

RECORD OF SOCIETY OF ACTUARIES 1982 VOL. 8 NO. 2

FUTURE DIVIDEND PHILOSOPHY

Moderator: HAROLD R. GREENLEE. Panelists: DONALD D. CODY, RICHARD S. MILLER, JOHN M. O'SULLIVAN, PAUL E. PETRY

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The paper "An Expanded Financial Structure for Ordinary Dividends" by Donald D. Cody will be discussed in this session.

MR. HAROLD R. GREENLEE: I would like to welcome you to Panel Discussion 5. Our topic for discussion is Future Dividend Philosophy. The panelists are: Mr. Donald D. Cody, Mr. Richard S. Miller, Mr. John M. O'Sullivan, and Mr. Paul E. Petry.

Mr. Miller, who has served for six years on the Society's Dividend Philosophy Committee, will begin our discussion by giving us an update on the status of the Academy's and Canadian Institute's actions on dividend philosophy. He will also discuss the implications of these efforts on stock company dividend practices and on stock company use of non-guaranteed benefits.

MR. RICHARD S. MILLER: On October 31, 1980 the Academy adopted Dividend Recommendations and Interpretations which are meant to apply to an actuary's

recommendations to management on the determinations of a United States mutual life insurance company's dividends.

Since these recommendations deal with what is fundamentally an internal report, the Academy Committee also has recommended to the NAIC that a series of questions be added to Schedule M. These questions will disclose any significant exceptions to the Academy Recommendations contained in the internal report. The following is a quote from the recommendations to the NAIC:

"The suggested modifications to Schedule M focus on an extract of the actuary's report. This extract is intended to be helpful to the regulators in their supervisory role. The report requires a summary of practices used, a highlighting of changes in practices, a quantification of changes in dividend scale and a certification by the actuary that the dividends have been determined, except as disclosed, in accordance with the Recommendations Concerning Actuarial Principles and Practices in Connection with Dividend Determination and Illustration."

This Schedule M reporting will probably give the Academy recommendations considerable practical force.

The Academy recommendations for changes in Schedule M were submitted last June to the Manipulation Committee, but no action has been taken to date. Recently, renewed interest on the part of the NAIC has surfaced, and the Academy Committee has been requested to present its proposals to both the Blanks and Disclosure Committees.

The Canadian Institute is traveling a similar path. Its recommendations are to be voted on by the membership at its June meeting in Winnipeg. The Council of the Canadian Institute has approved the recommendations, and there is expectation of passage in June. If adopted, the recommendations will be effective for 1983 dividend declarations for distribution in 1984. The Institute recommendations do cover participating annuity contracts and the participating business of Canadian stock life companies. Subject to revision after looking at any product of the Society and Academy Committees, the CIA Committee does not expect to address practices with respect to non-guaranteed aspects outside the dividend process.

Our next consideration is the current status of the Society Committee on Theory of Dividends and Other Non-guaranteed Benefits. Our current attempt is to expand the scope paragraph of Opinion S-7 and then modify the opinion as little as is absolutely necessary to accommodate known practice with which we find no obvious fault. Thus, the thrust is very much oriented toward:

- . Disclosure of non-standard practice.
- . Equity of treatment between classes or generations.
- . Reconciliation of assumptions and experience factors to actual observed experience.

When recently asked by Bill White of the New Jersey Department for comments on the potential of our Committee's deliberations with respect to Universal Life and Indeterminate Premium Type Policies, our Chairman, Harry Garber replied in part, as follows:

"Because these new forms are still evolving and are not well established, the Committee's recommendations will probably take the form of general principles and will not contain anywhere near the level of detail of the dividend recommendations

"As in the area of dividends, our recommendations do not seek to command compliance but, rather, will require disclosure where pricing or repricing actions deviate from the recommended principles

"The Society Committee should be able to bring forward an exposure draft for individual policies involving non-guaranteed prices or benefits for consideration by the membership at the fall meeting this year The Academy Committee, under the leadership of John Harding, will begin the task of developing the recommendations that would be binding on Academy members and the external reporting analogous to that contemplated for mutual company dividends. It may be at least two years before a formal set of Academy Recommendations will be completed and in effect."

I also would like to make some remarks on stock company issues. The SOA Dividend Philosophy Committee's current majority view is to copy the Canadian Institute and apply the mutual company participating insurance recommendations to participating insurance issued by stock companies with a single obvious substantive exception. This exception may be viewed as more than substantial since it would exclude from its scope all in-force stock company participating business as well as any new business written before a relatively distant operative date. The exception arises from the broad spectrum of product practices which have at one time or another gained the label of participating in stock companies but bear very little resemblance to the commonly held view of participating insurance.

Some of these practices, which I find less objectionable than the laws which spawned them, are:

- . Dividends equal to the difference between the desired nonpar premium and the net valuation premium for the express purpose of evading deficiency reserve laws.
- . Dividends equal to a set percent of reserves after a policy becomes paid-up. This device was used extensively prior to World War II to provide the equivalent of a 4% guaranteed return to the client in an era when a 3½% reserve was the legal maximum.
- . Dividends added to an otherwise nonpar single premium life policy when pure nonpar pricing would have called for a gross premium considerably less than the issue date minimum cash value.

Moreover, even where stock company par issues were meant to participate in the emerging experience, the experience group was expected to be much broader than just the par issues. It might have been all the company's business or even general industry experience. The appropriate split between shareholders and policyholders of any identified experience deviations was also subject to considerable debate. In addition to the above facts, participating individual life insurance is a small part of the in-force of most stock life insurers; therefore, it seems that prudence is the better part of valor on

requiring the stock company to issue a report complying with mutual company ground rules.

In addition to the very obvious grandfather clause exception, there is an important silent exception as compared to the CIA recommendations. In Canada there is not only a stringent legal maximum on the amount of participating policy profits which may be transferred to the shareholder's account, but also strictly enforced rules on separation of accounts between the par and nonpar portfolios. There is at least a vocal minority on the SOA Committee who would advise the Academy Committee that we are unaware of any satisfactory substitute for similar disciplines on U.S. stock company participating business which would enable the stock company actuary to issue a "clean" dividend recommendation report.

