

MARKET FLUCTUATIONS AND LIFE COMPANIES' INVESTMENTS.

President of Institute of Actuaries points out how Market Depression Strengthened Offices in Certain Respects.

Two weeks ago, in the London correspondence of THE CHRONICLE, passing mention was made of the inaugural address of President G. F. Hardy, F.I.A., of the Institute of Actuaries. The effect of the depression of 1907 upon the investments of British life companies was a matter to which special attention was given in the address. As the subject is one of vital concern to Canadian life companies and other financial institutions, somewhat fuller consideration may well be given to the conclusions reached by President Hardy.

The American Crisis toward the close of 1907 brought about a fall in the value of investment securities held by British life offices—securities which had already declined considerably from the high-water mark of 1897-8. During 1908 there occurred some recovery, as to the probable extent and relative permanency of which the address does not venture an opinion—these matters depending upon events that the actuary, as such, does not attempt to forecast.

Companies' Conservatism during Years of Advancing Prices.

Contenting himself with retrospect rather than prediction, Mr. Hardy recalls that in the ten years prior to the close of 1898, the gross profit on investments brought into the revenue accounts of the various life offices, so far as this can be ascertained from the Board of Trade returns, represented about 2 per cent. of the average aggregate values of the Stock Exchange securities held by the offices, or considerably less than quarter per cent. per annum. Even this estimated sum probably includes some profit on reversions. When there is considered the actual extent of the appreciation that must have occurred during those years, over an annual average holding in 'all about £80,000,000, one cannot but agree with Mr. Hardy that the offices generally exercised a wise restraint in the revaluation of securities—of which they have reaped the benefit in subsequent years.

From the year 1899 the general movement in security prices has been reversed, and taking the offices as a whole, the assets probably depreciated about \$5,000,000 up to 1907. This aggregate no doubt includes losses on other classes of securities, but probably not to any considerable extent. If this sum appears large it must be looked at in relation to the total of the funds affected, and it will then be seen to represent about half per cent. per annum on these investments during the eight years.

Necessary to Write off but Little during Depression.

As compared with the extent of the fall in investment securities during the period, Mr. Hardy comments upon the smallness of the amount that the companies have, in the aggregate, found it necessary to write off, a state of things obviously due to their caution in the preceding period of advancing prices.

In reply to the question as to how far the financial position of life companies has been affected by this fall in securities, or may be affected by any fur-

ther extension of this movement, the answer is given, paradoxical as it may sound, that the fall in prices has strengthened their position.

While the reasons for this conclusion will be apparent to the actuary, they may not be so readily grasped by the public. Mr. Hardy holds that the rise in the rate of interest which has necessarily accompanied the fall in prices will, even if the fall prove permanent, more than compensate the offices for the reduction in capital values. This rise, as distinctly shown in the revenue accounts of the companies, is much larger than can be accounted for by the automatic effect of the writing down of securities that has taken place.

Effect of Falling Values and Rising Interest Rates.

It is held that the gradual rise in securities up to 1898, and the consequent continuous lowering of the rate of interest, very properly led to a general reduction in the rates employed for policy reserve valuations. No reversal of the former movement by a corresponding rise in valuation rates has taken place—owing to the conservative management of the offices generally.

The exact financial effect upon a life office, as regards existing contracts, of a fall in values and corresponding rise in rate of interest has not been fully worked out, but valuable approximate general conclusions are given in Mr. Hardy's address. In an office of average age and constitution, if there is assumed a rise in the rate of interest from $3\frac{3}{4}$ per cent. to 4 per cent., corresponding (so far as these figures have reference to Stock Exchange securities) to an average fall of about 6 per cent. in prices, a corresponding change in the valuation rate, say from 2-3-4 per cent. to 3 per cent., leaving the same interest margin, would result in a reduction of, roughly, 2-1-2 per cent. in the estimated net liability. It is unlikely, however, that the funds will be reduced in this proportion as the shrinkage in values will affect Stock Exchange securities only, and these to a less extent than might appear from the above estimate, as many of them may consist of stocks redeemable at the end of comparatively short periods, and therefore not subject to much fluctuation. In the meantime, by the valuation of lower net premiums, a larger provision has automatically been made for future expenses and profits, while the new business transacted will clearly be done with a larger margin for profit than under the lower rate of interest. Hence such an office would be in all probability, in a stronger position than when its securities stood higher and its rate of interest lower; and *a fortiori* will thus be the case when the valuation rate has been maintained at its old level.

Careful Distribution of Investments by British Offices.

It would seem that British life offices, as a whole have arrived at that balance between Stock Exchange and other investments, such as mortgages, which will in the long run best insure them against any adverse effects arising from fluctuations in interest rates and capital values. There is a general agreement among conservative managers that it is indispensable that assets should not be brought into the balance sheet at a higher figure than the market prices of the day, the only exceptions that can be admitted to this rule being those investments in which the income is absolutely secure, which are redeemable at fixed dates and prices, in which cases