Expenses

A. What are the current expense trends on Ordinary insurance? How are these being affected by electronic data-processing, negative premium accounting, automatic checks, new agents' contracts, sales of Term insurance?

B. How can expenses be allotted equitably for Term plans of short duration? Should special persistency rates be used in calculating the premiums for short Term plans or for decreasing Term riders?

MR. ARCHIE R. McCRACKEN: You will recall that Mr. Arthur Pedoe, in his 1961 paper to the Society entitled "Further Notes on the Trend of Life Insurance Company Expenses," described a method that has been used by the Canadian Association of Actuaries for a number of years to calculate a so-called "Ratio of Actual to Expected Expenses" for twenty Canadian life insurance companies. The steady upward trend of the ratios as shown in Table I of his paper has continued. The extension of this table for the years 1960 and 1961 is shown below:

RATIOS OF ACTUAL TO EXPECTED EXPENSES

	Year		
	1959	1960	1961
	Formula I		
L Companies.....	114%	115%	119%
S Companies.....	129	133	135
	Formula II		
L Companies.....	101%	102%	105%
S Companies.....	109	114	116

The ratios have been calculated on a total company basis, combining Ordinary and Group. However, it has been determined that if "expected" Group expenses were replaced by "actual" Group expenses as allocated by the companies in their annual reports, the over-all ratios would be altered by less than one-half of 1 per cent. The figures may, therefore, be considered as reasonably indicative of expense trends on Ordinary insurance.

I shall not attempt to guess how these trends are being affected by changes in data-processing, accounting, and collection procedures. With respect to agents' contracts, we have noted within our own company a

significant increase in recent years in those expenses which seem best expressed as a percentage of direct commission earnings.

If the formula used for calculating expected expenses were ideal, the resulting ratios would be independent of changing proportions of Term business. While I do not suggest that either of the Canadian Association formulas is ideal, I do think that they give sufficient weight to the number of policies and to the amount of insurance that any upward tendency resulting from an increasing proportion of Term insurance is quite negligible.

With respect to Part B, it seems to me that, with conversion added to the other means by which policies terminate, it is imperative to use special persistency rates in calculating premiums for convertible term plans and riders. I speak of conversion as a mode of termination because with the fairly common practice of paying full commission on the converted policy there is little opportunity to recover any of the Term policy expenses after conversion.

If a company has developed satisfactory expense factors and if it applies proper persistency rates and uses appropriate mortality rates, then the calculation of proper premiums for short Term plans would seem to be a matter of simple arithmetic. However, I doubt that much business would be sold with the premiums so determined.

MR. RUSSELL M. COLLINS, JR.: We have made attempts to compare our expenses at Minnesota Mutual with those of other companies and to study the trend of expenses of several companies on the basis of general information contained in the Annual Statement and using various methods and have come to the following conclusions:

1. It is very difficult to make meaningful comparisons between companies of even over-all expenses without more intimate knowledge of other companies' figures and accounting practices.

2. It is virtually impossible to compare trends over a short period of time. This is especially true in an age where more and more companies are changing over to electronic systems. A relatively long period must be observed in order to distinguish a trend.

3. Undoubtedly, expense levels are up from the levels of five years ago.

Although automatic systems will undoubtedly have a material effect on checking this trend, the insurance industry must also look in other directions. Our methods of compensating agents, our marketing methods. our approach to the public, our product lines—all must be examined with an eye toward providing our policyholders with an even better product at a lower cost, while at the same time providing good underwriters of

quality business with adequate incentives to write that business, if we are to compete successfully for the public's savings dollar.

MR. ALEXANDER J. BAILIE: A prerequisite in allotting expenses equitably is an adequate analysis of expenses. For Term plans of short duration it is particularly important to know clearly how much it costs to put a policy on the company's books, how much it costs to keep it there, and how much it costs to terminate it. When this information is available, and only when this information is available, can expenses be allotted equitably for Term plans of short duration or, for that matter, for any class of policies.

The term "adequate analysis of expenses" implies that there is sufficient expense information available for any class of policies to verify that the class is operating on a self-supporting basis. The analysis will be partly subjective to the extent that individual judgment plays a part in the allocation of those expenses which are not directly related to amount of premium, to amount of insurance, or to number of policies. The average premium per thousand of insurance and the average size policy of the Term plans must be considered in allocating these nondirect expenses so as to charge the Term plans with neither more nor less of these expenses than is equitable.