It is the majority (perhaps even the unanimous) opinion of the Committee that such a call for legislation is unwise, politically suicidal, and something which is much better left to the Academy Committee.

Further development of various forms of non-guaranteed benefits (with active impetus from the IRS) will bring to an end the stock company use of the term participating. The major exception may be stock companies with substantial participating portfolios which are operated much in the fashion of a separate mutual company. In the latter case I think application of S-7 will not cause difficulty.

If these speculations are reasonably accurate, the obvious exception of the grandfather clause may indeed be big enough to let an elephant through, but all that actually escapes may be a very tired mouse.

MR. JOHN M. O'SULLIVAN: Rather than prescribe a narrow set of procedures to be followed in dividend determination, the Academy and Society have relied on the technical competence and ethical standards of the actuary in responding to regulatory and public concern about dividends. This course of action is correct. Dividend determination is a fairly complex area for detailed regulated practice, which would surely restrict the diversity of sound practices.

The Academy recommendations should strengthen the resolve of the actuary in resisting the pressure to cut corners. Recommendation 20, which I will quote, clearly states our responsibility.

"The actuary's primary professional responsibility with regard to illustrated dividends is to ensure that the dividends appropriately reflect the current financial results of the company and are related to paid dividends in an equitable, justifiable manner. This responsibility must be adequately discharged, despite the actuary's recognition of the important role that illustrated dividends play in product cost comparisons and competition in the marketplace."

On the topic of disclosure, it is important to note that at the current time, the actuary's report is an internal company document. This is a logical conclusion to the Academy's Opinion A-3 which says that when an actuary advises an insurance company on dividends, the client is the company, its policy - making executives and in some situations its board and auditors. The actuary's report basically sets forth the recommendations of the actuary and relates these recommendations to generally accepted practices.

There are both advantages and disadvantages to having the actuary's report as an internal company document. The advantages are:

- . The report may encourage more frankness between the actuary and management.
- . The report may contain proprietary information.
- . The report may be quite a lengthy, complicated document, which is not easily understood.

One of the disadvantages of having the actuary's report as an internal document is that "outsiders" may assume the worst case -- a cover-up. This is a very real problem. In a recent issue of a trade publication, an insurance professor mentioned "that there is virtually no policing of dividend policy, and not unexpectedly, as a result there is no consistent practice in dividend determination or in dividend illustration." The article mentioned "the certification syndrome that the actuarial profession has embraced - certification largely made by insiders and hidden from public scrutiny."

The Academy has suggested to the NAIC that qualitative extracts of the actuary's report should be incorporated into Schedule M. A relatively short qualitative extract seems desirable. The main points could be covered without burdening the reader by a maze of details. Schedule M seems to be the natural place to have this type of disclosure since the current schedule lists dividends for new issues and the actual dividends paid on a policy issued twenty years ago and also includes a description as to how dividends were calculated.

Since the topic this afternoon is future dividend philosophy, it seems appropriate to speculate about the future. The long-term trend will be toward more disclosure of dividend practices. For example, last year's exposure draft of the Virginia Insurance Bureau's Report "Life Insurance Products, Disclosure, and Marketing Practices" made the following points:

- "The Bureau proposes to utilize the actuary's report as an oversight vehicle. The report certainly should be available for review and critique by regulatory officials.
- "... Any company that fails to follow the Contribution Principle with respect to dividend illustrations should provide a caution to that effect on its Policy Summary and on all sales materials and advertisements showing illustrated dividends. Moreover, a similar notice should be provided annually on in-force policies if substantial deviation is made from the Contribution Principle in dividend determination on such policies.
- "If the method of dividend scale determination on existing policies is changed from one involving the investment generation method to one involving the portfolio average method, or vice versa, the company should be required to send to each affected policyholder a notice of change and the implications thereof on dividends payable under the policy."

On occasion, regulatory interest in the actuary's report will go beyond the qualitative extract which may appear in Schedule M. As Don Cody will mention in his remarks, one of the advantages of the generalized dividend formula is that mystery is absent. The completeness and explicit recognition of all the factors in the formula mean that there is demonstrable equity across dividend classes. The key word here is demonstrable.

It would seem that sometime in the future the method of allocating investment income will be disclosed in both the qualitative abstract appearing in Schedule M and in the caveat appearing on sales illustrations. The Buyers Guide will probably contain a brief explanation of the difference between portfolio and investment generation methods. The worth of all this to the consumer brings us to the next point, the credibility of illustrations.

The purpose of a dividend illustration should not be the forecasting of future dividends. It does give the prospective policyholder an indication of the cost of a par contract on a basis other than the most adverse (which would be a zero dividend). A dividend illustration should reflect the current performance of the company. Unfortunately, it may or may not permit valid comparisons between different companies.

From the buyer's perspective, the natural tendency is to choose the product with the best illustrated values. The assumption is made that the cost will be better with the company that has better illustrated dividends. In a comparison of a new money product with a portfolio based product, this assumption may or may not be valid. Although it is desirable to mention the method of investment allocation on sales illustrations and to explain the difference between portfolio and new money in the Buyer's Guide, these distinctions are subtle and could easily be missed by prospective buyers.

Another example of the difficulty of making valid comparisons would be the comparison of a traditional product with a non-traditional product which has significant unresolved tax issues. After considering these types of examples, it seems that there are real limitations on the usefulness of illustrations in comparison shopping. Although the historical relationship between illustrated and paid dividends for a company does not indicate what the future relationship will be, a comparison of dividend histories does add another dimension to comparison shopping -- if only in a qualitative way.

Assuming that there is no expected deterioration in experience, a dividend illustration should reflect the current experience of the company. The tendency to make new products look as good as possible is tempered by the Academy's recommendations. Illustrated dividends should be supportable if current experience continues. The relationship between the dividends paid on in-force policies and those illustrated on new business should be equitable and justifiable.

