thereof, that counts. Right now, there are other things which are putting more pressure on insurance company guarantees than the pending pension legislation. A number of the larger companies are looking for a way to prevent the deferred annuity type of unallocated funds from being taxed as life insurance reserves under the 1959 Life Insurance Company Income Tax Act. This is a choice that was made in

1959, and now it is being regretted by many. So we may be seeing a major change in the types of guarantees that life companies offer under deferred annuity–type contracts. Obviously, the pending legislation will have some effect on such contracts.

There are other special problems for life insurance companies. The new regulations require survivor annuity provisions which could cause some real problems in individual policy and deferred group annuity arrangements. It means a complete redesign of most of our individual policy pension products, because we have few policy forms where the normal form of annuity is a "joint and survivor" annuity. We do have some products which have a preretirement spouse's benefit, but I doubt that they will have "the effect of a qualified joint and survivor annuity." One of the problems that I am having with H.R. 2 is deciding exactly what is meant by some of the terms used, even though they may be defined in the legislation. In particular, the definition of "qualified joint and survivor annuity" under section 1021 just does not make sense to me. The bill shows signs of having been patched together, and the effects of some of the changes on other parts of the bill have been completely ignored. I certainly hope that the final legislation is constructed better than H.R. 2.

Another problem which applies to insurance company pension plans arises when an insured plan is terminated and replaced by a self-administered plan which in turn terminates and is not replaced. What does one do with the dividends or experience-rating refunds from the terminated insured plan? I am afraid that I have raised more questions than I have provided answers. However, I do not think that we should become too hysterical until we know what the final legislation is.

ACTUARIAL REPORTS

I do not believe that the legislation will have too much effect on the kind of reports that actuaries produce. We will have to make annual reports to the administrator of the "present value of accrued benefits" and "accrued benefits" and triennial valuation reports. I believe that most of us are already doing more than is required in the nature of reporting.

Montreal Regional Meeting

CHAIRMAN DOUGLAS C. BORTON: As you probably are aware, the Senate passed H.R. 4200 by an overwhelming margin last September. The House subsequently passed H.R. 2, the Employee Benefit Security Act of 1974, on February 28. There are major differences between the two bills which a joint conference committee is attempting to resolve. The general consensus at this time is that a final pension bill will be passed by both houses of Congress some time this summer and signed into law by the President. The purpose of our discussion today is not to provide a detailed analysis of the various provisions of the Senate and House bills but rather to indicate the major areas in which we expect actuaries to be affected by the legislation. Because of the wide scope of the legislation, the federal government will be involved in private pension plans to a much greater extent than ever before.

One of the major impacts of the proposed legislation on members of the Society and the Academy concerns the establishment of rules for the accreditation of actuaries. The Senate bill provides that reasonable standards and qualifications for actuaries shall be established and qualified persons shall be enrolled. Naturally the federal government would reserve the right to terminate or suspend the enrollment of an individual. While the House bill would provide for similar enrollment of actuaries, it refers specifically to a "grandfather" period. To quote the bill: "With respect to individuals applying for enrollment before January 1, 1976, such standards and qualifications shall include a requirement for an appropriate period of responsible actuarial experience or of responsible experience in the administration of pension plans." In my opinion, this latter requirement shows an unfortunate failure by the House to recognize the functions of an actuary in the operation of a pension plan, and it is to be hoped that it will not be included in the final bill. It is my understanding that the joint committee has decided that persons who apply before 1976 would need responsible actuarial experience related to pension plans and that experience in pension plan administration would not count. However, this decision could be reversed by Congress when the final bill is considered by the House and Senate. It is interesting to note that the administrator of one very large pension plan has advised the joint committee that he does not believe plan administrators should be enrolled as actuaries.

