**TRANSACTIONS OF SOCIETY OF ACTUARIES
1971 VOL. 23 PT. 2D NO. 66AB**

THE ALTERNATE ROUTE

Seattle Regional Meeting

CHAIRMAN PAUL T. ROTTER: Many of you will recall that at the annual meeting of the Society held in Denver last fall there was a panel discussion of the alternate route. This discussion consisted of prepared comments by several people outlining the pros and cons of the alternate route proposal being considered by a committee of the Academy of Actuaries. A copy of these comments was sent to each Society member following the Denver meeting.

Today we would like to have comments from any of you who wish to speak on this subject. To set the stage for the discussion, the Academy committee appointed to study this subject has prepared a "Statement of the Question."[1] This statement not only covers the original proposal of the Academy committee, but it stipulates certain results which it is believed would flow from this change and which are generally accepted by both those who think that the adoption of this proposal would be desirable and those who do not. Therefore, we believe that this statement provides a common starting point for today's discussion. Several of the expected results covered in the statement have been accepted only after considerable debate by those who have spent a great deal of time studying this subject.

MR. JULIUS VOGEL repeated the discussion which he had presented at the annual meeting and which is found in *TSA*, XXII, D478.

MR. PETER W. PLUMLEY repeated the discussion which he had presented at the annual meeting and which is found in *TSA*, XXII, 482.

MR. PAUL D. YEARY: I have strong feelings concerning the alternate route. My opinions may be closely related to the fact that I attained Fellowship without attending an actuarial school and to the way my company uses actuarial students.

The last thing many companies need is new Associates of the Society with no practical experience. Many companies have hired students with one or two or even no examinations, and much of their progress in becoming successful actuaries may be traceable to their "earn and learn"

[1] The "Statement of the Question" was read following Mr. Rotter's remarks. It will be found in *TSA*, XXIII, D85.

experience at the lower examination level. Under the alternate route approach, smaller companies may hire a new Associate expecting to get a practicing actuary instead of a person with nothing more than the theoretical knowledge required to pass a deliberately easy examination. In other words, new Associates may be less qualified for practice in the future than they have been in the past.

If we have an alternate route which results in giving credit for five traditional examinations by attending an accredited college and taking one examination with an 80 per cent pass ratio, those who have studied the same material on their own may feel that they should have the right to try to pass the easy test after self-study. To deny them this right may seem inconsistent with the fact that the alternate route student can, after failing the comprehensive test twice, use the traditional route to Associateship.

Mr. Vogel stated that those who have attended actuarial schools have enjoyed higher pass ratios than those who have not. This may be partially due to screening that undoubtedly occurs in the schools rather than to the examination itself. Those who attend actuarial schools are probably more committed to the profession, at least during the early examinations. They have a better idea as to how much study is required to pass an examination and are probably less likely to stop taking the examinations on a failing note. To have the pass ratios turn out otherwise would indicate that the extra hours spent in the classroom were worthless.

Des Moines Regional Meeting

MR. JAMES C. HICKMAN repeated the discussion in favor of the alternate route which was presented by Mr. Harry D. Garber at the New York regional meeting.

MR. STEPHEN G. KELLISON repeated the discussion against the alternate route which was presented by Mr. John A. Fibiger at the New York regional meeting.

MR. CARL H. FISCHER: The question of granting examination credit for university courses passed with a satisfactory grade is a perennial one. Many actuaries have made such suggestions before the old American Institute of Actuaries, the old Society, and the present Society. Although I have always been convinced that some day such credit would be granted, I did not anticipate the sudden eruption about three years ago which put the "alternate route" before the Academy, the Conference, and the Society for serious consideration.

Giving examination credit for the successful completion of university courses is not an untried idea. I understand that the Faculty of Actuaries gives credit for courses taken at the University of Edinburgh and the Institute of Actuaries for course work at the University of London. Fairly recently the Institute of Actuaries of Australia and New Zealand has given great recognition to the actuarial courses of Macquarie University.

One of the major arguments in favor of the alternate route is that practically all other professions have advanced from the apprenticeship stage of education to reliance upon formal university education in accredited institutions. This argument has the tactical advantage that it puts the opponents on the defensive. They must show that there is something so special about the actuarial profession that it cannot be properly served by professional university education. They state that the actuarial profession is so much smaller than law, medicine, and accounting that it would not need as many professional schools. To my way of thinking, this would make the process of accreditation much easier, since only relatively few schools would need to be examined and accredited. Then it is sometimes stated that accreditation is ineffective. This would come as a shock to the American Medical Association, which many years ago managed through accreditation to upgrade or eliminate the numerous class B and class C schools and to eliminate the "diploma mills."

Those opposed to the alternate route appear to make the implicit assumption that the present examination system is perfect and should be the sole criterion with which everything else is compared. Now I would like to challenge the assumption that all is perfect with the present system of education and examination, although I believe that, by and large, the system which the Society has supported since 1892 has worked well. By this I mean that I believe that relatively few well-qualified persons have been excluded from Society membership and that fewer still poorly qualified persons have been admitted.

What are the reasons for the incorrect exclusions or admissions? The basic reasons are inherent in any system which uses the results of standard written examinations as the sole criterion. Every experienced teacher knows that it is impossible to design an examination which shows fully the extent of knowledge of a subject which every given candidate possesses. The reasons are many. One big factor is luck, as in guessing the answers to some of the multiple-choice questions. The particular list of questions may include or exclude topics on which the candidate is exceptionally well prepared or poorly prepared. Other factors are the candidate's speed of writing or speed and accuracy in making arithmetical computations by hand; his astuteness in forecasting the emphasis on

certain of the topics covered by the syllabus; his access to sample examination questions; and, finally, his emotional makeup. Some persons are at their best under this kind of pressure, while some others wilt, yet their abilities in on-the-job situations may not be at all correlated with their examination-taking abilities.

It is undoubtedly true that generally the outstanding students and also those well below the desirable level of competence are likely to fall into their respective appropriate slots under almost any reasonable set of questions or grading method. But there will always be a fair number of students whose fate is a function of the particular set of questions and grading method employed. This is just as true of examinations given in the classroom as it is of the Society examinations. For this reason, in most courses the professor does not base his grades solely upon one final examination but relies on the results of several examinations plus problem sets, term papers, class discussions, and individual conferences. The superiority of using all of this evidence over using the score on only one examination, no matter how comprehensive, is obvious to teacher and student alike. Of course, the uniformity and fairness criteria needed for nationwide examinations rule out the possibility that the Society itself might use the classroom methods.

The most common objections to the alternate route are the fears that the present "uniformity" and the "high standards" would be compromised. The critics are not always clear as to the kind of "uniformity" they mean. If they mean that all students should have studied not only the same subjects but exactly the same textbooks, then this seems to be carrying things a bit far. Is such extreme uniformity a virtue? We do want the students to have studied the same core subjects, but otherwise such regimentation is contrary to good educational practice and out of step with modern university education. Even in medicine, often thought of as a program of great rigidity, there has been a reorganization so that now a number of electives are permitted. These young doctors are going to specialize in diverse ways after graduation, and so are young actuaries. Even our Fellowship examinations have recognized that now, with the establishment of the "I" and "E" options.

The argument that the adoption of the alternate route would lower the "high standards" we now have was refuted to a considerable extent by the recent analysis by Harry Garber of the examination records of graduates of most of the actuarial schools. Their excellent examination records were made in spite of the fact that most of the schools, I believe, do not aim primarily at examination passing but prefer to give their students balanced, well-rounded educations.

To embellish their arguments regarding the possible loss of the "high standards," at least two of the critics have made sweeping statements to the effect that a college professor is simply not going to apply the same level of standards to his students that the Society applies, or that professors are not really as dedicated to the maintenance of high academic standards as many persons believe. When the critic is not an academician, we can ask, "How do you know? What evidence do you have for such a generalization?" When the critic is himself a professor, we can quote Priscilla Mullins in *The Courtship of Miles Standish* and say, "Why don't you speak for yourself, John?"

One critic feels that colleges cannot really introduce more modern mathematics or other modern topics into their curriculum ahead of the Society because textbooks not available to one are not available to the other. Anyone who has taken any graduate work knows, however, that in advanced courses it is very common to present the work by means of lectures and library assignments in research journals because there is no textbook on the subject. Another objection is that, because a year ago a number of colleges closed shortly before the end of the scheduled term because of campus disorders, we cannot rely in the future on the academic quality of their work. If continuous disorders and early closing were to become the pattern of the future, the entire university system would disintegrate and we would not have to be concerned with an alternate route.

Finally, in considering the arguments opposed to the alternate route, we find that one objector thinks that Gresham's law would operate so that the bulk of the actuarial students would gravitate to the weaker, easier schools. Another objector, however, fears that top schools would be favored, threatening the very existence of the actuarial programs which were smaller and weaker. I leave it to these two prophets of doom to fight it out as to which way the alternate route will lead to disaster.

From my foregoing remarks the reader might conclude that I am certain that the alternate route is almost heaven sent to rescue the actuarial profession. This is not so. I am not positive that it will work; I recognize that there are several practical problems which must be solved to implement the program, but the possible advantages are great enough so that it deserves a fair trial. I do feel that none of the counterarguments has sufficient validity to compel us to abandon, a priori, an adequate trial of the system. What have we to lose except some effort and the somewhat remote chance that a few persons might be admitted as Associates who in some respect might not be as well qualified as we would like?

There are indeed a number of problems remaining to be solved before the alternate route reaches its optimum development. One problem is

the conflict between the Bachelor's degree concept and the graduate degree concept. The original alternate route proposal was based definitely at the Master's degree level. Obviously one can be better educated in five or six years than in four. That breadth of education which has been so highly praised and advocated in presidential addresses of the Institute and the Society for nearly a century must be whittled down in a four-year course to make room for the technical courses. Another advantage of the graduate program is that the student is much more likely to have fully decided upon his vocation. The person who must commit himself early in his undergraduate years is much more apt to change his mind.

Another major problem concerns the extent and character of the "comprehensive" examination. This examination was not part of the original concept but was added because of the fear that a state would not accredit an actuary solely upon his degree from an accredited university, especially one operating in another state. In my view, insistence that the comprehensive examination should be a slightly shorter version of the first five examinations of the Society, with the same low passing results, is a way of killing the alternate route. Why should a student opt for such a setup? The comprehensive examination would *not* be the sole determiner of competence, as the actuarial examinations are, but instead would be merely a final confirmation of the learning achieved primarily by performance at a high level in university courses. The passing rate for A and B students should be very high, just as it is now for newly graduated doctors and lawyers. No one in those professions believes that merely passing a licensing examination proves the man capable of practicing his profession. The major evidence is graduation from an accredited professional school. We are not even proposing that we go as far as these other professions. The alternate route would only lead to the Associateship, and the new Associate would still have the five Fellowship examinations ahead of him before receiving the final stamp of approval.

In conclusion, I recommend that the Society pursue the study of the alternate route with a view toward working out the practical problems so that it can be given a thorough and fair trial over a substantial period of years. After this experience has been thoroughly reviewed, the program can either be dropped or adopted as a permanent feature of actuarial education.

MR. KELLISON: I feel that the remarks made by Professor Fischer require a rebuttal. Although he and I largely agree on the facts, we reach substantially different conclusions.

The granting of exemptions from actuarial examinations for university

course work cited in other countries—in particular, Great Britain and Australia and New Zealand—may not be a good precedent for North America. In these two cases there are fewer universities involved, and there is much homogeneity among them. Contrast this with the quite heterogeneous, pluralistic educational system in North America.

It was stated that accreditation of university programs would be easier rather than harder for the actuarial profession, since the number of programs is rather small. This is true as far as it goes. However, the real problem is the extremely small size of the faculties at each of the various actuarial schools. This creates severe problems in maintaining standards in an objective manner. For example, what happens to a two-man accredited actuarial program if one of the men leaves? How contingent is continued accreditation on the individual involved?

On another point, I would certainly agree that the current examination system is not perfect. However, if we are really concerned that luck is a factor, I maintain that it would be less a factor in our current nineteen-hour examination system than it would with a nine-hour comprehensive examination. Concern has also been expressed about excellent students who never became actuaries because they "wilted" under examination pressure. Personally, if I were a student again, I would rather wilt on Parts 1–5 than wait to wilt on Parts 6–10. Furthermore, someone who undergoes our training process is less likely to wilt on the job.

The question of uniformity has also been raised. One of the major features of the actuarial profession is the fact that there are no variations in standards from state to state and from university to university. As much as is humanly possible, all Fellows have undergone the same training process. Thus, when an employer hires an actuary, he has a clear knowledge of just what he is getting in the way of professional background. It should also be noted in passing that our examinations are objective as well as uniform, since they are taken anonymously.

Finally, the question of Gresham's law has been discussed. I do not know just how significant a factor this is. If it is a factor, then there would be a tendency, with the alternate route, to gravitate to the easiest of the accredited schools. We cannot maintain that all students striving for professional qualification and its attendant rewards will be as idealistic about their education as we would hope.

MR. HARLOW B. STALEY: One question inherent in the discussion of the alternate route which needs more consideration is, "An alternate route to what?" We seem to be more interested in the method of getting there than in the destination. I realize, of course, that the implied goal

is Fellowship in the Society of Actuaries. I believe that the goal should be to become a competent and accredited member of a profession. The subject matter of that profession needs to be defined. Defining what an actuary is can only be done by describing what one has to do to become one.

The accountants are recognizing that much of what we study to become actuaries can be considered a specialized subject in advanced accounting. There is little that comes under the heading of actuarial science that is not covered, perhaps with different labels, in the better M.B.A. programs. The second group of principles we study are those of contract law. Again, we overlap another profession. This is not too surprising, because accounting itself has large areas of overlap with business law. Drake University here in Des Moines has a graduate program leading to both an M.B.A. and a J.D. degree. We study insurance practices. These are also studied by underwriters, particularly in nonlife insurance.

Could a college freshman of the type we like to see go into actuarial work become a CPA with less effort, greater recognition, a broader field to work in, and similar opportunities? A CPA with the necessary capabilities could specialize in insurance work and become a Fellow of the Society of Actuaries more readily than the transition could be made in the other direction.

Instead of an alternate route to Fellowship, let us concentrate on a new single route to the status of "Accredited Actuary." Two routes may be needed during the transition, but eventually only one should prevail, and it should include a combination of education, examination, and perhaps experience.

At this point I would like to raise a question that has seemed to be taboo in our formal deliberations. Is it possible for actuaries to become recognized as professionals in the same sense that doctors, lawyers, CPA's, and college professors are, when a college degree is not one of our requirements? Granted that our examinations are tougher than most college courses. Granted that a formal education is a questionable requirement for any occupation. Granted that there are a few good actuaries who do not have a degree and that the requirements could not be applied retroactively. Nevertheless, I think that the lack of such a requirement makes it more difficult to obtain recognition and accreditation from those who are not familiar with our requirements.

MR. DAVID M. WELSH: Resolution of this controversy can perhaps be eased and expedited if the principal arguments favoring the proposal are carefully examined.

A. "By establishing the alternate route, the Society would encourage diversification in the mathematical basis of our profession."

Any substance to this argument is rather difficult to find, since most actuarial students have, in their undergraduate work as mathematics majors, physics majors, and so on, already been exposed to a wide range of mathematical theory and technique not yet recognized as fundamental to actuarial science. Upon becoming an actuarial student, one does not forget all such prior knowledge. To permit substituting knowledge of these peripheral areas of mathematics for a thorough grasp of fundamentals would appear to add nothing new to the prefession and would certify as professionally competent many who have not thoroughly mastered the basics of our work.

B. "The proposed alternate route would keep students (and, thus, the profession) in close contact with 'the front line of new technical developments' and the latest 'intellectual innovation,' and it would encourage and reward students' acquiring a broad general education. Both such forces would encourage students and actuaries to be more innovative and to experiment and explore more vigorously into new fields of knowledge and new solutions for the problems of the day, whereas the current educational process stifles creativity by simply elaborating and transmitting a fixed body of theory."

The suggestion here seems to be that the actuarial profession has been characterized by an absence of innovativeness and creativity, due to removal of insurance companies and consulting firms from the "technical front lines" and due to a lack of general education among actuaries. This line of argument probably results from unfamiliarity with the work actually done by practicing actuaries. Few actuaries are engaged in a daily regurgitation of canned solutions to predigested problems; rather, the practicing actuary's time is largely devoted to innovative work, dealing with problems which require comprehension of the full scope of material covered in the examination program. It must also be borne in mind that the current examination syllabus is not intended to impart an all-inclusive, fixed body of theory; rather, the objective is to give the student a dependably strong working understanding of the fundamental considerations and central issues bearing on insurance company and employee welfare plan operations and to familiarize him with some lines of thinking and approaches to problems that achieve the desired results. The apprenticeship feature of the current educational approach provides the student with sufficient understanding of the realities of the business community that innovativeness and creativity are tempered with practicality. Any

problem of distance between the profession and the "technical frontiers" would appear to depend more upon personal motivation of individuals to keep abreast of new developments than upon the educational system.

C. "The alternate route would help the profession advance from its (presumably outdated) emphasis on learning while working—the apprenticeship approach."

This obviously misses the point that the standard of comparison properly used in analyzing the educational process of actuaries is this: Does this process achieve the desired educational results at a reasonable cost and to the satisfaction of both students and established professionals? Absence of close parallels with educational processes used by other professions is irrelevant.

D. "The alternate route would foster a greater effort by the academic community to meet the educational needs of our profession."

While this may be true, it would not necessarily benefit students, schools, or the profession. Unless there were a corresponding increase in student interest in university-operated actuarial training programs, the result might simply be an increased number of programs having insufficient enrollment for their economic justification.

E. "Some otherwise-competent students 'wilt' under examination conditions. The alternate route would facilitate their entry into the profession, because it would provide a fairer measure of their actual understanding of the material in question."

The student who wilts under examination conditions may similarly wilt under pressure on the job. An advantageous feature of the present examination system is that it provides much more than an intellectual screening of candidates to the profession. Actuarial examination success gives an employer a reliable indication of the student's capacity to deliver in the work situation. The successful student under the present examination approach has shown that he is self-motivated, able to work independently, and capable of fast, clear, logical thought and expression with respect to complicated subject matter under extreme pressure. Does the Society really want an alternative to these inherent advantages of the present system?

Thus the proposed alternate route to Associateship appears to offer few, if any, clear benefits to the profession or to students. In view of the numerous resulting problems, adoption of the alternate route would be injudicious. If, however, there developed a strong wave of sentiment

favoring the alternate route, a compromise solution would be establishment of an alternate route to credit for Parts 1–3 or Parts 1–4 rather than for the full Associateship program.

MR. JOHN C. ANGLE: One of the aspects of the alternate route that troubles some of us is the difficulty of accrediting or evaluating educational programs in actuarial science. The problem is remarkably well pinpointed in an analysis by James C. Hickman that appears in the May, 1971, issue of *The Actuary*.

In his analysis Mr. Hickman concludes that society needs to find measures of efficiency for each of the social systems within it. "Society" must do so, because the professionals within each system will not. Thus Mr. Hickman tells us:

> Because of the inherent difficulty in measuring the effectiveness of health, education, and defense systems, the professionals who manage these systems tend, as a convenience, to define operational management goals that only indirectly relate the ultimate output to the input of the system.

Mr. Hickman takes education as a case in point by observing:

> If you discreetly inquire of a school superintendent or a college president the rating of the institutions that fall in the same general class as his, once again you will observe no great trouble in making the ordering. The chances are overwhelming that the rating will be a function of class size, the credentials of the faculty, and measures of library, laboratory and computer size. Seldom will the ratings depend on the relative educational impact on the students who move through the various institutions.

It seems to me that Mr. Hickman's observations are relevant to the debate involving the alternate route. His observations would suggest that accreditation ratings will not measure the educational impact of actuarial instruction and to imply that the only way to measure the effectiveness of actuarial instruction at any institution is by testing its graduates.

I suggest that actuarial examinations constructed and administered by our profession continue to be the only practical means of determining the knowledge of candidates and of evaluating actuarial instruction. The impossibility of accrediting programs of actuarial instruction remains a fundamental weakness of the alternate route.