The level of dividends on in-force policies is affected not only by Academy standards but also by the marketplace. The exposure to replacements, the increasing sophistication of policyholders, and the desire to keep your customers happy have a positive effect on the level of these dividends.

The next subject I would like to discuss is terminal dividends. The theory behind the payment of terminal (settlement) dividends is well-founded. Surplus is freed up by the termination of an existing policy. Some of this

surplus could be paid to the terminating policyholder in the form of a terminal dividend.

In the current environment, it is interesting to think of withholding terminal dividends as an asset liquidation charge. There are some problems with this approach. It does not protect you from policy loans. The same terminal dividend is payable on deaths, maturities and surrenders whereas an asset liquidation charge should be directed toward surrenders. Assuming a \$35 per \$1,000 of insurance upper limit on terminal dividends, the level of terminal dividends would be fairly small to do the complete job.

Since terminal dividends enter into the calculation of interest adjusted net costs, they could be manipulated so as to enhance the appearance of a product. The Academy recommendations are important here, since the actuary's report should state whether termination dividends equitably reflect the incidence, size and growth of the policy's share of accumulated surplus.

MR. PAUL E. PETRY: You have just heard the viewpoints on our subjects presented by an actuary from a large mutual life insurance company. Since I am representing the medium-size company on these questions, I asked myself what determines a medium-size company. Assets, premium income, life insurance in force - all of these are indications of size. If we were to pick one of these and do a survey of actuarial staff compared to our choice, I suspect we would find a fair correlation between the number of actuaries and the size, however we define it, of the company. This analysis led me to the startling conclusion that the most significant factor determining whether a company is large, medium or small is the size of its actuarial staff. So, what are some of the problems faced by a company with a smaller actuarial staff?

Unlike the large companies' head actuaries who may wonder if they have enough challenges to keep their new FSA's interested, a medium-size company chief actuary wonders who will have the time to look at the new valuation law, variable loans or new dividend principles. The Academy standards and recommended management letter will force the medium-size company actuary to spend more time on dividend documentation. Usually, after a dividend decision is reached and top management agrees, the actuary is busy implementing the new dividend scale. He may even be involved with the communication effort, rate books and spot checking. With the pressure of other matters of "greater" importance, documentation and thorough justification are often overlooked (at best not written down). The actuary for the medium-size company feels that he will be there next year, and he will remember why, if next year someone asks him why, he had done it this way. Of course, in a few instances he is not there next year, or no one asks until four years later why he used a certain approach, and by that time he may have forgotten. Another advantage of written documentation is that it increases the number of reviewers. Only so many can attend a senior management dividend recommendation meeting. Written documentation is a way of communicating to the other actuaries in the company. They in turn will act as reviewers, formally or informally. Also, opening the process to outside review compels the actuary to use additional care in developing his recommendations. The principles, themselves, also give a firmer foundation for the actuary to build on. In cases where the actuary feels the principles

are not appropriate, a logical and reasonable basis for departure is required.

The need to communicate may force the actuary to "keep it simple". Easily understandable differentiation in dividend scales may become more commonplace. Disclosure may expose less-ethical practices or may even cause a change in those practices. At the same time, the importance of explaining complex actuarial terms in everyday language will take on greater importance. Actuaries will not be able to hide behind their actuarial certificates. Only those actuaries with a thorough understanding of something can really explain it in a non-technical way. These actuaries will be in greater demand in the future.

Dividend illustrations will be under more scrutiny as the buyer becomes more sophisticated and home computers are as common as television was by the 1960's. Consequently, the credibility issue will be an important one.

Let me put on my futurist hat and picture the role of home computers as they may affect future dividend scales. Having been a faithful subscriber to Consumer Reports, you naturally subscribe to their new home consumer video service. For a modest annual fee you receive access to their computer files and analysis. For a few dollars you can do a search. A recent advertisement by the national spokesperson for the insurance industry, Andrew Tobias, has convinced you that you need more life insurance. You connect your home computer to the Consumer Report network and type in life insurance. After putting in your consumer i.d. (for address and demographic information) you are given a series of questions.

Rank - low premium, flexibility, reputation of the company, low long-term costs, etc., in importance. Also input your expectation for interest rates over the next ten years. On the basis of this input the screen will show you the best twenty companies. Under these circumstances, the pressure to be one of the top twenty companies and once there, to stay there, would be tremendous.

Now, I would like to make a few comments on terminal dividends. My company does not currently use terminal dividends. We have one product with terminal dividends that reflects the difference between minimum cash values and full reserves. However, in addition to the usual use of terminal dividends (i.e., to pay the difference between the asset share and liability), I propose a new use for terminal dividends or special one time dividends that are not necessarily payable at termination. In today's uncertain tax climate, one could pay a one time dividend that reflected actual federal income tax paid. I will discuss this suggestion later when we talk about FIT.

MR. DONALD D. CODY: My paper "An Expanded Financial Structure for Ordinary Dividends" sets forth a generalized dividend financial structure and formula, of which the classic 3-4 factor dividend formula on the Contribution Principle is an approximation. It incorporates in a single structure three methods described in actuarial literature: the Source of Earnings Method, the Asset Shares Method and the Fund Method. The formula is derived directly from the most generalized equation of equilibrium underlying the insurance mechanism and the Gain and Loss Exhibit on Page 5 of the Statutory Annual Statement. It provides explicitly and independently for select mortality, terminations, acquisition expenses and their amortization, other expenses and

taxes, FIT, modified investment year method (IYM) investment income, policy loans, profit charges, cash values, reserves, asset shares, surplus and terminal dividends. Before tying into the agenda items, let us look briefly into its derivation and format.

The generalized equation of equilibrium is the basis of the dividend financial structure and formula (Formula 1 of the paper is shown in Exhibit I which is at the end of this discussion). The asset share or fund at duration n , represented by fV_n , is equal to its value a year earlier augmented by the net premium n together with the investment income credit (before FIT) less several operational items which include cost of mortality, cost of terminations, FIT and the dividend. Three additional items - excess of loading over non-acquisition expenses, gains (losses) from non-par policies and riders, and any infusion from (charges to) surplus extrinsic to the dividend financial structure are added to this result. Note that the fund at duration zero equals the negative acquisition expense deficit; the reserve is zero at issue. Note also that the net premium can be factored out of the formula, leaving only the gross premium. Therefore, the definition of terminal reserves can be quite arbitrary.

