

ADJUSTED EARNINGS

1. Definition of adjusted earnings.
2. What useful purpose is served by adjusting earnings for
 - a) Life company management?
 - b) The investment community?
3. What adjustments in earnings should be made for
 - a) Ordinary life insurance?
 - (i) Basis of computing reserves: method, interest, and mortality.
 - (ii) Expenses.
 - (iii) Restrictions in stockholder sharing in earnings on participating business.
 - b) Industrial insurance?
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 - d) Group life, accident and health, and pensions?
4. Does a gross premium valuation provide a feasible vehicle for making such adjustments?
5. The actuary's role as an adviser to nonactuarial groups seeking to establish a method for adjusted earnings.

Philadelphia Regional Meeting

MR. RICHARD H. MORSE: My company's 1967 report to its stockholders included the following comment with regard to earnings:

Unfortunately, prescribed life insurance accounting methods do not permit any adjustment of statutory earnings for the high acquisition expenses inherent in the writing of new business. Acquisition expenses must be written off in the first year and cannot be distributed over the premium paying period for which the policies are written. The practical effect of this procedure is to defer earnings on the current year's sales to future years when renewal premiums are paid. Consequently, there is no adjustment in our 1967 earnings for the cost of writing the tremendous volume of new ordinary life insurance.

Elsewhere in the same report there appeared the following explanation under the caption "Notes to Financial Statement":

Basis of presentation.—The requirements of state insurance regulatory authorities differ in some respects from generally accepted accounting principles followed by other business enterprises in determining financial position and results of operations. Pursuant to such practices (1) certain assets such as furniture and fixtures, designated as "non-admitted" assets have been omitted from the balance sheet; (2) the contingency reserve "mandatory security valuation reserve" is reported as a liability rather than as apportioned surplus; (3) bonds eligible for amortization are carried at amortized values, other bonds and all stocks are carried at market values as furnished by the National Association of

Insurance Commissioners, except that preferred stocks in good standing were valued at cost in accordance with the NAIC Valuation Procedures, with no provision for income taxes relative to unrealized appreciation in such investments; (4) premium income is taken into earnings on a pro rata basis over the periods covered by the payments, whereas related acquisition and commission costs are charged off when incurred. The general result of not giving effect to the foregoing variances from generally accepted accounting principles is to present the statement of assets and liabilities and the statement of surplus on a more conservative basis than would otherwise be the case.

Comparable statements or variations of them have been included in recent years in the reports to stockholders of a considerable number of companies, much of this being motivated by management's concern to give a plausible explanation of where the magnitude of new business has had a significant effect on depressing the statutory earnings being reported. The nature of the life insurance business is such that it is axiomatic that the faster you grow the less you earn from a statutory viewpoint, or the more you lose. The high initial cost of writing new business is the reason for this.

An established well-run company could show fantastic earnings if it quit writing new business. Without the high initial cost for a large volume of new business to obscure financial operations, the runoff of business on the books would show earnings to whet the desire of a sizable segment of the investing public. Unfortunately, such earnings could not last forever, because they represent a combination of investment return on capital and the runoff of the business on the books. At some point in time, if a company would be permitted to continue on such a basis, it would become an investment-type company.

In addition to the effect of high acquisition costs, the reserves which companies have to maintain are a source of potential future profits, and, to the degree that the additions to reserves in any year are redundant, the statutory earnings can be construed as understated. Reserves currently are carried on a conservative basis at interest rates which are much lower than the yield rates actually experienced and at mortality rates with deliberately built-in margins of safety.

Because of the nature of new life insurance business, there have been developed a number of methods for making adjustments to statutory earnings and net worth figures, with the resultant amounts being referred to as adjusted earnings or adjusted net worth.

Adjusted earnings are useful to management in (1) providing explanations to stockholders; (2) reporting operating results to the board of directors; and (3) evaluating a company's strength and potential in merger discussions. Management has for years utilized the adjusted earnings principle in conducting its asset share studies.

The investment community adjusts earnings in order to judge the performance of a company. It is valuable to it in determining whether a company is well run or not, whether it has growth or not, whether to recommend the purchase of its stock or not. During the past three years the Association of Insurance and Financial Analysts of New York has had a committee at work developing a standard basis for making adjustments. The reason for this is that there are a considerable number of methods used today but no accepted standard. The life insurance industry has a mixed reaction to these efforts. Some segments favor them and some do not. One of the main reasons for opposition is the feeling on the part of some companies that they will not be accorded appropriate value for a specialty line important to them and therefore will appear at a relative disadvantage when compared with other companies.

MR. MELVIN L. GOLD: Ideally, it would be fine if one estimate of company earnings could serve all purposes and satisfy the diverse interests of the regulatory bodies, the taxing authorities, management, owners, and prospective owners. This is not the case, since the different purposes call for different approaches and different levels of conservatism. What I am saying is that the first reply to the question, "What are a life insurance company's earnings?" is another question, "Earnings for what purpose or from whose viewpoint?" Owners and prospective owners, quite obviously, want a statement that as closely as possible reveals the true earnings of a company. They want a statement that enables them to analyze the year-by-year operation of a company and to compare its performance with other companies, both within and without the industry.

We must realize that any representation of the true earnings of a life insurance company is necessarily an estimate. Premium rates and reserves are all based on future estimates of mortality, interest, persistency, and expenses. If we knew when each persisting insured would die, when each withdrawing policyholder would stop paying premiums, what investment return the company would realize, and what expenses would have to be met—if we knew all of this—it would be a straightforward matter to fix with precision the fund needed at the beginning and end of the year. From this and an accounting of cash transactions during the year, we could arrive directly at the earnings. However, we can only make an educated guess about the future, and that is why we can only estimate a company's true earnings.

Since we are dealing with approximation to true earnings, there is no universal agreement among actuaries on what methods and approximation should be used. We do not even have agreement on the definition of earnings.

Let us therefore set up some criteria which an approximation to the true earnings of a company should take into account:

1. The change in the amount of the in-force business. Quite obviously, if two companies have the same statutory gain from operations and one company increased its in force by five million and another company by twenty-five million, there has been a vast difference in performance.
2. All business was not created equal. A valid method for estimating true earnings should hopefully take into account the profitability of the in-force business.
3. The valuation method of the company being reviewed. Obviously it makes a great deal of difference whether a company sets up net level reserves or preliminary term reserves.
4. A valid method for estimating true earnings should remove the effect of deficiency reserves, where these reserves are only being set up in order to meet statutory requirements.
5. Surplus transactions.
6. The market value of investments. A life insurance company is, in many ways, an investment trust. This being the case, we cannot simply ignore the market value of bonds, stocks, real estate, and other investments.
7. A valid method for estimating a company's earnings, performance, and net worth should take into account deferred federal income taxes.
8. Limitations (statutory, corporate, or otherwise) on the stockholders' interest in the earnings of the participating branch.

All these factors should be taken into account in an analysis of the operation of a life insurance company. By the same token, I am also saying that statutory earnings generally fail to take these criteria into account.

Next, let us take an actuarial approach to estimating true earnings. An actuary has tools of his trade which will fulfill these criteria in an estimation of true earnings. One approach is that of a gross premium valuation. It involves essentially adding the increase in the value of the in-force business to statutory earnings, that is, calculating the change in net worth.

If the actuary so desires, he can, in determining the value of the in-force business, discount profits at the company's estimated investment return or at the interest rate an investor would seek on his risk capital—perhaps 10 or 15 per cent. This can be readily done. In essence, then, we are calculating the increase in the market value of our in-force business, that is, what it can be sold for. If there has been a change in assumptions, say, an increase in anticipated investment return, the effect of this change would be a credit to surplus.

All I have described here can be done internally. It takes time and effort, but it certainly is quite feasible. The fact that it cannot be done

readily by an outside analyst does not vitiate the truth of the approach.

This actuarial approach for estimating the true earnings of a company has not been embraced by the accounting and investing community for two basic reasons: (1) it requires a tremendous amount of data and information available only to a company's actuary or consulting actuary and (2) it involves the discounting of future profits. One can, however, argue that, by counting only the increases in the market value of the in-force business, we have vitiated the latter argument. There is no question that this is a prospective approach. In essence, we are dealing with the change in the value of the in-force business.

Let us look at a possible retrospective approach toward the calculation of adjusted earnings, an approach which will enable us to some extent to analyze the year-by-year operations of the company and to compare its performance with other companies both within and without the industry.

This is the first time, though, that I have used the term "adjusted earnings." Adjusted earnings are those earnings calculated on the basis of "generally accepted accounting principles" that will be accepted by the accounting and investment banking fraternity.

The adjusted earnings of a life insurance company would be obtained by *adding* the following major items to statutory earnings: (1) the increase in the capitalized value of the "investment in new business"; (2) the annual increase in the excess of statutory reserves over "experience" reserves; and (3) the increase in deficiency reserves; and *subtracting* the increase in deferred tax liability.

The investment in new business is exactly what it says it is: the cost of putting new business on the books. It is equal to total first-year costs less first-year premiums. This we call the new-business strain. In order to determine this, you must first break down the company's insurance operation into first-year cost and renewal profit. Renewal profit is the net profit accruing to the company from the renewing business. It is the earnings that the company would realize if there were no new business.

The writing of new business invariably involves an investment of surplus. Thus a \$300,000 gain from operations may actually mask a \$500,000 gain from renewal business and a \$200,000 investment in new business.

The difference, or \$300,000, is the statutory gain from operations. This \$200,000 investment in new business should be capitalized and amortized over a suitable period. This capitalized item can be amortized over the expected lifetime of the business or some shorter period. It should be noted that this approach is self-adjusting with respect to the reserve method. A modified reserve valuation approach would produce a smaller first-year strain to capitalize. The first-year expenses employed might be limited to

those expenses inherent in the structure of the gross premiums. This is particularly true for new companies, where there is no particular relationship between the new-business expenses and the expenses assumed in the calculation of the gross premiums.

One interesting variation of this approach would be to adjust earnings only for that portion of the "investment in new business" which actually produces an increase in in-force business. Thus, if a company wrote \$100 million of new business but only increased its in force by \$25 million, only 25 per cent of the investment in new business would be considered an adjustment to earnings, since the other 75 per cent of the investment in new business was used to replace terminating business. If terminations equaled new business, there would be no adjustment to earnings. This is logical and quite easy to explain to a layman. In lieu of in force, we could use premiums to determine what portion of the new-business cost produced an increase in new business. This method has the advantage that, if you have a break-even situation, that is, if your new business were used up by the lapsing business, you would have no adjustment, whereas the other method of capitalizing the new-business strain does not directly take this into account.

