TRANSACTIONS OF SOCIETY OF ACTUARIES
1952 VOL. 4 NO. 10

A METHOD OF CALCULATING GROUP TERM DIVIDENDS

ROBERT E. LARSON

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ARTHUR G. WEAVER:

Mr. Larson's method of calculating group term dividends is based on ten broad objectives. All of these objectives are essentially practical considerations, designed to provide reasonable equity between policyholders while safeguarding the financial stability of the group operation. To the list might be added two other objectives:

1. The group term dividend formula should be consistent with the formula used for other group lines, *i.e.*, group term, group permanent, group A & H, etc., formulas should reflect the same objectives, treatment of excess claims, etc.

2. The formula should be in such a form that its factors can be readily tested and modified if necessary in subsequent years. This seems important in view of the continuing nature of group insurance and the wide fluctuations possible in claims and expenses. Numerous formula refinements of the type suggested by Mr. Larson make the evaluation of proposed modifications extremely difficult.

The most intriguing part of the paper, in my opinion, is the section relating to excess claims. The suggestion is to limit the claim charge for any one policy in any one year to a maximum of 150% of the basic premium for that year. The cost of this limitation is to be spread among all the groups; the size of the excess claim charge has been determined by assuming that the probabilities of the occurrence of 0, 1, 2, . . . deaths in a year may be computed by the Poisson distribution.

It would be interesting to know if the author's mathematical development assumes a fixed benefit per life or allows for the greater fluctuation possible under benefits graded by salary or employment status. This point assumes greater importance now that New York has removed the previous limitation of $20,000 group life insurance on any one individual. Has any attempt been made to extend the mathematical theory to the group A & H line where both the claim frequency and the amount of benefit are variable factors?

In addition to charging all claims up to 150% of basic premium, the author proposes to charge against the individual group all expenses in-

curred, an excess claim charge and a contingency reserve contribution. Provided there are no terminations, any charges not collected in the current year will be repaid in subsequent years. In practice there would be some lapses each year and the excess claim charge would include allowance for uncollected charges on these policies.

A further problem arises due to the natural desire of management to have the group operation as a whole self-supporting each year. This objective can be secured more readily if the excess claims are assessed only against cases earning dividends. On the other hand, there is a definite limit to the amount of risk spread charge that the individual policyholder will accept. The final test of any group dividend formula must be its ability to produce dividends meeting the narrow tolerances permitted by competition. If dividends are too low, the policyholder will transfer his business elsewhere; if too high, dividends on other policies are likely to suffer.

The use of basic (*i.e.*, manual) premium to determine the maximum claim charge runs into practical difficulties. Both group life and group A & H basic premium rates are graded by size of case and consequently may not be entirely suitable for the purpose. Furthermore, the ratio of basic to actual premium may not be secured as readily as Mr. Larson suggests. It may streamline the dividend calculation without serious loss in equity if we use actual premiums.

The risk spread charges determined by the author involve points of discontinuity at 100, 200 and 300 lives. For example, a group with a $3,000 average amount of insurance per life would have a risk spread charge of $270 or $150 depending on whether there are 300 or 301 lives. Furthermore, while a risk spread charge of $150 may be adequate for a group of 301 lives, is the same dollar charge also adequate for 1,000 lives or 10,000 lives?

I have analyzed the John Hancock 1951 experience along the lines suggested by Mr. Larson. Some 3,000 policies are involved, covering over 1,000,000 lives. Since less than 10% of the policies had claims exceeding 150% of premium, a further analysis was made assuming the maximum claim charge to be 100% of premium. While the excess claim charges developed would not necessarily apply to other companies because of varying underwriting, claims and administrative practices, the variation by duration and size of policy is instructive. Charges for claims in excess of 150% of premium confirm, in a general sort of way, those suggested by Mr. Larson. However, our statistics suggest his factors may be rather high for policies with a high average dollar amount of insurance per life. Furthermore, there is some variation by duration, with the later durations requiring a slightly higher dollar charge. The dollar charge shows little

variation by size for groups up to around 200 lives, and then reduces gradually for larger groups.