If this equation is solved for the dividend, one obtains Formula 2 of the paper, shown in Exhibit I. Here, the asset and investment income FIT components have been absorbed into the investment income credit; the required interest credit component of FIT remains explicit. Also, the factor f has disappeared by the application of the relationship $S_n = (f - 1)V_n$. The n last term represents the build up of surplus starting with the negative acquisition expense deficit at issue; this surplus build-up ties in with the company surplus plan.

Now, if the surplus increase term is replaced by the equivalent acquisition expense amortization charge, B_n , adjusted by the smoothing factor (ΔD_n) , at durations during which acquisition expenses are amortized, and by the profit factor, B_n , at later durations, one obtains Formula 4 of the paper, shown in Exhibit I. This is the final format of the generalized dividend formula.

Since the surplus development term drives the dividend formula, it deserves more attention, as shown in Exhibit II. This exhibit elaborates Formula 3 of the paper. At introduction of the rate book class, B_n is equal to the amortization charge for acquisition expenses being repaid n over k years and a percentage of reserve thereafter. (ΔD_n) is a factor which smooths irregular commission based expenses for k' years n on an actuarially equivalent basis. The resultant values of surplus, S_n , are shown. If these values are kept entirely unchanged for k years as n mortality, termination and investment income rates, underlying the annuity value, change in renewal years, this pegging of the surplus objectives (and smoothing factors) means that B_n will vary from its original values as mortality, termination and investment n income (after FIT) rates change on renewal; however, recovery of acquisition expenses is assured. This control was suggested by Tom Kabele in his discussion of the paper.

Because of the importance of the investment income credit, let us look at its formulation (Section VII of the paper) which is shown in Exhibit III. The formula gives full recognition to the level of policy loans in the class. Income from invested assets is a weighted average between the IYM rate for the block of policies and the portfolio rate for all blocks of policies.

This weight is designated by α . For a typical relatively long general account, α would be in the range of 1/3 to 2/3, the lower level being that below which the recognition of IYM would be immaterial. The upper level is in recognition of the effects of the C-3 risk from changes in the interest environment and to avoid excessive replacements. For a very short general account, say in T-bills, or for contracts backed by longer assets and with cash values on a market value basis, α might be taken close to unity. Naturally, α equal to zero indicates use of the portfolio investment income rates, adjusted for loans.

Now, let me list some of the important utilities of the financial structure and formula:

1. Mystery is absent. Because of the completeness and explicit recognition of all the factors, the financial structure and formula have been found to enable management to understand the relationship of the dividend to net income and surplus development in detail. Important management decisions on dividends can be reached easily.
2. Asset shares are directly incorporated. This enables tie-in to premium development and surplus policy. All asset share techniques of the company can be conformed.
3. Expense matrices for budgets, for cost accounting, for annual statement and for dividends are conformed. All expenses, commissions and taxes, except for those explicitly excluded by management for reasons listed in the paper, are run through the dividend formula. The dividend formula becomes a cost control mechanism, since all changes in expenditures are reflected directly in changes in dividends.
4. Modified IYM investment earnings, after marginal FIT investment income and asset charges, are included. Therefore, all effects of historical net investable cash flows, including policy loan dynamics and disintermediation are reflected.
5. Acquisition expense amortization is explicit to assure scheduled recovery. Profit charges are explicit and are linked to company surplus policy.
6. There is an R_n - factor which allows for control of any surplus infusion or charge outside the dividend financial structure itself.
7. There is demonstrable equity across dividend classes because of the direct relationship of factors to actual experience and the uniformity of coefficients.
8. The discipline of the formula protects the actuary from extraneous pressures. The approach makes clear that the only legitimate course to an improved market position is reduced expenses, improved productivity and efficiency, and improved investment earnings. Its detail easily enables application to such reclassifications as updating of policies.
9. As Tom Kabele proves in his discussion, a company using this formula automatically conforms statutory financials to GAAP with the addition

of an asset for deferred acquisition expenses equal to the aggregate of the unamortized acquisition expenses in the dividend financial structure. Loss recognition and recoverability are assured. Technically, the dividend fund (statutory reserves less unamortized acquisition expenses) is equal to a (Posnak) Type 1 GAAP reserve (dividends treated as benefits) with net premium equal to gross premium.

10. Tom Kabele's lengthy discussion is impressive. It enlarges the significance of the generalized dividend formula and suggests valuable variations and historical background. His discussion enhances the value of the paper enormously.

My attitudes as to agenda items 2 and 3 are implied by the design and details of the generalized formula:

- . Classes naturally relate to rate book, issue age, duration, type of policy, type of underwriting and FIT basis. The Contribution Principle clearly requires uniform differentiation by class.
- . In the determination of IYM-based investment earnings credits, uniformity for equity purposes can be achieved only with an historical structure of IYM and rollover rates by year of investment and year after investment applied to investable cash flows in rate book classes with due attention to policy loans. The paper discusses this in depth.
- . An equally tough test of equity is the uniform allocation of expenses, especially among old and new issues. The paper also discusses this in depth.
- . Thus, the hallmark of equity is disciplined uniformity in treatment of credits and charges among classes. My formula, which enables this discipline, has proved to be a tough task master.

Legal niceties aside, Universal Life and individual deferred annuities are participating from an actuarial standpoint unless investment income credits are contractually formulated to outside indices. They are, of course, distinguished by lower commissions, use of new money rates with $\alpha = 1$, and investment in short assets compatible with their short liabilities. Also, there is faith that they have FIT advantages. As Tom Kabele points out, my generalized dividend procedure can produce the credits granted to them. If the FIT status of conventional participating insurance and annuities is conformed to that for Universal Life, whatever that turns out to be, and if commissions, investment income credits and asset configurations, along with use of variable policy loan interest rates are likewise conformed, the essential remaining differences from conventional life insurance are the unbundling of the investment and insurance components and flexibility of premiums and benefits. A lurking problem is how companies are providing adequately for the C-3 risk from changes in interest environment on Universal Life and deferred annuities with appropriate attention to length of assets. An identical problem, of course, exists for conventional participating life insurance sold in sophisticated markets as investment contracts.