The second adjustment to statutory earnings would be the computation of reserves on an experience basis, probably the same basis as is implicit in the calculation of the gross premiums. Thus a stock company today may typically be earning 5 per cent on its investments, assuming $4\frac{1}{4}$ per cent in the computation of its gross premiums and using 3 per cent as the basis for cash values and reserves. Any realistic adjustment of earnings must first recompute the increase in the reserve element using the more realistic assumptions implicit in the gross premiums. This would also call for a more realistic mortality assumption. However, using a mortality table somewhat more modern than the 1958 CSO Table does not affect reserves that much, even though the 1958 CSO Table is a loaded table. This re-computation has the disadvantage of coming up with experience reserves which can be less than the policy's cash value. An alternative adjustment would be to work with the increase in the company's cash value liability instead of dealing with the change in experience reserves.

The third adjustment to the statutory earnings is the familiar one of adding the algebraic increase in deficiency reserves.

The final adjustment to statutory earnings is concerned with the increase in the company's deferred tax liability.

While the foregoing remarks deal mainly with company nonparticipating business, most of the principles are equally applicable to "par" business and to other lines. The following should be noted in this regard:

1. A gross premium valuation method would automatically take limitations on "participating" earnings into account. In the adjusted earnings approach, specific adjustments must be made; this process is simplified if the company prepares a separate par and nonpar statement.
2. Most of the above approaches can, with little change, be applied to industrial life business. Generally, however, the investment in new business is not so important an element as it is in the ordinary branch.
3. No specific mention has been made of health insurance, although many of the comments made herein are generally applicable to this facet of the business. There are one or two important differences, however. The investment in new health business is generally much lower than that in new life insurance business, and a portion of the unearned gross premium reserve can generally be considered redundant.
4. Group life and group health are generally accorded little value in any adjustment of earnings, although again it must be emphasized that considerable variation exists among companies in their group operations and earnings.
5. Annuities generally constitute a minute portion of a company's business. Generally, little or no adjustment in earnings is called for or made. We have enough problems worrying about ordinary business before we start worrying about the annuity business.

In summary, the accounting practices of life insurance companies differ in certain important respects from those of other industries because of the prime concern with solvency rather than with profits. Because of these practices, adjustments are often made to statutory earnings in order to calculate earnings on a basis similar to those of other industries. This is usually done in order to analyze the year-by-year operations of a company. The actuary uses a prospective approach which adjusts earnings by adding the increase in value of the company's in-force business. In essence, he is estimating the increase in the company's net worth. An accounting or retrospective approach adjusts earnings by capitalizing the investment in new business and recalculating reserves on an "experience" basis. It is to this estimate of earnings that the investment community applies a price-earnings ratio.

The two terms, "adjusted earnings" and "increase in net worth," are not interchangeable and certainly not equivalent. Unfortunately, some analysts have confused these two fundamentally different concepts.

There is much to be said for changing the annual statement so that enough information will be available to split the gain from operations into the two elements of renewal profit and investment in new business. We have been hearing a great deal today about the need for adjusted earnings. The investment community is pushing for it, and the life insurance stocks are down. There was a need for adjusted earnings before anybody talked

about life insurance stocks, and there is no reason why mutual companies should not also adjust earnings for internal purposes. It is hard to believe, but before 1941 we had no gain-from-operations line in the Annual Statement. We never knew exactly how much money the company made in the old Annual Statement. Even a mutual company should know whether it is doing better each year, and this can only be ascertained by removing the investment return on surplus and then looking at the increase in business, or increase in agency plant, and so forth. You cannot look at one number only and say that this is the gain from operations. The question of adjusted earnings and increase in net worth is a very valid one for mutual companies, even if you are not at all interested in the investing community.

MR. EDWARD L. ROBBINS: I do not recall your making any comment about modal loading of premiums. Do you feel that they are redundant and should not be bothered with? Do you feel that methods of modal loading are generally adequate?

MR. GOLD: All premiums, regardless of frequency, are lumped together. In a gross premium valuation, the frequency would be taken into account.

MR. PAUL H. KNIES: The stress of setting a capitalized asset value on acquisition costs previously incurred bothers me from the standpoint of our annual statements and tax returns. How would provision for this be made in the Convention Blank? If such a value were used by security analysts, could it not easily become an asset for federal income tax purposes? Would it be preferable to liken them to research and development costs spread over a few years at the most?

MR. GOLD: The Internal Revenue Service is well aware of the accounting methods of insurance companies, and I would not change the Convention Blank to provide for the capitalization of acquisition costs.

I would add that many analysts are pondering the problem which arises because some companies accumulate reserves by using a net level premium method, some by using the Commissioners Reserve Valuation Method, and others by using variations of the two. The question is how to treat all companies fairly without converting reserves to one standard approach. The analysts are hopeful that the differences between first-year and renewal commissions as a percentage of premiums are not too different from that between the net level premium basis and the Commissioners Reserve Valuation Method, also as a percentage of premium.

MR. FREDERICK J. KNOX: Instead of revealing the actual financial position of the company, the present conservative requirements of the NAIC Convention Blank actually distort the real results of the company's

operations. If we can value our assets, liabilities, and reserves on a more realistic basis, including capitalization of certain acquisition costs and equipment, the annual statement would present a more realistic picture of the operations of a company without using gross premium valuations and other techniques that, in most cases, only the company actuary would be in a position to do properly.

MR. GOLD: Even if we forget about gross premium valuation, it is a very complex problem. Which of the new-business expenses should be capitalized, and how should it be defined in the statement? I think we have been right in the conservative approach we have used of ignoring the capitalizing of new-business expenses. I think we have been right in having reserves on a conservative basis. In fact, if interest rates had not risen as much as they have over the past ten years, I wonder what the earnings of many companies would have been. The point is that this is fine for the policyholder, but for the stockholder there must be enough information available to make some kind of judgment.

MR. ALLEN L. MAYERSON: There is a basic problem of definition that has not been faced. The question is, "Does the income of an insurance company during the calendar year 1968 consist of the money it receives during that year or does it consist of the present value of future profits on the business it writes?" The answer depends upon your view of the basic question of what you think an insurance company is doing.

If you view an insurance company as a marketing organization, perhaps the profits you ought to consider in 1968 are just the present value of the business written that year. You should ignore income from business written in past years, because this money is earned from the efforts of management years ago and should not be considered in judging whether today's management is doing a satisfactory job, although it certainly is important for the purpose of a merger. You may get earnings figures that are quite different, depending upon the purpose for which you want them and depending upon the philosophical approach you take to the problem.

I do not feel very sorry for the security analysts; they have used rather arbitrary, and in some cases rather foolish, rules of thumb and applied unrealistic price-earnings ratios without really knowing what they were doing. That is the reason, I think, that life insurance stocks reached such unrealistic price levels. Now they are beginning to re-evaluate their procedures and maybe use some actuarial skill, which, if it had been used several years ago, would have produced much better results. But, you must first decide why you want to know, before attempting to evaluate what your earnings are. Otherwise, it is very difficult to tackle some of these other problems.

Most of the procedures Mr. Gold's paper mentioned as possible ways for estimating earnings were for internal use, with the thought that the information is only available to the actuary of the company, who has access to the records, and that not too much could be done from the outside. One thing I found reasonably successful is to run asset shares using some fairly arbitrary premium and an estimate of average renewal expense rates and then to make an adjustment for the company's actual premium rate and, conceivably, for the reserve basis. If this is done, the only additional thing you need to be able to value a company is a model office of the business in force or some approximation to it. After all, most of the differences among companies today are in first-year expense rates, which do not affect the value of the insurance in force.

MR. ABRAHAM HAZELCORN: There are several organizations and individuals working on the problem of adjusted earnings. Among the organizations are the American Institute of Certified Public Accountants, the Association of Insurance and Financial Analysts, and the LIAA-ALC counterpart of the American Institute group. The Conference of Actuaries in Public Practice is working closely with the Association of Insurance and Financial Analysts. And, of course, there are many actuaries working on the problem.

You would think that, with all this talent from various professions examining the problem, the joint effort would bring forth conclusions or differences which would be brought into focus. However, as has been hinted here, perhaps there are some people in the insurance community who are not that fired up about adjusted earnings. I cannot speak for mutual companies, but we can see, even among stock life companies, different interests in degree as to adjusted earnings per se before we talk about methods.

In preparing for this meeting, I spoke to several investment bankers and security analysts who are engaged for their firms—these are large firms—in assessing life insurance companies. They wonder, or I have had this impression, about the insurance industry's claim on the investor's dollar. In competition for the consumer's dollar against various other products, life insurance has a unique product to offer; but I wonder whether the life insurance industry has a unique product as far as attracting investors' dollars is concerned.

With the holding company formation and the approach of a conglomerate within the insurance industry, some insurance executives still speak in terms of gross numbers of so much insurance sold, so much in earnings, without bringing it down to earnings per share. The number of shares at

December 31 divided into gain gives the gain per share, but in the ferment of changing corporate structures there have been situations, I am told, in which, as a result of the change, the number of shares had increased and, while total gain had increased, the earnings per share had decreased. In one case I was told that, while the decrease was quite sharp, the company representative was talking glowingly of the increased earnings.

As far as my task of presenting the actuary's role as an adviser is concerned, I think I have the easiest job here, because I can pretty much reiterate what Mr. Morse and Mr. Gold have said. I would like to stress some points. Mr. Gold speaks of the investment in new business. He expresses it as "inherent in gross premium valuations." I think that most of the accounting profession speaks of "amortizing expenses if recoverable." I guess it is another way of saying "inherent in gross premium valuations."

Until these various groups can arrive at a solution to adjusted earnings, I think that I would have to concur with one investment banker who said that he sees no other way to assess a life insurance company for an institutional investor or an individual investor than to meet with the company executives. There are quite a few professions—the actuarial profession, the accounting profession, and the investment banker—all with their techniques, looking at the actual versus the expected of all elements of the premium structure. This investment banker said that on Wall Street the feeling right now is that the life insurance industry is either hiding this information or perhaps does not have it. I mention this as further provocative background without getting into the specific techniques.

The response that I received from one security analyst was that the gross premium method would be like the Ford Motor Company's trying to figure out its profits on its cars in 1975; he thought it was a rather unusual approach to value a company not in the liquidating position, as Mr. Gold mentions in his paper, but just by the gross premium method. To him it was no different from taking as profit that which will be produced five or ten years from now.