PENSION DEVELOPMENTS

Seattle Regional Meeting

Early Retirement

1. What provisions have resulted from recent collective-bargaining agreements? How do the provisions vary by type of employment? Why the push for liberal early retirement provisions? What are the social and economic implications of these provisions?
2. How does the actuary determine the cost of early retirement? Does he consider only the pension plan cost? Are there plan design alternatives that give better cost control and personnel management?

Legislation and Regulation

3. What are the current status and probable course of pension "reform" legislation? What problems were encountered by those completing the study questionnaire distributed by the Senate Labor Subcommittee? Is there any indication of what use will be made of the study?
4. What problems are encountered in forming a professional corporation and in designing a qualified pension plan for it? What features are found in such a plan which are not usually found in a conventional corporate plan?

MR. JUAN B. RAEL, JR.: My knowledge on the first question in this session is based on familiarity with jointly trusteed plans on the West Coast, where I have been a consulting actuary for fifteen years. Most of the recent development in jointly trusteed pension programs has been in the militant labor cities in the West, such as San Francisco, where the unions have negotiated substantial employer contributions for pensions.

There are a few instances in which specific plan provisions have been negotiated within a collective-bargaining agreement. The general pattern is for a union to negotiate a contribution to a pension trust. Then a plan is developed. During succeeding rounds of collective bargaining, additional contributions to the trust are negotiated, and it is up to the trustees to resolve how the plan is to be revised. The union trustees generally carry the greater responsibility in suggesting the types of new benefits they would like for their membership.

The emphasis on early retirement provisions has a correlation with the contribution rate. In the early years of a pension plan, when the contribution rate is generally low, say, 15 cents or less per hour, the usual desire of a joint board of trustees is to provide the highest possible benefits with the moneys available for those close to retirement. This objective is, in fact, usually the principal reason why the pension plan was negotiated. Since the union is able to negotiate additional contribu-

tions to the plan, the trustees become mindful not only of the retirees and those close to retirement but also of the younger membership.

There is no doubt that a pension plan is an important political tool to the union trustees and that benefit increases have been used by incumbent officers as a part of their "record." As contributions are increased, it is vital that the improved benefits have a broad appeal to the entire membership. This means that the younger members must be able to see new benefits which they feel have fairly immediate rather than long-deferred value to them.

If I were to attempt to assess an order of priorities of the demands by union trustees for benefit improvements, I would list them as follows:

1. Increase the normal retirement benefits.
2. Liberalize the vesting provision.
3. Reduce the normal retirement age.

As you can see, the first three items relate to greater early retirement benefits. The other items on my list are the following:

4. Provide for subsidized early retirement factors.
5. Provide a preretirement death or widow's benefit.
6. Liberalize the disability benefit.
7. Provide or liberalize the postretirement death benefit.
8. Increase the benefits to retirees.

The normal retirement age under a pension plan should be the average age at which it is more economical to retire an employee than to keep him on the payroll. If we use this criterion, industries or crafts should have different normal retirement ages, varying according to the work requirements.

In our experience the greatest demands for improved early retirement benefits or a reduced normal retirement age have been in the heavy construction industries, where the average employee cannot work as long. It is also in the construction industry that the greatest pension contributions are seen. It is not uncommon in California to see contribution rates in this industry well in excess of 80 cents to $1.00 per hour. A typical normal retirement age is now 62, and this lower age is often combined with early retirement reduction factors of 0.25 per cent for each month the individual retires prior to his normal retirement date.

Three reasons that come to mind for the strong trend toward liberal early retirement provisions are the following:

1. The substantial contributions available for the purchase of benefit improvements have pushed benefits to a high enough level so that the money can best be spent, from a political standpoint, on improved early retirement provisions.

2. There is a desire on the part of both union and management to encourage older, less efficient workers to leave the industry.
3. There is a trend toward increased leisure time.

I am not sure what the social and economic implications of these provisions are. As of this date, there are too few plans nationally with a normal retirement age of less than 65 to have any material, social, or economic impacts. I foresee, however, an increase in demands to Congress to reduce the social security normal retirement age from 65 to 62.

The two typical types of early retirement provision are (*a*) a reduced normal retirement age and (*b*) subsidized early retirement factors.

Under the reduced normal retirement age, we assume that all employees will retire at the lower age. This is a conservative approach because of the actuarial gains resulting from postponed retirement if employees are allowed to accrue additional benefits and continue to work after normal retirement age. If no benefits are granted during postponed retirement, then most employees will terminate on the normal retirement date and the actuarial gains will be reduced.

It is more difficult to estimate the cost of an early retirement provision which provides for subsidized actuarial reduction factors. In theory, we should estimate the percentage of employees taking advantage of the early retirement provision at each possible early retirement age, and establish an arbitrary retirement age which represents a weighted average and which will be somewhat lower than the normal retirement age.

Where the plan does not provide for an actuarial increase on postponed retirement, irrespective of whether the employee is allowed or is not allowed to accrue benefits beyond his normal retirement age, we fund to the normal retirement age and assume that the gains on postponed retirement will be awash with the resulting actuarial losses on early retirement. We have not had enough experience on plans with subsidized early retirement factors to evaluate our arbitrary assumption.

As actuaries working with either a joint board of trustees or a corporation, we can only use our judgment in giving advice as to the anticipated cost of any changes in the early retirement provision. We have no technical basis for evaluating the noncost effects of "encouraged" early retirement. Those people working with the "human" part of a group evaluation—personnel managers, industrial relations directors, business agents—would be in a better position to determine the impact of other factors.

I have a few observations on the question whether there are plan design alternatives that give better cost control and personnel management.

1. If the purpose of a reduced normal retirement age is to encourage early retirement, its effect is maximized if the reduced retirement age is made mandatory. The effect of lowering the normal retirement age is lessened if postponed retirement is allowed and is further minimized if additional benefits can be earned and/or an actuarial increase is also granted.

2. Under a jointly trusteed plan, which, as we have mentioned previously, is frequently a political tool of the union trustee, it is often desirable to concentrate additional employer contributions on maximizing the normal retirement benefit. By increasing the normal retirement benefit without any modification in the early retirement reduction factor, any employee who chooses to retire early also enjoys increased benefits.

3. One plan with which we are familiar approaches the normal retirement age question from a slightly different standpoint. The emphasis under this plan was on having a low normal retirement age with provision for an actuarial increase to employees who postponed their retirement.

MR. DANIEL F. McGINN: Although not a direct by-product of bargaining, one very large jointly managed pension trust (the Western Conference of Teamsters Pension Trust) has made a major improvement in its early retirement provisions by eliminating all actuarial reductions between ages 62 and 65. Actuarial reductions for retirement before age 62 have been liberalized so that the actuarial reduction at age 55 is less than 50 per cent. In general, labor is exerting continuing pressure to reduce the normal retirement age and liberalize early retirement provisions to make more job opportunities available to younger employees. The recent economic recession has re-emphasized the need for labor's action.

With the recent improvement in social security benefits, early retirement is becoming more practical. Soon there will be increasing pressure to provide unreduced social security benefits at age 62. If and when that liberalization comes, I believe there will be a massive movement to liberalize early retirement benefits. As a matter of fact, today several plans are using newly bargained nickels to provide automatic temporary pensions to supplement early retirement benefits until social security pensions commence.

Many corporations are now beginning to consider their pension plan's early retirement provisions as a very useful personnel tool for replacing worn-out executives. Since most plans are integrated with social security benefits, the Internal Revenue Service has established the maximum early retirement factors applicable to the excess portion of the pension formula. To effect more liberal early retirement benefits, one very large corporation has changed its formula into a "base plan" and a "supple-

mental plan." Because the "base plan" is independent of social security benefits, there is no actuarial reduction on that benefit portion when an employee retires. Even the excess benefit is treated liberally, since the maximum early retirement factors allowed by the IRS produce early retirement benefits significantly greater at the principal retirement ages than the actuarial equivalents of the accrued benefits.

Union leadership faces declining employment opportunities caused by the continuing impact of automation in industry. Labor does not view the shorter work week as the solution; rather, it believes that employment opportunities will result from additional holidays, longer vacations, *and early retirement*. Labor views the shorter work week as an encouragement to "moonlighting," which will defeat labor's basic goal of removing older employees from the labor market. Consequently, despite the vast sums required to finance earlier normal retirement, a reduction in retirement age is inevitable!

During the next few years, we are certain to see labor negotiators press for reduction in the normal retirement age, and, as they succeed in doing so, corporate managements will face increasing pressure to provide their salaried employees with the same opportunities for early retirement. The signals for change can be seen now. When male employees can receive unreduced social security benefits at age 62, as I previously suggested, the die will be cast. In my opinion, we have at best a few more years before that liberalization will be realized—if we have that much time.

As I mentioned earlier, corporate managements are giving increasing attention to the use of liberal early retirement provisions to smooth the way for replacing worn-out executives. Corporate managements must decide whether the increased cost of liberal early retirement provisions for its long-service employees is not, in fact, less than the cost of continuing such employees—even at reduced salaries—on the payroll.

Until recently, when corporations and trusts began to make significant liberalizations in early retirement provisions, the problem of "pricing" early retirement costs was relatively simple. The cost was essentially the same as that of a vested terminating employee because benefits were actuarially reduced—at least in an approximate manner—and the basic benefits usually were quite modest.

Today, when benefit levels of many plans have become substantial, when less than full actuarial reductions are being imposed, and when social security benefits are available (even though reduced) at age 62, past experience is unlikely to be of much value. It is up to the judgment of the actuary to evaluate all the plan provisions and probable economic

factors to develop his best "guesstimate" of retirement rates. In one recent valuation, we developed "high" and "low" probable rates of retirement to obtain a range of costs in order to advise the plan's trustees.

With the marked swing of corporate pension plans from formulas of the "career average" type to those of the "final average" type, employees who retire early will have pensions which are more adequate than previously. This more adequate early pension and a social security pension that can commence at age 62 assure greater use of early retirement provisions. Also, as I indicated earlier, corporate executives today tend to "wear out" because of the effects of business pressure and of rapidly changing business technology; therefore, many corporations are looking to the pension plan as a vehicle for budgeting for the economic replacement of executives at an earlier than normal retirement age. This same concept is applicable to nonexecutive personnel, but not to the same degree.

The usual "with consent" provisions of corporate pension plans can be helpful to corporations to some degree in regard to cost control and personnel management, but it is difficult to effectively force an employee to stay on in a useful capacity if he has decided to retire early. Also, the "with consent" proviso is difficult to impose on an integrated benefit formula and still to accord a liberal determination of early retirement benefits.

Usually plans will allow early retirement after attainment of at least age 50 or age 55 and a relatively long period of service. A more flexible approach is to allow early retirement after age 50 or age 55 where the combined age and service equals 70 or 75, respectively. Perhaps personnel management can be best achieved if early retirement under the plan is co-ordinated with eligibility for the continuation of postretirement group insurance. For example, if an employee retires early "without consent," he might be considered a terminated employee who is ineligible for postretirement group insurance. On the other hand, if the employee does retire early "with consent," then he and his beneficiary are entitled to valuable postretirement group insurance. Such a practice would have to be handled carefully to avoid discrimination and could be useful only where postretirement group insurance or other coverages are truly valuable.

Pension legislation appears inevitable. However, exactly what legislation and when are questionable. Now pending before the Ninety-first Congress are the following: the Employee Benefits Protection Bill (H.R. 16462—Ayres); the Employee Benefits Protection Bill (S. 3589—Javits); the Welfare and Pension Plan Protection Bill of 1970 (S. 4327—

Williams); and the Welfare and Pension Plan Protection Bill (H.R. 1046—Dent). The Javits and Dent bills are receiving the most publicity, which leads me to believe that some combination of these bills will probably be passed either by the Ninety-second or by the Ninety-third Congress. I personally will be very surprised if any of these bills are passed by the Ninety-first Congress.

From my viewpoint, the study questionnaire sent to the administrators of more than a thousand private plans last year by the Senate Labor Subcommittee will probably be the "launching platform" for public support of major pension reform legislation. The questionnaire requested information on plan provisions, funding media, and forfeiture of benefits. Replies in the latter area undoubtedly will generate statistics that will be interpreted as demonstrating that vast numbers of employees have forfeited benefits on account of inadequate vesting and/or portability provisions. Unfortunately, most administrators' records have not been maintained to produce meaningful data; also, there is no way to determine the number of employees who "forfeit" pension benefits under one plan and simultaneously become covered by another pension plan.

In any event, I believe that the following are likely to be a part of the pension "reform" legislation:

1. *Eligibility.*—Conditions will probably be similar to those currently applicable to pension programs for self-employed individuals—that is, coverage must commence after three years' service or less.

2. *Compulsory vesting.*—Probably the "rule of 50" will eventually be adopted; that is, an employee will be at least 50 per cent vested once his age and service equal 50. I have talked to others who feel that compulsory vesting will be even more liberal than the "rule of 50."

3. *Minimum funding requirements.*—I suspect that something similar to the Canadian provincial legislation will be adopted—that is, unfunded accrued liabilities existing as of the effective date of legislation will have to be amortized over a period of 30 years, and the unfunded liabilities resulting from benefit improvements will have to be amortized over 10–15 years.

4. *Expanded disclosure information.*—Audit and disclosure requirements would be increased. A new annual report would require additional detailed information on the transactions, the auditor's opinion on the financial condition of the plan, and a copy of the latest actuarial report. Upon request, the administrator would have to furnish plan participants with individual statements of benefits accrued and the benefits which would be received if the plan suddenly terminated.

5. *Minimum fiduciary standards.*—Every person with any control or authority would be expected to conform to the "prudent man" rule. No loans are to be made to a fiduciary or his employee, to an employee's relations, to the

employer who contributes to the fund or his employees, or to a labor organization for whose members the fund was established. An investment restriction would be imposed so that no more than 10–20 per cent of the fund's assets could be invested in the securities of the employer.

MR. WILLIAM K. STEINER: The following are some of the problems encountered in forming a professional corporation:

1. *Announced IRS policy.*—The IRS has been indicating for some time now that it feels that, as far as qualified plans are concerned, partnerships and sole proprietorships should be treated in the same way as corporations. This would mean that Keogh plan benefits would be greatly increased and, presumably, corporate plan benefits limited. If this change will occur in another year or two, and if the primary purpose of incorporation is to obtain the more favorable treatment accorded a corporate retirement plan, why not wait?

2. *Ethical objections.*—Until recently corporations were prohibited from the practice of a profession. It was assumed that a professional practice should be limited to individuals, without control or interference by others. Many professionals who have spent the major part of their lifetimes working just cannot give up this ethical objection to incorporation.

3. *Cash flow.*—If the partners are already spending almost all the money that is coming in, it is useless to talk about the tax savings that can be realized with a retirement plan. Even if there is an annual "surplus," can the partners afford to have substantial portions of their profits "locked in"?

4. *Changes in taxes.*—The limit of 50 per cent on incremental earned income coupled with the changes that have been made in the taxation of lump-sum payments from a qualified plan have reduced some of the tax advantages of qualified plans.

5. *Bunching of income.*—Many partnerships enjoy a form of tax benefit that will be lost if they incorporate. Partnership income is normally taxable to a partner in the calendar year in which the fiscal year of the partnership ends. For example: If a partnership operates on a July 1–June 30 fiscal year, the partner who joins the firm on July 1, 1972, reports no income from the partnership until 1973. If the partnership incorporated on July 1, 1973, he would report twelve months of income as a partner and six months of income as an employee of the corporation in 1973.

6. *Transfer of accounts receivable and depreciable assets.*—There are some possible unfavorable tax consequences involved in transferring these two assets to the new corporation.

7. *Coverage for employees.*—The cost of providing for benefits for common-law employees may be prohibitive. This may not be a problem if (1) employees are already covered by a plan, (2) there are very few employees, or (3) benefits for employees are necessary anyway for competitive and personnel reasons.

8. *Dealing with professionals.*—In many professional partnerships, the primary job of taking care of clients or patients comes first. The running of the

business of the partnership is the last thing to be done and suffers accordingly. It may be difficult to obtain agreement from partners on necessary actions to be taken. The professionals may be so busy that it is virtually impossible for a meeting to occur. Jealousy may also be a serious deterrent. For example, one of the main reasons why some partnerships have not incorporated is the inability of the partners to agree on the election of a president for the corporation.

9. *Fees.*—Many professionals are used to charging fees for their services but not to paying fees for professional services rendered. As a group, doctors are particularly bad in this respect. Because of the relatively high level of income and correspondingly low level of financial sophistication of many medical groups, they are the most in need of help and the least willing to pay for it. Legal partnerships pose a special problem. Lawyers earn their livelihood by exploring issues at great length and discussing all sides of a particular question. This is as it should be, but, if you charge for your services on the basis of the time you spend working for a particular client, it is important to stress this fact when discussing possible employment by a law firm. Bad enough to get talked to death, but worse if fee problems also result.

In many cases the adoption of a retirement plan for the proposed professional corporation is the principal reason for incorporation. The consultant is furnished census data covering all partners and common-law employees. Unlike the usual corporate situation, however, the cost of the retirement plan (and any other extra costs associated with incorporation) must be subtracted from the distributions which would otherwise be made to the partners. This means that the consultant, with or without substantial guidance from the partnership or its other advisers, must experiment with various salary levels as well as various benefit formulas. Setting salaries, even on a tentative and admittedly arbitrary basis, for the owners of a professional firm is fraught with danger even if there are no prima donnas involved. It may be helpful if a separate tax comparison sheet can be made for each partner which will compare his income as a partner with his status as an employee of the proposed corporation who participates in one or more alternative retirement plans.

The following are some of the problems to be considered in designing a retirement program for a professional corporation:

1. *Service before date of incorporation.*—Inasmuch as "service" as a sole proprietor or partner does not count as employment for purposes of a qualified plan, most retirement plans for professional corporations do not provide past service benefits. If one or more partners were employed for long periods of time before they became partners, past service benefits should be explored.

2. *Level of contribution.*—(*a*) Maximum: If there is interest in maximizing deposits for all and little or no concern about the proposed corporation's ability to make the required contributions, a pension plan appears to be the best

answer. Recent IRS statements indicate that annual deposits of up to 60 per cent of compensation may be deductible. (*b*) Maximum flexible: If there is interest in making sizable deposits but a desire to maintain some degree of flexibility in the amount that must be contributed each year, a combination pension and profit-sharing plan can fit well. The maximum contribution which is deductible in the first year of such a combined program is 25 per cent of compensation, but if greater amounts are contributed, this limit increased to 30 per cent in subsequent years.

3. *Forfeitability of former partner's interest.*—The new corporation may want to adopt a typical retirement program with usual vesting provisions, normally based on participation in the plan. This poses a special problem for a former partner who has taken a $20,000 year cut in income so that $15,000 could be set aside for him each year in the plan. As far as he is concerned, these amounts are his and are nonforfeitable, or else. This result can be achieved outside the plan by agreement of the other former partners, usually in a buy-and-sell agreement set up by the new stockholders. In order to make use of the estate tax advantages of the qualified plan, death benefits are usually included in the plan, with or without the purchase of life insurance policies.

4. *Employees to be covered.*—By its very nature, a professional corporation may have minimal flexibility in choosing a waiting period. If several partners have little or no employment as common-law employees of the partnership, a long waiting period would exclude them from immediate participation.

5. *Identical benefits.*—Not infrequently, partners of a professional firm have been splitting everything on a 50-50 basis and want to make sure that this continues in the future. If the deposit to a pension plan for one is to be greater than the amount for the other (because of an age differential), both will be unhappy. If you suggest that the difference could be made up by adjusting their salaries, this may not be the answer. The simplest solution may be to utilize a money purchase pension plan or profit-sharing plan or combination of the two. Although their benefits at age 65 may be quite different, their accounts will remain identical while they are both employed. This same type of problem may occur with more than two partners and/or with differing percentages involved.

6. *Large age differential.*—Occasionally, one partner will be relatively close to retirement, while others have many more years to go. The older partner may be much more interested in retirement than his younger partners and they in turn may be anxious to see his leisure assured so that he will, in fact, retire and provide opportunities for advancement for the younger partners.

7. *Integration.*—Integration should be seriously considered in establishing a retirement system for a professional corporation. There are some cases, however, where it does not do the job. One example is the case of flat benefit pension plans, where one or more older partners can be expected to work only a few years and maximum benefits are desired for them. Maximum integrated benefits under a flat benefit pension plan are provided for 15 or more years of service. Better results may be achieved if full nonintegrated benefits are provided for a shorter period, such as 5 years of service. Another example is a situation in which the

former partners with varying percentage interests want to maintain the same percentage of salary and retirement plan allocations as they received as partners. Integration will distort this relationship somewhat.