As to regulatory inhibitions against the generalized approach of my paper, especially recognition of IYM interest rates on a modified basis, I am

unaware of any and can visualize no reason for them. Indeed, as our understanding of the C-3 risk develops through the research of the SOA Task Force on C-3 Risk and the NAIC Technical Advisory Committee, it may turn out that attention to IYM concepts is necessary for appropriate recognition of the risk and its effects on different types of products and to determine the contingency surplus needed against it.

Section 11 of the Academy Recommendations on dividends sets down the principle that terminal dividends should relate to the size of S in the generalized formula. My experience is that with reasonable determination of acquisition expenses and reasonable definition of amortization period for such expenses, terminal dividends under this principle are unlikely to emerge at policy durations currently in vogue. At later durations, the principle will produce terminal dividends. I suspect, therefore, that actuarial reports to management frequently will note this deviation from Academy Recommendations. Incidentally, I find no fault with grading in terminal dividends at earlier durations, but I am struck with the absence of any note of this presumably common phenomenon in the Academy Recommendations. The generalized formula provides for recognition of the effects of terminal dividends, however derived.

MR. FRANK METZ: Don, have you thought of using an interest rate, other than the asset interest rate "i", to amortize the acquisition cost? Could you use a rate equivalent to an internal rate of return?

MR. CODY: Yes, it would be appropriate to use return on investments (ROI). You should charge for the utilization of surplus in each class of business. Reference to this can be found in Tom Kabele's discussion on my paper.

MR. OWEN REED: I did not have an opportunity to see your paper, but I was curious as to your comment on GAAP accounting with respect to the federal income tax item. Is that item a GAAP federal income tax charge?

MR. CODY: Technically it is not, but I treat it that way. With minor exception it meets GAAP, and I prefer to treat it as an expense item.

MR. REED: Would someone please comment on dividend illustrations with regard to terminal dividends?

MR. O'SULLIVAN: I do not agree with Don's remarks that terminal dividends at the levels and durations at which they are appearing are unreasonable.

MR. GREENLEE: I do not think that Don is saying there is anything unreasonable about the termination dividends. Don is saying that under his formula he amortizes acquisition expenses over the policy's expected lifetime, and thus, there is not any surplus from which to pay the termination dividends until the expected lifetime of the policy is reached. Am I grasping the point, Don?

MR. CODY: Yes you are. Your amortization period for acquisition expenses is twenty years. You might like to be able to amortize more quickly, but you cannot and maintain a reasonable market price. To get a reasonable termination dividend sometime after twenty years you must start earlier. Surplus builds up rapidly after such expenses are amortized. You can pay a

termination dividend completely supported by your surplus build up by duration twenty.

We seem to have drifted from the question. The question was: "What is the motivation for termination dividends?" There are two basic motivations. One is to improve your position in the market. The second motivation, which is a philosophical one, is to release built up surplus, which is not to be held permanently, to persons who surrender or die so that they receive an equitable portion of the non-permanent surplus.

MR. GREENLEE: There are two forms of terminal dividends, those forms just discussed by Don and those alluded to by Paul. The ones Paul referenced are payable on cash surrender and represent the difference between cash value and reserve.

At the Prudential, on some very old policy forms, a termination dividend is granted which is equal to the difference in reserves on a strengthened and non-strengthened basis. These dividends are payable only on cash surrender.

MR. PETRY: I will discuss policy loans, disintermediation and the investment year method for dividends. These three subjects are interrelated. Before discussing specifically these items, I would like to talk about equity.

Equity is a conceptual term. You cannot get your hands on it or your arms around it. People can describe what is not equitable and what is equitable, but they cannot give you a good definition of what is equity, at least as it applies to policyholders.

Equity to a certain extent is dictated by the marketplace. Let me explain. Equity means being fair. If you are unfair and the group you are unfair to has an alternative, they will take that alternative. Until 1981 very few companies distinguished between smokers and non-smokers. In 1982 very few companies will find it healthy not to distinguish between smokers and non-smokers. If they do continue to offer a blended product, non-smokers will feel they can get a better product elsewhere, and the company will be left with nothing but smokers. Therefore, in this case, the marketplace has played a role in defining what is equitable.

I believe the marketplace will, in the not too distant future, force companies to go to direct recognition of policy loans in their dividend scales on an individual basis. One of the tougher concepts for an actuary to explain to a non-insurance person is why policy loan borrowing does not affect individual dividends. Let me draw an analogy with a similar bank situation. Imagine your reaction if you were told by your savings institution that they were paying you less interest this year because some of their customers had withdrawn their funds, and therefore, since they were paying the same interest based on funds held at the beginning of the year (most of which were withdrawn), they could not afford to pay as high a rate as you expected. Another way of looking at it was discussed by David Carpenter of Occidental in a recent article in the Financial Planner. Mr. Carpenter stated: "I will lend to anyone \$10,000 for one year if you will make the following three promises to me -

- (1) At the end of the year you will return my principal

- (2) You will promise me 8% interest on my \$10,000, to be paid at the end of the year
- (3) Immediately after I give you my \$10,000 you will allow me to borrow it back for one year for which privilege I will pay you 6% interest.

The financial absurdity of this example explains the real dilemma in which the life insurance companies find themselves."

You may be saying that you cannot reduce someone's dividend if he borrows since you would be charging more for the loan provision than is allowed by state law. However, dividends have to be equitable, and I am just proving that by not individually reflecting policy loans you are being inequitable. Let's look at Universal Life. In the Universal Life policy you are paid interest depending on the funds that you have deposited with the company. If you were to withdraw some of those funds, the company continues paying you a rate of interest on the amount of money left behind. For insurance companies to pay a rate of interest in their dividend scales on the money left behind for each individual policyholder is not in any way changing the policy loan interest.