I found it very refreshing to speak to one investment banker, a member of the Society, who gave me various insights into his view of the life insurance business. He was truly concerned with continued investment interest in the life insurance business. I suppose this is something that I am most naturally interested in. He spoke of the low earnings. Then another investment banker spoke about the holding company formation but not in favorable terms. He felt that, if you could not do well in one industry, there is no reason to believe that you could move into other industries and improve your position.

As to the specific question, I have in effect used the techniques of amor-

tizing excess first year's cost over a set duration. In premium construction I have used the gross premium valuation.

As an interesting sidelight to one of the differences that various people mentioned, namely, that between market value and amortized value of bonds, we had a very unexpected result. A company is now in liquidation, and instead of amortization of bonds producing a conservative approach, its assets were \$200,000–\$300,000 overstated, because it happened to reach the ultimate position of having to be liquidated by market values instead of amortized values, which had seriously overstated its assets.

MR. WILLIAM J. NOVEMBER: I would like to comment on something Mr. Mayerson said and perhaps to what Mr. Hazelcorn said about the investment banker who does not feel that he can really judge a company without sitting down with the manager and looking at all facets of its business. I wonder whether the security analysts are not trying too hard to get to a simple figure so that they can have a price-earnings ratio when the problem does not lend itself to that. In judging a company, you have to know much more about the company than you can get out of the single earnings figure.

How much should we lend ourselves to that project? The life insurance business has achieved great public confidence with the methods we have followed. What we have to be careful about is getting away from them into new ways of evaluating ourselves which may be much more questionable. When you begin to adjust the basis to take into account future earnings which may or may not materialize, I think you are beginning to get on to shaky ground, and we ought to be very careful about that.

Mr. Gold, you said that you hope the authorities will begin to change the form of the statements. Did you have something specific in mind when you said that?

MR. GOLD: I think consideration should be given to breaking down the operations into investment in new business and renewal profit. This would give us a lot of information. Your first point about sitting down with management goes without saying. Even if you know the earnings of any electronic, aviation, or other type of company, you do not simply take their figures and let it go at that. You go and talk to the company and analyze it; this enables you to arrive at a price-earnings ratio. One company may have an earnings ratio of five, another fifty. The same is true of a life insurance company. Even if we had a wonderful, agreed-upon method for arriving at adjusted earnings, a competent analyst must go out and talk to the officers, see their company, see where they are going. The thing that they object to is that we do not even know what the earnings are to begin with.

MR. NOVEMBER: I think the problem is more complicated than that. You must know the quality of management. You must also know the quality of business—what the persistency is going to be and what the expenses are likely to be—and this is much harder to know.

MR. HERBERT L. FEAY: To me, the problem of adjusted earnings is a comparison of the current assets plus the present value of future income with the present value of future payments. In the past it was considered good practice for a mutual company to put some of its surplus in reserve liabilities as a further protection for policyholders. An additional consideration for putting surplus in reserves was the effect on a company of the New York limitation on surplus, if all true surplus was included in the surplus account. These considerations are historically acceptable for an established mutual company but lead to difficulties in the evaluation of stock for a stock life insurance company. I tend to agree that, for the determination of the value of capital shares of a stock life insurance, the value of both the assets and the liabilities should be on a realistic basis.

MR. HARWOOD ROSSER: A partial answer to the question raised about how to handle old premiums would be to go all the way on gross premium valuation, an approach which is usually associated with the British. The British actuaries value benefits and premiums separately. They get the present value of benefits; then they get the present value of premiums and, in so doing, recognize the different premium modes. They then subtract one from the other and apply the factors which represent the present value of benefit expense out of premiums. I think this method will answer the question of how to handle old premiums.

MR. NOVEMBER: I question whether we would be doing the right thing if we abandoned our old-fashioned methods of determining what our earnings are. When I was with an insurance company, we would study what was happening to our mortality rates, our investment return, and our volume of new business to form an over-all judgment about how we were doing. I imagine that is still going on. Am I mistaken about that?

MR. GOLD: Analyzing your mortality experience, investment experience, and new business is fine, but they are all separate. The question is, "What is the monetary effect of a small improvement in mortality versus a tremendous increase in interest return and so much production of new business, and how much of it has stayed on the books?" I still maintain that the best way to analyze a company's experience is to take out the investment return on the capital and surplus and put it to one side; then look at the investment in new business and the gain from renewal operation. It will tell a great deal and surprise a lot of us. In fact, we could look

at some companies, and, if we take out their interest in the capital and surplus, we would be surprised at how little some of them are making, if they are making anything.

MR. RONALD A. KARP: I question whether adjusted earnings are the best starting point for determining a price-earnings multiple. It is intended that the adjusted earnings figure, together with an appropriate price-earnings multiple, determine a suitable price for the stock in the valuation process.

But determination of the appropriate price-earnings multiple requires consideration of the question, "What are the elements which give rise to investment value?" Certainly, the trend of "earnings" over time is a relevant factor. But a more basic element may be the dividend-paying capacity implicit in those earnings.

I believe that the trend of *statutory* earnings is a very good indication of what will be the dividend-paying capacity of the firm. If we agree that dividends and the growth of dividends give rise to investment value, then a projection of statutory earnings may be a much better indication of the value of a company's stock than an adjusted earnings measure. To derive investment value from adjusted earnings requires a circular analysis—from statutory earnings to adjusted earnings and back to the dividend-paying capability within those earnings.

MR. GOLD: Traditionally, until the present, life companies have not paid very much in dividends to stockholders. Some companies may be better off not adjusting their statutory earnings. It might be bigger than their adjusted earnings.

MR. GEORGE D. CHESTER: I analyze annual statements of a limited number of life insurance companies for Middendorf, Colgate & Company of New York City. Most of the work which I do consists of determining adjusted earnings annually with respect to a number of the larger life insurance companies. This information is generally used for the benefit of stockholders and prospective stockholders of these life companies.

My remarks are applicable only to the methods used for determining adjusted earnings for the above situation; they are not applicable in situations where adjusted earnings are being determined with respect to a company which is to be merged with another company or which is being purchased by a company, or which is being valued for federal income tax purposes. In such cases, we would use a much more detailed approach.

Our method of adjusting earnings might be referred to as the "cost of additional inventory method," since it is essentially a method which deter-

mines the cost of writing new business either on the cost per thousand of insurance or per dollar of premium basis, then gives a credit to earnings for such cost based on the increase in business in force. It should be noted that this method is reasonable and proper only in the cases of established companies which are spending less money to increase the business in force than such increased business is worth. If a company is spending more money to place new business in force than the value of such increased business, then the actual value of the additional insurance in force is the maximum adjustment that can be made.

In our approach statutory earnings are adjusted in the case of ordinary insurance (which includes the disability, double indemnity, and supplementary contract lines), industrial insurance, and, for some companies, the individual accident and health line. Individual consideration is given to any adjustments in earnings with respect to the group annuity line, such adjustments being made based upon our knowledge of the particular company's business.

A stockholder or a prospective stockholder is interested in the rate of growth of future earnings of a company so that he may be able to evaluate its potential value. In our experience we have found that it is necessary to analyze the annual statement convention blanks of a particular company for a continuous period of several years in order to obtain a meaningful level of adjusted earnings. It is especially important to determine the trends in experience as well as the effect of such trends on expected earnings. If only a single year's earnings, or even two or three years' earnings, are studied, such earnings may be affected by unusual or nonrecurring items and accidental fluctuations in experience.

Accounting and valuation procedures of companies may have a significant effect on the earnings of a particular year or series of years; therefore, annual statements are reviewed to determine whether certain preliminary adjustments should be made before the normal adjustments are determined. These adjustments may have to be made in cases where (1) earnings were increased or decreased by amounts subtracted from or added to surplus funds; (2) terminating business is valued on a less stringent basis than new business; (3) reserves were strengthened or weakened without charging such adjustments to surplus or a company consistently made direct charges to surplus rather than attempting to carry such charges through earnings.

In conclusion, I might state that it is our objective to determine a particular company's level of earnings rather than its specific earnings of a particular year. It seems to us that in order to do this we must use rather stable yardsticks for measurement of trends in earnings and

experience from year to year. It is, therefore, difficult for me to understand the merit of a suggestion by the New York investment analysts committee that adjustment of earnings be based upon increases in reserves whose basis is changed annually using variable valuation interest rates consistent with the company's earned rates of interest.

MR. GILBERT W. HART: The idea of amending the NAIC Convention Blank to establish uniformity for measuring the performance of companies bothers me. The Convention Blank is a tool that we are regulated by, and to revise it to impose uniformity on ourselves does not seem desirable to me. I think it could backfire. There are a lot of changes we could make now without going through the Convention Blank, if everybody in the industry agrees these are changes we ought to make.

CHAIRMAN RICHARD M. SELLERS: If an adjusted earnings summary is developed, will mutual companies raise objections? It is conceivable that this sort of summary could place pressure on a mutual company to raise its dividend. If stock life insurance companies revalue their reserves on a "realistic" basis, will not mutual companies be pressured into doing the same thing, and will this not make it appear that they have large sums of money which could be distributed to their policyholders in dividends?

MR. WILLIAM C. HSIAO: The security analysts and investment bankers want to use the same yardstick to measure an insurance company that they use to measure an industrial company by asking us to publish adjusted earnings. I think, however, there is one major difference between an insurance company and a manufacturing firm; that is, the insurance company does not go to the investment market for capital. Sometimes the smaller companies do, but the established companies have not felt the need. Because of this major difference, I question whether it is wise for the insurance companies to publish adjusted earnings and let themselves be measured by this new yardstick.

Mr. Fred Townsend proposes that we add some additional information in the Annual Statement so that the adjusted earnings can be derived readily from it. Presumably this will also apply to the mutual companies. To show better performance by this new yardstick, do the mutual companies have to borrow from Peter to pay Paul; that is, give out less dividends to the policyholders and thus show better adjusted earnings?

MR. HAZELCORN: It may be that life insurance policies of stock companies will become more attractive if the adjusted earnings are dramatically raised. Maybe the policyholder may take a different position to the sales approach of a representative of a stock company.

MR. RALPH H. GOEBEL: The strength of a company's manpower is an important factor in evaluating a company, whether it be an industrial or life insurance company. For the life insurance company, the ability and strength of the agency force and actuarial staff must be considered. This must be taken into account regardless of what a company's adjusted earnings might be.

CHAIRMAN SELLERS: In releasing information to analysts, I think we must ask to what extent information which is not available to all stockholders should be given to the analysts.

MR. MORSE: We came face to face with this problem three or four years ago in our company. We came to the conclusion that we would not furnish any information except that which was available to the public through material that was filed with the insurance departments. We appointed one person who would be the co-ordinator on all inquiries from all analysts inquiring about information of this type.