Charges for claims in excess of 100% of premium show quite a different pattern. The dollar charge increases steadily as the number of lives increases. A peak is reached somewhere between 500 and 1,000 lives and the dollar charge then drops slowly. Expressed as a percentage of premium, the charges on both bases drop as the number of lives increases.

Mr. Larson does not dwell at length on the allied problem of contingency reserve contributions. Apparently this is his only source of surplus, and the amount is sharply controlled by the force of competition. It would be interesting to learn to what extent the author would vary the contribution by size and duration of individual groups, and, for those companies operating in New York, how the minimum contingency reserve of 2% of premium less dividends would be developed.

HERBERT J. STARK:

Mr. Larson's paper is most refreshing, both in the objectives he has so clearly set forth, and in the direct approach to those objectives shown in the formula he presents. The portions of the paper most interesting to me are Mr. Larson's fourth and sixth objectives and the means chosen to carry them out.

Mr. Larson's fourth objective is to minimize year to year fluctuations in dividends for a particular group, and this is accomplished by the deduction of a reserve and by restrictions on the year to year change in dividend, subject to the availability of a sufficient amount in that reserve. From time to time we have discussed at Metropolitan whether it would be advisable to adopt some such mechanism as that proposed by Mr. Larson to smooth out year to year fluctuations in dividends. Since we have operated satisfactorily for many years without such smoothing, we have not yet felt it desirable to change our formula in this direction.

Several questions arise as to the amount and status of this reserve, such as whether the actual reserve on hand on profitable groups under Mr. Larson's formula can be counted upon to exceed the corresponding deficit in reserve on unprofitable groups. One other question relates both to the objective and to the means for its accomplishment: If unfavorable trends in a group's experience eventually require increases in premium rate, will not the maintenance of dividends for several years beyond the period of good experience by the operation of the reserve tend to cause resistance to and delay in the premium rate increases required?

Mr. Larson's sixth objective is to distribute excess claims among all cases rather than charge them to the particular group. He gives strong

arguments for doing so and the suggestion seems an attractive one. Several points should, however, be noted.

I wonder if the uniform maximum claim charge of 150% of the basic premium for the year, used by Mr. Larson, is an oversimplification. For some groups the chance of claims exceeding 150% of premiums is markedly different than for other groups. Consider two policies each insuring 300 employees for an average of $2,000 at a premium of $6,000 per year. If in one case the policy provides a uniform benefit of $2,000 for each employee, at least five employees would have to die in a given year before excess claims would arise. Unless there is a catastrophe hazard for that group, this is a relatively unlikely event. On the other hand, if the other policy provided amounts ranging from $1,000 for the lower paid employees to $10,000 for the high paid, excess claims would arise in any year when one of the latter group died. Thus excess claims would be more likely in the latter case, and it would seem desirable to make a distinction between the two cases, either in the maximum amount chargeable directly to the group or in the excess claim charges normally deducted. The same type of argument might justify differences in the excess claim procedure for groups differing in average age, in industry hazard and in other factors.

While the foregoing comments are addressed merely to the means Mr. Larson has adopted, his sixth objective is in conflict with another objective which seems to be a desirable one. That objective is to give at least as favorable dividend treatment over the years to policies which over the years develop stable claim experience as is given to similar policies which over the years develop widely fluctuating claim experience. If two policies were undertaken which after twenty years' experience had each the same total premiums and the same total claims, Mr. Larson's formula would in general have paid greater dividends over the period to that policy which in one or several years of the period had claims exceeding the maximum claim charge than would have been paid to the policy which did not have excess claims in any year. This it seems to me should be avoided.