MR. BARTHUS J. PRIEN: The discussions of the panel members did not refer to service pensions, which are a distinct form of early retirement. For example, a man can complete 25 or 30 years of credited service in an industry by the time he is age 45 or 50 and qualify for a service pension by retiring from work in the particular industry.

The service pension has been relatively common in fire and police retirement programs with minimum age requirements of 45 or 50, and in recent years the automobile workers have made substantial gains in acquiring service pensions. Earlier this year there was discussion at the New York meeting in which it was pointed out that, through the attractive service pension, automobile workers were retiring in greater numbers at the younger ages than had been anticipated. Hence it becomes necessary for the actuary to lower his assumed retirement ages for valuation purposes and to increase his future cost estimates.

The situation might arise in which an employee "retires" as early as age 50 and transfers to another geographical area in the same industry—thus receiving a pension from one area and wages from another area. Frequently our company (Martin E. Segal Company) suggests an additional eligibility requirement for a service pension whereby the pensioner must furnish the administrator of the retirement program with the first page of Form 1040 and all wages reported with supporting W-2's. If the pensioner has had wages in the industry, his service pension is temporarily suspended. To have a procedure that is 100 per cent foolproof against invalid returns, it may be necessary to require the original filing a week before April 15, with the administrator sending the original filing directly on to the IRS. Although the foregoing process can be somewhat unpopular, it does support the primary objective of a pension plan of providing an income to members who are genuinely retired. The procedure can be modified by allowing a nominal wage in the industry, such as a maximum of $1,000 a year, while the member continues to receive a pension. Needless to say, a strong procedure here can be an excellent means of preventing a tendency toward actuarial unsoundness that could otherwise arise from a much higher incidence of early retirement than originally forecast by the actuary.

MR. ROBERT J. MYERS: The analysis of the questionnaires on pension plan performance that was recently issued by a subcommittee of the Senate Committee on Labor and Public Welfare was appallingly mislead-

ing, since the statistical techniques employed were faulty. It is not proper procedure to consider the proportion of separations in a certain period who have immediate or deferred pension rights as a measure of pension plan effectiveness. The errors involved are that no account is taken of re-entries of the same individuals or of persons who subsequently enter the employment of another employer and remain long enough to acquire pension rights (or who had done so with a prior employer).

One speaker expressed the view that it is possible that the age at which full social security benefits are payable may be reduced from 65 to 62, thus adding impetus in this direction for private pension plans. I have seen no moves in this direction among those who seek to expand the scope of the social security program. In my opinion, any movement in this direction will be due to employment trends, and not the cause of them. I believe that it is undesirable for compulsory retirement ages to be pushed lower, as seems to be occurring now. If this is the case, the social security program will have to recognize the situation, and the minimum age for full benefits will have to be reduced. The resulting increased cost will then have to be met, but this is better than having the general benefit level raised so as to provide "adequate" benefits (which would have even more cost).

Finally, I would like to raise a question about the possible deleterious effect of professional corporation pension plans on the entire private pension system of the country. Where there is the possibility that some of these plans have been set up on a discriminatory basis, it may be necessary to establish special restrictions on professional corporation plans. This would certainly be preferable to having the entire private pension plan system subjected to restrictions on account of a few abuses in the professional corporation plan area.

PROFIT SQUEEZE FOR INDIVIDUAL INSURANCE

Seattle Regional Meeting

Are current dividend scales and nonparticipating rates conservative enough to provide for profit margins, mortality fluctuations, and increasing expenses?

a) What has been the recent trend in changes in dividends and gross premiums?

b) To what extent have changes in experience of expenses, interest, mortality/morbidity, and persistency contributed to or alleviated the profit squeeze? Can we continue to expect to use higher interest earnings to offset inflated administrative costs?

c) To what extent has increased volume of business helped stabilize functional unit cost factors in spite of increasing total costs?

d) What steps can be taken to improve the situation? Should the loadings provide for some level of continuing inflation?

CHAIRMAN ALFRED L. BUCKMAN: The three basic elements of determining nonparticipating premium rates are mortality, interest, and expenses. To these, there must be added persistency, competition, taxes, and the trend toward term insurance and away from permanent plans. In the last ten years the rate of mortality has been relatively stationary; interest rates have climbed slowly, then precipitously in 1968 and 1969, and then have fallen again in 1970 and 1971, where they appear to have leveled off, if we are to judge from the May 5 increase of 0.25 per cent in the prime rate to $5\frac{1}{2}$ per cent, after a steady decline from $8\frac{1}{2}$ per cent beginning March 25, 1970, and reaching $5\frac{1}{4}$ per cent on March 15, 1971.

Expenses have climbed continually during the last ten years. The principal items of expense are salaries—for our company today beginning clerks start at salaries 48.5 per cent higher than the corresponding beginning salaries ten years ago. Medical examiners charge $15.00 for examinations, compared to $10.00 a decade ago. Our average attending physician report ($6.50) costs more than double the $3.00 going rate ten years ago. Basic inspection reports in metropolitan areas are up 37 per cent. Added increases in expenses are caused by the demands of state and federal governments for more reports of all kinds and by the increased difficulty of complying with the requirements peculiar to fifty-one different insurance departments in the states and the District of Columbia. The industry is facing another major increase in expenses as a result of the pending action of the American Institute of Certified Public Accountants to require companies to report earnings not only on the prescribed statutory basis but also on an adjusted basis, using so-called natural reserves, beginning with 1971 statements.

Persistency of policies in force two years or more appears to have been fairly stable during the last ten years, but the lapse rate of new business shows an upward trend, as indicated in the schedule shown on page 56 of the 1970 *Life Insurance Fact Book*. This recent upward trend in lapse rate is confirmed by the Life Insurance Agency Management Association surveys of 1965 and 1970, which showed 16.4 per cent and 18.1 per cent, respectively, for 13-month ordinary lapse rates. Competition is a factor which has influenced many companies in reducing rates (or increasing dividends) during the last ten years, despite the influence of other factors.

Taxes and fees have been climbing. In California a fee was imposed for filing accident and health and group policy forms and related documents. This is particularly onerous for California companies because a number of other states have imposed retaliatory filing fees on them. About a year ago Pennsylvania passed a 6 per cent sales tax on all insurance premiums; fortunately, however, this was quickly repealed after the confiscatory nature of this tax was explained to the legislature. Currently, it appears that Connecticut is considering enacting this same kind of confiscatory sales tax on all insurance premiums. Domestic insurance companies could not survive such a tax because of the retaliation on them by other states.

Finally, the trend toward term insurance has reduced the ability of companies to recover increased expenses from increased investment income.

The combined effect of all these factors is reflected by the action of some thirty-four representative stock life insurance companies in adjusting their nonparticipating rates in recent years. The thirty-four companies ranged in size from under $200 million in force to over $50 billion in force. For convenience, I divided the companies into Class A, with over $4 billion in force (eleven companies); Class B, with between $1 and $4 billion in force (fourteen companies); and Class C, with less than $1 billion in force (nine companies).

During the five years 1966–71, fourteen of the thirty-four companies increased their policy fees, and seven additional companies are definitely planning such changes. One Class B company decreased its policy fee from $10.00 to $9.36. Twelve companies have made no change in the last five years and at present have no intention of doing so. Table 1 shows the distribution of changes among the three classes. Several companies have increased policy fees from $10.00 to $20.00 during the last five years, and one company is considering going to a $25.00 fee. Some companies have had two increases in fees.

The increase in policy fee is a direct attempt to adjust the expense

factor in the gross premium. On the other hand, changes in basic premium rates per $1,000 of insurance would reflect changes in interest earnings or mortality experience or both. The thirty-four companies were surveyed to determine their action on basic premium rates and annuities.

The strangest action, reflected in Table 2, is that of the nineteen companies which decreased their term insurance rates during the last five years. This can only reflect the competitive nature of the business;

TABLE 1

ACTION OF COMPANIES ON POLICY FEES SINCE 1966

	CLASS OF COMPANY			
	A	B	C	TOTAL
Increased fees	6	6	2	14
Plans to increase fees	1	1	5	7
Decreased fees	0	1	0	1
Unchanged and no plans	4	6	2	12

TABLE 2

ACTION OF COMPANIES ON BASIC PREMIUM RATES

	TERM			WHOLE LIFE			ENDOWMENT			ANNUITIES		
	A	B	C	A	B	C	A	B	C	A	B	C
Increased rates	1	0	0	1	1	0	1	1	0	0	0	0
Decreased rates	8	6	5	7	6	4	6	4	2	7	4	2
Unchanged	2	8	4	3	7	5	4	9	7	4	10	7

there can be no justification for such action, since the rate of mortality did not improve and the higher interest earnings have negligible effect on the profitability of term insurance.

MR. RONALD E. TIMPE: The changes in dividend scales as reported in *Best's Review* over the last ten years give some insight into the number, if not the magnitude, of dividend increases in the last two years compared with the number of increases in the early and middle 1960's.

Eighteen companies were reviewed; only two companies reported dividend scale increases for 1970 and only one for 1971. This is considerably below the peak reached in 1967, when twelve of the eighteen companies

increased their dividend scales, and below the normal range of seven to ten out of the eighteen that increased their dividend scales in the other years. The recent trend in dividends has been to continue the current scales.

MR. WALTER N. MILLER: As has been mentioned, term insurance is an area in which any interest margins are of only minimal help in offsetting the impact of increasing expenses. Yet there seems to be no evidence that the "profit squeeze" has affected term pricing to a greater extent than the pricing of permanent plans. I would like to ask the panel whether they think that there might be a tendency toward artificially low pricing of term coverages, particularly those designed to be sold on a "tied-in" basis in conjunction with other products such as mutual funds or deferred annuities.

CHAIRMAN BUCKMAN: A few companies are offering term coverages at artificially low prices when they are sold on a tied-in basis. I know of one such instance where negligible commissions are paid on the term insurance when it is tied in with a deferred annuity policy, on which premiums are not particularly low. However, the few exceptions involving artificially low pricing of term insurance on tied-in sales can hardly be described as a "tendency" to reduce term premiums. A number of companies, including some of the largest in the industry, are increasing term premiums and/or policy fees as a result of the profit squeeze. Some companies are charging higher fees on term plans than on other plans.

MR. RICHARD S. ROBERTSON: I certainly agree that many companies appear to be reducing their profit objectives for term insurance. This is an especially competitive market, particularly for those companies that depend on brokers for much of their production. For such companies, low margin products may be necessary to maintain their positions in these markets.

Perhaps these companies are justifying the reduced profit objectives by considering measures of profitability other than profits per thousand of face amount. What might appear to be a less than adequate profit per thousand on a term plan could also appear quite satisfactory as a percentage of premium or as a rate of return on surplus invested. A good case can be made for using either of these measures. I hope, however, that companies are not totally ignoring the need for an adequate profit per thousand.

I know of some companies that are having considerable success selling low-cost term insurance tied in with deferred annuities, and it may be

quite proper to consider the profitability of the package. Others may be looking for their profits on term conversions. However, I should not think that there would be enough margin on a mutual fund sale to subsidize a tied-in term sale. In general, if the term product produces a less than adequate margin, it would seem to be necessary for the profit on the related product to be greater than normal. In the "packaged products" I have looked at, this frequently has appeared not to have been the case.

MR. ROBERT C. TOOKEY: If anything, the reverse is true. When the sale of life insurance is somewhat incidental in the installation of the savings program, pricing of the insurance is simply not all that important. It is not necessary to have a highly competitive premium rate.

MR. JOSEPH F. CROWE: A number of statements have been made implying that, at least on the surface, several companies have term insurance rates which are not self-supporting. Since it is my understanding that the New York law requires that each plan be self-supporting, I wonder whether any companies have been questioned on this subject by the New York Insurance Department?

MR. ROBERTSON: The companies I am aware of that admit that their term products are not self-supporting do not operate in New York. Presumably, those companies that have reduced their profit objectives on term policies and that do operate in New York have been able to demonstrate that the reduced profit objectives are reasonable.

MR. TOOKEY: The increase in operating expenses of the typical life insurance company is directly proportional to the inflationary salary increases granted to home office and field personnel. Since the salaries constitute over half the general insurance expenses in the typical company, the effect of inflation is almost immediate. With the possible exception of rent and depreciation, most of the other general expenses will tend to rise at the same rate of increase applicable to salaries and wages.

One very important point which should be kept in mind in analyzing this subject is the fact that true functional renewal costs in the typical life insurance company are quite nominal and probably run no more than 10 per cent of first-year general expenses. In a typical company, insurance in force that has entered the renewal years is five times the amount of first-year business. This means that at least two-thirds of general insurance expenses are incurred by new issues. However, most companies do not allocate their indirect overhead (executive expense and the like) en-

tirely to first-year business. This, in my opinion, is fallacious because the true expense involved with renewal business should be regarded as that expense that an efficient, thoroughly automated company would incur if it were to reinsure the business. They simply would not need the executives of the company, except possibly a "caretaker" general manager.

From the foregoing, it would appear that inflation would adversely affect health insurance considerably more than life insurance. Its effect on renewal business in force, although not as severe as its effect on the cost of writing new business, is nonetheless quite marked. Obviously, higher expenses hurt the company writing predominantly term business considerably more than the company with a well-rounded portfolio, because the latter will have the additional earnings from investments to offset their losses.

The high rate of yield that is available on new investments has in general more than offset the increased handling costs. For example, the annual handling cost on a typical $10,000 ordinary life policy has increased from $8 at the beginning of the last decade to about $12 at the end thereof. This amounts to $0.40 per thousand. On the other hand, if the policy has a reserve of, say, $100 per thousand, the extra post-tax yield of at least 1 per cent provides an additional source of profit equal to a dollar per thousand. Unfortunately, this is not the case with term insurance, and here is where the profit squeeze really is felt.

It is a well-established fact that morbidity rates increase when times are slow, and this is certainly confirmed by the experience with the recent recession and rather sluggish recovery. Hospitalization rates and rates of disability have increased particularly among the unemployed.

Despite the assiduous efforts of the industry to improve persistency, first-year lapse rates have been creeping upward in the last five years; the first-year lapse rate of the composite LIAMA study has increased by $1\frac{1}{2}$ per cent to a level of over 18 per cent. On the other hand, many companies that have sold insurance as part of a savings program (usually in the form of a systematic contribution to a mutual fund) have had superior persistency. Also, with companies which issue the policy on the so-called deposit basis, under which a forfeitable first-year deposit is made part of the first-year premium, the results have been spectacular. We have several clients that issue this type of business (sometimes a mutual fund share is placed as collateral), and in normal times the lapse rate is about $2\frac{1}{2}$ per cent, for both first-year and renewal. An analysis of the lapses indicates that they are the so-called natural or unavoidable terminations. These would be the divorces, the partnership breakups, the business bankruptcies, and those situations in which the insured's financial circumstances have been radically changed so that he simply cannot afford to pay the

premium, forfeiture of the deposit notwithstanding. Because of the recent recession in the aerospace industry, the lapse rate under deposit plans has recently increased to about 5 per cent.

While the majority of actuaries apparently do not predict substantial increase in mortality gains in the future, I view this possibility with guarded optimism. A massive automobile safety campaign requiring installation of all known and proved safety devices in new cars might reduce traffic deaths sufficiently to make a material difference in mortality rates at young ages.

The age range promising the greatest potential improvement in mortality lies in the 45–65 age group, where, indeed, there is the greatest room for improvement. Simple comparison of the American male death rates in this age group to the corresponding male death rates in other countries makes this quite apparent. A slowdown in the pace of life is probably just as important as regular medical checkups, weight control, regular exercise, and the like. The highest coronary rate occurs among males in the United States, Scotland, and western Finland. Apparently, the one attribute these three localities have in common is the work pace, or the tendency to work under tension. This produces a high cholesterol content, low-fat diets notwithstanding. Men work this way in the United States because we inherited the Protestant work ethic, and this probably more than any other factor has brought this country to its present position. Scotland is an extremely poor country in resources, and the people must work hard simply to scratch out a living. Western Finland must compete economically with Sweden, and this perhaps is a factor contributing to the high coronary rate in that area.

There are other reasons to anticipate an improvement in mortality. As our population becomes better educated, we can anticipate improvement because there is a significant correlation between formal education and low mortality. Certainly any success realized by antismoking campaigns will result in lower mortality not only from lung cancer but from numerous other causes as well. Already certain enlightened groups have changed their smoking habits. Doctors and actuaries are excellent examples.

There is some hope that modern instrumentation in medicine and new diagnostic techniques will materialize positive results. Strenuous efforts to identify the "cardiac-prone personality" appear to have been successful, and now we need merely make use of this knowledge.

If cancer is ever conquered, it will be a piecemeal conquest. Yet we are discovering cures for certain forms of cancer. I understand that a new very early detection test for cancer of the colon has been developed, which measures changes in the blood before any abnormal cells can be observed.

Two scientists from the Massachusetts Institute of Technology have

developed a sound-spectrograph technique (phonoangiography) which not only detects the existence of fatty deposits in the arteries but actually pinpoints the exact location. Thus the necessary preventive steps can be taken to eliminate the deposits and arrest the progressive development of arteriosclerosis. The mere prolongation of life by six months, twelve months, or a few years can have a profound financial effect on the gains from mortality. Further improvements in the mechanical heart, even if it could only be used temporarily for two days, will save lives that would otherwise be lost.

The importance of mortality gains becomes quite evident in view of the increased production of term insurance and decreasing whole life insurance, which gives rise to smaller investable funds and less gain from interest.

For the company writing at least one-third permanent business, we can perhaps continue to expect to use higher earnings to offset inflated administrative costs. Although interest rates have significantly decreased over the last year as a result of deliberate government action, this is probably a temporary phenomenon. The long-term trend in the cost of money is upward, and it would not surprise me to see an upswing shortly after election day in November, 1972.

The company writing predominantly term insurance is up against it because of the cost squeeze. We have one client that writes 93 per cent of its business on the decreasing term plan. It recently raised rates an average of 7 per cent to restore the normal level of profitability. It also raised the policy fee from $10 to $15, increased mode loadings, and established a higher minimum amount of insurance that could be written. Other cost-saving devices included a change in the schedule of insurance which was determined on the basis of a straight-line monthly decrease. The company also doubled its retention limits to reduce the required reinsurance of 20 per cent of its writings to 5 per cent and took out stop-loss coverage. In a sense, the lack of permanent business to provide a cushion of investment profits motivated this company to run a taut shop.

From another company's experience, it appears that direct underwriting costs in the last eight years have increased slightly more than 100 per cent. For example, the cost of a physical examination has increased from $10 to $20; attending physicians' reports and inspection reports have had comparable increases. The salaries of seasoned underwriters have had to be increased 7 per cent per year simply to offset inflation, and merit raises must be added to that. It is quite apparent that functional issue costs have doubled in many companies over the past decade.

On the other hand, the increase in renewal expenses has been considerably less. With clerical personnel, heavy turnover actually seems to operate to the company's advantage, since the new clerks start at the bottom of the salary scale, and the average period of employment is not much over two years. Since these clerks can be trained for the relatively unskilled jobs in about three months, they earn their pay after this brief training period. The real hardship devolves upon the supervisors, who must constantly train new help.

The high interest rates are definitely working to the advantage of the companies that write a substantial amount of ordinary life insurance. For example, one of our clients was able to sell off $500,000 of 4 per cent government bonds and switch the proceeds to an "A"-rated bond with a yield of 8.6 per cent and ten-year call protection. Mortgage interest rates are now on the increase, and it appears that the insurance industry can anticipate high yields for several years to come.

One result of the profit squeeze is manifested in personnel policy. At least one large company has temporarily discontinued hiring new personnel, with the exception of actuarial students. Another company has actually laid off a few employees working in departments which were unable to keep them fully utilized, particularly in cases in which new business production simply did not match expectations, thereby giving rise to a prolonged overstaffed status.

