DIGEST OF INFORMAL DISCUSSION

SURPLUS

A. What are the prospects for future earnings from the standpoint of interes and expenses? In what ways is the investment field being broadened which may lead to increased interest earnings? What economies are being effected at the present time?

B. How may amount of surplus available for policy dividends be estimated?

C. How elaborate a scale of charges against dividends by reason of liberal settlement options is it desirable to make in order to take into account variations by plan, age at issue and duration?

MR. E. W. MARSHALL, speaking on section A, did not believe there was any imminent prospect of market interest rates rising, a return to slightly lower levels being more probable. The political atmosphere is not conducive to higher returns to investment capital. There might, however, be moderate increases in company earnings to be achieved through alert investment programs and through the broadening of the field for investment. In this connection he mentioned investment in real estate and common stock and entry into the small and moderate sized loan fields. He noted the result of a somewhat similar situation in 1900 when investment in collateral loans became popular.

The pressure on expense margins was continuing with increased demands for services to policyholders, the extension of Social Security to agents, demands for specialties in the field of pension trusts and elsewhere, a general quickening of the tempo of competition, the revision of Section 213 of the New York law, increasing taxes, and the serious potentialities of a revised Federal Income Tax law. The only significant influence to the contrary would be an increasing average size policy but too much reliance could not be placed on this factor. The area where economies could be effected was definitely limited. The further use of mechanical devices was one, but their effect could be overestimated when it was considered that salaries of office staff amounted in some cases to only 2% of premium and investment income. Serious problems were posed in the present situation because, with margins initially small, moderate changes in interest or expense rates would have a marked effect on the emergence of surplus.

MR. H. B. WICKES, discussing the same section, agreed largely with Mr. Marshall. It was government policy to keep interest rates low and the encroachment of Federal agencies (the Federal National Mortgage Association) into the mortgage field for institutional investors would have a further depressing effect on mortgage loan interest returns. The rate of industrial expansion of the last few years was slowing down, whereas the demand for investments of the types suitable for life insurance funds was increasing. This effect was aggravated by competition with accumulating trust funds and pension plans. Another factor was the uncertainty of the future status of Federal taxation, involving the possibility of an annual tax load on the industry of 200 million dollars. Areas in which investment might be expanded were directly negotiated loans (inaccurately called "private placements") which seemed to be available now to smaller companies, preferred stocks and other nonamortizable securities, which with a possibility of a different valuation procedure might become more attractive, and to a limited extent, common stocks.

Economies could and were being effected in so far as home office overhead was concerned. These included the elimination of unnecessary operations, mechanization wherever possible, job evaluation and procedural reorganization with particular attention to training, merit ratings and employee morale building. There was no prospect of any reduction in commission costs; rather the pressure was all in the opposite direction. Agency overhead expenses in the field seemed to be more difficult to control because the units were smaller but just as susceptible to inflationary costs as home office operations. The cost of acquisition of new business was of prime concern, and merited the serious consideration of actuaries.

MR. H. R. BASSFORD, in reference to section B, outlined the methods used in his company to determine distributable surplus. If the valuation bases of assets and liabilities were satisfactory, surplus should grow in approximately the same proportion. In the Metropolitan, part of the surplus is accumulated systematically through the annual dividend formula which provides for building up funds greater than valuation reserves; this part of the surplus is largely in the nature of a contingency reserve for lower interest earnings. Furthermore, to provide for general losses such as investment losses and catastrophic mortality losses, an additional surplus fund is accumulated from (a) interest earnings of approximately .1% of invested assets, (b) 15¢ per $1,000 of insurance in force, and (c) asset and other miscellaneous gains. In this manner provision is made for the accumulation of funds considered necessary to give adequate surplus margins for various classes of policies. The amount remaining out of the earnings from premiums and interest, after providing for dividend fund incre-

ment and after the charges (a) and (b) just mentioned, automatically produces the amount available for annual dividends. So long as the amount of surplus so shown to be available for annual dividends is not out of line with the amount required to continue the current scale, the scale is continued. It is easy to maintain a check on the experience of each classification because factors close to actual experience are used in the dividend formula. The provision for the accumulation of appropriate surplus margins for each classification serves to insure that each classification of business will be self-supporting.

In discussing topic D, the scale of dividend adjustments made by the Equitable Life Assurance Society to place each of four closed series of policies with liberal settlement options on a self-sustaining basis was described by MR. WALTER KLEM. The method involved a study of the rates of acceptance of settlement options on death claims, maturities and surrender values by attained age of the insured independent of plan of insurance, the persistency of options not involving life contingencies, and, in the case of the life annuity options, the average certain period, the proportion of male and female beneficiaries and their ages corresponding to each age of the insured at death. From these studies calculations were made of the deficiency per $1,000 of policy proceeds falling due at each age of the insured. The dividend adjustment, for each attained age in the year in which the adjustment was first introduced, was a level amount the present value of which was equal to the present value of the deficiencies at all older ages. Present values on the basis of current experience rates of interest, mortality and other termination prior to settlement were calculated to permit supplementary contracts to be carried out on 1937 Standard Annuity Table at 2.75% interest and current persistency rates of settlements not involving life contingencies. As these dividend adjustments varied only by attained age of the insured in the year in which they were introduced they would apply unchanged in succeeding policy years to the same policies until the basic assumptions were altered. The assumptions were adequate for current experience but would require re-examination for distant maturities.

The method adopted in the Metropolitan Life Insurance Company, as outlined by MR. F. A. WECK, was based on calculated values of each option, using 2.75% interest and appropriate mortality and persistency rates, expenses being absorbed by expected interest earnings in excess of the assumed rate. For policy issues prior to 1935 (which included options based on an interest guarantee of $3\frac{1}{2}\%$) the interest option was estimated to have a value of $1,100 for each $1,000 of policy proceeds, the instalment certain option $1,035 and life income options $1,300. Approximately 35%

of all death claims and matured endowments were currently being applied under option and this rate was expected to rise to a maximum of 40%. With an assumed distribution of options elected the average cost was estimated to be $45 per $1,000 of proceeds. The dividend formula was, therefore, designed to accumulate policy reserves and funds and provide policy benefits for a policy of $1,045 with a premium for $1,000. (For later issues up to 1941, which included options based on an interest guarantee of 3%, the comparable figure was $1,015 per $1,000.) No distinction was made by plan, age or duration within the class of policies containing a particular settlement option guarantee.

MR. E. H. WELLS, with partial reference to the practices of the Mutual Life Insurance Company of New York, indicated that by an examination of rates of acceptance of the various options and their real values, a figure representing the average real payment per $1,000 death claim could be determined. He used $1,025 as an example. In respect of options elected for death claim proceeds 1.025 times the experience claim rate might be charged, but since rates of acceptance for matured endowments were higher than for death claim proceeds, he thought an excess charge of $2\frac{1}{2}\%$ of the premium might be a better factor. This, however, presupposed that an additional $2\frac{1}{2}\%$ of the current policy reserves was also available for future settlement option losses. He doubted whether this was a completely satisfactory solution. There were other problems to solve anent paid-up policies, policies with already narrow dividend margins, policies which by their form were excluded from rights of election and current policies which in 20 or 30 years might be expected to produce option losses. Some of these might be solved by introducing a negative factor on all issues immediately, or by assuming a 100% rate of acceptance of the most costly option and allowing a termination dividend for more favorable settlement.