I would not wish the comments I have made to be considered as minimizing the merit of Mr. Larson's excellent and stimulating paper. Mr. Larson's objectives are desirable ones and the devices he has suggested for their accomplishment are, I think, well worth a trial.

ROBERT C. MCQUEEN:

At the beginning of Mr. Larson's paper he sets as his purpose the usefulness of his approach to actuaries of companies entering the group business who will be taxed with the problem of establishing a group term dividend formula. Since our literature in recent years is barren of any solution

to this problem, we may expect that students will also turn to the paper as a source of reference.

The author of this discussion is presenting his views because they differ with Mr. Larson's in a number of respects, and he feels that students and actuaries should have the advantage of being able to read as many opinions as possible, particularly since the subject is usually approached somewhat empirically. The Union Central Life Insurance Company began to issue group term policies only two years ago and the problem of establishing a satisfactory dividend formula has been an important consideration in the promotion of its group insurance.

Mr. Larson sets forth a list of ten specifications which have been his guiding principles in deriving a suitable formula. Obviously any list of objectives must be drawn up to fit the particular circumstances in which the company entering the group business finds itself. For example, the company's surplus position, sales efforts and the quality of its Ordinary agency force will to some extent determine these objectives.

Mr. Larson states in his first objective that the company's group term business should be self-supporting and contribute to the company's general surplus. No one can quarrel with this objective if it is to be realized over a long period. Group insurance, however, is no different from Ordinary insurance in that initial expenses are heavy. Furthermore, a company new to the business must make a capital investment in the form of personnel experienced in group matters and if expenses are regarded realistically it is to be expected that the surplus for the group line will be negative for the first few years.

I would like to interpolate at this point that our company is using its regular agency force and home office executives to a much greater degree than has been the case with many other companies with which I am familiar. Even so, we have found that our group department ran slightly in the red in 1951 and we expect that we will still be in the red this year although we will be making substantial progress toward self-sufficiency.

I applied Mr. Larson's formula to several of our groups which have already reached their first anniversary and on which we have paid a dividend. Using our expense and other factors where they are not specifically given by Mr. Larson, I discovered that his formula produced no dividend in several cases where our return was approximately 15% of premium. For example, on a case with 94 lives and approximately $11,600 of premium our dividend at the end of the first policy year with no claims was $4,332.49. Mr. Larson's dividend using our factors is only $431.19.

If we used Mr. Larson's formula we would probably be operating our group department in the black even during the first year, but we feel that

it would seriously hamper the sale of new business and inspire conservation problems that would be difficult to solve. As a company new in the business we cannot argue that our service is the best in the field or that we have a long history of good performance. We must depend to some extent upon a good return in the early years to satisfy our clients and bring new ones to our door.

Mr. Larson states in his fourth objective that year to year fluctuations in the dividend as a percentage of the current year's premium should be as small as possible. He has introduced a number of checks and balances in his calculation sheet to produce this result. This objective may be practical for a small or even medium-size case, but for the large case it might create a severe conservation problem. Unfortunately brokers and group consultants frequently use the "retention" (difference between gross premiums and the sum of claims and dividends) as a criterion of good performance and the criterion is thus passed on to the group client. Even in a large group the actual claims paid may vary significantly from year to year. If the dividend is artificially stabilized, the "retention" must fluctuate.

In our dividend formula we make no provision for stabilization of the rate of dividend as a percentage of premium. On small cases this means that the employer's cost as measured by the difference between gross premiums and dividends may change noticeably from year to year. However, our coinsurance element on claims for small cases is stronger than Mr. Larson's so that the variation is reduced.

We do not hold any reserve for unreported death claims, preferring to delay the dividend calculation as described in Mr. Larson's paper. While this approach is satisfactory for group life, it would not be appropriate for group accident and health insurance. Perhaps the fact that we have not yet entered the A & H field may have influenced our judgment in this respect. Incidentally we do not feel that the fact that we do not write A & H has hurt our group life sales to any great extent.