Let's examine how one company, Northwestern Mutual, is using direct recognition in its new series. They have declared a dividend rate for non-borrowed monies and a dividend rate for borrowed monies. They then calculate on a daily basis the percentage of your initial reserve that you have borrowed. Then the interest element for the dividend is a blended rate based on your actual borrowing. Let's take an example. Assume the initial reserve for a policy in year one is \$1,000 with a non-borrowed interest rate of 10% and a borrowed interest rate of 6%. Let's also assume a \$500 policy loan at the beginning of year one in one case and in the second case no borrowing until the last day of the year. In case one, 8%, the effective interest rate, times \$1,000 would produce an interest element dividend of \$80. In case two, we assume that the borrowing was at the close of business on the last day of the year. In this case, in spite of the fact that the person has a \$1,000 policy loan, the dividend for year one would be \$100. Now let's assume that at the beginning of year two the initial reserve increases to \$1,200 with no new borrowing in either case. In case one, the second duration dividend will be $7/12 \times 10\% + 5/12 \times 6\%$ or $8-1/3\% \times \$1,200$ for an interest dividend of \$100. In the other case, the interest rate would be $2/12 \times 10\% + 10/12 \times 6\%$ for an interest rate of $6-2/3\%$ and a dividend of \$80. I think this approach makes a lot of sense.

If you look at it another way, borrowing on a policy probably has a greater financial impact than age within one or two years. A 27 year-old policyholder, who is fully borrowed, should have to pay more for his coverage than a 28 year-old policyholder who does not borrow - given that they are both in good health at issue. Currently, companies are illustrating dividend scales that are based on 40% to 50% borrowing to customers with the assumption that the customer will borrow 100% of his cash value after seven years. This is commonly called minimum deposit. If everyone borrowed, we could not maintain our dividend scales. When those who do not borrow realize that they have more attractive financial alternatives, they will go to those alternatives. If your company does not have a borrow-free option, you will

lose that business, and your remaining business will be closer to 100% borrowed than it is today.

What we call disintermediation in 1981 will be called cash management by 1983. In fact, Merrill Lynch would call disintermediation cash management today. Some insurance companies will develop systems to borrow cash values to pay premiums for their high income customers. When we arrive at the point where we are selling policies with IYM interest rates, variable loan rates and/or direct recognition, we will be insulated from the shock waves of disintermediation caused by interest rate swings. At that point, interest rates will drop and a new generation of actuaries will wonder why we developed all these elaborate dividend adjustments.

In Don Cody's remarks he pointed out that the dividends would be derived from all the factors that go into life insurance company profits. The dividend will become less of a mystery. It will become the result of year-by-year company experience. This approach will take most of the magic out of dividends. Companies with good fundamentals, that is, investment returns, mortality, expenses and lapses will have the best dividends. That has always been true. However, I feel there will be a finer distinction made between classes. Dividends will be based more on company experience than on an asset share. Interest earnings will be returned in the interest element. Policy loan borrowing and taxes for Phase I companies will impact this factor. Likewise, the other factors will be more closely tied to their experience. I believe, in this environment, that companies will be forced to go to an IYM approach for their own protection. If the consumer were given a choice between a low current rate with a stable future rate versus a higher current yield rate with more volatility, he would overwhelmingly choose the latter. We have already adopted an IYM approach for individual annuities and group annuities. A few companies have adopted it for life insurance. IYM creep will soon become an IYM stampede. If, however, interest rates fall to the 7% to 10% level, IYM will take a back seat. Portfolio rates are already approaching or have reached these levels. I am not here to predict where interest rates are going. In any event, dividends should reflect that experience.

MR. O'SULLIVAN: The industry trend is one of coming out with many new wrinkles in response to the competitive environment. Examples are: preferred plans, non-smoker discounts, loan rate differentials, high minimum plans, indeterminate premium products, the use of higher valuation rates, and investment generation methods.

These refinements in dividend classes are impacted by the Academy Recommendations. The difference between the experience factors of two dividend classes should be based on actual differences in experience, and the magnitude of the difference should be supportable. Moreover, illustrated dividends should be related to paid dividends in an equitable, justifiable manner.

In relating the dividends on an in-force policy with the dividends on a newer policy, the first level of review would be based on the reasonableness of the relationship. The generalized formula presented by Don Cody goes beyond this. The use of consistent coefficients preserves intergenerational equity. The form of the formula makes it fairly easy to relate paid dividends to illustrated dividends.

Where is this trend in refining dividend classes going to lead us? At some point, it may be necessary to extend some of these distinctions to in-force contracts, perhaps through an amendment program. The rationale would be the avoidance of replacements. The threat of replacements is a good reason for maintaining intergenerational equity.

As Paul Petry has pointed out, one of the major problems facing the insurance industry today is disintermediation in the form of policy loans. The assumptions which we made in running our business in more stable times no longer seem appropriate. Today, we are much more aware of the C-3 risk and are placing more emphasis on the matching of assets and liabilities.

In a company with several distinct lines of business, it makes sense to have investment strategies for groupings of products which recognize the unique investment needs of these products. For example, the investment needs of a qualified annuity would be different from those of a traditional whole life policy since tax preference income is less important and liquidity may be more important. The natural extension of this idea is to allocate assets by business segment and to recognize the investment performance of these assets in the dividend distributions for each segment.

Policy loans are assets which have been completely allocated by the actions of policyholders. Although Paul has discussed this topic, I would like to add a few points about the direct recognition of policy loan activity. I am concerned about going this route because it may be looked upon as charging more than the stated maximum policy loan rate and also because it would be changing dividend classes after issue. On the other hand, under the current set-up the only way for a non-borrower to end his subsidizing the borrowers is to become a borrower himself or surrender his contract. This alternative is a bit insane since if all policyholders were to become borrowers, the aggregation of all policyholders would be worse off, given the relationship of market and book values.