For Life and Endowment policies acquisition and termination costs can be reflected in the level of nonforfeiture values; that is, the amount allowed at termination can be determined in such a way as to minimize the possibility of gain or loss through withdrawals. On Term plans of short duration, however, withdrawals normally result in a loss. Since this loss on withdrawals is a characteristic of this type of policy, it should be taken into account in pricing these policies through the use of persistency rates appropriate for them. The loss on termination would be of less importance on Term riders, since the experience would be expected to follow that of the base policy.

MR. HENRY S. HUNTINGTON III: The allotment of expenses under Term plans of short duration presents a special problem when the normal amortization of the initial expense over the term period would produce premiums or costs higher than those for Term plans of slightly longer period.

The situation is obviously more difficult to handle under Term policies than under Term riders, and under smaller policies than larger ones, because of the higher initial expense per $1,000. Because the age slope of Term plans increases as the issue age advances, this problem tends to be more difficult at the younger ages.

These conditions point to two approaches to the problem of developing short Term plans with premiums which will bear their proper share of expenses without being out of line with those for longer Term plans. First, measures may be taken to reduce the impact of initial expenses on premium and cost levels. And, second, the plans of shortest duration may be limited to the older issue ages—where the call for the shortest period plans may be greater than at the younger ages, on account of the greater differences in premium in relation to the length of the Term period.

One method of cutting the per-$1,000 initial expense is by using a high minimum amount for short Term policies. A second approach is to extend the period over which the initial expenses are recovered by offering the short Term plans only on a renewable or automatic-conversion basis. If the premium payable at renewal or conversion is the same as would be applicable to a new applicant, and assuming the Term premium provides for the extra mortality costs on renewal or conversion, the saving in selection costs may be applied against unamortized initial expense under the original policy.

The second part of the topic suggests the possibility of using special persistency rates in calculating such premiums. It has been our experience that the short Term plans tend to show very poor persistency, so that use of special persistency rates simply aggravates the problem.

MR. DONALD M. ELLIS: It appears to be difficult to define equity as it pertains to the allocation of certain expenses to Term plans of short duration. Processing and administrative cost may be readily determined and allotted with considerable precision. However, indirect sales expense, that is, the cost of acquiring, training, supervising, and housing of the sales organization, amounts to a very substantial figure and its allocation is subject to considerable individual judgment.

"Equity" is defined in the dictionary as fairness or justice beyond mere legal requirements. This leaves the actuary considerable scope. A common method of allocating sales expense is in proportion to first-year premium and this appears to meet the definition of equity. Any lesser allocation than this to Term plans would seem hard to justify, yet the Term rates currently charged by many companies do not seem adequate to cover even an assessment of this order. Furthermore, I would like to suggest that within the realm of equity a substantially greater assessment could and should be applied to Term plans. It might well be that the methods commonly used today for this allocation are at least partially responsible for the tremendous swing in sales in recent years, away from permanent plans and toward Term insurance.

The acid test of the correct assessment would be a charge which would

be consistent with the costs which a company would incur if it carried on a large-scale sales operation marketing Term plans only. My guess is that we would get much closer to this result if we were to allocate our indirect sales expense in proportion to new business sum assured. However, with competition as intensive as it is today, it is probably out of the question to reverse the trend and put Term rates back up to a level which would support a larger share of sales expense.

MR. SIDNEY M. T. BAILEY: At Sun Life we use special persistency rates which include conversions when investigating premium rate bases for Term policies. For policies with cash values, the cash value itself can be calculated to write off the unamortized initial expense on termination, but no such means is available for Term policies and Term riders.

From various analyses we have made we find that the average number of premiums expected on 5-Year Term is just over 3 and on 10-Year Term about $4\frac{1}{2}$. These figures in themselves will indicate the necessity for allowing for lapses and conversions in the premium or the policy fee. Again, for decreasing Term riders we have recently been looking at our Family Income premiums and found that, by taking voluntary terminations into account, the Cammack premiums were increased by 5 to 10 per cent depending on age at issue, the higher figure being for the lower issue ages. This, I may add, was in a territory where we have a much lighter lapse experience than is general on this continent.

One problem that undoubtedly we have all met when using persistency rates in our Term premium calculations is that the theoretical premiums for 5-Year Term exceed those for 10-Year Term, except perhaps at the highest ages at issue. Thus, we cannot hope to make each plan self-supporting and have rather to attempt to insure that Term business as a whole is not being supported by non-Term business.