As previously stated our formula has a stronger coinsurance or risk-spreading factor for small cases. On a case of 25 lives, for example, we think that a charge of 150% of premium plus the excess claim charge is too high even if the group has experienced a claim equal to three or four times the premiums. Good group underwriting with regard to setting proper maximum limits will also help to ameliorate this problem.

Mr. Larson's decision not to pay any dividend when the calculated return is less than 2% of premiums would seem to apply only to small cases. Perhaps a fixed dollar minimum would be better. We have no such restriction and the other day one of our agents told me he was delighted to de-

liver a dividend of $4.13 to one of our customers. In any event for a case of, say, $100,000 in premiums it would seem undesirable to withhold a $2,000 dividend because of an arbitrary rule.

Mr. Larson's paper points up admirably the too little known fact that group dividends are apportioned on a fund accounting basis. Essentially the dividend is equal to the excess, if any, of gross premiums over the sum of claim charges, expense charges and contribution to surplus. The actuary who derives a group dividend formula for his company is faced at once with the following questions:

1. How shall the total expenses allocated to the group department be divided between acquisition and administration and how shall the acquisition costs be amortized? This alone would be a good subject for a separate paper.

2. What proportion of the actual claims incurred for each group shall be charged to the group's own experience and how should the proportion vary between big groups and little groups?

3. What form should the contribution to surplus take and what ultimate surplus objective should be anticipated?

Mr. Larson has apparently made no distinction between the two types of expense listed above, since he makes no provision for amortization. If all first year expenses are charged directly in the first year, the dividend at the end of the year will be low, but the group business will be more self-supporting as previously pointed out. Our first year expense amortization method provides for no fixed period over which the initial loss is recouped. The actual period depends on the size of the group, the actual claim experience incurred and the average amount of insurance per life.

In defining a factor for contribution to surplus, we might remember that it is easier to withhold funds in good years than in bad years, so that the factor should tie in with the claim experience in the current year. The traditional surplus objective seems to be 50% of premiums less dividends. Interest earned on Mr. Larson's contingency reserve apparently does not accrue to the group's advantage, while our formula takes account of interest earned on the various elements in the fund and distributes or charges the interest in proper fashion.

Once having determined appropriate factors for expenses, claims and contribution to surplus, we pay whatever dividend comes out of the machine without arbitrary adjustments. I found that the second page of Mr. Larson's worksheet containing the checks and balances was considerably more formidable than the fund accounting page and I wondered whether the accuracy of charges on the first page might not be affected by the adjustments on the second page. The answer to this is, of course, that Mr.

Larson has tested his formula by applying it to various cases and is satisfied with the results. That, after all, is the important criterion of any formula.

While Mr. Larson's paper applies only to group term insurance, it is possible to apply the principles to group permanent. The group term formula can be thought of as a special case of the general group formula in which the cash value at the end of the year is zero. Our company writes a number of group permanent cases each year in connection with pension trusts and we have tied our formulas together in this manner.

Since this discussion does not describe the Union Central's formula in sufficient detail, I will not inflict upon the Editor the task of reproducing our worksheet. If, however, any member would like to have a copy for reference, I shall be glad to send him one on request.

WILLIAM W. KEFFER:

Mr. Larson's paper is an excellent summary of the problems and objectives of a group dividend formula. Although he confines himself to an analysis of group life insurance his reasoning is in general applicable to the casualty field, and I should like to comment on some of the difficulties encountered in experience rating casualty business.

1. *Excess Claims and the Insurance Principle*

It has been common to write group term business with a one-year rate guarantee. If no arrangement for retroactive charges exists, as is usually true, the insurance company must look for recovery of losses exceeding the premium on a particular case in any one year to one of two sources: a margin withheld from returns made to all policyholders with satisfactory experience; or retentions out of future good experience on the particular case in question. As pointed out by Mr. Larson, the latter is unworkable except in very limited degree, and the problem, therefore, exists of spreading claims in excess of 100% of premium less expenses among all groups, rather than Mr. Larson's hypothetical 150%.

