**TRANSACTIONS OF SOCIETY OF ACTUARIES
1953 VOL. 5 NO. 11**

ANNUITIES AND SETTLEMENT OPTIONS

A. What practical considerations are involved in deciding whether or not to adopt projected mortality rates in connection with individual annuities, settlement options, retirement income policies, and the various forms of group annuities?

If projected mortality rates are not used, what methods of providing for decreasing annuitant mortality are practical?

B. In view of increased administrative expenses, what are the arguments for and against imposing limitations on the granting of settlement options with respect to size of policy?

Is it practical to provide for the expense of administering supplementary contracts other than through the use of conservative mortality and interest assumptions?

MR. H. C. UNRUH stated that Provident Life and Accident has adopted for life income options in new policies the Progressive Annuity Table and $2\frac{3}{4}\%$ with the assumption that income commences in 1970. Although this initially understates the average income commencement date, they plan periodic revisions. The practical reasons for adoption of this basis were: (1) safety by realistic appraisal, as they write only non-participating business, (2) simplicity and (3) salability.

For retirement income policies, they use a constant commuted maturity value for each issue age, correlating with the life income settlement options, although a projected table would call for different commuted values by age at issue. They plan to accumulate auxiliary reserves to cover the true liability at maturity for the younger ages at issue. This is to be done by pure endowment premiums included in the gross premiums, and will take into account mortality and lapse rates.

Single premium immediate annuities are based on the Progressive Annuity Table with the assumption that income commences in 1955, the expected middle year of issue. Deferred annuities with a death benefit equal to the return of premiums or cash value, if greater, are treated on a consistent basis with retirement income policies.

By adopting more realistic mortality assumptions for group annuities, they anticipate less confusion in explaining to employers the functions of the interest and expense loading components of the premiums, since currently these explanations include an anticipation of adverse mortality. With regard to the guarantees in Deposit Administration contracts, he suggested that if projected tables are used it might be better to guarantee

the purchase price of annuities, say, for the first twenty years rather than for those purchased with the first five years' deposits.

MR. WALTER KLEM said that developments subsequent to the new mortality basis for annuities presented three years ago by Jenkins and Lew had confirmed the validity of their general views. He felt the probability of continued increase in the use of annuities and life income settlements was one practical consideration in deciding on the use of projected tables.

In devising a practical approximation to yearly mortality improvement at each age, the Equitable of New York derived one static table for use during a limited number of years. Study revealed their retirement income at 65 policy to be sufficiently representative of all types of future life income arrangements. By fixing on an average weighted duration (by amounts) from age at issue to age 65 among retirement income policies which reach maturity, they in turn established an average year of birth for payees under maturities arising from the current year's issues. The corresponding Jenkins-Lew table with Scale B was used as the single table with the proviso that in no event did they use a mortality rate applicable to a calendar year earlier than the current year. They found the results close to the more refined system described in the last number of *JIA*.

He mentioned that nonforfeiture values for individual annuity contracts would require special attention to the laws of the states of New York and Washington. There are eight other states with applicable laws, but as these permit the use of the proportionate parts rule in determining paid-up values, no new problems should arise.

In providing for decreasing mortality, he felt that past reliance on excess interest earnings as an offset had not worked too well, and that anything short of a system of definitely calculated reserve liability may not be entirely satisfactory.

MR. J. H. BRADDOCK reviewed the recommendations to limit the use of settlement options in the 1930's when yields were decreasing and the use of options was increasing, but thought that the restrictions then suggested would be inappropriate under present conditions. He pointed out that rates of election had decreased in the last five or six years, thus minimizing the impact of high administrative costs, which he estimated were probably now requiring close to a quarter of one percent excess interest. Assuming expenses of $40.00 for setting up a supplementary contract, with $1.00 a year for maintenance and $0.75 as the cost of making each payment, he concluded that supplementary contracts under about $5,000 principal were not paying their way.

One solution might be to limit the options by size of policy, but this

might lead to justifiable criticism that the insurance companies were not fulfilling their social obligations to small policyholders. The suggestion to eliminate guarantees entirely has the objection that widespread use of programming by agents requires some sort of guaranteed rates for options. Many companies set limits of ten dollar payments or one thousand dollars principal and he thought that limits of this type were realistic.

There are many other services, such as the payment of proceeds in one sum, for which companies make no specific charge to those for whom the service is performed, and the necessity or desirability of charging expenses directly against those who elect settlement options may be questioned. He thought that equity would be maintained so long as each group of policyholders contributed funds sufficient to meet the expenses of administering the options for the group, and urged the building up of funds for this purpose before the options become effective. This course is often followed in providing for other expenses, such as the cost of maintaining paid-up policies. It would then not be necessary to count on mortality or interest margins in settlement options to meet the expenses as incurred in the future.

MR. H. F. ROOD felt that settlement option payments of ten dollars a month were not of much value to beneficiaries under the present economy and were expensive to handle. In 1948, Lincoln National raised their limits to twenty dollars a month or minimum proceeds of two thousand dollars, and he said they had had no difficulty with these limits. He reported that several years ago they had tried a special one thousand dollar simplified policy without settlement options, but discontinued it partly because of lack of volume and partly because of agency objections. However, he thought there were opportunities where such a plan would work satisfactorily.

MR. G. C. THOMPSON said that it seemed inconsistent to have a minimum limit on settlement options but no maximum proceeds limit other than the maximum amount of insurance which would be issued to an insured, particularly when the maximum single premium annuity limit was for a lesser amount, and wondered if any company did have such a maximum limit on settlement options.

MR. J. R. GRAY replied that Canada Life has a provision in their ordinary policy forms that the amount under this and earlier policies may not exceed fifty thousand dollars except with the consent of the company.