MR. JOHN S. MOYSE: If acquisition expenses are to be shown separately in the Annual Statement for ordinary business, in order to determine adjusted earnings, the same treatment must be given to other page-five columns, such as industrial, annuities, and accident and health. Otherwise, results will be distorted for some companies, especially for combination companies.

MR. FREDERICK S. TOWNSEND: If you work with column three and recognize that there are other columns, you will, I believe, arrive at a conservative figure as opposed to perhaps arriving at a liberal figure. Some companies are still showing their increases in their industrial accounts, but most of the stock companies, the combination companies, show a 1-2 per cent decrease per year in their in-force account, and any adjustment would probably be negative rather than positive.

You could make adjustments by line. What we do in individual accident and health insurance is to consider those individual companies in which there would be a significant effect on their earnings. We do make special adjustments for those companies.

CHAIRMAN SELLERS: Nearly all companies that publish adjusted earnings figures also publish the formula by which they obtain the adjusted figures, from what I have been able to learn. It appears that each year a few more companies are including adjusted earnings in their annual reports.

MR. HAZELCORN: My clients are showing increasing willingness to show adjusted earnings. However, the New York Insurance Department

holds that the whole matter is in too much of a state of flux and will not allow anything to be sent to stockholders which shows adjusted earnings.

MR. GOLD: I find that companies that are not doing well where gain from operations is concerned are inclined to make comments or adjustments in their reports to stockholders about large increases in new business.

I would also say that it seems to me that no adjustment should be made for capital gains. Some companies do sacrifice investment income for the purpose of realizing capital gains; but these gains are irregular from year to year and companies are, I feel, still primarily in the insurance business.

MR. TOWNSEND: I think companies could do a much better job in developing adjusted earnings figures if they did so as a by-product of their corporate planning rather than basing them on a rule of thumb. As part of their corporate planning, many companies derive what they call investment in new business.

MR. HERBERT J. BOOTHROYD: Granted that security analysts should have information adequate to value certain stocks, there should be far greater concern that appropriate information for each type of company is available for the benefit of policyholders, regulatory authorities, and company management.

There is a fear that a more realistic definition of earnings would have undesirable consequences, such as higher taxes. The positive approach is that less obscure accounting practices would help achieve desired results, for lack of understanding of the life insurance business is one of our major problems.

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MR. WILLIAM K. NICOL: The actuaries, accountants, and financial analysts have all attempted to define the term "adjusted earnings," but there is no general agreement among them on an exact meaning of the term. Even within the groups there exist many differences of opinion on what the term means. Most of the disagreement centers on the specific accounting adjustments that should be made or on the method of determining the amount of the adjustment.

In Mr. Gold's paper, he suggests an exact definition that is related to statement items and is mathematical in nature, but I preferred his more general statement that "adjustments are often made to statutory earnings in order to calculate earnings similar to those of other industries."

The accountants have stated that the adjusted earnings is the net income as shown in the statutory Annual Statement, adjusted as required to

reflect such income on the basis of generally accepted accounting principles. Unfortunately, the term "generally accepted accounting principles" is not clearly defined.

To illustrate the difficulty experienced in translating these broad definitions in practice, it is generally agreed that adjustments are appropriate that will capitalize and amortize your acquisition expenses, but there is very little agreement on how it should be done. The expense and persistency rates needed to make this adjustment are available only within the company, and, even then, many companies would not have the appropriate accounting breakdowns to calculate the adjustment. The only suggestion as to uniformity of expense allocation among companies is in the LOMA functional cost method, and, with respect to a satisfactory amortization schedule, I think the only appropriate method would be to recognize an individual company's actual lapse-rate experience.

To summarize, everybody agrees that one does have an initial expense load which needs to be amortized. I think it is possible to work something out within an individual company for comparing among years. To date I have seen nothing that would give a general method for comparing among companies.

There is also fair unanimity on the appropriateness of adjusting earnings for an item such as the increase in deficiency reserves for deferred federal income taxes when the basis of valuation is different, for example, between a company's tax return and its annual statement. This situation arises when a company carries its statement reserves on a preliminary term basis and makes an 818(c) election to evaluate them for income tax purposes on a net level basis.

Mr. Gold suggests in his paper that it is appropriate to adjust earnings for capital gains, for some companies, and I believe that most accountants would recommend that realized capital gains and losses should be treated as an adjustment to earnings. Mr. Gold says that he would not treat capital gains as an adjustment to earnings in all companies. If they constitute an extraordinary item, or are not recurrent from year to year, he would be tempted to exclude them.

I do not really see including capital gains as an adjustment to earnings. If they are to be included, I find it difficult to see why you should not include both realized and unrealized capital gains in any adjustment which is to be made to earnings. If you go that far, I think it would also be necessary to take into account the change in market values or the difference between market and amortized values as shown in a company's statement. This becomes more important when it is necessary to estimate the net worth of a company.

Another area in which the adjustment of earnings is considered relates to the reserve-increase item. Mr. Gold suggests that earnings should be adjusted for the "annual increase in the excess of statutory reserves over experience reserves." The accounting fraternity is not generally persuaded that this is either a feasible or necessary adjustment. They note that adjustment of earnings is not a meaningful process unless one is dealing with a fairly mature company, and, when this is the case, they believe that aggregate cash values in more established companies are not materially below the statutory reserve requirements and therefore that it is not appropriate to adjust earnings to an experience reserve basis. This is their position, and I am not sure that I subscribe to it.

In some earlier suggestions made by the Association of Insurance and Financial Analysts, they recommended that an adjustment of earnings is appropriate with respect to the interest element of reserves but not with respect to the mortality element. They would recompute the reserves on an interest basis equal to the company's average yield on assets, using an approximation technique such as is found in the federal income tax law, and the difference between the actual reserve increase and the reserve increase on this adjusted reserve would be treated as an adjustment to earnings.

If adjusted earnings are to be compared among different companies, it is necessary that the comparison take into account the valuation method. Mr. Gold suggests that the appropriate single basis should be the net level method, since this is consistent with the amortization of acquisition expense.

The reserve area is more controversial than any of the others as to whether any adjustment should be made, and, as is the case with expenses, nobody has really come up with a particularly reasonable method which could be used.

In summary, adjusted earnings are equal to statutory earnings adjusted for the amortization of acquisition expense, for changes in deficiency reserves, for increases in deferred tax liabilities, and possibly for capital gains and a policy reserve adjustment.

Adjusted earnings can be useful to the company management. Anyone who has attempted to explain to company management or to the board of directors the effect that variations in the level of production have on the statutory earnings will recognize the value of adjusted earnings.

Ideally, the use of an adjusted earnings technique will remove the new-business impact from the earnings results, and it remains the actuary's responsibility to explain variations in earnings caused by mortality or morbidity, interest improvement, and this sort of thing.

Life company management can benefit materially from the use of adjusted earnings to trace real progress over a period of years, uninfluenced by variations in production. Of even more consequence is the fact that any material upward or downward trend in true earnings will be revealed at the earliest possible date.

Again, I think that the actuary can provide comparisons within his own company on a year-to-year basis much more easily than comparisons among companies.

The investment community's interest in getting adjusted earnings for life companies is not entirely motivated by altruism. The market in life company stocks topped out in 1964, it fell markedly in 1966, and it has not recovered to date. Many life stock analysts are employed by brokerage firms, and their prime interest is in the sale of life company stocks. When the market in life company stocks did not turn up with the stock market generally, some members of the investment community went looking for an excuse. Historically, life company stocks over the past twenty years have outperformed the stock market generally, and the people who had specialized in life company stocks saw no reason why this should not continue.

I think life stocks were overvalued in 1964, and their position today, I think, reflects that past overvaluation. I think that the investment community, as represented by those who are interested in selling life company stocks, has felt that the definition of adjusted earnings which they had used in the past was not sufficiently refined. They hoped that a suitable refinement of the definition of adjusted earnings would once more present to their investing customers the fact that life stocks were undervalued and that the customers would get back on a life stock band wagon.

Apart from analysts associated with brokerage firms, there are a large number of analysts associated with large institutional investors, such as mutual funds. This latter group is very interested in getting a better appraisal of life company earnings or net worth, and, to the extent that they represent a substantial proportion of our outstanding stocks, they can bring very real pressure to bear on management of life companies to get together on more meaningful measures of life company earning performance.

As I have mentioned, the accounting profession states that earnings should be reported on the basis of generally accepted accounting principles. They have not come to any real agreement on which accounting principles are to be generally accepted, but they are working on the problem and have issued some tentative conclusions. I think that any company desiring to have its financial statement certified by a public accounting

firm must recognize that the accountants will reserve the right to report on what they deem to be the appropriate adjusted earnings, either through footnotes to financial statements or in their certification letters.

Other groups interested in this subject include the Securities and Exchange Commission and the Internal Revenue Service. The SEC requires only statutory results when filing, but they would like to have adjusted earnings. I think that, if and when general agreement is reached, particularly when the accounting profession agrees on proper adjustments, the SEC will require the adjustments.

With respect to the IRS, some people have been concerned that if we arrive at any uniform method of adjusting earnings the IRS might suggest this as an appropriate basis for paying taxes. The possibility of this is remote, I believe. It would be a legislative matter. Furthermore, I think that the methods suggested so far for adjusting earnings are not feasible for immature companies and I find it difficult to visualize providing a method of adjusting earnings which could be applied across the board to all life companies.

Some uniform method of adjusting earnings, or partially adjusting them, on which agreement could be reached among actuaries, accountants, and the investment community would, I think, be worthwhile and beneficial to all concerned. I am dubious that methods can be derived that can be applied to very different types of companies. I do not think such a method is either here now or even on the horizon. In any event, if adjusted earnings are to be reported by companies to shareholders and the investment community, I believe that audited statements relating to these adjustments would be necessary to protect shareholders from subjective adjustments by management, whether overoptimistic or overpessimistic. Again, this assumes that satisfactory methods of adjusting and reporting can be agreed upon.

MR. ALAN RICHARDS: My remarks will cover the adjustment of earnings for ordinary insurance from the standpoint of those members of the investment community who have little or no access to financial information other than that contained in the annual statement and stockholders reports. The adjustment of earnings by the insider who has available to him all the relevant data has, in any case, been covered very comprehensively by Mr. Gold in his paper. He carefully distinguishes between the situation of the insider and that of the outsider, who must deal with published data designed to demonstrate solvency for the benefit of the policyholder. Such data are less than satisfactory for use in estimating the earning power of the corporation for the stockholder.