The variable loan provision would help insulate new business from disintermediation through policy loans. Direct recognition of policy loans in the calculation of in-force dividends would end the subsidy between borrowers and non-borrowers, which is a very worthwhile step, but it would not stop disintermediation -- especially given the lowering of marginal tax rates for individuals and the availability of IRA's.

The recent activity in the subsidiary area has been caused by the desire to write equity-based products such as variable life, the desire to write business in the best tax phase, and the desire or even need to diversify into synergistic areas such as mutual funds and casualty insurance.

An investment in a subsidiary should be an acceptably profitable venture. How should this investment be reflected? One company pays a performance dividend, which can vary significantly from year to year, based on the profitability of its subsidiaries. Another way to recognize the investment in subsidiaries is to realize that the investment return will be comprised of two pieces: a dividend and a capital gain. In the early years of a subsidiary's existence, it may be necessary to invest the profits of the subsidiary back into that operation. This suggests that a long range view will be taken in the form of a realistic capital gain assumption.

MR. MILLER: Since any comments on the current Federal Income Tax proposals which actually describe the alternatives being presented would require a full session, I will try to speculate on the direct changes in dividend practice which may result from adoption of the current compromise proposal.

- i. Phantom premiums or the uncollected difference between maximum premiums and charged premiums will probably not enter into income and, in effect, become a 100% deduction. While this interim treatment will not assure the same treatment in the "ultimate" solution, it should tempt mutual companies at least to prepare to issue indeterminate premium participating business. This approach would help forge a common front on this particular item during the negotiations on the ultimate solution.
- ii. The existing tax leverage on participating policy updates has been primarily in the increase in required interest. If the compromise pattern holds in the ultimate solution, the tax leverage may occur in shifting 80% deductible dividends into 100% deductible guaranteed benefits. This might lend pressure, beyond considerations of the G-3 risk, for stronger reserve standards than for policy update cash values.
- iii. Excess interest, particularly when tied to an outside index, may well become 100% deductible in both the compromise and ultimate solutions. At today's interest rates the loss of management discretion may become an acceptable price to pay for competitive performance, and the 20% difference in deductibility may translate into over 50 basis points of tax based upon reserves.
- iv. A new marginal tax rate of 36.8% will emerge.
- v. Most mutual companies will shift phase down to Situation A. This will greatly increase the value of 818(c) and further complicate the allocation of tax to the policy level. Some companies will conclude that they generate a large negative tax in the year of issue and use this item to improve new business dividend illustrations. The mirror image of this conclusion will charge a larger portion of the tax burden to older duration issues which had the 818(c) election.
- vi. The SOA Dividend Philosophy Committee members will resign en masse when requested to review S-7 in light of these developments.

MR. O'SULLIVAN: The allocation of FIT becomes a much more important issue as the excess of the earned rate over the valuation rate increases. The difference between a portfolio basis and a new money basis is drastically reduced when considered on an after-tax basis under the current law.

It is the after-tax rate which is important to a policyholder. Unless the industry can pass-through a competitive rate of return, it would seem that whole life will be eclipsed by "buy term and invest the difference" since the policyholder will be in a lower tax bracket than many companies. Without a major revision in the tax law, it is conceivable that the future will be one of unreasonably high taxation with the recurring appearance of "tax gimmick" products, each of which has a relatively short life.

One of the incidental results of some reinsurance agreements is that they may result in significant tax savings. On the one hand, it could be argued that this issue will be unresolved for many years, and hence it would be foolish to spend money you may not have. On the other hand, if these savings are not distributed, the cost of insurance is not being lowered for current policyholders.

MR. PETRY: Previously I mentioned a possible tax use for special one-time dividends. Let me explain my concept.

For the last two years or so companies have entered into numerous modified coinsurance arrangements. Additionally, the IRS has proposed a change in the tax impact of mod-co. Also, there is an industry proposal for stop-gap taxation that, by some sources, has a good chance of being enacted. Then what is to follow stop-gap?

In this environment, what is the dividend actuary to do?

I suggest that one possible solution is to have your current dividend scale reflect a conservative tax impact. That is, a tax that will prove to be safe given all this uncertainty.

Then reflect in special one-time dividends part of mod-co, two years of stop-gap or whatever. This dividend would be payable on old and new issues but not until a duration such that the duration of the policy plus the issue year of the policy would be, say 1988, a year in which your company's returns for 1980, 1981 and 1982 will have been audited and appealed.

If the audit disallows some portion of the mod-co effect on taxes, then the special dividends could be reduced; if mod-co stands, the special dividends may even be increased.

After stop-gap, the new issues could reflect the new taxation. At this point you could institutionalize the tax change in the dividends for the older policies that went through the stop-gap years.

If you feel you will be flip-flopping from Phase I to Phase II and back again, then have a dividend scale to reflect the more conservative impact and use special dividends to reflect the actual changes and their impact.

MR. GREENLEE: Dick, I am intrigued by your suggestion that companies that find themselves newly entered into a Phase II negative position might consider giving an enormous credit to new issues while charging a large tax burden to existing inforce. How could an actuary who does this claim to be conforming to generally accepted principles?

MR. MILLER: Unfortunately, if you do a marginal tax calculation on your inforce business, this is the result in the flip-flop in phase in going from a Phase I (Situation B) to a Phase II (Situation A) tax basis.

MR. GREENLEE: These older policyholders, however, never received the credit. Don't you have to use a little judgment in this situation?

MR. MILLER: I assume this would be done. However, what I had suggested would be an extremely attractive argument to those who want to promote new business.

MR. GREENLEE: I guess this is a way to get on Paul's top twenty list. Paul, in your futuristic consumer report scenario, do you expect the actuary to state the inevitable - that experience is expected to deteriorate and the dividend scale cannot be maintained?

MR. PETRY: At some time mortality gains and productivity gains must be offset by a decrease in investment income. The actuary may have to vary the established scale, but the reason for the decrease must be explained to top management.