One ominous cloud relates to state premium taxes. The urgency of raising the revenue necessary to meet the continually increasing demands for services has led the states to resort to nearly any device that shows promise. We all recall the state "sales tax" on life insurance premiums that was passed by the Pennsylvania legislature and then repealed following the Herculean efforts of the insurance industry. More recently, the state of Connecticut has attempted to augment the tax on insurance premiums. While the proposed increases were too high to be acceptable, we may see the premium taxes edge up somewhat from their current levels. This would certainly contribute to the profit squeeze under discussion.

A final thought on this subject relates to the uncertain future of permanent life insurance. Because of the extremely high rates of interest that have prevailed in the last two years, permanent insurance has lost much of its appeal to the sophisticated buyer. In many cases the attractive policy loan interest rate (limited by law to 6 per cent in most states) will act as an effective ceiling on what a company can earn on its investments if policy loans continue to enjoy the popularity they have among sophisticated policyholders. On the other hand, if the long-term interest rates

settle at a level midway between the new money rates of 1970 and 1965, permanent insurance will not fall entirely out of favor with the insured public.

MR. TIMPE: The rate of investment return and the ordinary renewal expense rate as reported in *Best's* were reviewed for the same eighteen companies involved in the review of changes in dividend scales. Each company had increased its rate of investment return in recent years, with the average for the eighteen companies increasing from 4.75 per cent in 1965 to 5.21 per cent in 1969. A review of 1970 annual statements showed a continuation and probably an acceleration of the increase in investment yield. Without a doubt, increasing investment return has been an offsetting feature of any tendency toward a profit squeeze, and a little later I shall comment on the role that I expect investment return will play in the future.

I would like to comment also on the recent trend of expenses for these eighteen companies. The information will be as reported for the renewal expense ratio for ordinary business in *Best's Insurance Reports*.

For 1969, five companies showed the same or a lower expense rate as compared to that in 1965, with none of the improvements exceeding $0.13 per $1,000 of coverage. Five companies showed an increase of up to $0.15, six showed increases ranging from $0.16 to $0.25, and two showed an expense rate increase above $0.25. My conclusion from this information is that there has been a detectable trend of increased expense rates but that generally the increases have been small, and increased investment return, even after federal income tax, more than offsets the expense increase.

I also examined the profitability of a current policy issued by Standard Insurance on the basis of interest and expense assumptions used in the 1963 and 1967 dividend scales. For an issue age 40 whole life policy, the 1967 assumptions would require a premium increase on the current issues of $0.28 per $1,000 in order to have the same profitability. With the 1963 assumptions, a $1.02 premium increase would be needed. Thus the combined effect of the changes in expense and investment income rates has been to reduce costs to policyowners.

Separating the influence of changes in expenses and investment yield illustrates the effects of each. The change in interest assumption from 1963 to 1967 was sufficient to decrease the premium $0.74. The change in interest assumption from 1967 to 1970 was sufficient to decrease the premium an additional $0.64. This is a total change of $1.38 from 1963 to 1970 due to increased investment yield. At Standard the 1967 dividend expense assumptions were the same as in 1963. The 1963–70 changes in

expense assumptions were equivalent to a $0.36 change in premium. Again, this reveals that the influence of the changes in investment income has far exceeded the offsetting influence of increased expenses in recent years.

To move to the current situation and then on to the latter part of the question dealing with the use of higher interest assumptions, I have noted that two mutual companies have just recently introduced increased dividend scales. I feel that other companies will be following this lead during the next few months, and we might well see dividend increases similar in number to those of 1966–68. One other comment on the current situation is that our investment people report no investments, other than policy loans, made in the last two years on which they expect the yield to be less than 8 per cent per year over the term of the investment.

Now to comment on the future. While I am not an economist, it is my feeling that interest rates will generally be high during the next decade. The first of two major influences will be continued difficulty with inflation and an associated reluctance to invest unless the rate of return provides some compensation for the expected deterioration of the value of the dollars invested. This is the natural interest theory, and under it money is assumed to have a value of 3 or 4 per cent per year with the amount increased by any expected deterioration of the value of the money. The second influence will be a high demand for capital funds, with an associated increase in the cost of capital—in other words, high interest rates.

These are complex influences on investment yield which I only mention, but I feel that they are the basis on which to expect investment opportunities at yields significantly above current portfolio yields. Low-yielding policy loans will be a problem, but, even though policy loans might increase as a percentage of total assets, the total net investment yield will increase above current yields.

To illustrate the effects of what I have been prognosticating for the future, I would like to explain briefly the results of a model-office projection over the next ten years. The model is of a mutual company earning a 5½ per cent investment return, having a surplus of approximately 7½ per cent of total assets, with new business, in terms of face amount, approximately 18 per cent of the total amount in force. The mix of business by plan, as well as the other attributes of the model, are typical of medium-sized United States mutual insurance companies.

If this company is projected ten years on the basis of these assumptions, it is found that surplus would remain at approximately 7½ per cent of total assets—using surplus as an indication of profitability. If this company is projected ten years, with all new investments made at 8 per cent

except for policy loans, which are assumed to increase from 10 to 15 per cent of total assets, we find that surplus as a percentage of assets would increase from $7\frac{1}{2}$ to $12\frac{1}{2}$ per cent, and this assumes an annual increase in renewal expense rates of 2 per cent. Obviously, management of such a company would not allow such a growth of surplus, and competition would undoubtedly force an increase in dividends.

If the 8 per cent yield on new investments seems high, a 7 per cent yield would result in an increase in the model-office surplus of from $7\frac{1}{2}$ per cent to a little over 10 per cent. Either of these assumptions on the yield shows significant profitability during the next ten years.

The yield rates assumed are undoubtedly too aggressive for current use in pricing or in setting dividends. Use of such yields is, however, a definite possibility in the future, and such yields are certainly appropriate for actuarial studies and corporate planning. The realization of such investment yields could be accompanied by a complacency toward expense control and a profitability result of "living off the investment return." Such results are not necessary and should be avoided through the utilization of realistic expense assumptions in pricing and establishing dividends.

The surplus projections presented are a very brief description of a sizable model-office calculation, but they point out that, while there is evidence of some feeling of a profit squeeze during the last couple of years, such a squeeze, if existent, will be short-lived on the basis of the investment climate I have put forth. I feel that there is already evidence of a move away from the feeling of a profit squeeze.

MR. ROBERTSON: I think that high interest rates have tended both to alleviate and to contribute to the profit squeeze. Certainly the very favorable yields available in recent years have been a source of substantial profit on in-force insurance, since the cash flow from those policies could be invested at very attractive rates. The fact that the additional investment income was taxed at a relatively high federal income tax rate, together with the dampening effect of policy loans, served to offset that to some extent. Also, as interest rates were rising, companies were cautious about projecting these high interest rates in their dividends and in their nonparticipating profit analyses. Hence the potential for high rates of interest continued to be a source of future profit for new issues until such time as those high yields were recognized in profit projections.

By now, most of us are assuming a rather high rate of return in our studies. On participating insurance, dividend illustrations apparently assume that current interest yields will continue indefinitely—an assumption that is, at best, optimistic. Thus the high yields have had the prac-

tical effect of intensifying competitive pressure and now leave us in a position in which it will be necessary to realize those yields in order to achieve a tolerable level of profit. To this extent, high rates of interest have contributed very greatly to the profit squeeze.

It is also important to recognize that in times of very high rates of interest which cannot be expected to continue, such as those we experienced in 1968 and 1969, the high rate of interest tended to decrease profits on new issues, since the cash flow in the first year is normally negative.

MR. LEONARD R. CARGILL, JR.: It has been pointed out that we are in a period of high interest rates and high expenses. These two factors have opposite effects on premium levels and on profitability and, of course, affect the return that management should demand on surplus invested in life insurance. Theoretically, this combination should also lead to low early cash values and steep dividend scales. Have any of the panel members noticed a trend in this direction?

MR. TIMPE: I am not aware of any trend of reduced early cash values in those companies whose products usually provide cash values in excess of the minimum. There does, however, seem to be a trend toward steeper dividend scales. This is highlighted by a dividend scale recently announced by a large mutual insurance company somewhat noted for their high and relatively flat dividend scales. The new dividend scale produced a lower twenty-year cost to policyowners, even using the interest-adjusted cost method, but early dividends were reduced and later dividends were increased.

There are two factors which tend to dampen the development of steeper dividend scales as a result of increased investment yield. The first is that federal income tax takes a significant part of the increased yield. The second is that higher valuation interest rates are being adopted for new plans by companies which have traditionally used a rate below the statutory maximum of $3\frac{1}{2}$ per cent, and this tends to dampen the excess interest contribution under the classical three-factor contribution method of calculation.

MR. TOOKEY: We have not observed any material changes in cash value levels. A company either designs a product using minimum cash values (at least during the early years) or designs a product that requires a specific scale of higher cash values, occasionally having the cash value actually equated to the terminal reserve. Normally, minimum cash values are paid on decreasing whole life, since this enables the company to charge the lowest possible rate.

MR. GODFREY J. A. PERROTT: Several of the panel members have made the point that increased interest earnings on permanent plans can be used to offset increased expenses and so alleviate the profit squeeze. It would seem appropriate (at least in a stock company) to consider that when the general interest climate is high, a higher interest earning does very little to alleviate increased expenses, since the return on investment for the insurance should rise in a manner consistent with the general interest climate. For example, if a profit-study approach is taken to the plan of insurance (where the amount of book profit realized each year is produced), the yield on investment, considering the risk, should be substantially higher than the current industrial bond yield. This would probably result in higher potential interest earnings, increasing the squeeze on profit rather than reducing it.

MR. ROBERTSON: The answer to stabilizing functional unit cost factors depends to a large extent on the type of expense we are talking about. Consider, for example, premium taxes. Obviously, no increase in volume can offset the effect of an increase in rate of premium tax assessed against life insurance companies. A case could be made that, as tax revenue to the states increases in proportion to increasing premium volume, that helps offset the pressure for increased tax rates. Personally, I have my doubts.

In our company we have no qualms about making a forecast of no increase in the unit expenses for renewal maintenance. Here we have the benefit of a volume that will increase even if the level of new business remains constant (except for a fully mature block of business). Many of the costs are fixed, at least in theory, once computer processing systems are operational. To the extent to which renewal expenses are considered on a "per policy" basis, however, it is important to recognize that the number of policies in force must increase as well as the volume, if increasing administrative expenses are to be offset.

Acquisition expenses are another matter. In today's highly competitive market, it seems that we must devote a continually increasing amount of time and expense to our marketing effort, merely to stand still. At least in our company, sales have not been increasing nearly fast enough to offset increasing home office expenses allocated to the "selling" function. In a sense this is a result more of competitive pressure than of inflation. Much of the increased expenditure is for new programs for training, development, promotion, and the like. Such additional expenditure might be considered an alternative to a rate revision.

We do a little better with the acquisition costs incurred in the admin-

istrative area. There a greater portion of the costs are fixed, so that volume increases help reduce unit costs. However, they have not quite kept up in our company.

It is more difficult to make a general statement about field expenses. The tendency toward larger average sales helps to give the field man more income to enable him to maintain his standard of living. There is some evidence that average sale is not increasing fast enough to accomplish this purpose. A tendency toward term insurance, with its lower commission per thousand, may be adding to the problem. If this is true, we may have to increase the basic commission rate or be satisfied with a lower-quality agent. Many companies have helped maintain the agent's income by encouraging him to sell other lines of insurance, particularly health insurance or group insurance.

MR. TOOKEY: While increased volume of business has provided some stabilization of functional unit costs, companies following the "cheaper by the dozen" principle, either through a policy fee approach or the band approach, are passing on some of the savings to the insured—in particular, where the company writes basically the same plan but calls it by different names depending on whether it is a policy less than $25,000, a policy in the $25,000–$100,000 bracket, or a policy in excess of $100,000. Since lower rates apply for the larger policies, merely writing policies in larger amounts does not completely stabilize functional unit cost factors.

For the relatively young company which does not have the 4-to-1 ratio (of renewal business in force to one year's new production), the overriding goal of management is to reach this ratio, so that renewal profits can support the cost of writing new business and the new business will support the production plant. The young company is still very much concerned with obtaining a level of production to bring its functional unit cost factors in line with competition.

Another effect that the cost squeeze will have on the young companies will be the reversal of the tendency to overdiversify. Such companies simply will recognize that they cannot afford the specialists required to man a multiservice financial corporation.

MR. TIMPE: The steps which I believe can be taken to improve a company's relative position are based upon the expectation of continued inflation, high rates of investment return, and a tremendous increase in population at the insurance-buying ages. The latter is highlighted by an expected 46 per cent increase (during the next decade) in the age group 25–34.

First, I think that cost control will be more important than in the past. Inflation will foster increased costs, and expense difficulty is more likely to be encountered than under a stable economy. Also in this area, the service industries have not had the increased productivity enjoyed by manufacturing, and hopefully we can make strides in improving our productivity. The significant population increase at the insurance-buying ages gives us opportunity for increased productivity by agents and employees.

With an expected increase in investment return, it is a good time to attract a strong flow of money to your company. This will provide investment flexibility, future excess investment return for dividends to policyowners or stockholders, and opportunity for expansion or diversification. Low-yielding policy loans will be a competitive disadvantage. Control is difficult, but efforts to stem the tide will be important.

In conclusion, I would like simply to enumerate a few other troublesome areas with which we must exist. Federal income taxes are a substantial offset to increased investment return, and significant alteration of this fact is unlikely. A potential problem exists in the area of premium taxes. Social security taxes and projections of such costs continue to increase, and there is probably little chance to offset the increase by reduced cost of other employee benefit programs. Term insurance pricing will not benefit from increased investment yield, and increased premiums, particularly at the younger issue ages, would seem prudent.

MR. ROBERTSON: To begin with, I am basically pessimistic about improving the situation. Just as price reductions tended to lag behind improvement in experience, I believe that price increases will tend to lag behind the experience which would call for those increases. Probably the lag will be greater than for price reductions because it is easier to reduce prices than to increase them. Any company that attempts to provide leadership in the area of price increases is risking a severe loss of morale in its marketing operation and probably loss of business. We are not like some other industries in which one company tends to set the pricing trends for the entire industry.

At least in the near future, I do not believe that we are likely to see general life insurance price increases unless we encounter a sudden, dramatic, and adverse change in our experience which will make the necessity for a significant price increase obvious to all of us. An example might be a sudden decrease in new money interest rates which gives the appearance of being permanent.

I think that about the best we can hope for is a period of relative price

stability. This will allow us the opportunity to make selective price increases where those increases appear advisable. As discussed earlier, a number of companies have been increasing policy fees, and some have been increasing mode loadings. We may also see increases for some plans of insurance or at some ages, perhaps at the same time that prices are decreased for other plans and ages. Changes of this type may be easier for participating insurance than for nonparticipating insurance.

There are a number of new ideas on the horizon which will undoubtedly have an effect on life insurance pricing and the profitability of life insurance companies. One such idea is on the subject of adjusted earnings. Some people are speculating that because acquisition expenses are amortized, it will be easier for companies to increase the amounts spent for acquisition of new business. Others believe that adjusted earnings will tend to focus the attention of management more directly on profitability and the factors which lead to profitability and that this might create pressure for increased prices. At a minimum, the adjusted earnings principles are going to require a basic re-examination of pricing philosophy for those companies that have been basing their profit objectives primarily on the return on surplus invested in new business. It is also likely that the preparation of financial statements according to the AICPA guidelines will be very expensive. This source of additional expense will aggravate the profit squeeze.

Some people believe that the current emphasis on consumerism may have an effect on insurance pricing. It is claimed that, if more accurate techniques for measuring the cost of insurance are accepted by the public, the result will be greater pressure for lower life insurance prices. Although I am skeptical, this cannot be ruled out as a possibility. Alternatively, it is possible that the demands placed on our industry by the consumerist movement will significantly increase our expenses and may actually require us to increase our prices. In either case, the result will be a reduction in profitability.

If a national health insurance program eliminates hospital and medical insurance as a source of compensation to the field, we are going to have to find a replacement of this income for our agents. If this replacement takes the form of increased commissions on individual ordinary insurance, this will have a significant impact on prices and profits.

It is also possible that new products or techniques might make the question of increases or decreases in gross premiums academic. For example, if a substantial proportion of our ordinary insurance sales are transferred from current programs to variable insurance programs, variable life will represent a product in which different insurance guarantees

are provided the policyholder and for which an entirely different pricing structure prevails. Similarly, a basic change in our distribution system which would have the effect of increasing the productivity of our field force might enable us to increase field compensation without increasing the unit cost of distribution.

MR. TOOKEY: An obvious step would be to halt the downward trend in premium rates and, when appropriate, actually to increase premium rates above their current levels. I mentioned earlier that this has been done in the case of a few companies. This step requires that due consideration of continuing inflation be given in profit margin studies. A 5 per cent annual increase in renewal expense is certainly not an unreasonable assumption in view of recent trends. Since the elected politicians mistakenly believe that the cure is worse than the disease, as far as the majority of the American people are concerned, no administration is likely to commit political suicide to put out the inflationary fire. While the loadings should provide for some continuing inflation, the assumed interest rate should be realistic and due account should be taken of the fact that the average-size policy will undoubtedly increase. Continued effort should be made to investigate alternative methods of marketing life insurance. The trend toward salaried agents and telescoping of commissions will undoubtedly continue. We can, however, look forward to some relief from the manpower shortage because the 1970's will witness a much greater availability of people for employment.

Benefit design is being influenced by inflation. Policies providing for periodic increase in premium rate will provide additional margins for the higher handling expenses that may be anticipated in the future. Variable life insurance will be affected by inflationary trends much in the same manner as term insurance because most of the interest profit realized in a separate fund is passed on to the insured.

At least one company has actually contemplated setting up an "inflation reserve" because it has gone one step beyond generally accepted accounting principles and simply spreads all costs over the expected lifetime of all policies.

MR. BRUCE E. NICKERSON: Generally there is little need for serious concern about renewal expense margins as such, since these are more than adequate. The critical question is whether the policy will stay in force long enough for the excess renewal expense margin to fully amortize the high first-year expenses. Once the first-year expenses are amortized, we may anticipate a profit from expense loading even if renewal expenses increase very substantially.

Therefore, I suggest that the most effective means of combating a profit squeeze due to increasing expenses will often be a program to improve the persistency of the business written. If we can reduce lapses and fully recover the initial expenses sooner, on more policies, then we will have gone a long way toward solving the problem.

CHAIRMAN BUCKMAN: I agree with you that improved persistency will reduce the impact of increasing expenses on profits. According to the 1970 *Life Insurance Fact Book,* however, lapse rates for the industry as a whole, particularly during the first two policy years, have been climbing during the last five years.

MR. CARL J. STRUNK: Is there any evidence that, because of the New York expense limitation law, the non-New York licensed company is experiencing any greater degree of profit squeeze than the New York companies?

MR. BERT A. WINTER: The question was raised whether the recent increase in unit expense rates, on which the panel commented from the point of view of life insurance companies not doing business in New York, might not be lower for companies admitted to that state, because of the statutory expense limitations (sec. 213). I have seen a study by a committee of the Association of New York Life Insurance Companies of the Schedule Q reports of a representative sample of companies admitted to New York, and the recent trend in unit expense rates for these companies in the aggregate was similar to that commented on by the panel.

MR. PERROTT: The issue of consumerism has been brought into the picture, and it has been suggested that insurance companies should look more toward improving their performance than toward raising their rates. Historically, it would seem that level premium insurance was designed to cover an increasing cost (mortality) by a level premium. This is obviously economically sound. In the present market, however, with much improved mortality, more of the insurance premium is covering a decreasing expense cost with a level premium, resulting in high lapse costs. The deposit term policy, which has been mentioned by some of the panel members, transfers this cost relationship to the policyholder, with the result of much lower lapse rates and considerably cheaper insurance. Deposit term is currently being sold by a few companies to sophisticated buyers in policies for large amounts, but it is possible that the concept should be extended to sales of lower amounts, resulting in decreasing cost to the insured while still providing a comfortable profit to the insurance company.

MR. TOOKEY: Deposit term is sold to the more sophisticated market and, I might add, to the more financially well-heeled market. It is difficult to extend this product to sales of lower amounts because the prospective buyer in the lower-income group is less likely to have the cash required for the deposit or, having the cash, is loath to commit it to a ten-year investment.

CHAIRMAN BUCKMAN: What have companies been doing in recent years to reduce expenses and combat the inflationary trend?