One of the most noteworthy aspects of Mr. Gold's paper is the clear distinction which he makes between increase in net worth, on the one hand, and adjusted earnings, on the other. His definition of adjusted earnings relies upon accounting concepts and, quite properly, does not embrace the present value of future profits inherent in the actuarial concept of net worth. It is the accounting approach which the security analyst must use in his attempts to adjust life insurance company earnings. His objective is to be able to make meaningful investment comparisons not only among stock life companies but between the life insurance industry and other industries. Modern techniques of security analysis are concerned largely with identification of the underlying rate of growth in earnings and evaluation of the price-earnings ratios which the market imputes to such earnings at various points in time. An adjusted earnings figure which includes any future profits, at whatever rate they are discounted, is "contaminated" and loses its usefulness to the professional analyst. This is not to say that the measurement of net worth cannot be a valuable tool for management.

Mr. Gold states that adjusting earnings from the information available in the Convention Blank is often an "exercise in futility." He may well be right (he is certainly right with respect to many newer and smaller companies), but we live in a real world in which real security analysts must attempt to give advice to owners or prospective owners of approximately 10 billion of very real dollars of life insurance stocks. In the circumstance, the analysts must do the best they can even if their best leaves something to be desired with regard to pure actuarial theory. Perhaps we can make the exercise a little less futile by acknowledging that the resourceful security analyst is usually able to obtain some additional unpublished information. If incorporated in a standard adjustment technique, such additional data must be kept to a minimum.

Judicious use of ratios or bench marks derived from model-office calculations representative of the whole industry may also be helpful, although these should be used sparingly and only when specific company data are not available. The "rule-of-thumb" adjustment, which applies a stated number of dollars per thousand to the increase in insurance in force, is a notorious example of the misuse of this technique.

The considerations involved in capitalization of first-year expenses are probably less controversial than the reserve adjustments. A standard adjustment method will probably identify from the Convention Blank certain specific items which are obviously related to the production of new business, including first-year commissions. These would then be capitalized and amortized over the approximate average lifetime of the business,

using whatever information is available on persistency of the company involved. Alternatively, it may be necessary in the interest of uniformity to use industry-wide persistency data for this purpose or even an arbitrary period, such as ten years. Perhaps it is not too much to hope that one day the Convention Blank will require a breakdown of general expenses between first year and renewal. This would be extremely helpful and is long overdue.

The adjustments to life insurance reserves are of great importance and probably more difficult to make than the expense adjustments. With regard to business valued on a modified reserve method, some attempt must be made to convert this to a full level basis. Ideally such information might be included in the report to stockholders either on a precise basis or by using the approximate method contained in Section 818(c) of the federal income tax law. The latter could easily be calculated by management even if the company were not revaluing for tax purposes. Alternatively, it has been suggested that rough justice might be done by not capitalizing and amortizing first-year commissions and not making any adjustment for reserve method on such business.

I believe that no adjustment can or should be made with respect to the mortality basis for reserves. Such an adjustment would be difficult or impossible to make by the outsider and would probably have less effect on earnings than the interest basis or reserve method.

Next to the expense adjustment, the tabular interest basis of reserves symbolizes to the nonactuarial analyst the "credibility gap" involved in statutory earnings results. However, the adjustment methods which were first proposed by the analysts for this purpose are, I believe, unsound. Briefly, this method would use the 10-for-1 adjustment enshrined in the federal tax law to adjust reserves at the end of each year from a tabular to an "experience" rate of interest. The experience rate would be the company's own earned rate on its assets, probably on a 5- or 10- year moving-average basis. The increase from year end to year end in such adjusted reserves would be substituted for the increase in tabular reserves in the Convention Blank. The obvious flaw lies in the implicit assumption that the increase in the experience rate of interest (invariably higher than the tabular rate) must be earned for the balance of the life of the business involved in order to validate the earnings adjustment for the current year. Furthermore, it is probably not theoretically sound to adjust on the basis of an "experience" rate which varies from year to year. Accounting principles would probably prefer that a realistic rate of interest, if substituted for the tabular rate, be related instead to the rate assumed by the actuary in calculating gross premiums; such a rate should be maintained in the

calculation of adjusted reserves for the life of the business. A simple analogy (which should not be pressed too far) would be a depreciation schedule established on real estate or machinery and maintained without change despite resulting differences between "actual" and "expected" lives. If we follow this line of reasoning, we would need to know the "assumed" rate for each block of business currently in force using different gross premium assumptions before making any adjustment. This is clearly impossible, but it has been suggested that crude approximations can perhaps be made using the data in Exhibit 8, the company's earned rate of interest for various years of issue, and certain ratios derived from an industry-wide model office.

The easiest adjustment to make to reserves is, of course, the elimination of deficiency reserves. These can usually be readily identified from the annual statement.

Finally, some adjustment must be made for restrictions on stockholders sharing in profits on participating business. The annual statement is of very little help in this regard, and reliance will almost certainly have to be placed on whatever information companies care to give in their annual stockholders' reports. Some companies have taken the lead in identifying that portion of statutory earnings which accrues to stockholders from participating business. It is to be hoped that all companies will eventually follow this practice. Certainly it might be said that there is less than full disclosure when information is lacking on so important a matter. Of course, to the extent that any one of the adjustments I have discussed is affected by restrictions on earnings from participating business, such adjustments must, in turn, be modified to reflect such restrictions.

In summary, again let me emphasize that the analysts are groping for some uniform techniques to make earnings adjustments of approximately the right magnitude with respect to those items of life insurance accounting which clearly require them. The techniques I have mentioned may horrify many actuaries accustomed to dealing with these matters on a precise basis. Such precision is simply not possible given the present format of the annual statement. Nevertheless, these techniques should produce more meaningful results than the crude rules of thumb used in the past, particularly if they are applied on a recognized uniform basis. We can only hope that the quantity and quality of supplementary financial information provided by life company managements to their stockholders will improve over the years. This will permit the adjustment methods to evolve on a more scientific basis.

MR. NICOL: The methods to be used for adjusting earnings on industrial insurance are not essentially different from the methods that one would use for ordinary life insurance. Primarily acquisition expenses must be capitalized and amortized over a period of years and appropriate adjustments made in earnings to reflect this expense adjustment.

Because industrial insurance generally has a much higher lapse rate and a different incidence of lapse from ordinary insurance, a different amortization schedule would need to be used.

In the case of a company where industrial insurance is a relatively small part of its earnings picture, or where the amount of industrial insurance is remaining relatively stable from year to year, you get into the rule-of-thumb adjustment. The refinement of techniques has generally applied to ordinary, because it constitutes the bulk of earnings, and the typical adjustment on industrial would be to take anywhere from 50 to 100 per cent of the increase or decrease in annualized premiums in force. I think this is an adjustment of net worth rather than an adjustment in earnings, but it is a satisfactory approximation.

With respect to individual accident and health insurance, again the expense adjustments appropriate for ordinary life would also pertain. There is likely to be a materially different persistency pattern on individual accident and health, and this would have to be recognized in any amortization formula.

One difference with respect to individual accident and health is that in most jurisdictions the reserves will consist of the gross unearned premium reserves plus the appropriate reserves for guaranteed renewable or noncan contracts. With respect to unearned premium reserves, it is quite appropriate to add back to earnings at least 35 per cent of their increase, since commissions and expenses will have been incurred with respect to these unearned premiums. This would be in addition to your expense adjustment.

As was the case with individual life insurance, the variations in the valuation method that may be present in the additional reserve for guaranteed renewable contracts must be taken into account when intercompany comparisons are being developed.

Rules of thumb are frequently employed in connection with individual accident and health business if it is a relatively minor contributor to company earnings. Typically, an adjustment of 50 per cent of the increase in premiums in force would be employed.

Annuity business for most companies generally contributes such a small proportion of the company's earnings that it is not practical to make any special adjustments. I think that a review of the historical pattern of earnings with respect to the annuity line to make sure there are no wide

fluctuations for which adjustment should be made, perhaps using a five-year average, would be sufficient.

With regard to group insurance, I am afraid I am a little more pessimistic than some of the analysts. If we judge from many companies' analyses of operations by line of business, the appropriate adjustment to earnings for group insurance will generally be negative in nature. I would not do more than credit a company with its current year's results, again after careful scrutiny of the historical record to determine that the current year is consistent with past history. I think there is a very real danger in the method analysts have used in the past of ascribing a value per thousand to the increase in group life business. As a practical matter, particularly for those companies which are in a state where there is regulation of group life rates, the group life and accident and health rates are not realistic.

MR. GARY E. CORBETT: I would like to acknowledge the contribution of Mr. Robert Maule, an Associate of the Society, to the concepts and results that I shall describe. Our contribution to this panel is a discussion of whether a gross premium valuation is a possible alternative to what could be called a deferred expense method for the purpose of adjusting earnings. In order to answer this question, I propose to explore first a number of the facets of a gross premium valuation (which I prefer to call present value approach) and then compare the present value and the deferred expense approaches.

Basically, I shall be concentrating on the theoretical aspects rather than the practical problem of making the actual valuations. Thus, when I compare the present value and deferred expense approaches, I focus on the theoretical results of one plan and age (although the comparison could be just as easily extended to a total company composite) and not on the approximations used in practice. For the deferred expense approach in particular, differences between theory and practice are usually so great that, although one may show that a deferred expense approach theoretically yields reasonable adjusted earnings, the approach as applied in practice often does not.

When we discuss adjusted earnings, we should consider the two principal groups that require such calculations. These two are life company management and the investment community. Although there is only one basic present value approach, the results obtained do vary, depending on the purpose of adjusting the earnings. Therefore, I propose to discuss separately the problems of adjusting earnings for management and for the investment community.

In order not to introduce a new example with the necessary definitions

of assumptions and methods, I have adopted Mr. Gold's example of an ordinary life policy issued at age 35. The only change I have made in his example is to assume a total termination rate of 1.00 in the thirtieth year. However, such a modification does not affect the thirtieth-year profit. I have in effect added a fifteenth column to his Exhibit 1. This added column contains the statutory profits at the end of each policy year per \$1,000 originally issued. It is obtained by discounting the annual gains for survivorship by multiplying column (11) by column (13). (For example, the first-year value in column [15] is $-\$9.62$ and the thirtieth-year value is $\$0.73$.)

Now that the example I shall employ has been described, I would like to move to a consideration of our first problem, that of using a present value approach to adjust earnings for life company management. Since I believe that such adjusted earnings should be based on a company's gross premium assumptions, I would like to discuss for a few minutes the present value approach to rate making. This discussion will provide a base for the discussion of other management uses of adjusted earnings using present values.

