

VALUATION.

7. In making the valuation it has been assumed that the funds will produce an interest yield at the rate of 4 per cent. per annum net. Probably for some time to come a higher rate will be realized, particularly now that the investment of the funds has been placed in the hands of the Board; but for the long period involved in a pension scheme a greater average rate than 4 per cent. could not be assumed with safety.

8. The Experience Table (Table VII) contains the rates of withdrawal, mortality of contributors, and retirement on pension assumed in arriving at the liability. These rates, which are the same as those used on the previous occasion, were as far as possible based upon the experience of the fund itself up to 1913, the death-rates amongst males embracing also the experience of the Government Railways salaried division (1903–1912), and the rate of retirement amongst females the experience of female teachers in the Teachers' Fund. The death-rates of female contributors were adopted from the experience of female teachers in Britain (Mr. George King), after comparison with the somewhat meagre data of the fund itself. It may be mentioned here that owing to the disturbing influence of the war little use could be made of the statistics of the triennium 1914–1916.

The Life and Service Table deduced from these rates is given in Table VIII of the appendix, together with the average salaries from which were derived the ratios of increase to be applied to the present salary of each individual officer.

The rates of mortality assumed to rule among male pensioners were those of the actual experience of the fund to 1913 combined with that of the Railways and Teachers' Funds, whilst for female pensioners a table was constructed with the guidance of the limited experience available, giving rates somewhat below those of the New Zealand female population.

In valuing the benefits to widows and children the statistics of the fund itself up to 1913 were made use of as far as possible, but the rate of remarriage of widows has been taken from the statistics of the general population (widows and spinsters), and the death-rate of widows and children from Dr. Farr's Healthy English Mortality Tables.

It has been assumed that all male and female contributors will retire at the ages of sixty-five and sixty respectively, if they have not retired before reaching those ages.

9. The valuation balance-sheet is given in detail in Table IX, a summary being as follows:—

<i>Liabilities.</i>		£
Value of contributors' pensions already granted for £80,343 per annum	660,139	
Value of widows' and children's pensions already granted for £8,049 per annum	67,227	
Value of prospective pensions (to present contributors) for back service	2,139,877	
Value of prospective pensions (to present contributors) for future service	1,749,084	
Value of prospective pensions to widows and children of present contributors	453,696	
Value of return of contributions on death or withdrawal	480,817	
	<u>£5,550,840</u>	
<i>Assets.</i>		£
Accumulated funds	896,568	
Value of contributors' future contributions	1,647,191	
Value of present and future Government subsidies	3,007,081	
	<u>£5,550,840</u>	

10. This shows a total liability on the Government of the value of £3,007,081, of which £1,200,000 is met by the subsidy of £48,000 per annum, whilst the remainder has yet to be provided for. At the last valuation the Government's liability amounted to £2,381,466. The increase on the present occasion is £625,615, which is made up to the extent of £147,500 by interest accumulations on the unprovided part of the liability, the balance of the increase being mainly due to the normal expansion in the number of contributors and salary charge.

The pensions have increased from £60,970 per annum to £88,392, the number of contributors from 10,809 to 13,313, and the salaries from £1,820,379 to £2,287,591. The average salary has increased from £168 to £172, and the additions being greater at the older ages have had greater effect upon the liability.

In this connection it is interesting to note that though the pensions, the number of contributors, and the total salaries all show a greater increase than in the previous triennium, the Government's liability nevertheless shows a smaller increase. This is doubtless due to the fact that as time goes on the proportion of contributors who more fully provide for their own pensions becomes greater.

11. The Act (section 48 (2)) requires the report to be so prepared "as to show the state of the fund at the close of the period, having regard to the prospective liabilities and assets and the probable annual sums required by the fund to provide the retiring and other allowances falling due in the ensuing three years without affecting or having recourse to the actuarial reserve appertaining to the contributors' contributions." This has been taken to mean that the estimated pensions falling due during the three years following the valuation are to be divided into two parts viz., (a) containing that part of the pensions provided for by the contributions, and (b) the remainder, which includes the pensions for service prior to joining the fund, and (as the contributions are insufficient to purchase full benefits for even future service) such part of the pensions for years of contribution as the contributions are not sufficient to provide for.