Comparison of the table of excess claim charges prepared by Mr. Larson with an average premium of about $10 per $1,000 of group life insurance indicates that even the cost of normal losses in excess of 150% can be expected to require a charge of from ¼% to 1½%, on his assumptions. Considerably higher margins are, therefore, indicated as essential in any "prospective" rate for casualty or life business, if 100% is the maximum retroactive charge.

Suggestions have been made for shorter guaranteed periods and for experience rating based on permissive additional retroactive charges if ex-

perience is poor, but these tend to reduce the insurance element and hence lessen the value of our services.

2. *Importance of Initial Rate*

It has been said that the initial rate charged should be unimportant in the ultimate cost picture; adequate margins could be included, and adjustments made retroactively.

However, competition and the buying habits of our clients have forced group casualty rates down to where there is serious question whether margins sufficient for operation of the risk-spreading principle outlined by Mr. Larson are available. If we charge every policyholder a rate covering only our best estimate of expected claims plus expenses, we are certain to lose money, because some policies will turn out better and we will make returns, while a rate guarantee prevents recovery on the losers.

The inclusion of reasonable margins in the initial rate will reduce the proportion of cases with excess losses and permit lower retrospective retentions from good business. A policyholder has, therefore, sound reason to expect better treatment from companies with such a rate structure, and the recent increases in casualty rates by major group-writing companies are no cause for alarm among our cost-conscious clients, at least so far as administrative costs are concerned.

3. *Claim Reserves*

In the group casualty business there is no long-deferred liability nor expectation that the early years of the contract may give rise to a below-normal volume of claims requiring reserves—such as total disability under group life.

Therefore, reserves against the liability in case of termination must be built up as rapidly as possible, and this is sometimes difficult to explain to the policyholder. I believe the best practice is to establish such reserves on as closely-estimated a basis as possible, and then to settle immediately on terminations on the basis of these estimates, rather than to enter lengthy and problem-producing arrangements for return of any margins developed, or assessment of any excess charges.

We have found actual schedules of claim run-outs very helpful in explaining the need for such reserves to both active and terminating policyholders.

4. *Amortizing Expenses*

Initial expenses are, of course, relatively high, and although increasing dividends are desirable (Mr. Larson's objective 3), some modification to permit early returns seems entirely reasonable. In spite of some increase in

"switching" and shopping among carriers, group lapse rates do not appear high enough to endanger a plan spreading first-year costs over perhaps the first five years of the contract.

JOHN C. MAYNARD:

The usual form of mortality charge used in group dividend formulas consists of actual claims weighted by a credibility factor together with "expected" claims (according to a chosen standard) weighted by the complement of the credibility factor.

The form of mortality charge described in the paper is an unusual one. A maximum loss ratio is selected. The mortality charge then consists of the actual claims below the maximum loss ratio, taken at full credibility, together with the "expected" excess claims, also taken at full credibility. This form of mortality charge has the advantage that it has an absolute upper limit, but the disadvantage that it will be subject to the fluctuations in actual claims in the years when actual claims are less than the maximum. In order to prevent these fluctuations from affecting the actual dividends, it has been necessary to introduce several rather arbitrary rules which constrain the dividend within narrow limits. The question naturally arises whether the arbitrary rules will be capable of withstanding the pressure of the fluctuations in the theoretical dividends, and whether it would not be desirable to design a mortality charge which was less subject to fluctuation.

The idea that a mortality charge should have an absolute upper limit is thought-provoking, and it is likely that this idea could be adapted with advantage to many dividend formulas.