In the present value approach to rate making, we determine the present value of all statutory profits. This approach, of course, differs from the more traditional asset share approach, where we determine the accumulation of all statutory profits. The present value approach yields a "profit on sale" per \$1,000 issued and the asset share approach an "asset share" per \$1,000 in force.

There are two schools of thought on the rate of interest, i' , which should be used to calculate profit on sale. One school would use i , the rate assumed to be earned on retained funds (4 per cent in Mr. Gold's example). The other would use the so-called investor's rate, usually considerably higher than i . This latter approach was the one used by Mr. James C. H. Anderson in his paper "Gross Premium Calculations and Profit Measurement for Nonparticipating Insurance" (*TSA*, XI, 357). Personally, I am a supporter of the first school, for two main reasons.

1. Discounting at the earned rate, i , renders the reserve basis immaterial. So long as the reserves at the end of the study period are the same (and they always are if you assume a total termination rate of 1.00 in the last year), the intermediate reserves are of no importance. If we assume no survivors at the end of the period, the effect of the reserves on the profit on sale is zero. This result is not only convenient, but it also results in premiums and profits being independent of the reserve basis—which I believe is proper.

2. The second reason for my preferring the earned rate approach is that

the entire profit on the policy is concentrated into one figure. If you discount at an "investor's rate," some of the expected profit is in the excess of the investor's rate over the earned rate. Let me illustrate this point by using our example. The profit on sale, discounting at the earned rate of 4 per cent, is \$12.10. Discounting at a rate of 10 per cent, the profit on sale is \$3.96. Now assume additional acquisition expenses of \$3.96. Does the production of new business at this extra cost result in no profit to the company? Personally I find it difficult to accept that there is no profit in placing on your books an asset that will yield 10 per cent annually on the unamortized present value. Admittedly, the profit resulting from the transaction may be judged too small relative to the risk, but it is still profit. An investor expects to make a greater profit on money invested in a speculative venture than in a safe one. But such speculative profits are all called profits. They are not split into two segments—an appropriate high return on his investment plus pure profit.

One could accept my basic premise that all profit should be concentrated in one figure but argue that this figure should be a yield rate rather than profit on sale. This yield rate would probably be the rate at which the present value of all statutory profits is 0 (17 per cent in our example). Such a rate, the "yield on investment" is very meaningful since management can compare it with yields on funds invested in other enterprises. The 17 per cent yield rate undoubtedly has more meaning in and of itself than does the \$12.10 profit on sale figure which results from discounting at the earned rate.

However, I prefer not to use the yield-on-investment approach for three reasons. The first has to do with the practicalities of rate making, which I shall not take time to describe here except to say that the calculation of yields on investment involves a time-consuming, trial-and-error process. The second reason is that the reserve basis becomes of importance. The third is that it makes the comparison of results for production units much more difficult. Such comparisons may constitute a major use of adjusted earnings by life company management.

Let us now look further at these comparisons for production units. When I refer to a production unit, I mean any identifiable unit which produces new business. This could be a branch office, general agency, geographical region, or even an entire company. In the latter instance we might be comparing results for two different periods of time.

Mr. Nicol has suggested that a useful management purpose is served by adjusting earnings in order to study earnings from which the effect of variations in production patterns has been eliminated. Certainly this is a valuable use of adjusted earnings. However, equally valuable is the use of

adjusted earnings to isolate the new business results of production units. In order to best study these results in terms meaningful not only to the directors of the units themselves, a present value, earned rate approach to adjusted earnings is required.

I suggest studying only the new business results of such units, since, except in the largest companies, I do not think complete profit and loss statements would be meaningful. In individual life I believe all we should attempt to hold production units responsible for are their own expenses, production, and persistency. However, the profit-on-sale comparisons could be extended to take into account mortality experience if it were deemed significant.

As an illustration of the production unit comparisons that I am referring to, I would like to describe briefly those used by Safeco Life. The starting points for these comparisons are what we call acceptable new business results. These are equal to the profits on sale, if we assume that each production unit experiences the assumptions built into our premiums. These acceptable results are dollar amounts and, in my opinion, have much more meaning to the home office and, more important, to field people than would rates of interest. I have referred to this aspect earlier in supporting the use of the earned rate rather than the yield on investment in discounting future profits. Further, it is obvious that a deferred expense approach is of little use in such comparisons, as it assigns no value to new business in excess of what was spent to obtain the business.

We calculate acceptable new business results by multiplying the number of production units sold (a modification of face amount) by the average company profit on sale. (If Mr. Gold's example were a total-company composite, we would multiply by \$12.10 per \$1,000 of face amount.) Next we add to or subtract from the acceptable new business results the difference between the unit's acceptable and actual acquisition expenses. The acceptable expenses are simply the per-unit expenses built into the premium times the number of expense units produced. Then we make an adjustment for persistency. By varying first-year persistency in our profit studies, we have found the effect on profit on sale of a 1-point change in the first-year persistency rate. In Mr. Gold's example it is \$0.27 per \$1,000. For every point difference between the production unit's first-year persistency rate and the rate built into the premiums (80 per cent in Mr. Gold's example), we would add or subtract \$0.27 per \$1,000 of face amount. Acceptable new business results plus or minus the expense and persistency adjustments equal actual new business results. What we have in effect done is to produce adjusted earnings for each production unit

based on their production efforts, assuming that first-year persistency is part of this effort. As a final step we divide the actual by the acceptable new business result to arrive at what we call a performance ratio.

Let us now turn our attention to the subject of adjusted earnings for all policy years, primarily from the point of view of the investment community. I should preface my remarks on this section by reminding you that I am still primarily talking about theory, not practice.

The annual statutory profits per \$1,000 issued are still the starting point. However, before we can calculate present values based on these statutory profits, we must answer the all-important question of the rate of interest to be used in discounting these statutory profits to arrive at the present values. As Mr. Gold points out, "The rate at which future profits are discounted is an ultra-important consideration." In his example the present value at issue of future statutory profits is \$12.10 at 4 per cent, \$3.96 at 10 per cent, and 0 at 17 per cent. The corresponding values at the end of the fifth year are \$16.97, \$10.54, and \$7.02.

At this time it would be well to define the annual book profits that emerge from a present value approach to adjusting earnings. To keep matters as simple as possible, I would like to talk about policy years rather than calendar years and to assume that none of the statutory profits for a year are available to the stockholders until the end of that year.

As a first step we find the present value of future profits at the end of each policy year. The present value of future profits at the end of year t equals v times the statutory profit for year $t + 1$ plus v^2 times the statutory profit for year $t + 2$, and so on. I denote such present values as $PV_t^{i'}$, where i' is the rate of interest used to discount.

There are two equivalent formulas for book profits. The first is general enough to apply to any adjusted earnings method which assigns a value to in-force business. The book profit in any policy year is equal to the statutory profit for that year plus the increase in the asset item during the year ($BP_t^{i'} = SP_t + PV_t^{i'} - PV_{t-1}^{i'}$). The second formula for book profit can be used only for the present value method. It calculates book profit as the present value of future profits at the end of the preceding year times the rate of interest used in calculating such present value. If we use this latter formula, we must add the profit on sale in the first year.

Now that we have the definition out of the way, I would like to proceed to an investigation of some of the ramifications of discounting at a higher rate of interest than is assumed to be earned on the invested policy funds.

One obvious point is that the reserve basis now becomes important. The lower the reserve method, the higher the early statutory profits and the lower the later statutory profits. As we saw earlier, statutory profits

arising from different reserve methods have the same present value if we discount profits at the earned rate, but, if we discount at a rate higher than the earned rate, the lower reserve basis will result in an increased profit on sale. Substituting net level for modified reserves in our example leaves the profit on sale unchanged at \$12.10, when we discount at 4 per cent, but reduces it from \$3.96 to \$1.59 when we discount at 10 per cent.

The profit-study present value approach in effect says that money held as reserves is still invested in the policy and thus at risk. Therefore at any given time the higher the reserve basis the greater the theoretical investment. This point is illustrated by the fact that in our example the yield on investment is 17 per cent with modified reserves but only 12 per cent with the greater investment resulting from net level reserves.

Although accountants would generally say that the reserve basis should affect the present value of profits since it dictates the time at which profits become available to the stockholders, I believe most actuaries would agree that the mere labeling of funds as reserves or surplus does not affect the true profitability of the company. Surely, if a company strengthens its reserves to net level from CRVM, there has been no increase in the amount of funds at risk. The entire assets of the company are always available to pay losses. I realize that, if the company were willing to run the risk of insolvency, they could, if on CRVM, pay out so much in dividends that their surplus would fall below the difference between net level and CRVM reserves and thus would reduce the funds at risk to less than would have been possible if they had been on net level. But I believe that for most companies this is not an alternative worthy of consideration.

If the reserve basis should not affect adjusted earnings, how can we compensate for different bases? There are at least two methods that can be used: (1) Recognize the lower risk inherent in excess reserve funds by using a lower rate of discount if you use a high reserve basis in your present value calculations. For example, if 15 per cent is an appropriate rate of discount using CRVM reserves, 10 per cent or 12 per cent may be appropriate if net level reserves were used. (2) Do the present value calculations on the basis of minimum reserves, using the appropriate rate of discount, and hold the difference between actual and minimum reserves as an additional present value. In effect, this means that future profits on the minimum reserve basis are discounted at the investor's rate and the difference between profits on the actual and minimum reserve bases at the earned rate.

You will note that I have referred to "minimum reserves." There are a number of possible answers to the question, "What are 'minimum reserves'?" Arguments can be made for (1) experience reserves on a modi-

fied method, (2) cash values, (3) CRVM reserves on 1958 CSO $3\frac{1}{2}$ per cent, and (4) CRVM reserves on 1958 CSO and an interest rate equal to that used for cash values on the policy, the latter being the minimum statutory reserve for the policy. There are pros and cons for each basis. However, the choice of a minimum basis is not as critical as it may seem, because, as a practical matter, the choice of the discount rate is going to be guided very much by the minimum reserve basis used and this will act to reduce any differences.

I would now like to proceed to a theoretical comparison of the deferred expense and present value approaches. In order to do so, I shall propose two criteria, one actuarial and one accounting, that I believe any adjusted earnings method should meet. The actuarial criterion is that the resulting book profits should not be greater than the statutory profits, when both are brought to one point in time; the accounting criterion is that the book profits should flow roughly in accordance with the premium income that produces the eventual profits.