MR. LOUIS GARFIN: Our company did engage consultants a few years ago to seek improvements in operating efficiency. The emphasis was mostly on routine clerical operations. We did achieve improvement and modest expense savings. To retain such improvement and savings, however, requires continued attention, and it is my opinion that the savings results have been somewhat dissipated since the original emphasis. As a matter of fact, we have recently entered on a new cost reduction program which is not limited to the routine and clerical. To obtain desired cost savings, we are reviewing all our operations with a view to eliminating dispensable services in order to permit reductions in staff. This will involve reduction of services to our management, to agents, and even to policyowners, as possible.

MR. DAVID E. STEVEN: Several years ago, Great-West Life retained a well-known firm of management consultants whose recommendations led to the reorganization of our head office along functional rather than product lines, and to the formation of a corporate planning division.

While we were pleased with the immediate effects of the reorganization, we believe that the continuing efforts of our own management will achieve even better results. We have recently developed more detailed marketing objectives and are altering budget processes to a functional unit cost basis wherever possible. It is quite informative, for example, to find that some noncontractual reinstatements (which generally experience poor persistency) cost in excess of $100 to process.

These changes will enable us to quantify the costs associated with specific current and proposed activities and provide senior management with more accurate information on which to base decisions. In addition, we will have the benefit of a continuing awareness of the costs of our activities, which I believe to be a most important element of business efficiency and perhaps the most valuable result of a corporate review, whether by internal managements or consultants.

CHAIRMAN BUCKMAN: We are honored today by having with us Mr. David W. Donald, president of the Faculty of Actuaries. May we have the pleasure of a few remarks from you, Mr. Donald, on the problems discussed here as they relate to business in England and Scotland?

MR. DAVID W. DONALD: It is a pleasure and a privilege for a representative of the Faculty of Actuaries to have been allowed to attend this discussion, and even more to be permitted to comment on how very similar problems are facing actuaries in Britain. There is perhaps one major point of difference. Under our tax system, assurance companies pay tax on interest earnings at less than the standard rate, and, in addition, individuals are encouraged to save via the medium of life assurance by rebates on the premiums they pay. These concessions enable life assurance in Great Britain to compare favorably with alternative forms of investment.

The element of pure protection against premature death is, of course, still important, but at least as much of our business is sold as a means of saving as for protection. As a result, there is a greater emphasis on permanent as distinct from term assurance, and, perhaps even more important in this context, nonparticipating contracts can now be sold only on bases which can leave little, if any, margin for profit.

In the United Kingdom we have perhaps experienced a greater degree of inflation than you, and this is reflected in the terms on which fixed interest capital can be borrowed. Lenders are anxious to preserve the value of their investment in real-money terms, which may account not merely for the present high rates of interest obtainable—long-dated British government securities are available to yield around $9\frac{1}{2}$ per cent at present, and rates of up to 11 per cent have been paid by industrial borrowers on medium-term bonds—but for the gap of around 5 per cent between fixed interest yields and the immediate return to be obtained by investment in good-class common stocks. These high rates of interest have meant that nonparticipating business written in the past has provided a source of profit greater than could have been expected, and this, coupled with increased interest earnings on participating funds, has led to considerable increases in dividends, or "bonuses" as we call them. Current rates of bonus in Great Britain are more than double those which were current twenty-five years ago. In this sense it may seem odd to talk of a "profit squeeze," but, looking to the future, it is not.

Costs are continuing to rise, and indeed, looking back on the last twenty-five years, it is doubtful whether the renewal expense loadings in our premiums have ever been adequate to support current levels of expense. We have had the cushion of higher interest profits, but, on the

terms on which new business is currently being sold, the margin between the interest basis assumed in the premiums and the likely future earnings is far narrower, and the prospect of actual losses on nonparticipating business and reduced surpluses on the participating fund is not entirely academic.

This, in my view, makes it imperative that the actuary should try to make his premium basis as realistic as possible in each of the elements of mortality, interest, and expenses. He should not look for profits from one source to offset losses from another. The consequences of such an approach in the field of automobile insurance have been only too painfully demonstrated recently in Great Britain. Without an adequate rate structure, insurance is impossible. In current conditions an adequate rate structure, in my opinion, must involve an allowance for future increases in renewal expenses, and, however horrifying the results may be to the actuary, he should incorporate such an allowance in his calculation.

I say "horrifying" advisedly, because the idea that the value of our currency must inevitably decline strikes at the whole root of assurance operations. I do not believe that continued inflation can be controlled at a given and harmless level or that it is anything but an insidious disease. In one South American country in which we operate, we have seen the value of the local currency, in terms of United States dollars, move in twenty-five years from 50 cents to a current rate of 350 pesos to the dollar. The result has been that on many existing policies the cost of collecting the premiums was higher than the premiums themselves, and we have in fact found it more encouraging to pay off all permanent assurances effected before 1950 at their face value than to attempt to maintain them in force. This is an extreme example of the "profit squeeze," and it is easy to adopt the complacent attitude that "it can't happen here." I am not so sure about this that I should be happy to assume that, because in the past increased interest earnings have outstripped the effects of moderate rates of inflation, this is something we can expect to continue. Our rates should be based on our best estimates of what we think is likely to happen and not on pious and possibly unfounded hopes.

ADJUSTED EARNINGS

Seattle Regional Meeting

An introduction to the questions raised by the accountants' efforts to apply generally accepted accounting principles to the statements of life companies.

CHAIRMAN CHARLES B. H. WATSON: We are here this morning to discuss the question of adjusted earnings for life insurance companies. This essentially means discussing the adjustment of statutory accounting to reflect the "true" incidence of earnings. This is intended to be an undergraduate course in adjusted earnings.

This is a very large question, and we have tried to break it down into a number of areas. First, I will give a presentation of the background to show why the problem exists. Mr. Corbett will then present an examination of the audit guide, a discussion of revenue and costs, the question of the balance-sheet presentation, recognition of loss, application to other lines of insurance, and valuation of investments. Bert Winter will then deal with the question of how this problem applies to mutual companies and to the par business of stock companies. He will also discuss the rather knotty question of deferred taxes. Finally, I shall deal with the actuary's role in this area.

The financial statements of any type of company should disclose two kinds of information: information about solvency and information about earnings. Theoretically, both kinds of information have been available from the statutory accounting statements prepared for life companies. Statutory statements, however, reflecting principles stemming from the days of Elizur Wright, have historically emphasized solvency at the expense of earnings. Reflecting the long-term probabilistic nature of the insurance business, statutory accounting has in effect distorted the earnings of specific accounting periods in order to place emphasis on the conservative adequacy of present values. The treatment of initial expenses and the choice of assumptions bear clear witness to this. This emphasis has probably been correct from the standpoint of policyholders and from the standpoint of those regulators who protect policyholder interests. However, there are other groups that are interested in life company statements. Here I think of management and investors. For these groups interest in earnings and performance is at least as great as interest in solvency. It is therefore these groups which have seen the need for adjusted earnings statements—adjusted, that is, in relationship to the statutory statement.

Internally this has led to management's seeking more realistic data on how the company is really doing. Externally it has meant that the industry has attracted the interest of accountants and financial analysts. What sort of interest do these groups have? First, the accountants: the American Institute of Certified Public Accountants (AICPA) is an old, well-established, and important professional body which acts as a de facto monitor on the accounting principles and practices applied to nearly all business enterprises. Operating through a system of committees and through a major policy-setting body called the Accounting Principles Board (APB), it seeks to establish uniformity in accounting and auditing standards, essentially through the promulgation of what are considered generally accepted accounting principles (GAAP). The AICPA operates with high standards of integrity, a high level of discipline, and virtually complete independence.

Two recent developments have contributed to the interest of the AICPA in the life insurance industry. First, there has been the shift in the nature of stock ownership of life companies, from the closely held, almost family-type corporations of pre–World War II days to the widely held and publicly traded corporations of today. This shift has led to a great increase in interest in life company statements on the part of the financial community. This community is traditionally accustomed to statements that conform with GAAP. Moreover, if a life company wishes to be listed on a national stock exchange, as many do, its statements must receive an unqualified certification from a CPA. This can be given only to GAAP statements. The second development has been the recent trend toward life company diversification, which has led, in turn, to a close contact with the Securities and Exchange Commission and the need for audited GAAP statements.

The investment analysts responded to this situation by developing various rules of thumb for adjusting the earnings of life companies to what would approximate GAAP earnings. A great variety of these methods, all fairly crude, were used during the 1950's and early 1960's. Then, about two years ago, after several years of investigation, the Association of Insurance and Financial Analysts publicized a new method for adjusting earnings. This method, although handicapped by its complete reliance on statutory figures, and by what actuaries viewed as theoretical flaws, did represent a great improvement on past practice. The method at least introduced a degree of consistency in how earnings were adjusted.

In the meantime the accountants had been gearing themselves to a major confrontation with this question. In 1966, after an eleven-year

struggle, the AICPA had produced an audit guide for fire and casualty companies. Unfortunately, there had been very little useful communication between the accountants and the companies during this eleven-year process, and as a result the audit guide was received with something less than joy by the industry. In late 1966 the AICPA assigned to its Committee on Insurance Accounting and Auditing (the Arenberg committee) the task of producing a life insurance audit guide. In doing so, it was reflecting a number of influences: its long-term desire to produce audit guides for all industries, its dissatisfaction with the various rules of thumb the financial analysts were using, and, certainly not least, the increasing pressure it was receiving from the SEC and the New York Stock Exchange to provide unqualified, that is, GAAP, statements for life companies.

The life insurance industry was aware of the problems that had been created in the fire and casualty industry by the lack of meaningful communication, and, accordingly, the American Life Convention and the Life Insurance Association of America responded by setting up a Joint Committee on Financial Reporting Principles in early 1967. In this action these organizations recognized that the AICPA does have great powers and independence in these matters, and, accordingly, only through co-operative effort could life insurance companies have an influence in developing an audit guide which was most appropriate to the unique situation of the life industry. The results of this co-operation have been quite promising. Those people who attended the meetings of the ALC-LIAA committee and the accountants' committee have reported that the first few meetings were marked by some tension. There was a conflict between some accountants who felt that the life industry was really only interested in hiding its true earnings and some life industry people who felt that the accountants were showing unmitigated gall in looking at the question. The tension has evaporated, however, and, although there are a few major points on which it is by no means certain that there can be real agreement, there is now a very broad area of mutual understanding and respect. In particular, the industry joint committee, and especially Gary Corbett, was responsible in large measure for proposing the natural reserve approach that is taken in the audit guide.

The next development was the appointment in late 1970 of a Joint Actuarial Committee on Financial Reporting (the Winters committee), which consists of three members from each of the American Academy of Actuaries, the Society of Actuaries, the Canadian Institute of Actuaries, and the Conference of Actuaries in Public Practice and one observer from the Casualty Actuarial Society. The need for this committee grew out of

an appreciation of the far-reaching impact of the forthcoming audit guide on specifically actuarial matters as opposed to purely industry considerations.

These actuarial matters were, first, the efforts of the accountants to prescribe the method and assumptions that would be used to determine the actuarial elements of the statement and, second, the general relationship between the accounting and actuarial professions. The accountants published an official exposure guide at the beginning of 1971. Comments were requested by May 15. The industry joint committee has filed a response. The Joint Actuarial Committee has filed a response. I think I can safely say that this committee has made up for the lateness of its appointment by the diligence with which it has pursued its task.

The Joint Actuarial Committee response is marked by two important features. First, and most seriously, it sets forth a new theoretical approach to the concept of reserves. This is the so-called release from risk reserve developed essentially by Dick Horn of Security Life in Denver. To my mind it is one of the major pieces of actuarial research that have been done in the past few years. One interesting and obviously favorable result of all this activity is that a large number of actuaries have had to go back to the books and really examine the theory underlying the life industry. A second virtue of the Joint Actuarial Committee response is that it is the best piece of writing that has appeared on this whole subject. It reads very nicely.

The American Academy of Actuaries, in its role as a watchdog over the actuarial profession in the United States, has also submitted a response. It focuses specifically on the unique role of the actuary in the life industry.

MR. GARY E. CORBETT: The purpose and content of the audit guide are described in the preface to the guide, which states in part:

> The Guide has been prepared to assist the independent auditor in serving his clients in the life insurance industry by describing those aspects of the life insurance business with which he should be familiar.
>
> The first six chapters of the Guide provide background information regarding the nature of the business and how it is conducted, the character and extent of regulation and its effect on accounting and reporting practices. . . .
>
> Chapter VII deals with those accounting and reporting practices which are peculiar to the life insurance industry. Some of these practices are considered by the Committee to be at variance from accounting principles which are generally accepted for other industries. The Committee has attempted to deal with those practices and related auditing procedures.
>
> We expect that the Guide will be revised or supplemented from time to time as the need for refinement evolves in the application of the adjustments con-

templated in Chapter VII or as the need for such adjustments is eliminated through changes in accounting and reporting practices prescribed or permitted by regulatory authorities.

Chapter VIII discusses the types of auditors' reports considered appropriate under a variety of circumstances.

Two important things to note are, first, that the guide is written for auditing accountants and not for actuaries or other life insurance executives and, second, that even the final draft of the guide will be subject to change from time to time. As to this latter point, however, it will undoubtedly be more difficult to change the guide once it has reached final form than before this stage.

Chapters I–VI are of a very general nature and were written primarily to tell the auditors something about the life insurance business. They are essentially nonactuarial in nature, and for this reason the Joint Actuarial Committee did not submit a response to the Institute on these chapters. It did send a number of suggestions for changes to the ALC-LIAA Joint Committee on Financial Reporting Principles (the Farley committee), and they included our recommendations in the material they sent to the Institute on the first six chapters.

The stated purpose of Chapter VII is to discuss the differences which may exist between regulatory principles and GAAP and to set forth appropriate financial reporting, in conformity with GAAP, for stockholders, policyholders, and the public in reports prepared for other than insurance regulatory or taxing authorities. Ten such differences are discussed. They are as follows:

1. Recognition of revenue and costs
2. Deferred income taxes
3. Valuation of investments and recognition of realized and unrealized gains (losses) thereon
4. Accounting for investments in subsidiaries
5. Participating policies
6. Special reinsurance agreements
7. Composition of equity accounts
8. Mandatory securities valuation reserve
9. Nonadmitted assets
10. Reporting on consolidated financial statement

Even if we had the time today, I would not feel competent to comment on a number of these differences. For example, reporting on consolidated financial statements is almost entirely an accounting problem.

As far as most actuaries are concerned, the problem of appropriate recognition of revenue and costs is the most important area. The concept

of matching costs and revenues is a very basic accounting principle. One accountant expressed it thus: "The province of accounting is to allocate (recognize) revenues, costs, and expenses; profit recognition is only a derivative of this process. Proper application of this concept of matching of revenue with related costs and expenses is a primary objective (if not *the* primary objective) of accounting; creating a particular pattern of profits is not an objective of accounting." In discussing with accountants the appropriateness of particular reserving systems, one should thus not build a case for or against such a system based on the effect on earnings. The effect on earnings is not the primary consideration of the accountant. The primary consideration is to match costs with revenues, and earnings are what remain after this matching is accomplished.

Before we can match costs and revenues, we must define these two terms. Unfortunately, the definitions are not as independent as one might think. Once you define one of the terms, you do not have complete freedom in defining the other. Thus it makes a difference which one you start with. Accountants traditionally start with revenue. This is what the audit guide does. Revenues are defined as gross premiums. However, this is not the only possible definition of revenue. The Joint Actuarial Committee has considered two others, and it has even gone to the extent of preparing model company results based on the reserving systems derived from these other two definitions.

The first alternative is the very obvious one that revenues should include investment income as well as gross premium. The second is much more complicated. It is basically the release of risk method that Barry Watson has already mentioned. It is similar to what the accountants would think of as a completion-of-contract concept. For example, a contractor building a $5,000,000 bridge might receive payment all at the end, all at the beginning, or at intermediate periods throughout. In any event, the actual date on which payments are received is not the governing factor in recognizing revenue. The governing factor is the percentage of completion at the end of any accounting period. If the job is 20 per cent completed at the end of the year, 20 per cent of the total revenue, or $1,000,000, would be recognized in that period.

This concept may well have applicability to life insurance accounting, but it is obviously very difficult to measure the degree of completion of the contract. The release of risk method attempts to measure percentage completion by looking at the degree of the risk that has been satisfied and is no longer ahead. As these risks (which will be in the areas of mortality, investments, withdrawals, and expenses) are satisfied progressively over the period of the life insurance contract, the contract is considered

completed in proportion to the ratio of the completed risks to the total risks foreseen at inception.

The definition of costs for a life insurance company is probably more straightforward than that of revenue. However, to properly categorize the incidence of costs is often a problem. Costs must include all anticipated benefits and all anticipated expenses. It would be impossible to list all the benefits that should be taken into account. The audit guide does say that costs should be based on original premium assumptions. The rationale underlying this principle is that the cost assumption the actuary used when he designed the plan is somewhat analogous to the cost-of-goods-sold basis used in a manufacturing concern.

The other alternative is to use current assumptions, continuing to update them as the outlook changes. For instance, many years ago a 3 per cent interest assumption might have been realistic, but today the outlook is for 6 per cent rates. The audit guide says that use of the 3 per cent rate should be continued. I believe that this position is preferable for at least two reasons. First, the use of current assumptions would result in frequent reserve changes. Every time your outlook changed, you would have to change reserves. That is purely a mechanical problem. A more important reason for the use of original assumptions is that use of current assumptions would result in the effect of changes in outlook being reflected in the current year's accounting period. I do not believe that reserve changes resulting from such changes in outlook are properly part of earnings for that period.

The matching of revenues and costs is done through a reserving system. The Joint Actuarial Committee has suggested the use of the term "revenue reserves" to describe those reserves which are designed to match costs and revenues for general-purpose financial reporting. Audit guide natural reserves would then be a specific type of revenue reserves. The Joint Actuarial Committee has further commented that, once the revenue and cost bases have been determined, the determination of the unit revenue reserves is a relatively straightforward actuarial calculation. In other words, once the cost and revenues have been defined, there will probably not be a great deal of debate among actuaries as to how they should be matched. As a practical matter, once revenues or costs have been defined, the end result is pretty well determined. For instance, if revenues are defined as gross premiums, it is rather difficult actuarially to come out with revenue reserves appreciably different from audit guide natural reserves. If revenue is defined as gross premiums plus investment income, the resulting revenue reserves are somewhat similar to audit guide natural reserves calculated at a lower interest rate. This

lower interest rate results not from any arbitrary conservatism but from the algebra of applying the definition of revenue as gross premium plus investment income. As a further example, if the definitions of revenues and costs are based on a release of risk approach, revenue reserves are obtained which are again somewhat similar to natural reserves, but with specific margins built in for all assumptions. This is described more fully in Exhibit A of the Joint Actuarial Committee report.

The audit guide suggests that the matching process can be accomplished either by using natural reserves or by adjusting for the individual assumptions separately. I do not believe that the latter method is possible. A company could adjust for the expense portion separately, but it is not practical to analyze or determine the effects of mortality, interest, and withdrawals separately because of the combined effect of the three, particularly on the survivorship function. However, even though we cannot calculate the effect of these assumptions separately, it is still worthwhile to discuss them separately.

Let us turn our attention first to expenses. There are two questions that must be answered with respect to expenses: first, what expenses qualify as acquisition, and, second, what method should be used in writing off these acquisition expenses. The answers to these two questions will significantly affect reported earnings, particularly for new companies.

The definition of acquisition expense will lead to much debate between the companies, usually represented by their actuaries, and the auditing accountants for some time. Traditionally, accountants have taken a rather narrow view of expenses eligible for capitalization. For instance, they are very reluctant to classify any overhead as acquisition expense. These views have been developed with respect to other industries but will carry over to life insurance.

If the expenses are treated as part of the total natural reserve calculation, there is not much question about how they are written off. If they are to be treated separately, however—and this appears now to be the thinking of the AICPA committee—interest is often ignored in the writeoff. Also, somewhat more gross methods of estimating year-by-year acquisition expense and the appropriate writeoff are often employed. For instance, periods somewhat shorter than the premium-paying period might be used. I would urge all of you to investigate the effect of ignoring interest in the writeoff schedule before deciding to adopt this approach. The effect of ignoring interest will vary a great deal, depending on type of plan, age, and duration. Refer to my discussion of Mr. Pharr's paper "The Natural Reserve Concept and Life Insurance Earnings" for a fuller explanation of this effect. Ignoring interest may result in a con-

siderable overstatement of the first-year expense asset. The amount of the overstatement may not be too large, measured in terms of the asset, but the effect on first-year earnings can be as high as 50 per cent.