While neither bill refers specifically to membership in the American Academy of Actuaries, the House bill includes as one acceptable criterion for enrollment after 1975 "successful completion of . . . actuarial examinations deemed adequate by the Secretary or his delegate." Obviously the whole question of the setting of appropriate standards for enrollment is important, not only to members of the actuarial profession but also to the general public and to employers and their employees. I am sure we would all agree that pension plans should receive competent actuarial advice in order to minimize the likelihood of escalating employer contributions which may become unduly burdensome in the future, or the possibility of disappointment on the part of employees who do not receive their promised benefits. While the consulting actuary alone cannot ensure the soundness of a pension plan, he can help his client to avoid certain pitfalls such as the use of overly optimistic actuarial assumptions or the adoption of unsound benefit provisions.

It is clear that the proposed legislation will enlarge the scope of the actuary's responsibilities in connection with the preparation of pension plan calculations. For example, the House bill provides that an enrolled actuary would have to certify triennially that the actuarial calculations are "reasonably related to the experience of the plan and to reasonable expectations" and are based on "assumptions which, in combination, offer his single best estimate of the anticipated experience under the plan."

Another development in a related area is the trend in various states toward adopting legislation to regulate pension plans. Connecticut and Massachusetts are among the latest states to enact such legislation. Since there is some question as to whether federal pension legislation would pre-empt state legislation, the definition or lack of definition of "actuary" under these state laws is also of interest to members of the profession. As an illustration, the original version of the Massachusetts bill referred to membership in the Academy. However, the final bill contains no definition of an actuary and furthermore provides that quinquennial projections and analyses of each pension plan shall be prepared by an accountant.

MR. STANLEY R. FREILICH: I plan in these few minutes to do three things: (1) bring you up to date on the agreements reached so far by the House/Senate conferees; (2) point out two meaningful parts of the proposed legislation that I do not believe are generally known (at least they were not known to me until I received the bills in detail recently); and (3) mention the aspect of the legislation that has been most vexing so far to my clients.

I. HOUSE/SENATE CONFEREES

The conferees basically have adopted the H.R. 2 provisions; that is, all pension plans will be covered except government plans, church plans, plans established and maintained outside the United States primarily for the benefit of non-United States citizens, supplementary plans, unfunded plans primarily for a select group of management or highly compensated employees, fraternal-society plans, and labor organization plans to which employers do not contribute.

A. *Participation*

Employees must be eligible not later than the later of attainment of age 25 or completion of one year of service, except that a three-year service requirement may be used if the plan provides for full and immediate vesting, and provided that, if age 25 and one year of service is used, service credit for vesting purposes must be granted from the earlier of (*a*) the completion of eligibility requirements or (*b*) the later of completion of three years of service or attainment of age 22 (i.e., the "three-year look-back" rule).

The H.R. 2 provision which permits defined benefit plans to exclude employees hired within five years of regular retirement age has apparently been agreed upon by the conferees.

In addition, the conferees have said that employees generally must work at least 1,000 hours in any year to receive credited service for that year.

B. *Vesting*

The conference committee has not yet completed its work on the proposed mandatory vesting provisions. Thus far, it has agreed to full vesting after ten years and the 5–10–15-year graded vested alternatives of both bills but has not yet reached a conclusion on the "rule of 45" or a similar provision.

With respect to conditional vesting, if an employee is at least 50 per cent vested when he withdraws his contributions, the benefits derived from the employer's contributions are not to be forfeited, but if the employee is less than 50 per cent vested, the benefits derived from the employer's contributions are to be forfeited upon withdrawal of employee contributions. This is a very clear compromise. The House bill stated that employer-derived benefits could not be forfeited upon withdrawal of contributions while the Senate bill would have allowed such forfeitures.

C. *Definition of Accrued Benefits*

A plan must satisfy one of the following three rules:

1. The accrual rate for any year for each participant is not more than 133⅓ per cent of that participant's accrual rate for any other year.
2. For any year, each participant must accrue not less than 3 per cent of the maximum benefit to which he would be entitled if he commenced participation at the earliest possible entry age under the plan and served until age 65 (or the earlier normal retirement date under the plan).
3. The accrued benefit is to be a fraction of the amount the employee would receive at normal retirement age under the plan as in effect at the time for

which the accrued benefit is to be determined. It will apply only to the benefit payable at or after normal retirement age and would not take account of subsidized early retirement and social security supplements.