J. ARTHUR GREENWOOD:

Mr. Larson quotes, with approval, from a discussion of Mr. Keffer's paper. I feel that another discussion of the same paper, that of Mr. E. E. Cammack,[1] is even more in point: "If the question were set in our examinations as to how dividends on Group Insurance are calculated, I think the correct answer would be as follows: They are calculated in advance by the Group Salesman and the total amount paid in dividends has no relation whatever to the profits earned on the Group business."

The Manhattan Life has so far calculated its group dividends without excessive pressure from its salesmen. It has refused to issue retention letters, either guaranteed or estimated. Under pressure, it will put out a two-year illustration of the dividend on a constant case. If the client or the agent asks nothing about dividends, he is told nothing.

[1] *TASA* XXX, 604.

The formula used is:

Current dividend equals cumulative gross premiums, plus mortality savings, less cumulative contribution to contingency reserve, less cumulative payments to agents, less cumulative home office expense charges, less cumulative "expected claims," less cumulative conversion charges, less cumulative premium taxes, less cumulative previous dividends.

The contingency reserve contribution is intended to favor the better groups; it is a percentage of gross premiums less dividends. The "expected claims" are neither the gross expected claims by the valuation table nor the expected in the light of company or intercompany experience, but a figure roughly halfway between the company experience and 100% of gross premiums. This redundancy is intended to cover losses on unprofitable groups. The mortality savings are computed in the form:

z times (cumulative "expected claims" − cumulative actual claims),

$$\text{where } z = .3 + .007\ \sqrt{\text{life years}}\ .$$

This formula is a barefaced compromise between a credibility formula, which would give no weight to the actual experience of the smallest groups, and a retention formula, which would give 50% credibility to all groups with no claims. The conversion charge gives credit to cases where the agent has actively and successfully solicited conversions: it is \$75 per M on conversions of less than $1\frac{1}{2}\%$ of terminations, \$50 per M up to 3%, \$25 per M up to 5%, and zero beyond; provided that until five lives have converted the full \$75 is assessed.

No attempt is made to avoid fluctuations from year to year. On group life the formula dividend is paid, regardless of amount; on wholesale, if the formula dividend is less than \$1 per M, no dividend is paid. All accumulations are made from the inception of the case except that, to meet Mr. Larson's objective 6, when a good year follows a bad year a "fresh start" will be made, charging the previous losses against the group department as a whole and charging the individual case a "fresh start" assessment of 45% of acquisition costs. This "fresh start" is used when (1) there are no claims and no conversions in the dividend year, (2) the dividend produced by accumulation would be negative.

(AUTHOR'S REVIEW OF DISCUSSION)

ROBERT E. LARSON:

I appreciate very much both the quantity and quality of the discussions of my paper and wish to thank the six men who contributed to the discussion.

Mr. Weaver suggests that "there would be some lapses each year and the excess claim charge would include allowance for uncollected charges on these policies." If there should be a net loss from lapses, a charge would naturally be necessary, either as a part of the excess claim charge or otherwise. I am reasonably certain, however, that my method would produce a net profit from lapses.

Mr. Weaver also points out that the excess claim charges appearing on page 310 of the paper involve points of discontinuity. This is perfectly true and may possibly be more objectionable than I had originally thought. This situation can be improved by using more than four size classifications or corrected by using a formula under which the percentage is a function of the number of lives.

Mr. Weaver points out that the use of 100% rather than 150% as the maximum claim charge would result in an entirely different pattern of excess claim charges. This is perfectly true and points up one reason for the choice of 150%. I should like to emphasize that, although the choice of 150% was in the last analysis purely arbitrary, there is a range within which the figure should lie. If the figure is too high, objective 6 of my paper will be largely defeated. If the figure is too low, too little credit will be given to the experience of the particular group.

I am reluctant to mention a specific range since that would be just as arbitrary as the 150%. I am willing to state, however, that in my judgment 100% is too low.