The only other comment that I would like to make on expenses is that the effect of inflation on renewal expenses should be considered, probably in conjunction with the interest rate assumption. If you assume fairly high interest rates continuing on into the future, an underlying assumption of future inflation is probably present. In this case you should give attention to grading up renewal expense factors by duration. On the other hand, if you grade down interest rates for the later durations, it is probably less necessary to use increasing renewal expense factors. Some companies intend to reproduce the effect of a graded interest rate by using a level interest rate which starts lower but ends higher than the underlying graded rates.

The mortality assumption should generally be based on a select and ultimate table. The substitution of a select and ultimate table for the normal statutory mortality table can result in significant increases in reserves, particularly on term plans.

The combined effect of select and ultimate mortality and withdrawals can result in even greater reserves. Also, the effect of withdrawals on reserves is not restricted to term plans. The introduction of a withdrawal assumption will often result in reserve increases on ordinary life plans in the early years. This situation results not only from the provision for the payment of future cash values but also from the change in the survivorship table. The cash value floor concept has been discussed and discarded by all three major committees (Arenberg, Farley, and Winters) on the grounds that the use of a cash value floor would distort earnings.

One of the most radical proposals of the Joint Actuarial Committee results from our concern with respect to balance-sheet presentation. Until now, I have been discussing revenue reserves and how they adjust earnings. As you well know, however, much of the concern of actuaries, as expressed in letters to *The Actuary* and in other media, has been with the protection of policyholders and with solvency requirements. We share this concern.

According to the audit guide, GAAP earnings will appear on the income statement, the acquisition expense asset will appear on the asset side, and the revenue benefit reserves will appear in the policyholders' reserve section of the liability side of the balance sheet. As a result, the surplus in the balance sheet would be on a revenue reserve basis. This surplus would be much greater than the statutory surplus, but the difference between them would be shown as nondistributable.

The Joint Actuarial Committee believes that this presentation is undesirable. The existence of two statements with different balance-sheet figures, different surplus figures, and different earnings figures will result in confusion in and about the industry. We would resolve this confusion by combining the two statements into one.

Virtually nobody, including the regulators, believes that the statutory income statement used today has any particular meaning. On the other hand, we do not believe that a balance sheet prepared on a GAAP basis has any meaning. We propose one set of statements—basically a GAAP income statement and a statutory balance sheet. This would be done by producing an income statement on a GAAP basis but adding two lines at the bottom. The first line would be a deduction from GAAP earnings equal to the difference in the increase between statutory benefit reserves and revenue benefit reserves. The last line would be a result of deducting this difference in reserve increase from GAAP earnings and would be labeled "increase in surplus." On the balance sheet the policyholders' reserves would be the statutory reserves. We would have no objection to showing them as the sum of two items—revenue benefit reserves and the excess of statutory over revenue benefit reserves—but the total figure shown for policyholders' reserves would be the traditional statutory reserves. The balance-sheet surplus would still be greater than statutory surplus because it does include the deferred acquisition expense and other differences between statutory and GAAP accounting. We would show the difference between statutory surplus and the total surplus on the balance sheet as nondistributable, just as the accountants have suggested for the larger difference that would occur if we followed the audit guide.

If our recommendation were to be adopted—that is, if reserves different from those shown on the balance sheet were used to calculate earnings—we would recommend against anticipating losses in the revenue reserves. For instance, if interest rates were to drop, and even if it were assumed that this drop would continue in the future, we feel that any deficiency between the assumed rate and the actual earned rate should be reflected in the year the reduced investment income is realized. The theoretical justification for this point of view is that one should not adopt an approach for losses that is different from that for profits. One is simply the reverse of the other and does not require different accounting treatment. Looking to the end result, we feel that it is in the investment area that this problem is likely to arise. Interest rates are historically cyclical—just as surely as they will go down from today's level, they will subsequently recover part or all of that drop. The result of anticipating a loss by revaluing at a lower interest rate, as the audit guide proposes, leads to

overstating earnings in future years after the interest rates have recovered. If such rates are still below the original assumptions, we believe that to report earnings in those years is inappropriate.

As far as the policyholder is concerned, we realize that he is not protected if we are holding reserves based on 5 per cent when interest rates have dropped to 3 per cent. We recommend, however, that any strengthening necessary from this point of view be done on the balance sheet only. Balance-sheet reserves would be on a conservative basis. This conservative basis would initially probably be statutory, but not necessarily so. We have some hope that the divorcing of the balance-sheet reserves from those used in calculating earnings will have the result that actuaries and company management will pay more attention to the adequacy of their statutory reserves. Even today, I would suggest that companies writing almost entirely term may be underreserved from a protection-of-policyholder point of view. Also, companies might be more willing to strengthen reserves for the protection of policyholders if they did not affect earnings by so doing.

The Joint Actuarial Committee has made some rather brief and tentative recommendations as to how other lines might be handled. The audit guide says that the natural reserve concept should be applied to individual life, to noncancelable and guaranteed renewable health policies, and to any other insurance benefits that require actuarial reserves greater than the earned portion of the current premium. The Joint Actuarial Committee has suggested that for the accidental death benefit and the waiver of premium benefit statutory benefit reserves are probably sufficient, but deferred expenses should be set up if material. For single premium individual annuities, we have recommended the use of the release of risk method. The committee believes that the audit guide natural reserves are not appropriate because they result in all the expected profit being released into earnings at the time of sale. The specific suggestion for single premium individual immediate annuities is that the valuation be done at an interest and renewal expense rate very close to what is assumed but at a slightly lower mortality—mortality being the main risk undertaken by a company when it writes a single premium individual immediate annuity. As far as annual premium individual annuities are concerned, the committee has recommended statutory benefit reserves, and deferred expenses if material. A great deal more work must be done on individual health, but the committee has tentatively suggested that a revenue reserve approach comparable to that used for individual life insurance is appropriate for noncancelable and guaranteed renewable disability income. We do not hold the same view

on individual medical care and hospital policies because of the very high withdrawal rates currently being experienced on such plans and the possibility of a national health program in the not-too-distant future.

For group life and health there would generally be no adjustments, but in the case of group permanent and for companies writing a large number of small-group cases deferred expenses could be set up if recovery could be demonstrated. Statutory accounting is probably appropriate for group pensions. As far as variable annuities are concerned, the statutory basis is probably appropriate, except that deferred expenses should be set up for individual variable annuities if the result is material. Individual variable life has not yet been investigated because we do not know what form this plan will finally take.

Perhaps because the subject of valuation of investments and recognition of realized and unrealized gains (losses) thereon concerns itself with the asset side of the balance sheet—normally not an actuarial concern—it has not received the attention from actuaries that it should have. It is, however, a very important item because of the necessity of consistency between asset and liability valuation.

The APB is currently considering the problems of accounting for marketable equity securities, both common and preferred stocks. Their decisions on this question will apply to all companies, not only to insurance companies. A number of the committees concerned with the adjusted earnings question have made presentations to the APB as to how capital gains should be treated in the income statement and balance sheet. The Arenberg committee has recommended that for insurance companies, fire and casualty or life, realized and unrealized gains should be reported together and in the long run be reflected in the income statement. Equity investments should be carried in the balance sheet at market value, but the year-to-year changes should not be directly charged to income. The committee prefers some method which would credit or charge the capital gains or losses to income on a basis which results in a rational and systematic recognition of the results of investing in marketable securities and which avoids giving undue emphasis to short-term market fluctuations. It proposes three methods of accomplishing this objective—basically averaging approaches which would operate through a surplus account.

The industry (Farley) committee has recommended that preferred stocks be handled as they are today: cost if in good standing and market value if not. Common stocks should be carried in the balance sheet at market value, and realized and unrealized capital gains and losses should

be treated alike. Changes in market value should be charged to surplus and not reflected in the income statement. However, if the APB says that such changes must be reflected in the income statement, the Farley committee recommends that they be shown as a separate and distinct part of this statement, not labeled as income. As a third position, if the APB insists that they be in the income statement and labeled as income, the Farley committee says that the gains and losses should be handled as the Arenberg committee has suggested—by the use of a smoothing method operating through the surplus account. The Joint Actuarial Committee has contented itself with stating that asset and liability valuation must be consistent. We have supported the amortized cost basis for bonds but have not specifically addressed ourselves to accounting for equity securities.

You will note that the current APB deliberations are limited to equity securities and do not extend to debt investments, such as bonds. I believe, however, that, if we are to use revenue reserves, employing original assumptions, we must look at the way bonds are accounted for at the time of sale and change our traditional accounting. If we do not, we shall not be treating assets in a manner consistent with the original-assumption philosophy for liabilities, and a distortion in earnings will result.

Allow me to illustrate. If we were to invest in twenty-year bonds today at 7 per cent, and five years later, when interest rates have dropped to 5 per cent, we sell these 7 per cent bonds and reinvest in 5 per cent fifteen-year bonds, our net return over the twenty years has not changed as a result of the second transaction. The way we are required to account for these transactions today, however, results in our reporting losses in years 6–20 because of earning 5 per cent rather than the underlying 7 per cent assumed in the revenue reserves, and reporting perhaps a large profit in the fifth year, depending on whether or not the capital gain is reflected in the income or surplus accounts. In any event, there will be a distortion of the true earnings of the company because of the losses reported in years 6–20, even though the investment performance over the entire term is exactly what was anticipated at the time the business was written. I believe that we must spread such gains (or losses), at least for income statement purposes, over the remaining term of the original investment. Such a spreading would be exactly analogous to that suggested by the Arenberg committee for equity securities. I do hope that this specific problem receives much more attention in the next few months than it has to date.

MR. BERT A. WINTER: The ALC-LIAA joint committee, which is now headed by Jarvis Farley, was organized early in 1967. During the first three years of its existence, although a mutual company representative was always present, the problem of matching revenue and costs was regarded as a stock company matter, primarily because of the absence of an investor constituency in the case of mutual companies. In April, 1970, at the joint meeting of the industry committee and the AICPA committee at which the natural reserve concept started to gain momentum, it became clear to the mutual company representative, who was then Paul Knies of the Metropolitan, and to several other mutual people whom he consulted, that this concept was inappropriate for mutual companies because it failed to recognize the inherent nature of truly participating business. By January of this year six other mutual company representatives had been appointed to the Farley committee, bringing the total to seven out of a thirteen-man committee. Four of these seven mutual company representatives, as well as several of the stock company representatives, are Fellows of the Society. In considering the stock company versus mutual company relationship on the Farley committee, the following should be noted:

1. Both stock and mutual companies have been sympathetic to the other's concerns with regard to its own statements.
2. A conviction exists that accounting principles evolved must be judged to be sound from the viewpoint of the industry as a whole and that stock and mutuals are special cases to which the basic principles must apply.
3. Stock company representatives on the committee have been quick to give full support to the efforts of the mutual companies to avoid application of onerous requirements which serve no basic purpose, but those stock company representatives are also concerned that the progress which has been made to date with respect to their problem not be upset.
4. There is a lack of understanding of each other's operations.
   a) The stock companies, much less the accountants, do not realize how little a mutual company operation is concerned with "most realistic" assumptions. The mutual company representatives have tried to make it quite clear that, when they set a premium at the inception of a contract, they provide for the most adverse probable assumptions and do not provide for what they think is going to happen. Not even in preparing dividend illustrations are estimates of what is probable used. This is prohibited by section 211 of the New York law, among others. We do say what the dividends will be if the current dividend scale now applicable to in-force policies is continued for the period illustrated.
   b) Stock company participating business varies greatly in character, from essentially "coupon" policies, where the original dividend scale is not

expected to be changed over the life of the policy, to truly participating business, where policyholders experience the full net cost less a charge for employment of risk capital.

5. There is an obvious need for consistent treatment of truly participating business issued by both stock and mutual companies.

A meeting of the Joint Committee on Financial Reporting Principles and the AICPA committee was held in San Juan on March 16.

1. The AICPA committee indicated apparent agreement that total funds held for participating policyholders should be treated as a liability to policyholders.
2. It was recognized that there is a basic lack of demand for an adjusted earnings statement for mutual companies.
3. The AICPA committee failed to understand why mutual companies should not show a separate liability for guaranteed benefits, the natural benefit reserve on most realistic issue assumptions, thus demonstrating their financial strength.
4. The mutual companies had a growing conviction that guaranteed benefit natural reserves for truly participating business should not be permitted as in accordance with GAAP.

As indicated in an appendix to the Joint Actuarial Committee's response to the exposure draft, a possible proper answer for truly participating business is the following:

1. The policyholder liability must be the total funds held for participating policyholders, that is without division into a most realistic guaranteed benefit reserve and a reserve for future dividends.
2. Reserves based on most probable experience should not be permitted, since such reserves fail to recognize the obligation to provide benefits without cost to other classes of policyholders. Also, since the determination of most probable results plays no role in the administration of participating business, it should not be the basis for determination of a key financial item in the statement, namely, a separately analyzed guaranteed benefit reserve.

Many of us have a conviction that there is a critical need for time to explore the natural reserve principle. There are a number of other approaches for matching costs and revenues. There is a possibility that the natural reserve approach may place a disproportionate amount of profit in the early policy years. If this is so, it could prove disastrous for the industry. This proposal amounts to the application of an entirely new accounting concept to an entire industry which never before has used that principle. It is rather incredible that it could be adopted so quickly without significant testing in various different real periods of history.

I would like now to give a brief summary of the deferred tax problem.

The problem arises because the values of many of the items in a general-purpose statement that conforms to GAAP will differ from the values of those items in a statutory statement. It is the statutory statement on which the actual taxes imposed by the federal law are based. According to GAAP, if earnings are restated or adjusted, then the effect of taxes should be included in the adjustment, so that earnings are aftertax adjusted earnings. The accountants have well-established principles for this, and, unfortunately, neither the Farley committee nor the Joint Actuarial Committee, both of which have commented extensively on this point, has succeeded in conveying to the AICPA committee the peculiarities of the life insurance business. Both committees feel that the exposure draft of the audit guide takes insufficient account of two characteristics of the life insurance business in applying APB opinions to the calculation of pro forma tax adjustments in general-purpose statements:

1. The complex nature of the chapter of the Internal Revenue Code applicable to life insurance companies makes it particularly difficult to distinguish between timing and permanent differences in taxation. For example, some additional earnings introduced into this pro forma adjusted earnings statement for the year may, depending on the company's future tax situation, never be taxed under the present Internal Revenue Code.
2. Both for this reason and because they are inherent in the calculation of all other significant liability items in the general-purpose statement, discounting for interest and probability of payment is appropriate. This is not generally permitted by GAAP.

CHAIRMAN WATSON: There have been a number of references in the presentations to the role of the actuary. My purpose now is to tie these together and to give some prognosis of future developments in this area.

Most of these references so far have dealt with the essential need of having actuarial judgment applied in the choice of the factors that determine reserves and other actuarial elements of life company statements—hence the desire of the Joint Actuarial Committee to have alternative methods and factors available under the audit guide. Very dramatically, the question at issue is the responsibility of the actuary for the adequacy of life company reserves.

Up to the present this responsibility has by and large been accepted without question by the accountants. They have sometimes given explicit recognition to this by referring to the actuary in the scope paragraph or sometimes in the opinion paragraph of the auditor's statement. The scope paragraph is the portion of the auditor's statement that de-

scribes the data and the tests that the auditor has made. In this paragraph the auditor might state that he has referred to the work and certification of a qualified actuary. The opinion paragraph contains the auditor's statement that, in his opinion, the earnings of the company have been fairly presented; here GAAP must be referred to if the auditor is to give a clean opinion.

If the auditor states in the opinion paragraph that he has relied upon the statement or representation of an actuary as to the correctness of the reserve liabilities, this is a very important recognition of the importance of the actuary. In the view of the audit guide, it is too important a concession. For GAAP to apply, it is the view of the AICPA that the auditor must satisfy *himself* as to the appropriateness of all aspects of the statement, including the reserve liabilities. Otherwise, the auditor is not rendering a whole opinion, and implicitly not a clean one. From this point of view the actuary should be considered in the same light as any other expert an accountant might consult—a petroleum engineer to measure gas reserves or a gem expert to assess the inventory of a jewelry store. Any reference to the actuary in the opinion paragraph would be, in the memorable word of Chapter VIII of the audit guide, "gratuitous." If the auditor is satisfied with the reserves, he can give a clean opinion on his own; if he is not, he cannot get off the hook either philosophically or legally by dragging in an actuary.

This is not to say that the accountants do not recognize the importance of actuaries in the life insurance business or that they want to do without them. Every accountant the Joint Actuarial Committee members have talked to has made this point very clear and has asserted that he and his firm would continue to rely on actuaries. But the accountants do not want to say in the auditor's statement that they have done so. Moreover, the audit guide does not prescribe to the last detail what the auditor must do. It is, after all, the auditor's own responsibility and judgment that stand behind his opinion. Hence the audit guide, as it now stands, does not at any point require that the auditor consult an actuary. It states that the auditor "may find it" desirable to consult an actuary, and that is all.

This general attitude toward the role of the actuary has given great concern to the Joint Actuarial Committee and to the board of the Academy, to whom this specific question was referred. The submissions of the two bodies are similar in thrust; therefore, I shall refer only to the submission of the Academy board. The Academy letter, signed by President Raymond Strong on behalf of the board of the Academy, bases its comments on the following premise: "Public interest demands

(*a*) that an opinion by a qualified actuary be obtained on the actuarial items in life insurance company financial statements, and (*b*) that the nature of the opinion of such actuary be made known as part of any published statement." From this premise the letter builds up to two major recommendations: first, the audit guide should make clear that the auditor should, as a part of his audit procedure, obtain the opinion of a qualified actuary on actuarial items, and, second, the audit guide should require that the scope paragraph reveal that such an opinion has been obtained. The Academy submission also recommends some additional specific language to make clear the need of the auditor to obtain the services of a qualified actuary. In specific circumstances, it takes the words "may find it desirable" and changes them to say "must find it desirable."

For a definition of a qualified actuary, the letter refers to that appearing in *Accounting Principles Board Opinion No. 8*. Membership in the American Academy of Actuaries, a comprehensive organization of the profession in the United States, is generally considered to be acceptable evidence of professional qualification. The board of the Academy and the Joint Actuarial Committee are somewhat hopeful that a recommendation along this line will be accepted.

It has become clear that any attempt to obtain a reference to the actuary in the opinion paragraph would be doomed to provoke a long, bruising, and ultimately uncertain battle. A clear audit requirement of an actuary's opinion, combined with a reference in the scope paragraph, would seem to be a satisfactory substitute. Even this solution will bring its own problems in train. For one thing, it may now be necessary for some companies to acquire direct actuarial guidance, when previously they could rely on indirect assistance, such as the use of various tables.

More important, the entire question of independence is in the air. The accounting profession demands that the auditor be completely independent of any company he audits, even to the point of owning no stock in the company. In general, the auditor, to the extent that he adheres to GAAP, will require the same independence of those experts he consults. This, on the surface, would seem to require that the auditor obtain the opinion of an independent actuary as to the company's reserves rather than that of the in-house actuary. In fact, this is done in the case of many companies whose statements are audited today. An independent firm of consulting actuaries in effect audits the work of the company actuaries. If this is to be the future of audited statements, it will not be surprising if some of the larger companies, and some of the smaller ones, view it with something less than unbridled enthusiasm.

Nevertheless, the entire picture must be kept in view. If GAAP is to come to the life insurance industry, then the auditor will be expected to satisfy himself as to the validity of the reserves. It should be the goal of our profession to make certain that, in so doing, the auditor relies on the opinion of a qualified actuary. As to whether that actuary is the company actuary or an independent consultant, that decision is the prerogative of the auditor, and there seems to be little that we as a profession can do about it. There may be other pressures, but they will be outside our professional calling.