The compromise here was to include the alternatives of both bills.

D. *Breaks in Service*

Basically, if an employee has a one-year break in service, he may be required to serve a year after he returns before his prebreak service is counted. If an employee has any vesting when he terminates employment, all his prebreak and postbreak service must be counted. If the break occurs before vesting, he does not lose prebreak credits until his period of absence equals his years of covered service.

E. *Automatic Joint and Survivor Annuities*

The normal form must be at least a 50 per cent joint and survivor annuity if the participant has been married for at least one year before retirement. The participant may elect an alternative form of payment (e.g., straight life) if he wishes to do so. Details of the joint and survivor waiver rules have not yet been determined.

A participant eligible for early retirement who does not elect to retire is not automatically covered by the joint and survivor annuity, but he must be permitted to elect coverage for his period of eligibility for early retirement. If he does not elect the option and dies before normal retirement, his spouse will get nothing. If he lives and does not opt out at normal retirement age, the joint and survivor annuity will apply then. The annuity for the wife of a participant who is eligible for early retirement but who continues to work may be actuarially reduced to cover the cost of the coverage she had before his demise.

Similar provisions are included in the bills for terminated vested employees; that is, such an employee must be allowed to elect a 50 per cent joint and survivor annuity.

F. *Maximum Benefits*

The conferees have not yet announced agreement.

H.R. 2.—The limitation varies by type of plan:

1. *Defined benefit plans.*—Limited to the lesser of an annual benefit of \$75,000 (adjusted for future consumer price index increases) or 100 per cent of the participant's average earnings during the three years of highest compensation, payable as a life annuity. The \$75,000 limit is reduced for retirement before age 55. Pension plan limits are not reduced for preretirement death, disability, or other ancillary benefits or for postretirement joint and survivor

annuities not exceeding 100 per cent. The previous limitations are not applicable if the pension does not exceed $10,000 per year and the employee has never participated in a defined contribution plan of the employer.

2. *Defined contribution plans.*—Limited to the lesser of an annual contribution of $25,000 (adjusted for future consumer price index increases) or 25 per cent of the participant's compensation, including the lesser of one-half of the employee's contributions or the excess over 6 per cent, and forfeitures.
3. *Both plans with same employer.*—The sum of the percentages of utilization of limits under plans cannot exceed 140 per cent of single-plan limitations (i.e., if the defined benefit limit is reached, the company can still provide 40 per cent of the defined contribution limit).

For existing defined benefit plans, these limits will not reduce pension below the lesser of (*a*) 100 per cent of the annual rate of pay on October 2, 1973, or (*b*) pension generated by application of the October 2, 1973, pension plan provisions to all service but ignoring pay increases after October 2, 1973. Benefits in excess of the limits may be paid as long as they are not prefunded. *Comments:* The application of salary increase rates may result in more than just a few employees being affected for valuation purposes by the limitations. We will have to build into our valuations, therefore, a procedure whereby excess benefits will be segregated and financed elsewhere separately. Book reserves will be established, I suppose, until the benefits are due, at which time the trust will be reimbursed and the book reserve written down.

H.R. 4200.—Annual benefits at age 65 are limited to the lesser of $75,000 or 100 per cent of the participant's average earnings during the three years of highest compensation, payable as a life annuity. However, employer deductions are limited to the portion of benefits which does not exceed 75 per cent of such compensation. Limits are reduced for retirement before age 65, pre- and postretirement death benefits and disability benefits, and also for employer contributions to qualified profit-sharing or thrift plans.

G. *Termination Insurance*

The conferees have not yet announced agreement.