In order to be consistent with the earlier development, I use the present value per \$1,000 issued to compare book profits arising from different adjusted earning methods. In the deferred expense approach it is obvious that, if the expenses to be deferred are spread taking into account interest and survivorship, as Mr. Gold does, the present value of the adjusted book profits is identical to the present value of the statutory profits. In our example this is \$12.10, if we discount the profits at 4 per cent. Therefore, the theoretical deferred expense approach meets the first criterion.

What about the present value approach? To answer this question, we must first decide on the rate of interest to be used for discounting the book profits. It is probably obvious that, if we were to discount the present value book profits at the same rate as the statutory profits, the former would always have the greater value, since the sum of the profits is the same in both cases and a present value approach moves the same total profits closer to the time of issue. However, this result should not lead us to the conclusion that a present value approach can never meet the first criterion. An integral part of the present value approach to adjusting earnings for investment purposes is the use of an investor's rate to discount future profits. The justification for using a high discount rate is the risk inherent in realizing projected statutory profits. In any given year the book profit is determined using present values that have discounted future statutory profits back to that year at the investor's rate of return. It would seem, then, that the only consistent rate at which to discount these resulting book profits back to the date of issue would be at the same investor's rate of return.

Applying this approach to our example, I found the present value of the book profits resulting from the use of 4 per cent present values to be \$20.11; from the use of 10 per cent present values, \$11.97; and from the use of 17 per cent present values, \$5.13. We can see that the use of 10 per cent present values yields a value, \$11.97, which is very close to \$12.10, the present value of statutory profits at 4 per cent. We could therefore say that the use of present values calculated at 10 per cent would meet the first criterion, and the use of present values at any higher rate would be conservative.

Let us now turn our attention to the second, or accounting, criterion, which says that profits should emerge roughly in proportion to the premium income giving rise to the profits. It is first of all obvious that accepting this criterion results in denying the validity of statutory profits. They must be adjusted in order to come anywhere close to meeting the criterion. In order to apply this criterion to our example, I calculated the proportion of the total premium income expected in the first year and in the first five, ten, and twenty years. This is 9 per cent, 34 per cent, 55 per cent, and 83 per cent, respectively. Mr. Gold's deferred expense formula does a good job of redistributing the book profits to meet this criterion, except in the very early years. His resulting profits are zero in the first year, 35 per cent in the first five years, 56 per cent in the first ten years, and 86 per cent in the first twenty years. If he had used experience reserves but spread all expenses in excess of ultimate expenses over the life of the policy, his resulting book profits would be in exact accord with the premium income. To express this another way, the book profits per \$1,000 in force for each policy year would be level. I personally believe this to be a preferable deferred expense approach, but, since I am not discussing deferred expense approaches except to compare them with present value methods, I shall leave this point and proceed to an analysis of the present value methods.

These methods display significantly different results depending on the rate of interest used in calculating the present values. For example, 4 per cent present values assign 51 per cent of the total book profits to the first year, 10 per cent present values assign 18 per cent, and 17 per cent present values assign no profit at all to the first year. For the first five years the corresponding percentages are 64, 38, and 24, and for the first twenty years 94, 87, and 81. The reason that the present value approach has difficulty in meeting the accounting criterion is primarily because of the first-year adjusted earnings. As long as the rate of discount used is less than the yield on the investment, a profit is assigned to the transaction of selling the policy. I could argue that the criterion should be modified to permit a more-than-proportionate profit in the first year. But the argu-

ment is probably more valid from a management than from an investment point of view, and I doubt that the accountants would, or perhaps even should, modify their criterion. So, accepting the criterion as stated, we see that, although neither a deferred expense approach like that of Mr. Gold nor the present value approaches can qualify in the very early years, over a period as long as the first five years his deferred expense approach shapes up fairly well and a rate of discount could be found (about 12 per cent in our example) that would result in a present value approach also meeting this criterion. Whether or not such a rate were chosen would depend on the importance placed on this criterion versus the first criterion and other factors touched on earlier.

I would like to conclude by stating the advantages and disadvantages of the deferred expense and present value approaches as I see them. However, in order to do this, I must distinguish between the theory of the methods and their application in practice. To apply either approach accurately would require the calculation of asset factors that could be applied to in-force business by plan, age, and duration. A practical compromise that probably must be made is to group certain ages and plans but preferably not duration. The number of cells that we would end up with would be determined by balancing the theoretical and practical aspects of the valuation. Historically, present value approaches actually used have applied factors to in-force business but have not usually used sufficient cells and have not usually employed a company's own rates and experience to arrive at the factors. The deferred expense approaches in general use, however, do not apply such factors, even in bulk, to in-force business. They attempt to work with actual acquisition expenses. They are thus immediately faced with the problem of separating actual expenses into acquisition and annual. Assuming that this problem can be solved, they then defer these acquisition expenses roughly in accordance with a schedule developed from the theoretical approach described earlier. However, actual acquisition expenses may bear no relationship to expected acquisition expenses. If they are less, no great harm is done, but, if they are greater, which often will be the case, it is possible to hold as a deferred expense asset an amount greater than the present value of future profits. Such a value cannot be justified by any reasonable method of adjusting earnings. Therefore, any practical deferred expense approach must be checked to insure either that the deferred expenses are not greater than those built into the premiums or that they are not greater than the present value of future profits. If the latter check is chosen, it would seem to me that it would have been better to have used a present value approach originally.

So much for practical deviations from theory. If we assume that both

the deferred expense and present value approaches are reasonably accurately translated from theory into practice, which is superior? From the point of view of the investment community I believe that either method can produce adjusted earnings that are acceptable when judged by any reasonable criteria. The deferred expense approach does have the advantage that the required asset factors are somewhat easier to calculate and require less input if the calculations must be done from scratch. However, if the basic present value factors are available from earlier gross premium work, the situation is reversed.

It is when we turn to the other user of adjusted earnings, life company management, that I believe the superiority of the present value approach is evident. First, the earnings picture is directly related to gross premium assumptions, and deviations from expected adjusted earnings can be explained in terms of deviations from expected assumptions. Second, the results of different production units can be compared much more easily and understandably than can be done with a deferred expense approach.

On balance, therefore, I believe that the present value approach to adjusting earnings is not only a feasible alternative to the deferred expense approach but that it is a superior one.

MR. RICHARDS: The actuary's role as an adviser to nonactuarial groups seeking to establish a method for adjusted earnings is a very delicate one. On the one hand, it is quite obvious to anyone who has had any contact with these groups that they will sooner or later evolve a method for the adjustment of earnings, which they will then proceed to apply on a uniform basis. On the other hand, it is unrealistic to expect that under present conditions the final results will be anything more than partially acceptable to the actuarial profession. I believe the actuary's job is to provide, as tactfully as possible, whatever help and guidance he can, in the hope that, whatever formula is adopted it will have some basis in sound theory and will not be damaging to our industry. In particular, he should seek to discourage the use of adjustments which appear to be designed solely to increase current earnings.

I would like to make one thing quite clear. It is not necessary for any actuary who is engaged in exploring methods of adjusting earnings to abandon the principles underlying the solvency basis of accounting for the benefit of policyholders. There should be no inconsistency between adherence to the traditional approach for determining solvency and the presentation of supplementary data designed solely to give a more realistic picture of the earning power of the stock life insurance company, for the benefit of stockholders.

I do not share the concern over the motivations of the security analysts in seeking a uniform method of adjusting earnings for stockholders. Even if the method should produce larger dollar earnings, the analyst who expects to see substantial market appreciation for this reason alone is likely to be disappointed. As I mentioned earlier, the market these days looks at the underlying growth rate in earnings, and there may not be any significant difference for the industry as a whole between the compound growth rate in statutory earnings and adjusted earnings over a reasonable length of time.

A more important effect of a uniform method of adjusting earnings for the investment community, if that can be attained, would be the lessening of the uncertainty and the confusion that surround this subject. I believe that, as actuaries, we should applaud any attempt on the part of the investment community to substitute fact for appearances as they relate to the analysis of life insurance stocks. To give you a little more background on the analyst's thinking in regard to the stock life insurance companies, let me quote from a speech made recently by an analyst who specializes in life stocks:

Managements of the companies are not responsible for the adjustments as calculated by individual analysts. Managements, however, are not only charged with the responsibility of running their companies on a sound and profitable basis, but also for adequate communications with their shareholders and with the investing public generally so that reasonable investor interest is developed and maintained.

While security analysis may, as a profession, be somewhat young and immature, it nevertheless is establishing professional standards and is worthy of our recognition. It is interesting that many British actuaries are full-time security analysts, and it is curious that so few American actuaries have seen fit to become involved with a discipline which is very close to our own. I believe that we have a lot to contribute.

MR. DONALD J. LEAPMAN: If the goal of management is to estimate the increase in the net worth generated by the investment in new production, and I believe that it is, the gross premium valuation should readily provide this estimate. Frequently, an analysis of the various sources of profit will suffice, particularly in a relatively new company, where premium assumptions have not been subject to many changes.

With regard to security analysts' desire for information, I wonder whether we are not submitting to a regimentation that is unjustified. Their methods of valuing differ among, for example, rail, industrial, mining, and banking stocks, and their existing methods probably will not fit

the insurance industry. I believe that their goal in seeking adjusted earnings is to establish the capital value of the company so that a purchase price for its stock can be determined. It would be more sensible if we, the actuaries, tried to provide this information directly. We could make our estimates of the value in such a manner that the analysts could then determine the probable yield that a purchase price would obtain over a period of time or what the price should be to achieve a given yield.

MR. RICHARDS: I think it is necessary to distinguish between earnings for the valuation of the stock of the life insurance company as a going concern in the market and the liquidation value. However, if you are referring to liquidation value, I would agree. In fact, this kind of information could be produced at two rates of interest; the analyst could then decide which was appropriate or use the results to estimate other rates of return.

MR. CORBETT: I disagree with the concept that we should not use the present value approach to anticipate future profits in valuing a company. The value that an analyst or prospective stockholder wants to place on the business is its value as a going concern. The value of the insurance operations of an insurance company consists of its in-force business and the potential of the agency force to sell additional business, which in turn will have a value as in-force business.

I see nothing wrong in trying, as best we can, to estimate the value of the in-force business. The future growth in earnings, using the present value approach, is then the growth of new business from the agency plant, and this an analyst will arrive at himself, relying on your management, your history, and so forth. It almost seems to be accepted in some of these papers and by some of the speakers that by definition you cannot use future profits for adjusting earnings for the purpose of valuing a company. Frankly, I do not understand this position. It is certainly not self-evident.

MR. RICHARDS: Generally accepted accounting principles require that future earnings not be anticipated.