MR. DALE GUSTAFSON: Everything that has been said is accurate. I would like, however, to expand on the Northwestern's direct recognition program.

We introduced a new policy series on January 1 of this year. The market loan rate was not available in enough of our territory to make that a viable approach. We had to do something with regard to equity.

Since we decided to do direct recognition, we have come to like it. We are, however, aggressive and enthusiastic supporters of the ACLI's and NAIC's market loan rate legislative programs. Every Universal Life program that I have seen has direct recognition. So we were not first in this regard. Also, Franklin Life introduced direct recognition for all of its inforce business in 1981.

Starting January 1, 1983, Northwestern will offer another update program to every inforce policyholder willing to select direct recognition for his dividends.

MR. DALE HAGSTROM: I have two points to make. First, Franklin Life's direct recognition program considered only the loans made after a certain date. Loans made prior to this date were not considered for the direct recognition program on inforce business. Northwestern Mutual's program is different from Franklin Life's in that pre-existing policy loans are recognized.

My second point concerns Mr. Greenlee's surprise at the different treatment accorded policyholders of different duration when a company goes from a Phase I to a Phase II position. This treatment seems fair. It is true that the older taxpayers did not get credit, but neither did the company.

MR. GREENLEE: My problem with this concept is that these taxpayers will get the negative impact as their policies go off the books. They will be hit with the 818(c) adjustment coming through as earnings.

MR. HAGSTROM: This is true, but so will the company. If the company passes through to the policyholders what happens to it, this is fair.

The real problem, in this situation, is going to be replacements.

MR. GREENLEE: At this time I will conclude with a few brief comments. Significant improvements are occurring in providing management with

information concerning dividends, in the control of the dividend preparation process, and in the area of public disclosure.

Equity is a dynamic concept which is difficult to define, but the absence of equity becomes apparent through the destabilizing effect on a company's financial structure. Among the current problems of equity are the proper allocation of investment income and the proper allocation of FIT. The impact that these parameters have on new product design should not be overlooked.

The philosophy and use of termination dividends have been questioned. Termination dividend practices need to be rethought in light of the new Standard Valuation and Nonforfeiture Laws as well as in the light of an investment climate where large changes in yield rate can occur over relatively short periods of time.

EXHIBIT I

Formulas 1, 2, and 4 from the paper "An Expanded Financial Structure For Ordinary Dividends"

1) Equation of Equilibrium:

$$\begin{aligned} f_n V_n &= (P_n + f_{n-1} V_{n-1}) (1+i') + (\Pi_n - P_n) (1+i') \\ &\quad - [E'_n (1+i') + E''_n (1+\frac{i'}{2})] - q'_{n-1} [F_n (1+\frac{i'}{2}) - f_n V_n] \\ &\quad - w'_{n-1} (C_n - f_n V_n) - FIT + G_n + R_n \\ &\quad - D_n [1 - mq'_{n-1} + \frac{i'}{2} q'_{n-1} (1-m)] \end{aligned}$$

2) Dividend:

$$\begin{aligned} (1 - mq'_{n-1}) D_n &= (P_n + V_{n-1}) (1+i'') - V_n + (\Pi_n - P_n) (1+i'') \\ &\quad - [E'_n (1+i'') + E''_n (1+\frac{i''}{2})] \\ &\quad - q'_{n-1} [F_n (1+\frac{i''}{2}) - V_n] - w'_{n-1} (C_n - V_n) \\ &\quad + (FIT)_{CR} + G_n + R_n - [S_n (1 - q'_{n-1} - w'_{n-1}) - S_{n-1} (1+i'')] \end{aligned}$$

4) Dividend:

$$\begin{aligned} (1 - mq'_{n-1}) D_n &= (P_n + V_{n-1}) (1+i'') - V_n + (\Pi_n - P_n) (1+i'') \\ &\quad - [E'_n (1+i'') + E''_n (1+\frac{i''}{2})] \\ &\quad - q'_{n-1} [F_n (1+\frac{i''}{2}) - V_n] \\ &\quad - w'_{n-1} (C_n - V_n) + (FIT)_{CR} \\ &\quad + G_n + R_n - [B_n - (1 - mq'_{n-1}) (\Delta D_n)] \end{aligned}$$

EXHIBIT IIAt Introduction of Rate-Book class:

$$\begin{aligned}
 B_n &= \frac{E_o}{a_{\overline{k}|}} & n \leq k \\
 &= g_n V_n & n > k \\
 S_n &= -E_o & n = 0 \\
 \\
 S_n &= - \left[\frac{E_o}{a_{\overline{k}|}} * a_{\overline{k-n}|} + \text{Retro. Acc. of } (\Delta D_t) \right] \text{ for } n \leq k' \\
 &= - \frac{E_o}{a_{\overline{k}|}} * a_{\overline{k-n}|} & k' \leq n \leq k \\
 &= \frac{g_n V_n + (1+i'') S_{n-1}}{1 - q'_{n-1} - w'_{n-1}} & n > k
 \end{aligned}$$

On Renewal:

Hold S_n and (ΔD_n) at the above values;

Use new values for q'_{n-1} , w'_{n-1} and i'' :

$$\begin{aligned}
 B_n &= [(1 - mq'_{n-1}) (\Delta D_n) + (1+i'') (-S_{n-1}) \\
 &\quad - (1 - q'_{n-1} - w'_{n-1}) (-S_n)] & n \leq k \\
 &= g_n V_n & n > k
 \end{aligned}$$

EXHIBIT III

IYM AND POLICY LOANS

$$i' = (1-\beta) [\alpha i^{IBYM} + (1 - \alpha) i^P] + \beta i^L$$

β = Ratio of Policy Loans to fV

α = Weight given to IYM interest

Several Points of Interest are:

. For Typical General Accounts:

$$\frac{1}{3} < \alpha \leq 2/3$$

. For a Very Short Asset Portfolio:

(Individual Deferred Annuity and Universal Life)

$$\alpha = 1$$

. i' on a Portfolio Basis with Full Weighting for Policy Loans

$$\alpha = 0$$

. α involves the C-3 Risk