H.R. 2.—Effective with plan years beginning after June 1, 1974, for single-employer plans, the Pension Benefit Guaranty Corporation will insure unfunded mandatorily vested benefits. The maximum guaranteed benefit for retirement or disability will be the value of a single life annuity commencing at age 65 equal to $20 per month per year of credited service, with such $20 benefit to be increased for future increases in average wage rates. Lesser coverage may be provided for any benefit becoming effective during the prior five years. Employer liability equals the lesser of 100 per cent of the insured amount or 50 per cent of the employer's *net worth*. An optional insurance program may be established to eliminate all employer liability. Annual premium initially is not to exceed 0.1 per cent (0.025 per cent for multiemployer plans) of liability for unfunded insured benefits plus an additional charge (to be determined) based on the present value of total insured benefits. The plan is covered only if its vested benefit ratio (assets/vested liability) exceeds 10 per cent. Benefits are insured only if the plan has been established for five or more years at termination or if the Guaranty Corporation's board decides to extend the insurance to the plan. Maximum guaranteed benefits are phased in over a five-year period. A complete valuation under approved assumptions will be required at least once every three years. *Comments:* The public will not understand the lack of immediate full coverage. The value of assets for this purpose differs from the value for funding purposes. A current or preceding eighteen-month average of market values is used.

H.R. 4200.—The Pension Benefit Guaranty Corporation will insure unfunded vested liabilities. The maximum guaranteed benefit will be the lesser of (1) 50 per cent of final five-year average earnings preceding the year in which the plan terminates or (2) $750 monthly adjusted according to future social security wage base changes. Employer liability equals the lesser of 100 per cent of the amount determined by the corporation or 30 per cent of the *net worth* of the employer determined as of 120 days prior to the date of termination. The liability of an employer shall be subordinated to all claims of general creditors existing at the time the plan terminates. No plan termination insurance is payable while the employer continues in business. The annual premium is $1 for each participant in the pension plan (higher if the employer wants to avoid a potential charge against net worth). No benefits provided by a plan in existence less than three years at termination shall be guaranteed. There is a similar restriction for benefit increases. *Comments:* Premium is unrelated to the risk. Some have postulated a trend toward defined contribution plans due to the employer liability threat coupled with faster vesting. I expect that most pension plans will accept the required changes in stride and continue business as usual.

II. TWO LESSER-KNOWN ASPECTS OF THE PROPOSED LEGISLATION

A. *Allocation of Assets upon Plan Termination*

H.R. 2 provides that, if a plan was amended within five years of its termination, the priority order be gone through first under the oldest benefit formula within the five-year period; the vesting and eligibility provisions at termination are used. If any assets remain, the order of priority is gone through again for the next layer of benefits, and so on. In addition, assets remaining after satisfaction of all liabilities will be distributed pro rata to the plan participants unless the plan specifically provides for return to the employer.

All plans that I have seen will have to be amended. The five-year carry-back provision of H.R. 2 appeals to me. It should prevent situations where a plan terminates just after a substantial increase in benefits to retirees. Union-negotiated plans are particularly affected.

B. *Calculation of the Social Security Benefit for an Offset Plan*

The conferees have agreed that benefits already being paid under qualified pension plans may not be reduced because of increases in social security, nor may vested rights to deferred benefits be reduced. One aspect which I do not think has been discussed widely is that both bills require that the social security benefit for offset purposes be computed by assuming level earnings to retirement and then prorating for service to date over potential service. No direction is given as to what earnings are to be used for years prior to employment with this employer. This will largely eliminate some of the flexibility that has existed heretofore and will necessitate a great many plan amendments.

III. MOST VEXING ASPECT SO FAR

The definition of accrued benefits earns this title. Many plans are "front-loaded," with higher benefits for thirty years, for example, than after thirty years, and will, therefore, unless an acceptable proration is already employed, be affected by the accrued benefit provisions. This is somewhat surprising, since it is my understanding that the provisions were designed to frustrate "back-loaders."