MR. RICHARDS: Perhaps many years from now—and I imagine it is so far in the future that we can fairly well ignore it—the life business will persuade the accounting profession, the financial analysts, the SEC, and others that life insurance business is different and should be accorded the use of different techniques in the analysis of its earnings and earnings growth. If that day comes, it is my belief that the most appropriate basis

would be something akin to the natural reserve. As I understand it, the natural reserve is the gross premium valuation with the profit removed.

I think that we would still be in a position of not anticipating future profits, so we would be nodding in the direction of generally accepted accounting principles but would be able to produce something that is much more accurate than anything conceivable at the moment. You must remember that the analysts are dealing largely with an absence of information on which to make any reasonable judgments.

MR. NICOL: I think we should define our responsibility with regard to the analyst. I do not think we should be telling him what the net worth of the company is. I do not think we know. If we are going to buy a company for our own use, we must determine the net worth at that point, but from the standpoint of the analyst and the investment community it is my opinion that we should do what other corporations do. They do not give a net worth figure; they give an earnings figure. The analyst applies a multiplier which is appropriate to the time and the condition of the market to arrive at what he thinks the stock is worth. I do not think that we should be contributing the ultimate net worth value.

CHAIRMAN STUART A. ROBERTSON: I would like to touch briefly on something that Mr. Richards referred to—the question of whether we are bringing future profits into earnings.

Is not part of the problem determining what profits are future profits and what profits are today's profits? Consider, for example, the reserve basis. If one group considers net level reserves to be appropriate, they are going to say that others are taking future profits into account if they are using modified reserves. In terms of the statutory bases, these are not future profits; but in terms of some other bases, they may be. Just what are the future profits that we must not bring into the accounting?

MR. RICHARDS: It is very hard to get any measure of agreement on these points. The analysts, after listening to everybody concerned, are hoping to find what they believe are the most reasonable answers with respect to each of these points; they will then proceed to apply them. To the extent that we can influence them before they arrive at their criteria, perhaps we can be helpful.

MR. G. PHILIP STREATFEILD: Under the statutory approach, the profit is released over the life of the policy. The purpose for adjusting the earnings is to smooth the incidence of this release by eliminating the first-year deficit. It seems to me that we could think of the profit as being

the absolute total profit over the life of the policy and discount it back to the date of sale. Is there a generally accepted accounting principle that a life insurance policy should release profit equally over the life of the policy?

MR. RICHARDS: I do not believe that there is any generally accepted accounting principle that would require earnings to be uniform each year. I think the principle is that one should attempt to match expense in relation to the flow of income.

MR. CRAWFORD E. LAING: We as actuaries are very much attuned to the present value approach, and it is difficult for us to adjust the incidence of earnings so as to level them out for use by the analysts. We know what the releases of surplus each year will be on our assumptions and whichever reserve basis is used. We can identify the yearly releases and discount them to the present time at whatever rate of interest is appropriate for the purpose in hand, and we can do this by proper technical actuarial methods.

This can be based on a going-concern approach to the intrinsic worth of the company, but surely we can translate our "present value" thinking into an earnings approach, so that the analysts can use their price-earnings ratio, which they understand and the market tends to reflect. Can we not translate our terminology into their terminology so that they can use it in those areas in which they are experts?

Surely it is a simple step to express our result in an earnings manner for the sake of the analysts by taking 8, 10, or 15 per cent of the capital value and giving them this as the earnings figure.

MR. RICHARDS: I believe that this would be the best solution. Unfortunately, since you would have to convince the analysts, the accountants, and others that this is best and then convince the companies to produce the data, it is not practical in the near future.

MR. CHARLES H. CONNOLLY: The approach to adjusted earnings that we have been talking about, based upon current rates and results, arrives at a semi-liquidation value assuming no future production. The ultimate value of the business that we have put on the books depends to a degree on the ability of management, and the true market value reflects not only current results but also future results. We should be aware that this method overlooks the quality of management when comparing one company with another.

MR. R. LEE SMITH: There has been considerable discussion of the usefulness of adjusted earnings, and actuaries have been using similar results for a long time. To what extent and in what manner is management actually using this or similar results?

MR. NICOL: There are two or three companies that are incorporating some adjustment of earnings in their reports to stockholders, generally using the historic rules of thumb. I think the other area in which variations on these techniques are used is in explaining to management why you have had a bad year in a particular line of business.

MR. LEAPMAN: I know a number of British life companies well, and, to the best of my knowledge, all of them analyze profits by tracing them to their source.

MR. BERNARD FENSTER: My company has been using adjusted earnings on a threefold basis. We have been very active in an acquisition campaign in the last year and a half; we have used the relative value and net worth approach on a company in placing a value company on its stock or on a block or blocks of its life business. We have also, within the framework of our profit objectives, level of gross premiums, and so forth, used this method to develop an acquisition-cost limitation that we can spend on new business and still retain our anticipated future profit potential. We have been measuring quarterly our actual acquisition costs against the limitations we have in a sense budgeted for. Third, we have, with limited success, begun to convince management that up until the present all accounting work that we have done has been related to statutory requirements. To my knowledge, very few companies of our size have spent much time, money or effort in providing management with the type of information it should receive. How effectively are we producing business? Are we spending money for acquisition and servicing of business wisely?

For example, Bankers Life & Casualty has over each of the past several years generated a substantial net gain from operations; but are we getting the best for our money? For the same dollars expended could we not have perhaps generated more profit in a given year or more new business that would have given us a greater future profit potential? Our problem is basically one of staffing, along with the need to further convince management that we should spend some money to set up the necessary accounting and research units to develop a reporting procedure to management rather than simply gearing ourselves to statutory accounting requirements.

CHAIRMAN ROBERTSON: I would like to put a question to Mr. Nicol. Did you say that some accountants are requiring that a statement of adjusted earnings be footnoted on the statement?

MR. NICOL: I do not know anybody who is requiring a dollar figure, but I think that many of them will require a footnote pointing out that expenses have not been capitalized and amortized and that to this extent the statutory earnings are not a true statement of earnings as visualized by generally accepted accounting principles.

They also are requiring some footnotes relative to differences between statement reserves and federal income tax reserves, along with notes—no dollar amounts generally, but more or less a *caveat emptor* to whoever might be interested.

MR. HOWARD H. KAYTON: In your approach dividends are treated as a fixed item, that is, in the same manner as expenses. My question is, shouldn't you be building in an increase in the level of dividends, particularly since you are talking about earnings rates on the order of 15 per cent?

MR. FENSTER: We had occasion during the year to look at a block of life business, a part of which was participating. Two things had to be taken into consideration. First, in certain states, limitations existed on future profits that could be retained on participating business. To some extent this put a ceiling on the relative value of the business in force. Second, when negotiating a buy-and-sell agreement, the sellers and buyers have their respective views on what this type of business may be worth. Based on the premium rates, cash values, and so on, we developed a relative value without any consideration of dividends. We then negotiated with management on the assumption that, on the average, about 85 per cent of the future profits would be returned to policyholders in the way of dividends. We settled on a value of 15 per cent of the figure that we initially derived as the relative value of the block of business without any deduction for dividends. If and when we acquire the business, we may or may not disburse 85 per cent of the future profits in the form of dividends, but this is the leverage one has as the buyer.

CHAIRMAN ROBERTSON: In connection with your acquisitions, what do you do when you find a stock company available in which a very large part of the business on the books is a special participating policy which promises dividends that are equal to dividends on stock or equal to 50 per cent of the profits on the nonparticipating business?

MR. FENSTER: We faced that question, but we dodged it in that we did not negotiate any further. The dividend clause for several blocks of participating business in force was so worded that, in our opinion, no value could be assigned to the business, since the policyholders were basically entitled to *all* the profits that would emerge.

MR. CORBETT: One of the problems we are faced with is in the area of acquisition costs. There are certain companies, and I think mutual companies are among them, that have large surpluses and do not particularly care, at least for outside publication, to break down profits between those they are getting from new business and the large profits that are being generated from their existing in-force business. They are using the profits from the existing in-force business to, in essence, subsidize some of the first-year operations and thus they can live with some of the premium rates we see today. Knowing what the commission rates and other direct expenses of these companies are, it seems to me there is a limit to how low you can drive true expenses. Whether it could happen that an entire block of a company's business would yield no profit, I do not know, but it might. The possibility cannot be dismissed, even for a mature company.

MR. RICHARDS: I agree that this is very definitely a problem. I would be surprised if any of the large companies that are actively traded have that problem, but it could arise in the future.

MR. ALFRED L. BUCKMAN: We have been discussing this question from the point of view of management and of the financial analyst.

From management's point of view there is no doubt that we must be able to value the new business that we put on as well as the value of the business that has stayed in force for prior years. We should not devote too much time to the value that a financial analyst is going to put out on the business of the company.

Five years ago the stock of life insurance companies was being traded at two to three times today's prices; this was due to the fact that life insurance stocks were a "market fad" at that time and there were a great many brokers promoting the sale of life insurance stocks. This has a much greater effect on the price at which stock will be traded than the particular method or basis used in determining the "adjusted" value of an insurance company.

Right now the stocks of life insurance companies are being traded at a very, very low rate in comparison with what I believe is the true value of the insurance industry. But the general public does not think so, so they

are not paying any more than the current low prices. And, because life insurance stocks are not a current "fad," comparatively few analysts and brokers are promoting them.

It is very important for management to know what it is doing each year. Each company must be able to evaluate its business at the beginning of the year and, at the end of the year, to appraise properly the prior years' experience, ignoring entirely the price at which its stock is being traded. The individuals and companies owning shares of stock may be concerned as individuals with what the price of the stock is, but it would be absolutely wrong for management as such to be concerned with what the analyst or broker sells the stock for or how popular he makes it.

Mr. Gold has given us some additional tools to use in evaluating our own respective businesses. This is good, since we must obtain better tools as we go along. It is completely wrong for management to give up its prime concern—the proper management of the business—and to start worrying about such questions as, "What are we going to give the financial analysts so that they can place a higher value on our company?"

MR. RICHARDS: There are fads in life insurance or in any group of stocks. Brokers begin to push something, and it feeds on itself, prices rise, people get more interested, and the prices rise further. There is often very little connection between intrinsic worth of a company and the price at which it is selling in the market.

In my opinion any analyst who thinks that a new or different formula is going to increase the price of insurance stocks is going to be disappointed. Maybe analysts do not realize this. Perhaps some of them think that it is going to make a big difference, but I do not think so, because it is not going to have any dramatic effect on the underlying compound growth rate of life insurance company earnings.

There is still a duty on management's part toward existing stockholders to do what they can to maintain the value of their investment, particularly in those instances where, as you feel, there are many companies selling at much lower levels than they should be.