MR. JOE B. PHARR: The preferred definition of revenue (at present outlined in the audit guide) is one with revenue defined as equivalent to premium income. The guide does allow use of another definition of revenue in which revenue and expenses are allocated ratably over the expected life of the contract instead of being spread over the expected premium-paying period. The feeling is expressed, however, that a definition of revenue other than as premium income is an unnecessary refinement.

Others have suggested that revenue be defined as equal to premium income plus investment income. The Joint Actuarial Committee suggests methods of defining revenue which include (1) a per cent completion of contract method and (2) a release from risk method. The Joint Actuarial Committee also suggests that a life insurance company have a choice of the method it wishes to use.

I favor one definition of revenue which defines revenue as equal to premium income. Inherent in the use of this definition is the use of realistic actuarial assumptions as to mortality, interest, withdrawal, and expenses. These are actuarial assumptions which are realistic at the time the gross premium levels are established. Although mortality and interest assumptions are supposedly realistic, in fact these assumptions are typically on the conservative side. Withdrawal rates should be at least at the level experienced. It is probably true that maintenance expense assumptions are not adequate over the years. On balance, then, it is my opinion that realistic actuarial assumptions tend to be conservative.

It is submitted that the combination of revenue equal to premium income and the use of "realistic" actuarial assumptions which tend to be conservative (especially in the areas of mortality and interest) in effect provides a spreading of earnings over the life of the contract similar to that arrived at by defining revenue as equal to premium plus investment income or by following the more sophisticated concepts of per cent of completion of contract and release from risk method.

Use of more sophisticated definitions of revenue increases communica-

tion problems among actuaries, accountants, and management, as well as with those outside the life insurance industry, such as stockholders and investment analysts. Complexity of the actuarial calculations is also increased. Neither a problem of communications nor an increase in complexity of calculations is needed or necessary when the practical effects of an implementation of adjusted earnings with revenue equal to premiums and use of actuarial assumptions inherent in gross premium calculations are considered.

It has been suggested that natural reserves be graded into cash values or statutory reserves at the end of a relatively short period of time, such as twenty years. This suggests ignoring natural reserve adjustments on older issues. It should be pointed out that these are practical expedients which may give statements of earnings significantly different from those produced by a complete natural reserve approach and which ignore a considerable amount of earnings which may be reasonably declared from an insurance company's current operations. Management should be well apprised of the ramifications of the use of these simplifying and economically desirable assumptions.

Many have expressed concern over federal income tax implications as they relate to natural reserve adjusted earnings. It is likely that the taxing authorities are not fooled by life insurance statutory accounting and that tax laws have been designed to produce a given amount of tax dollars from the life insurance industries. If financial statements were available on other than a statutory basis, it is likely that the tax laws would have been developed to still give about the same amount of dollars. Complexities of the federal income tax laws are such as to make it likely that neither the Treasury Department nor the life insurance industry is anxious to spend the time and effort to revise such laws just to make them applicable to general accounting principles.

Similar fears about tax implications were expressed when the audit guide applicable to casualty insurance companies was developed. To my knowledge, the change in accounting methods with respect to the casualty insurance industry has not brought about increased federal income taxes in that industry. Similar fears were expressed when financial reporting was changed in other industries as a result of audit guides. These changes in financial reporting have not resulted in increased federal income taxes.

These remarks have been made to suggest that there will be no increased federal income taxes as a direct result of the promulgation of an audit guide which suggests the natural reserve concept for life insurance accounting. A valid concern, however, is the political pressure which

may build up when the politicians view increases in assets and surplus, and in earnings, which are likely to be shown in most company financial statements as a result of the new reporting through the use of the natural reserve concept.

MR. RICHARD S. ROBERTSON: A little over a week ago, before a group of this size, I discussed the per cent completion method. I gave the example about building a bridge. I stated that in this case revenue is allocated more in line with cost and indicated that this might be parallel to our industry. When I finished, an accountant said that it was a very good parallel but that I was all wrong about reallocating the revenue. Actually, he said, they left the revenue alone and reallocated the costs. Has the release of risk concept been discussed with accountants, either privately or publicly, and, if so, what was their reaction?

MR. CORBETT: It has probably not been discussed with them in any meaningful way. They know we are proposing alternative methods. They would prefer not to have a range of methods because of comparability problems. The security analysts are even more adamant on this point. They do not even want a range of assumptions permitted—again because of comparability. We must sell the concept that there is a range, or, more appropriately, a family, of methods that are appropriate. We might be better able to sell this concept if we started by defining costs and then moved to defining revenues in terms of costs rather than the reverse. I am hopeful that the accountants will come back to the Joint Actuarial Committee for some further explanation and discussion on this subject.

MR. ROBERT L. PAWELKO: I am with the Illinois Department of Insurance. My attitude about the natural reserve approach is slightly different from that of some of the others here. I have no fear of using natural reserves for the companies which you gentlemen represent. However, more than one-third of the companies operating in the state of Illinois do not have competent actuarial help. They use a "schlock" actuary who has gotten into the Academy through the grandfather clause. All the little promoter-run companies use such people. They would rather pay a $10,000 fee for his actuarial services than a $3,000 fee for the services which one of your firms can supply, simply because he will do what they want to have done. I am really concerned about what the promoter will do with natural reserves. I have envisioned several cases in which the promoter is able to highly inflate the stock of his company

for the first four or five years. At this point the good accountant and the good actuary will come in and say, "Hey, something is wrong here." By that time the promoter is out of the state of Illinois. We certainly have our share of these people. I do not think that the natural reserve approach addresses itself to the problem companies, and I think that this is what the good regulators, at least, are worried about. The industry will get a black eye from the problem companies, not from well-run companies. I personally think that the gross premium valuation method, with some type of modification not requiring a highly detailed experience analysis every year, offers the regulator a better tool in assessing whether the adjustments are realistic. It is easier to compare two small companies offering very similar products on current-day assumptions than it is to go back and say that five years ago we assumed that we would earn 5 per cent, whereas we now assume that we will earn 7 per cent. I personally think that we should be looking at the problem companies and not at your companies.

MR. CORBETT: Who would suffer from this? Are you concerned with the policyholders, or with the investors, who might be taken in by the promoters?

MR. PAWELKO: The insurance industry gains its reputation from the actions of all of the companies in the industry. Almost all the complaints which we receive are about the operations of the small "schlock" companies. The people who complain to our department are also the people who complain to the federal legislators. They also complain to other people. This is what produces the image. We do not hear too much about the operations of the good companies and the good things they do. We always hear about the bad things that happen.

MR. CORBETT: But is it the policyholders or the stockholders who suffer?

MR. PAWELKO: The stockholders. I am not so much worried about the policyholders, assuming that the policies they are issued can be bulk-reinsured in another company. I am concerned about the fact that the stockholder is being misled.

MR. CORBETT: Accountants cannot legislate morality. They do attempt to audit against dishonesty. That is their job. That is why we have auditors. They try to identify those who are deliberately misrepresenting themselves. The large accounting firms know who might be a

good actuary and who might not be—regardless of Academy membership. The actuarial profession cannot require, nor would we want to require, that accountants accept without question an actuary's opinion. We do say, however, that if they want to question that opinion they will have to call in another qualified actuary, that is, a member of the Academy.

MR. PAWELKO: You are talking about the large and good accounting firms. These companies also use bad accounting firms.

MR. CORBETT: Doesn't the investor's intelligence have to be considered at some point? Again, you cannot legislate morality. There are crooks in the business now. You can misrepresent statutory earnings more readily than you can adjusted earnings because you can say they are meaningless. The more we lose, the better we do. That's the way they do it now.

MR. PAWELKO: They now have eight years, and the natural reserve method will give them four or five years. I personally think gross premium valuation would not give them the four or five years.

MR. CORBETT: A gross premium valuation is subject to just as much manipulation by dishonest or incompetent actuaries as are natural reserves.

CHAIRMAN WATSON: Gary, is it not true that when you mentioned regulators you were thinking of the NAIC meeting out on the West Coast?

MR. CORBETT: Yes. One member of the NAIC, Harold Bittel, has been a very active member of the Joint Actuarial Committee. Their concern, as illustrated by the transcript of the NAIC meeting in San Francisco, has been with the balance-sheet problem. Mr. Bittel's initial opposition to natural reserves was based on his concern about their being used in the balance sheet. He agreed that as a system for producing earnings they are far superior to the statutory statement today. They may not be the ultimate. They may not even be the best available today, but they are far superior to statutory. The Joint Actuarial Committee has not sought out representation from all state insurance departments, but the departments were represented on this committee by one of their most respected members, who played a very active role in our deliberations.

MR. WINTER: It is clear from the proceedings of the San Francisco meeting of the commissioners that they were very concerned with the effect of natural reserves on the balance sheet. The accountants' committee did have a representative at that San Francisco hearing, namely, Randolph Waterfield. In the course of this hearing he gave the commissioners what might be interpreted as an assurance that the AICPA would not sanction a balance sheet which represented as solvent a company which was insolvent according to statutory methods. I am not sure that there is full comprehension of how much of a restriction that would be on adjusting earnings.

MR. PAWELKO: Look at Penn Central and the roast beef food chain annual statements. The accountants attested to those, and they were not necessarily very solvent companies.

CHAIRMAN WATSON: I think there is one point that I could make. Unfortunately, whether we like it or not, the accountants seem to be determined to arrive at some form of adjusted earnings. Their approach of using the concept of the auditor, using the concept of a clean statement under GAAP, is a thrust that, since companies want and need clean statements, cannot be prevented. The accountants' committee is aware of the concern regarding manipulation of earnings, and they claim that they are doing their best to avoid it.

MR. WALTER SHUR: Under a noncancelable hospital or major medical form issued several years ago, current claim costs now could be substantially in excess of what was originally assumed in the premium rates. One reason for this would be substantial increases in hospital and medical charges, such as we have seen recently. If it were determined that there was, say, a $5,000,000 prospective deficiency, would this be reserved immediately, or would it appear in the adjusted statements year by year as it was incurred?

MR. CORBETT: We are not making any proposals on hospital plans. Let us use this, however, as an example of what might happen on ordinary life. The accountants require that we anticipate the loss. If it is a five-year policy, and a $5,000,000 loss is expected over the next five years, they would establish that extra reserve immediately, just as we would traditionally do with statutory reserves. Assume that there is no profit loading at all. There would then be zero profits each year over the next four years, if the reserves were just sufficient to pay those

claims. The Joint Actuarial Committee would require an additional reserve on the balance sheet (to make sure that those amounts of money are held for the security of the policyholders and are not distributed to the stockholders). But the loss would be allowed to flow through, say, $1,000,000 each year, as it was actually incurred. We do not think that there should be a $5,000,000 effect on earnings in that one year. If we are going to lose in the future, the reported losses should be in the future.

MR. LOUIS GARFIN: Is it not true that under the audit guide proposal the $5,000,000 would show as an operating loss in this year?

MR. CORBETT: That is correct.

MR. GARFIN: This would differ from the current annual statement practice of strengthening reserves through the surplus account.

MR. CORBETT: The clean surplus theory of accounting requires that basically nothing go through surplus. Present statutory accounting is not very conservative because you can dress your statement by strengthening reserves through surplus and reducing the reserve increase in future years.

I have some other comments, if there are no other questions. First of all, a remark on deferred taxes. Even though the Arenberg committee did agree that the current deferred charge method of handling taxes is not appropriate for life insurance companies, the accountants do not feel that they can accept the liability approach that the industry committee and the Joint Actuarial Committee have recommended. Under the liability approach, projected future taxes are discounted at least for interest and perhaps for probability. The deferred charge approach was decided upon in *Accounting Principles Board Opinion No. 11*. The feeling of the Arenberg committee—and I think it is probably right—is that a revision of *Opinion No. 11* would be required before the accountants could go along with us, even if they wanted to.

I would also like to raise a question about the effect of adjusted earnings on income tax. To what extent should we, as professional actuaries—not company executives but professional actuaries—be concerned with possible tax implications and allow this concern to affect what we really believe to be appropriate reporting? Whatever is decided on, financial reporting may have certain tax implications, but as actuaries should we really consider the possibility of what the Internal Revenue Service might do?

CHAIRMAN WATSON: I would like to make a comment. This has to do with the locking in of assumptions, a question to which Walter Shur addressed himself. Gary pointed out the difference between the audit guide approach and what the Joint Actuarial Committee recommended. There was a great deal of controversy as to whether one should lock in for all time. I wanted to point out that this was debated very seriously before the Joint Actuarial Committee came to its conclusion.

MR. JOHN C. WOODDY: I would like to make two comments. I understand with regard to the deferred federal income tax that the adjusted earnings approach would require that on the asset side of the balance sheet the accumulated adjusted earnings be shown gross and that on the liability side the deferred tax on those earnings be shown, and, furthermore, that this would have to be carried back to 1958. If that is correct, I can imagine that by, say, 1975 the life insurance industry might have an aggregate deferred tax of perhaps a billion dollars. I wonder if Congress is going to sit still and let us hold that and not use the argument that, since the life insurance industry expects to pay all this money, why shouldn't it be paid now, when the government can very nicely use an extra billion dollars?

The second point is that we have talked about "most probable results," "most probable mortality," "most probable lapses," and so on. I think that approach is entirely appropriate when we are talking about the Metropolitan, the Prudential, and a hundred or so other companies. I think that "most probable" is a very slippery concept when it is applied to a small company. I do think that, before the adjusted earnings approach is applied rather blindly to companies where it may not be appropriate, some kind of mathematical studies should be made as to the extent of variation which can reasonably be expected in a small company from whatever the most probable results might be.

CHAIRMAN WATSON: John, I want to talk briefly on that point you raised. The release of risk method defines assumptions that are somewhat more conservative than the most probable. There is a built-in level of conservatism, and year by year, as that level of conservatism is not needed, the earnings emerge. I think that to that extent it is quite appropriate for what you have in mind. This is certainly what the Joint Actuarial Committee wants to achieve. It wants to build into the audit guide individual consideration of companies' needs rather than to have a particular method laid down forever. Whether they will succeed or not is certainly an open proposition.

MR. CORBETT: I think that this is probably one area in which the competence and experience of the actuary working with the auditor are extremely important. A consulting actuary, who has worked with many small companies, probably has some feeling for this range of variability. He knows the management of a particular company—its underwriters, for instance—and how competent the management might be in relation to that of some other young companies. The accountants are not oblivious to the problems of the young companies. In the audit guide they describe ways in which companies might arrive at assumptions. Different methods are suggested for established companies and for unestablished companies, and there are a number of comments on smaller companies. For instance, on expenses, the new company will have special problems with respect to the recoverability of deferred acquisition expenses: "Because of uncertainty resulting from the lack of reliable experience, the auditor may be required to qualify his opinion as to recoverability of such expenses unless the company has been very conservative in the amount of expenses deferred and unless the company clearly demonstrates the ability to produce a sufficient volume of business to justify the expenses assumed in the premium calculation."

If the accountants had their way, they would probably permit only a very narrow range of assumptions, thus tending to avoid some of the possibilities of misrepresentation referred to earlier. It is the actuarial profession that has resisted the setting of restricted ranges. We say that assumptions must be determined in the light of all the experience and outlook available at that time. As a profession we are rather reluctant to prescribe anything. Historically, we have never wanted to tell another actuary what he can or cannot use. The accounting profession does tell other accountants what they can or cannot do.

CHAIRMAN WATSON: The Joint Actuarial Committee wants to keep assumptions locked in but wishes to use a method implicitly permitting variations in these initial price assumptions. This is what the actuary would prefer to do.

MR. GARY L. MULLER: Personally, I believe that being able to change assumptions year by year under the gross premium method or something similar would probably be the best approach. In a stock company, it is sometimes difficult to get management to approve assumptions for calculation of gross premiums if the resulting premiums are not competitive in some areas. I would personally not want to put myself in

the position year after year of trying to use assumptions which were actuarially sound while the management of the company wanted me to use assumptions which made the company more profitable that year.

MR. CORBETT: It is a little difficult to determine at times which assumptions will maximize profit in a given year. It takes a lot of work to find out which way to juggle assumptions in order to make results come out a certain way. I realize, however, that there are people capable, both morally and technically, of doing just this.

MR. ALFRED L. BUCKMAN: I want to make one brief statement on behalf of the professional actuaries. I think we are being pushed around quite a bit by the accountants. Barry told us about what Ray Strong is trying to do in his committee to make sure that an opinion of an actuary is included in public statements of companies rather than published solely with the opinion of the accountant. We are a very well-trained group of men in the business of dealing with long-range probabilities. I do not believe that accountants think the way we do. The accountants that I have had experience with in my lifetime are concerned with numbers and not so much with probabilities. The concept of probabilities is foreign to their way of thinking. They want exactness always, and they are not concerned with range of probability, expectation, standard deviation, and matters of that kind that we spend so much time studying. I think that we must not yield to the accountants the sole right of verifying the statements of insurance companies, and we must all support the stand of Ray Strong.

CHAIRMAN WATSON: Thanks very much, Al. That expresses a feeling I know most of us, if not all of us, have, and it expresses it very well.

AGENT COMPENSATION

Seattle Regional Meeting

1. Are such factors as inflation and pressures from the field causing company management to effect or consider changes in agent compensation formulas, with respect to
   a) Commissions, service fees, persistency bonuses?
   b) Incidence of payments?
   c) Vesting versus nonvesting?
   d) Benefit plans?
   e) Level of total payments?
   f) Financing plans?
   g) Orphan policyowners?
2. Should section 213 of the New York Insurance Law be revised, considering
   a) Interests of agent, policyowner, company?
   b) Effects of inflation?
   c) Competition between New York and non–New York companies?
   d) Current emphasis on "consumerism"?
   e) Other reasons?

MR. RICHARD B. WYMAN: I should like to discuss commissions on the savings element of life insurance company products. It has been suggested that we pay out too much of the policyholder's savings in agent compensation; that is, there is not enough left to provide the policyholder with a competitive return on his investments. It has also been suggested that, since the industry has no comparison for the "pure risk" portion of our premiums, we can pay our agents whatever we want on this element. We have several reasons to study these suggestions at this time.

1. We have been concerned about our lost share of the savings dollar for years—perhaps we would not have lost it if we had competed for it.
2. Consumerism will eventually study the insurance industry in detail.
3. We are marketing our own competitive products, mutual funds being the principal example.
4. We need to consider the variable life insurance policies of the future.

After having agreed to talk about commissions on the savings element, I realized that we should be concerned about something I call "sales load" rather than about commissions. The consumer does not care what we pay our agents—he cares whether he gets his money's worth. In mutual funds he cares that only 92 per cent of his money is invested, not whether we pay 4 per cent or 5 per cent to our agents. The same is true for life insurance.

The consumer, or, at this point, the Securities and Exchange Commission, has been very interested in the size of the sales load on mutual funds, as shown by the recent decision to restrict contractual plans. How does the $8\frac{1}{2}$ per cent level sales load of mutual funds compare with the sales load in our products? My calculations are as follows: When a person buys 20-pay life instead of ordinary life, he is investing extra premium during the first twenty contract years, and, in return, he will receive full coverage after the twentieth year. How do his investments in extra premium compare with his return? Most of us charge a sales load in excess of 25 per cent of these extra premiums; that is, the value at issue of the ordinary life premiums after the twentieth year is most often less than 75 per cent of the value at issue of the extra premiums. Some of us have a sales load of over 40 per cent. The same comparison of 20-pay life and life paid up at 65 shows a load in excess of 20 per cent at age 35. There are no expenses to justify these differences.

The implication in the above examples is that ordinary life is pure insurance and that there is no savings element. The consumer will not analyze it that way but will probably reason as follows:

1. My company charges $16.30 per $1,000 for ordinary life at age 35 and pays a first-year commission of $10.60. We charge $3.00 for annual renewable term and pay a first-year commission of $0.60. The consumer will say that we have a first-year commission of $10.00 on the savings element of $13.30—a rate of 75 per cent.
2. The level ten-year sales load of one of the principal West Coast companies' products (comparing the excess of premiums over tenth-year cash value and annual renewable term premiums) is as follows:

Term to 65	30%
Ordinary life	23
Life paid up at 65	38
Endowment at 65	48
20-year endowment	60

These comparisons are not completely logical, but neither are our consumers. In answer to the question of what action we should take, we can make our higher-premium forms more equitable, study cheaper distribution techniques, promote the value of the service rendered by our agency forces, and improve such service.