I have always started the design of a new plan or the redesign of an existing one with consideration of the plan benefit formula and the employer's definition of a career employee. Suppose, for instance, that he feels that thirty years represent a career and wants to provide full benefits at that point or beyond. The accrued benefit rules, all of which tend to make benefit accruals uniform year by year, may make it impossible for this employer to avoid providing excessive benefits to longer-service employees.

MR. JACK M. ELKIN: H.R. 2 spells out a variety of situations requiring actuarial determinations and reports. More emphasis will now be placed on the actuary's opinion, and, consequently, more responsibility will go along with it.

FUNDING STANDARD ACCOUNT

Each pension plan will have to establish and maintain a funding standard account. The account will be charged and credited with certain amounts, and, if there is an excess of cumulative charges over cumulative credits at the end of any year, the funding deficiency will, unless a waiver is obtained, be subject to certain penalties.

The account will, under the House version of the bill, be charged with

1. Normal cost.
2. Level annual installments required to amortize
   a) Initial unfunded past-service liability over thirty years, except forty years in the case of a multiemployer plan or an existing single-employer plan
   b) Increases in unfunded liabilities resulting from plan amendments in thirty years, except forty years for a multiemployer plan
   c) Net experience losses in fifteen years, except twenty years for a multi-employer plan

   but, as a minimum, the amount required to amortize in equal annual installments over twenty years the unfunded nonforfeitable benefits. In addition, any waived funding deficiency must be amortized in fifteen years.

The account will be credited with

1. Actual contributions.
2. Amounts necessary to amortize
   a) Decreases in unfunded liabilities resulting from plan amendments in thirty years, except forty years for a multiemployer plan.
   b) Net experience gains in fifteen years, except twenty years for a multi-employer plan.

Charges and credits will be accumulated with interest.

The several amounts to be amortized as charges and the several amounts to be amortized as credits may be combined into single amounts, netted off against each other, and the difference amortized according to a single schedule to be defined by regulation.

All liabilities will be considered amortized when the assets exceed the accrued liability determined in accordance with the funding method used (note: not on a plan termination basis).

Experience gains and losses are to be determined under the funding method used to determine costs. Under the aggregate funding method, with or without a frozen supplemental liability, gains and losses are absorbed automatically into normal costs and, presumably, therefore may be ignored for the purpose of the funding standard account.

A valuation of the plan's liability and a determination of experience gains and losses, where pertinent, must be made every three years, except that the secretary of the Treasury may require it more often.

The value of plan assets is to be determined on the basis of any reasonable actuarial method of valuation which takes into account fair market value. This means, of course, that plans valuing assets at cost will have to switch to a market-value basis or adopt some systematic procedure for adjusting the book value to reflect market fluctuations. The value of a bond, however, may be determined on an amortized basis running from initial cost at purchase to par value at maturity date or earliest call date.

For the purpose of the full-funding test, the bill specifies that assets are to be taken as the lesser of market value or the actuary's adjusted value.

Changes in the funding method or the plan year may be made only with government approval.

In the Senate version the several amortization periods are, on the whole, somewhat shorter, but the conference committee staff members are recommending the House approach. On the other hand, the Senate bill does not call for a special amortization of the unfunded vested liabilities and the staff is recommending that the requirement be dropped from the House bill. The staff favors also the House definition of assets for funding purposes rather than the Senate requirement that they be taken as the five-year average of market values, and it recommends against the Senate requirement that liabilities and gains and losses be determined annually. Finally, although it is in neither version of the bill, the staff recommends (not unanimously, however) that the conferees permit an alternative minimum funding standard in certain cases where the assets are sufficient to pay all the liabilities of the plan if it then terminated. This alternative, if adopted, would be a boon to employers who wanted to stop or slow down the accumulation of fund assets when the accrued liability determined on a plan termination basis was fully funded without having to adopt the unit credit cost method and ignore future salary projections and ancillary benefits.

Several courses of action to be taken before the effective date will be suggested to the actuary of a fund that will have trouble meeting the new funding standards.