In the last paragraph of his discussion, Mr. Weaver mentions the source of surplus. I feel that my method will produce surplus from three major sources: contingency reserve contribution (item 15, page 312), profit from lapses, and interest. I did not make a specific recommendation with respect to item 15 because I felt that there was room for difference of opinion and because I felt that the actual factor was not fundamental to the method. In testing the method, however, I used 3% of premium for this item. Mr. McQueen, in his discussion, mentions that his company takes interest into account in the dividend formula. I feel that interest is a legitimate source of surplus on group term business.

In counting on interest and profit from lapses to contribute to surplus, I am of course assuming that the actual reserve on profitable groups will exceed the deficit on unprofitable groups. Mr. Stark raises the question of whether this assumption is justified. I am convinced that it is, but I cannot, unfortunately, quote supporting company figures.

Mr. Stark also wonders whether minimizing dividend fluctuations might not tend to delay rate increases for cases under which a period of very good experience is followed by an unfavorable trend. Although this

point is very well taken, Mr. Stark's concern with it is greater than mine for two reasons. First, I feel that my method is more sensitive to a really unfavorable trend than Mr. Stark's comments would indicate. Second, I feel that the advantages of minimizing dividend fluctuations outweigh the disadvantages, including the one under discussion here.

Mr. Stark also mentions that the use of a maximum claim charge has the effect of discriminating in favor of a group with widely fluctuating experience as against a group with stable experience. The seriousness of this objection is necessarily a matter of opinion. I regard it as an unfortunate corollary of objective 6 but not serious enough to outweigh the advantages of objective 6. A small case is bound to have widely fluctuating claim experience unless it has no claims. For larger cases it seems to me reasonable to assume that fluctuation in group life claims are due to chance. On this assumption, there is no reason to become unduly concerned over favorable dividend treatment to widely fluctuating cases because such cases will not be common and because such fluctuation could have just as well appeared in some other case—and, in fact, will in the very long run.

Both Mr. Stark and Mr. Weaver question whether the excess claim charge should not take into account the fact that excess claims are less likely under a flat schedule than under a salary or occupation schedule. I must confess that this particular point gave me more trouble than any other single problem. In my experimental work, I even went so far as to devise an excess claim charge which was a function of both the number of lives and the ratio of maximum coverage on one life to average coverage per life. I finally decided to discard this idea as being too complicated, but I am still very close to neutral on the question. I might say, in answer to Mr. Weaver's question, that I arrived at my recommended charges by assuming a flat schedule and then recommending the highest charges that my theoretical computations would justify.

The formula used by Mr. McQueen's company apparently produces much higher early year dividends than would be produced by my method. He cites a specific case involving 94 lives and no first year claims. The only comment I can make to that is that in my judgment his dividend is much too high. I must admit, however, that he has a pertinent point when he says that it may be necessary for a young group department to emphasize first year dividends in its sales efforts. Mr. Cammack's remarks, as quoted in Mr. Greenwood's discussion, would appear to be appropriate.

Mr. McQueen has apparently misunderstood my 2% rule. The rule I used is that, if the formula dividend is positive but less than 2%, pay 2% —not nothing as Mr. McQueen has assumed.

The question of amortizing first year expenses is subject to a great deal of difference of opinion. Although I favor charging expenses as incurred, I readily appreciate the arguments in favor of amortization. I deliberately avoided specific descriptions of items 13 and 16 in the Dividend Worksheet so that the worksheet could be used under either theory.

Mr. Keffer points out that "competition and the buying habits of our clients have forced group casualty rates down to where there is serious question whether margins sufficient for operation of the risk-spreading principle outlined by Mr. Larson are available." I agree with Mr. Keffer and, in fact, view present group casualty rates with alarm.

Mr. Maynard questions "whether the arbitrary rules will be capable of withstanding the pressure of the fluctuations in the theoretical dividends." My answer is yes.

I should like to emphasize that my paper was intended to present a method, rather than a formula. By this I mean that I recognize that each company has its own particular problems; the specific factors used in my paper were intended to be illustrations rather than flat recommendations.