

of interest could be obtained at the present time by direct investment, a higher average rate than 4 per cent. could not be assumed with safety for the long period involved in a pension scheme.

7. The Experience Table (Table VII) contains the rates per cent. per annum of withdrawal, mortality, retirement on pension, and increase of salary assumed in arriving at the liability. These have as far as possible been calculated from the experience of the fund itself, but owing to the limited time the scheme has been in operation—six years—the data are not always sufficient, consequently the death-rates amongst males have been arrived at by including the experience of the salaried division of the Government Railways (1903–1912), and the death-rate and rate of retirement on pension amongst females by including the experience of the female teachers.

The Life and Service Table deduced from these rates is given in Table VIII of the appendix.

In valuing the benefits to widows and children the statistics of the fund itself have been 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-rates 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 these ages.

8. 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 £56,744 per annum	...	464,919
Value of widows' and children's pensions already granted for £4,226 per annum	...	37,384
Value of prospective pensions (to present contributors) for back service	...	1,692,148
Value of prospective pensions (to present contributors) for future service	...	1,323,625
Value of prospective pensions to widows and children of present contributors	...	375,842
Value of return of contributions on death or withdrawal	...	352,464
		<u>£4,246,382</u>

<i>Assets.</i>		£
Accumulated funds	...	537,914
Value of contributors' future contributions	...	1,327,002
Value of present and future Government subsidies	...	2,381,466
		<u>£4,246,382</u>

9. Compared with the previous valuation, the liabilities show an increase of £1,287,266, and the funds and value of future contributions an increase of £637,908, making a net increase in the Government's liability of £649,358. This is chiefly accounted for by increases in the number of contributors and in the salaries on which future pensions are to be based.

The pensions have increased from £39,944 per annum to £60,970; the number of contributors from 8,371 to 10,809; and the salaries from £1,358,119 to £1,820,379. The average salary per contributor has increased from £162 to £168, and the additions being greater at the older ages have had a greater effect on the liability.

10. 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.

The first is clearly a liability which should be borne by the fund, but the second is not, and it is assumed that the intention of section 49 is that it should be paid for by a subsidy, to be increased from time to time if necessary according to the Actuary's report.

As the contributions at most can only have been paid for six years, while many of the pensions granted are for forty years' service, the amount to be paid by subsidy at present is much the larger, but the portion provided out of the contributions shows a steady increase.

The estimated pensions falling due during 1914, 1915, and 1916, and the parts provided by the contributions and to be paid by subsidy respectively, are as follows:—

Required for	1914. £	1915. £	1916. £
Current ordinary pensions	53,437	50,225	47,095
New pensions and family pensions	13,227	24,440	35,963
	<u>66,664</u>	<u>74,665</u>	<u>83,058</u>
Deduct amount of pensions provided by contributions	6,501	8,379	10,542
Subsidies required for ensuing three years...	60,163	66,286	72,516