1. Within the range of reasonableness, he might adopt a less conservative set of actuarial assumptions than he had been using.
2. He might change the method of funding to throw more or less into the unfunded past-service liability and less or more into the normal cost, depending on which procedure will result in a smaller initial cost. It might be helpful, for example, to recalculate the frozen liability in order to increase it by some of the experience losses that previously had been absorbed into normal costs.

On the other hand, because normal costs may be met by a level percentage of increasing payroll while amortization payments must be in level dollar amounts, some situations will benefit from a reduction in the unfunded past-service liability. This might be accomplished by recalculating it under the accrued benefit instead of the entry age normal method. In some cases, the decision might be to go further and adopt the aggregate cost method without a supplemental liability, thereby reducing the funding requirement to simply the normal cost.

ANNUAL REPORTS

A pension plan covering more than twenty-five employees will be required to file, within 270 days after the end of the year, an annual report covering, among other things, the following actuarial information:

1. Minimum contribution, normal cost, accrued liability.
2. Actuarial assumptions and cost method used to calculate the minimum contribution, and justification for any changes.
3. Comparison between aggregate contributions and aggregate required contributions since the funding account became effective.
4. Present value of assets used for the purpose of the funding account, and a statement explaining the basis of asset valuation.
5. Present value of the liability for nonforfeitable benefits by the following specified termination categories: employee contributions, beneficiaries and participants over earliest age of retirement, other participants with nonforfeitable benefits, all others. Acceptable methods, including approximations, for the allocation of liabilities to termination categories will be established by regulation. "Present value," with respect to a liability, is defined as the value adjusted to reflect anticipated events, with the adjustments conforming to such rules and regulations as the secretary of the Treasury may provide. The report will have to state the actuarial assumptions used to determine liability for nonforfeitable benefits, but how much latitude will be allowed the actuary and how prescriptive the regulations will be is not yet clear.
6. Actuary's opinion as to whether the above items (*a*) are reasonably related to the experience of the plan and to reasonable expectations and (*b*) utilize assumptions which, in combination, offer his single best estimate of expected experience.

An actuarial valuation is to be prepared every three years, unless the actuary determines that a more frequent valuation is necessary to support his opinion.

If the secretary of the Treasury finds that there is any material qualification by the actuary in his opinion, he may reject the filing of the annual report and, if not satisfied with a revised report, may retain another actuary to make a valuation.

TERMINATION REPORT

A special report must be filed in the event of a complete or partial termination, which is defined to occur when the present value of accrued benefits (forfeitable and nonforfeitable) for all employees excluded from coverage in five consecutive years is 25 per cent or more of the present value of accrued benefits for all participants at the end of the five-year period. A requirement like this may, in its administration prove extremely onerous to plans with high turnover among nonvested participants, especially multiemployer and other collectively bargained plans whose records in this area are often incomplete.

TERMINATION INSURANCE

The bill creates a Pension Benefit Guaranty Corporation which will establish two plan termination insurance funds: a single-employer primary trust fund and a multiemployer trust fund.

The benefits to be insured are, in the House version, those required to be vested under the statutory minimum vesting schedules designated by the plan (other than those which became vested solely because of the termination of the plan), up to the insurance limitations, and any contingent rights to ancillary benefits if all contingencies on payment of such ancillary benefits have been satisfied as of the termination date. The Senate version would have the insurance protection extend to vested benefits even when they exceed the statutory minimum vesting requirements, and the staff recommends that that be the rule adopted by the conferees.

The House bill sets initial premium rates of 0.1 and 0.025 per cent for the single-employer and multiemployer funds, respectively, to be applied to the excess of the present value of insured benefits over assets. A second part of the premium amount for a particular plan will be based on its total insured benefits at a rate so calculated as to produce the same aggregate premium revenue as is produced by the premiums based on the unfunded insured benefits. The Senate bill sets an initial premium of $1 per year per participant for all funds. The staff recommends initially a premium rate of $1 for single-employer and 50 cents for multiemployer plans, with an option to use instead the House formula, provided that the latter does not produce a premium less than half the amount produced by the $1 and 50-cent rules.