MR. JEFFREY S. SKINNER: We are a smaller ordinary company which derives most of its business from personal producing general agents (many act more as brokers, with only limited loyalty to the company).

The base of our compensation structure is a schedule of writing agents'

commissions, with the first-year commissions varying by plan. Whole life pays 75 per cent, and term and endowment pay around 50 per cent. We pay a base of 5 per cent on all plans for nine years. After the tenth year, we pay a 2 per cent service fee. The general agent's overwrite is 20 per cent of the first-year soliciting commission and nine renewals of 2½ per cent of premium. The general agent earns overwrites on his own business. As an encouragement to add new men to his agency, we pay a supplementary recruiting bonus during the new man's first three years with the company.

The last major source of compensation is our bonus club, which rewards consistent production. A man becomes a member of the bonus club following two successive months of volume in excess of $25,000. For permanent plans his bonus is $0.50 per thousand. Once each year another bonus is awarded, based on the production in the lowest qualifying month. In the actuarial department we figure in the bonus club at an even $1.00 per thousand.

In addition to these base commissions and bonuses, we have regular weekly, monthly, and quarterly contests with prizes of Green Stamps, wristwatches, turkeys, and so on. Finally, the agency vice-president has wide discretion in waiving certain provisions or requirements in each of these areas. He may also award an additional $\$X$ per thousand or appoint a man as a regional manager of sorts and provide him with a base salary or office allowance.

The above activity has resulted in a very heterogeneous group of agents. Typically, more than a quarter of our new business in recent years has been produced by agents who have been with the company less than two years. We regularly have agents who are at the top of the list in production but whose persistency is almost nil. On the other hand, we have many high-quality agents of long tenure with the company who regularly write over a million dollars in new business with a first-year lapse rate of less than 5 per cent. Of course, we are regularly plagued with the rotating superagent who wants to take us for a ride.

Our chairman has asked us to emphasize what we think should be done. As a stock company, we have two related, but sometimes paradoxically uncorrelated, objectives. These are to maximize profits and to maintain the price level of our stock. As a company grows older and larger, the profit objective asserts a greater and greater influence on the stock price. The younger company places emphasis on the stock price with an appropriate charge to the agency force to maximize sales production. Although the lust for growth never ceases, the net gain from operations becomes relevant at some point for any stock company. Our company is

at the crossroads, but we do realize that, to survive in the years ahead, we must continue to grow.

An average company offering a general portfolio of products at competitive rates and to typical markets, prior to the era of adjusted earnings, could work wonders on its stock price by writing large volumes of new business. To maximize profits, however, the business would have to be added at a reasonable cost and persist for a reasonable period of time. If costs and persistency are ignored, the large volume of business will probably result in current and future losses. In dealing with agency matters, perhaps the best single parameter of profitability is persistency.

Last year the actuarial and agency departments of my company were presented with an attractive challenge in the form of a proved, successful general agent. He had several men under him who sold a unique policy using a set sales presentation. The man, the men, the product, and the presentation were new to us. We decided quickly that we wanted this man, but we also wanted to protect ourselves if we could. The man claimed that his persistency would be in the high nineties through the first few years.

We developed a compensation scheme which, although prepared in haste, had initial appeal to the general agent, the agency vice-president, and myself. The base commission was reduced from 75 to 65 per cent, and the bonus club reward for consistent production was replaced with a persistency bonus payable for five years. The particulars of this bonus are as follows: (1) A policy is deemed to have persisted through the first year if any thirteenth-month premium is paid; the second year, the twenty-fifth month; the third year, the thirty-seventh month; and the fourth year, the forty-ninth month. (2) The persistency rate is then calculated for each year using the above definition, and a "persistency credit" is earned for each percentage point that the rate exceeds 75 per cent. (3) The bonus rate is arrived at by multiplying the "persistency credit" by 100 per cent for the first year, 75 per cent for the second, 50 per cent for the third, and 25 per cent for the fourth. (4) The bonus rate is then applied to the actual second-year, third-year, fourth-year, and fifth-year premium income. Thus the maximum persistency bonus that can be earned over the first five years is 62.5 per cent. We have since signed other high-quality general agencies under this contract.

Looking further ahead and hopefully becoming more sophisticated in the process, we will probably attempt to apply this heavily weighted persistency idea to our entire agency force. I understand that some companies are somewhat disappointed with the results of their persistency bonuses. Perhaps these bonuses need to be larger. Our idea has been to equalize the present value of future profits of the business at the time of

issue (for all reasonable levels of persistency), with the agent sharing in this equalization process.

The total agency package contains many items in addition to commissions, overwrites, and other forms of cash compensation. These other items need to be given consideration, particularly in comparing the programs of the smaller companies to those of the larger companies. The smaller company will usually provide group life and may have some health protection, but it may be lacking in disability income. Stock options and deferred compensation schemes often overshadow formal pension and profit-sharing plans in the smaller company.

The smaller companies frequently are specialists in periodic contests. The prizes to a regular winner can be a substantial source of income. Conventions in the small company are often more elaborate. The service to agents can take various forms. The smaller company gives more personal attention to each agent, but computer ledger sheets and proposals are a service generally found only with the larger company. With an agency force made up of personal producing general agents, we offer training only as part of bringing out a new product. Other monetary items include general-agent financing, furniture and equipment for his office, rent, and a secretary. Then there are the fees for licensing—CLU, LUTC, and MDRT. Some companies will pay these fees and a bonus besides, while others will let the agent pay his own way. Each agent places a different value on these items. The value of any fringe benefit or service is fully realized only when it is properly and adequately communicated. The 105 per cent first year plus a dollar a thousand deals are easily and quickly understood. A pension plan or proposal service takes more careful study to be fully appreciated.

MR. JOSEPH F. CROWE: It seems that recently section 213 of the New York Insurance Law has been questioned in several different areas. The agents in New York feel that more compensation to agents should be allowed; the small companies feel that they should be allowed higher limits; and now the large companies are feeling the same way about themselves. Also, most companies feel that changes are required in training allowance plan regulations. Various groups seem to be working on particular aspects of the problem, each taking a rather narrow view. It seems to me that, since so many questions are being raised, it would be worthwhile for the industry and the insurance department to take a broad look at section 213 to see whether some very basic revision is required.

SMALLER COMPANY FORUM

Des Moines Regional Meeting

1. Profitability
   a) How does management view profitability?
   b) What part does the staff or consulting actuary play in the setting of profit objectives?
   c) Should the state insurance departments pay more attention to company earnings than to general profitability?
2. Budgeting and forecasting
   a) Isn't budgeting the key to management?
   b) What kind of budget or forecast is most effective for management?
   c) What part will the various state insurance departments be likely to play in budgeting and forecasting?
3. Distribution methods
   a) How can the small company effectively penetrate a market?
   b) What is the primary area in which many small companies entrap themselves?
   c) How does one succeed in persuading the fire and casualty agent to sell life insurance?
4. Reporting the results
   a) Why do many small companies feel that they have unusual problems with the regulators?
   b) What information should be communicated to the board of directors of a small company?
   c) What is the actuary's responsibility to management, the insurance departments, and the consuming public?

CHAIRMAN DAVID R. CARPENTER: Tom, as a consulting actuary who has worked closely with small companies for many years, what have you found to be management's view toward profitability?

MR. THOMAS F. EASON: My observation has been that management seldom establishes a company policy on profit. Every company should state the criteria which must be met in order for its rate structure to be acceptable. It is relatively easy for the actuary to calculate some sample rates and announce the recommended gross premiums to management. Without established profit policy, it is most difficult for the actuary to resolve the frequent conflicts which agency and competitive considerations bring about.

In my view, the consultant or staff actuary must strongly encourage management to establish company profit policy. This effort is perhaps the

most difficult nontechnical function of the actuary. In the beginning, it may be necessary to *sell* management on the need for such a policy. A study of alternative profit goals requires a clear, perhaps even dramatic, explanation of the results to be expected. The standard asset share development prepared by our firm includes a projection of results per million of face amount issued. The results on this basis are most helpful in illustrating the results of different profit margins. Actuaries who have faced this difficult problem may wish to contribute their approaches in later discussion.

The obvious should be stated. No management policy on a matter so crucial as profits will long remain inviolate. Legitimate reasons to modify or even ignore the established criteria are inevitable. This does not reduce the value of such a policy. Application of the policy can help in the following areas: (1) avoidance of loss leaders, (2) inequitable gross premiums among plans or even for different ages at issue within a plan, and (3) involvement in coinsurance arrangements or special product solicitations with limited profit potential. Appropriate policy can furnish some means of protection for the small company with limited surplus.

Once established, profit policy must be continuously reviewed with management. Has the agency head man changed? The new man should understand the profit policy. Is a new product under development? The memorandum describing recommended gross premiums should emphasize the profits. Has management elected to modify profit goals? The actuary should document the reasons for future analysis.

The actuary is trained to understand the financial impact of the insurance benefits promised by his employer. We as a Society need to discuss more often the means by which we can assist management to establish a policy on profit.

MR. JOHN A. HARTNEDY: We have established profit goals as follows: (1) return on surplus drain and (2) per cent of premium. The per cent of premium is arrived at by relating premium income to the capital and surplus invested in the company. The same rate of return is then sought on the capital and surplus as on surplus drain. Our profit goals are, therefore, stated as a return on dollars invested. Management can relate to this concept if they understand surplus drain as well as the source and need of capital and surplus. This concept must be conveyed to all the operating officers, and agreement must be reached by all these officers as to profit goals for the company. If the concept is understood and profit margins are stated when a new product is developed, the actuary is not in the position of "ramming" premiums down the throat of the agency department.

The above application has met with reasonable success in my company. On one occasion the agency vice-president was describing a new marketing approach on a current product. While laying out the additional expenses and commissions needed, he abruptly stated that this approach would substantially reduce profits, that he realized the program was not good, and that he intended to turn the program down. He left my office to implement his conclusions, and I had said virtually nothing.

CHAIRMAN CARPENTER: From an insurance department viewpoint, Bob, do you feel that the state insurance departments should be paying more attention to company earnings than to general profitability?

MR. ROBERT L. PAWELKO: In my opinion not enough emphasis is currently being placed on the earnings or the future earnings of life insurance companies. I feel, however, that the expected profit at the time of policy pricing is not a valid criterion on which to determine profitability. In other words, I do not like the natural reserve approach to adjusting earnings, inasmuch as it seems to me simply too artificial. Instead, I feel that periodic gross premium valuations (once every three to five years, with reasonable interpolation in the interim) would be much more beneficial both to the state insurance departments and to the companies themselves. I think that too many companies feel that their business is inherently profitable, and insurance departments automatically assume that new life insurance companies necessarily lose money for eight years and forever after are profitable entities.

CHAIRMAN CARPENTER: In line with setting profit policy, it seems that a critical function of management is budgeting and forecasting of results. What are some of the problems that smaller companies experience in this area?

MR. EASON: In discussing financial projections, emphasis should be placed on a major problem which is shared by many small companies. The problem is simply one of inadequate expense analysis. Too little attention has been paid to the concept of unit costs. Budgeting all too frequently becomes a matter of estimating the surplus position at the end of the current calendar year rather than a device to isolate high-cost areas and deal with them.

At various times, suggestions have been made that Exhibit 5 of the annual statement should break out first-year and renewal expenses. In my view, this kind of information should be available to company management whether or not it is dictated by the regulatory authorities. (A

comparison of actual expenses to those inherent in the gross premium structure would be very useful to the consultant or the staff actuary.)

It might be noted that those small companies which elect to adjust earnings will find an immediate need for better expense analysis. Competent accountants will insist that deferred acquisition expenses be supported by company results. Those actuaries who have been looking for leverage to force small company management into a better expense analysis can take heart. The accountants are in the process of doing us a real favor in this area of operations.

MR. ROYAL A. JOHNSON: Our company uses four basic categories of business: individual life and health, group life, group health, and pensions. We follow the statement form for our projections but combine entries into much broader groups. For example, income less outgo equals net gain, where income is the sum of premiums on an accrual basis and investment income, and outgo is the sum of benefit payments on a cash basis, reserve increases including claim reserves, and expenses on an accrual basis. We also show sales in terms of annualized premium. This requires some recordkeeping, but most accrual items can be estimated quite accurately by formula. Reserve increases can be calculated by using net premium factors and a Fachler accumulation for individual life. Other reserve increases can usually be expressed as a percentage of premium or a rate per thousand.

Premium projections require some estimate of lapses as well as of sales. This provides an opportunity to track lapses against your projection.

The use of benefit payments on a cash basis is not necessarily the best approach, but it may be the most easily understood and reached. We do calculate expected claims for the next year from our year-end valuation to give us a comparison of actual to expected (based on gross premium rate assumptions).

Expenses can be cash plus a flat adjustment for accruals except for taxes and commissions. These should be on an accrual basis and can be calculated using percentage of premiums rather than tabulated.

MR. PAWELKO: I personally feel that budgets and long-range forecasts are absolutely essential tools which the management of all insurance companies should utilize. Thus I think that the insurance departments should require budgets and long-range forecasts, at least for the companies who are in a relatively thin surplus position. To this end, the Illinois Department of Insurance is presently considering requesting budgets and long-range forecasts from all domiciled companies who are in

a thin surplus position. We not only expect to request these budgets but also expect the budgets to be realistic and to be lived up to. We have noted that there is a tendency for companies to understate their expenses on the first three quarters and then suddenly have several "unusual" expense items in the last quarter which show up on the annual statement. We are not tolerating this in those companies now filing quarterly statements in the state of Illinois.

CHAIRMAN CARPENTER: The smaller companies often have problems in penetrating a market. How can they effectively distribute their products to best achieve their profit objectives?

MR. PAWELKO: I feel that the smaller companies should avoid the suburban market, where the big companies tend to concentrate their efforts. Instead, the smaller companies should concentrate their efforts on the urban markets, and principally in the ghetto areas. They should limit the size of their policies and compete for the lower-income market in the state of Illinois. This is a market which seems to have been ignored since the withdrawal of many of the industrial writers. Smaller companies could also work extensively in the rural market. Again, proper training of the agent, a good sales job by the agent, and follow-up interviews with the insured after the policy is issued would seem to be advisable. I feel that too many companies—big and small—ignore the follow-up on the insured. Annual correspondence or a periodic visit by the agent would, or at least should, reduce policy lapsation.

MR. EASON: Insurance literature has an ever increasing amount of information on mass merchandising and related marketing approaches. I shall confine my remarks to bank depositor solicitations, which are becoming more common in this part of the country.

These solicitations go under various labels. One common one is a "guaranteed issue" program. Agency personnel remain the key to a solicitation of bank depositors. However, the third-party influence of a financial institution is brought to bear on the sales effort.

The agent involved in this merchandising approach becomes a mixture of salesman and order taker. The program has a clear advantage over cold canvass approaches, since the agent devotes the greater proportion of his time to actual sales interviews. The advantage to a small company which is attempting to build an agency force is clear. Only one or two products are used in the typical bank depositor program. The fledgling agent can do a reasonable job with limited training and has the real prospect of

earning a living within a few weeks. These same advantages have often been cited as reasons for preparing a special package policy. The difference is that the special policy sale will probably be successful for only a limited number of years. The prospects for continuing an agent in the bank depositor program or in related programs which rely on third-party influence are much brighter. This area is one which will receive increasing attention in the 1970's. Product design and profitability are subjects which would make an interesting paper.

MR. JOHNSON: Sentry is owned by the Sentry Group. The casualty company has a seven-hundred-man field force which is our main source of business. The keys seem to be (1) management crunch; (2) packaged products (single-need sales approaches); (3) simplicity; (4) not expecting financial planning or creative selling (the life agent tends to create a need and then fill it—these agents won't); and (5) giving the agents help such as WATS line service, field specialists for training, and sales help. The same general approach applies to the fire and casualty broker, but you have to woo him, not crunch him. Compensation is less important than client relationship.

The Sentry is also attempting to persuade the group broker to sell individual life insurance (currently on an experimental basis) by setting up payroll reduction plans and offering a simplified (on-the-spot issue) application. Amounts are small, and the offer is made to small-group cases where group underwriting has been done. Participation has been averaging 60–70 per cent. We do not know how well it will stick.

MR. PAWELKO: It seems to me that the primary problem that all our smaller companies share is that of poor expense control. The smaller companies try to buy their agency forces by offering excessive commissions and agency contracts. Perhaps I am somewhat naïve on this point, but I personally think that the companies should not feel compelled to buy an agency force. If the small companies would design a product which adhered more closely to insurance problems and not to savings and if they would properly train their agency force to sell this product, I feel that they could be quite successful. The small company does not have to give the agent excessive compensation. If the management of the smaller company reasonably points out the potential which the agent would have with this company, it can probably be much more successful. To this end, I think that the smaller companies should keep the first-year commissions at a level no higher than the first-year commissions of any of the big

companies. The renewal commissions could be increased to a level somewhat higher than the renewal commissions of the big companies. If this aspect is properly sold to the agent, he can easily see that persistency means much more income to him in the long run.

CHAIRMAN CARPENTER: To what extent should the results of operation be communicated to the board of directors of the small company? Also, what are some of the problems that smaller companies have in reporting the results to the insurance departments?

MR. PAWELKO: It appears that many of the smaller companies feel that the department of insurance is persecuting them. They seem to feel that we are much more stringent in applying the rules and regulations to the smaller companies than we are in applying them to the big companies. This simply is not so. The larger companies have the manpower and the expertise to avoid many of the pitfalls which the smaller companies seem to stumble into. Because the big companies usually have more surplus funds to play with, we have a tendency to spend more time reviewing the smaller companies. We certainly do not apply different standards, however, simply because of the size of the company.

MR. EASON: In my view, the board should have sufficient information to be able to evaluate the performance of the principal operating officers. This view requires that the actuary play a major role in preparing reports to the board.

A financial analysis can be prepared which is more meaningful than the annual statement. The number of figures should be reduced to a minimum. Some items to be shown include (1) analysis by line (and by major product area within each line); (2) operating results with nonrecurring items appropriately identified; (3) adjustments in reserve items which prove to have been poorly estimated, so that operations will reflect the correct incidence of claims and expenses; and (4) comparisons for at least three years. Problem areas can then be more readily identified and discussed with the board.

If there is even one serious problem, the consultant or staff actuary may be on the spot. If a problem is not clearly disclosed and analyzed for the board, and this problem subsequently worsens, the actuary must accept a large measure of the blame. It is not enough for the professional man to say, "The president felt it would not be timely to go over this with the board."

MR. PAWELKO: In my opinion, the actuary is the only individual in the insurance company who has been specifically trained for his profession. The actuary in the insurance company or the consultant is probably the only individual in the company who has a sound grasp of the fundamental concepts of the business. Thus I feel that the actuaries—both the consultant and the company actuary—owe it to the management of any insurance company to keep it fully advised of the relative profitability of all business which the company now has in force, the relative profitability of the policies which the company is currently selling, and the possible pitfalls that may be encountered along the way. I think that the actuary should be keeping management closely informed of any and all trends—not only mortality, interest, and persistency but also apparent market changes and possible tax consequences.

Because the actuary has such a thorough understanding of his own company's business, it would seem that he should be the one who works most closely with the various insurance departments. It has been my observation that the attorneys who visit the department of insurance frequently have only a slight knowledge of what the insurance business is all about. Consequently, any questions which we raise must be first referred to the actuaries for an answer. In most instances, the attorneys then relay the actuaries' answers to the department—thus distorting the answers more. I feel that these actuaries should speak for themselves, because it would certainly facilitate our efforts.

Additionally, I think that the actuaries should inform the departments when they know of improper activities of either their clients or their own management. This is a difficult concept to buy, I realize, but without it I think that the insurance industry is likely to continue to flounder in the current shabby system of state regulation. Most insurance departments are understaffed and lack the talent to effectively regulate the industry. If more actuaries would take it upon themselves to assist the various departments in their efforts, I feel that we would see a much better quality of regulation from all states.

As far as the consuming public is concerned, I feel that the actuary owes it to the consuming public to see to it that the policies which are being sold are correctly presented to the public. The actuaries should be reviewing the advertising material which the company is using and should be completely aware of the sales pitch which the salesman is making. If either or both are objectionable, I think that the actuary should advise management of his feelings on this matter and then, if not successful in this endeavor, should inform the insurance department.