TRANSACTIONS OF SOCIETY OF ACTUARIES
1960 VOL. 12 NO. 33

Fractional Premiums

A. What studies have been made for the purpose of determining the additional premium required for payment of premiums other than annually (i) with normal billing and (ii) on the preauthorized check plan?

B. Traditionally, fractional premiums have been expressed as multiples of an annual premium. What other methods are being used?

MR. ROBERT G. WARD opened the discussion by describing the basis of fractional premiums introduced by the Provident Mutual late in 1957, at which time a system of quantity discount was announced under which the premium for yearly premium life insurance policies was $2 less per $1,000 on the portion of a policy in excess of $4,000 insurance. The factors which increase the cost of fractional premiums over yearly premiums are (1) loss of interest on premiums paid other than yearly, (2) loss of uncollected fractional premiums in the year of death and (3) the cost of additional premium collections. The first two factors are related to the amount of the premium while the third is a "per policy" expense independent of the premium or amount of insurance.

A study of collection expenses per policy showed that a collection charge of $.50 per premium per policy on other than yearly premium policies would be adequate to cover the cost of additional premium collections. Half-yearly, quarterly and monthly premiums were defined as 50.8%, 25.6% and 8.58%, respectively, of the yearly premium, plus a collection charge of $.50 per policy. This basis replaced the previous straight percentage basis of 51.5%, 26.25% and 8.83% of the yearly premium. The new basis resulted in larger policies paying lower fractional premiums and smaller policies higher than on the previous basis. Mr. Ward stated that to the best of his knowledge, the Provident Mutual was the first major company to use this approach of a percentage plus a constant for fractional premiums.

For premiums paid by preauthorized check the constant was reduced from $.50 to $.25, and for premiums paid under a salary savings plan the constant was eliminated entirely.

MR. RICHARD A. LEGGETT centered his attention on the cost of additional premium collections. In the analysis of expenses of The Travelers for the year 1958, it was found that the cost of each premium collection was about $.80 on regular business and $.25 on salary allotment business. The cost for preauthorized check business was not significant because of the small volume of such business. These figures were based on cost allocations of home office and branch office expenses for handling premiums and commissions together with expense for overhead in support of these functions. These unit expenses may be higher than they will be in the future since The Travelers was planning the conversion of billing to an electronic computer during the period studied.

The premium structure of The Travelers includes a policy fee of $7.50 for yearly premium insurance which was determined based on expense analyses through 1956. They felt that the extra cost of collecting fractional premiums clearly should be part of the policy fee. A study of then current expenses indicated that for monthly business the cost of each of the eleven extra collections was about $.65, or $7.15 per year. After adding the expenses of commissions and taxes to this figure and combining it with the regular yearly policy fee, they adopted a policy fee for regular monthly business of $1.25 per month, or $15.00 per year.

For monthly salary allotment and preauthorized check plans, a monthly policy fee of $.70 was adopted after the characteristics, including more favorable persistency rates, of these plans were studied.

Mr. Leggett said that the increased equity of this approach to fractional premiums was one important reason why The Travelers adopted the policy fee system rather than size groups or bands for grading premiums by size of policy.

MR. PAUL H. KNIES stated that all of the various methods for grading premiums by size of policy are based on the fact that certain expenses are of a "per policy" nature rather than a "per $1,000 of insurance" or "per $1 premium" nature. Since costs of premium billing and related operations are of a "per policy" nature, it is logical to extend the "per policy" concept of cost analysis to all modes of premium payment. This was done by the Metropolitan in their recent series of policies for amounts of $5,000 insurance or more. Where, for monthly premium policies, the company sends a coupon book to the policyholder once a year, the savings of such an arrangement can be taken into consideration. The Metropolitan recognizes the savings in the preauthorized check plan by using a constant deduction from the regular premium on a monthly premium notice basis.

The Metropolitan collects monthly premiums on an account or debit basis as well as by premium notices. Under the account basis, the "per policy" expenses are lower and the "per $1 premium" expenses are higher because the cost of billing is replaced by the collection commission. In theory the dividing line between these two methods of collection should be set at a point where one becomes more economical than the other. At the $12 dividing line which they established between notice and account business, their rates for each type of operation produce about the same monthly premium for the size of policy which is involved for a given plan and issue age. When the amount of monthly premium for a given policy is $12 or more, the premium on the notice basis is always lower than that on the account basis. For monthly premiums less than $12, the premium on the account basis is generally lower. In the few cases where this is not true, because of rounding, the smaller of the two premiums is used.

MR. JAMES R. GILLAN confined his comments to the effect on fractional premiums when annual premiums are based on the persistency of annual premium business only. He pointed out that to the extent that persistency on other than annual premium business is worse than that on annual premium business, fractional premiums should be increased to cover the higher cost of amortizing initial expense.

This approach will generally result in lower annual premiums and higher fractional premiums than would be the case if persistency rates for all modes combined were used to obtain annual premiums. Mr. Gillan stated that this approach could produce bases for fractional premiums considerably higher than the traditional ones, but that the relationship by mode of premium payment would be more valid. He pointed out that there are advantages in having lower annual premiums and in discouraging more frequent payments.

In response to a question by Chairman Clarke, it was found that persistency by mode of premium payment was not being given recognition in the fractional premium bases of those companies represented.

MR. NORMAN F. BUCK commented that the experience of the Lincoln National on preauthorized check business was about the same as on their regular half-yearly business and not much different from payroll deduction business, provided such factors as policy size are considered.