Under the House bill, assets will be taken at market value or at the average value over the preceding eighteen months, except that the value of a bond may be determined on an amortized basis or as the commuted value of future income discounted at the valuation rate of interest.

Recognizing that a complete valuation is required only once in three years, the corporation will set standards for acceptable approximations to be used for interim years and will require that appropriate mortality and interest rates be used in calculating the present value of insured benefits. A statement by the actuary will be required to certify that the corporation's rules are complied with.

Under the House bill, insurance coverage will apply to all plans subject to the funding standards, except for those that do not meet two requirements, namely, that they cover more than twenty-five persons (with at least ten having obtained vesting status) at all times over a five-year period and that their vested benefit ratio (i.e., ratio of assets to present value of insured benefits) is at least 10 per cent. The Senate does not make these exceptions. The staff recommends covering all plans, with some discretion left to the corporation in dealing with small plans, where, on the one hand, the possibility of deliberate abuse is greatest and where, on the other hand, the need for protection is greatest.

JOINT AND SURVIVOR ANNUITIES

Under both the House and Senate bills, pensions will have to be paid in joint and survivor form unless the employee elects otherwise. The provision will apply to vested deferred pensions and disability pensions as well as to normal and early retirement pensions. Since employees in good health may elect out without advance notice and employees in poor health need do nothing, pension plans obviously will be subject to antiselection. The law will allow reductions in the single life amounts to offset "the estimated additional actuarial costs associated with providing qualified joint and survivor annuities." How this may be accomplished is not clear. Will the plan, for example, be permitted to use more favorable tables for employees who voluntarily submit proof of good health and less favorable ones for those who do not? Will it be permitted to use disabled life tables for disability retirements? The likelihood is that, in practice, the provision will create additional costs, the potential impact of which the actuary will have to disclose to his client.

The House bill provides also that, in case of death after the earliest age at which retirement is permitted under the plan, the participant will be deemed to have retired on the date of his death and the survivor annuity will become payable automatically. The Senate bill has no comparable provision, and, in compromise of the two positions, the conferees have agreed to incorporate the provision, but without the automatic feature. The participant eligible for early retirement who remains in service will have to make an affirmative election to have the protection.

If he survives to normal retirement age and does not elect out, the joint and survivor annuity will apply.

There is the question of how the "additional actuarial costs" of the preretirement protection can be offset. Will it be permissible, for example, to reduce the retirement benefit of those who had elected this protection during their period of early retirement eligibility but survived to normal retirement age? Even if it is, such a step undoubtedly would be so misunderstood and so unpopular that, as a practical matter, most plans will have to adjust to the additional cost of a new preretirement death benefit. This raises another interesting question: If a plan is integrated with social security to the maximum permissible limit, will it be in violation of the integration rules as a result of the legislation? We might also ponder a more important question: to what extent will employers be discouraged from offering early retirement provisions in the first place, and to what extent will they tend to cut down on benefit improvements they might otherwise make?

MR. JOHN C. ANTLIFF: Individual retirement accounts (IRA's) may be of particular interest to insurance companies. This development might justify extending the investment year method of interest allocation to individual annuity contracts in companies where it has been used previously for group annuity contracts only. What is the status of IRA's in Congress? Are they likely to remain in the final bill, and, if so, will it be necessary for them to be fully insured (like tax-sheltered annuities)? Are the consulting firms thinking of becoming involved in IRA's?

CHAIRMAN BORTON: It is unlikely that the major consulting firms will become involved in IRA's unless a relatively large group of individuals is involved.

MR. JOHN W. PENNISTEN: At the April meeting of the American Pension Conference a member of the staff of the House Subcommittee on Labor indicated that if IRA's were available to employees covered by "substandard" pension plans, the federal tax revenue loss might be as high as $2.5 billion annually and that this would be a revenue loss which the federal government could not afford at this time. So, if IRA's are established, they probably will be available only to individuals who are now without private pension coverage.