

ages 50 to 59, further reference to which will be made later in this report. As it is now apparently the fixed practice to retire a considerable number of officers after forty years' service, irrespective of age, I felt compelled to make the valuation bases reflect this policy change.

17. The factors necessary for the valuation of widows' and children's benefits were calculated from population statistics combined with the experience of the Fund itself.

RESULTS OF VALUATION.

18. Valuation of the Fund has been made on the bases above mentioned, and the Valuation Balance-sheet is given in detail in Table VIII of the Appendix. The results may be shortly summarized as follow :—

Present value of existing pensions and allowances (£2,257,446), less the value of the subsidy from Working Railways Account in respect of increased allowances to existing widows and children (£97,567)	£	2,159,879
Present value of prospective benefits (£7,519,396), less the value of subsidies from Working Railways Account in respect of increased allowances to future widows and children (£144,669)	£	7,374,727
Less present value of members' contributions		1,738,574
		5,636,153
Total net liabilities		7,796,032
Funds in hand		985,828
		6,810,204
Present value of total liability of the State		6,810,204
Less present value of existing annual subsidy of £170,000 (if treated as a perpetuity)		3,777,778
		3,032,426
Value of future subsidies to be provided for by the State over and above the present subsidy of £170,000		£3,032,426

19. The above statement shows a total State liability of £6,810,204, as compared with £3,959,455 at the last valuation, giving an increase of £2,850,749. This increase, which would have been still greater had the valuation been made at 4 per cent. as on the previous occasion, is due in some degree to the normal expansion of the Service, but the two main causes are the economic effect of the late war on salary levels and the policy of retiring officers with long service, irrespective of age.

20. In order to give some idea of the effect of the first of the causes above mentioned, I submit the following table showing the average salaries paid to contributors at the three valuation dates :—

Ages.	First Division.				Second Division.			
	Average Salaries.			Increase of 1927 over 1912 Level.	Average Salaries.			Increase of 1927 over 1912 Level.
	1912.	1919.	1927.		1912.	1919.	1927.	
	£	£	£	£	£	£	£	£
Under 40	150	198	241	91	141	196	232	91
40-49	253	349	389	136	164	214	265	101
50 and over	304	397	429	125	164	216	264	100
Total	182	240	291	109	147	202	243	96

The table, besides demonstrating the general nature of the salary increases, gives a clear indication of the increase in the estimated value of pensions as compared with the preceding valuations. For example, a Second Division contributor with forty years' service retiring now at age 60 has an expectation of sixteen years of life and will accordingly draw on the average approximately £500 more from the Superannuation Fund than a similar contributor retiring in 1919, and approximately double that amount more than a similar contributor retiring in 1912. The effect of the increased pensions, when applied to the large body of contributors, need not be stressed. It should be borne in mind in estimating the effect on the Fund of the increased salary scale, that pensions are based on the salary at retirement, and accordingly each employee now in the Service reaps for his whole period of service the full benefit of the increase, whereas the effect of the increased salary scale on contributions is limited only to his future service. It will be apparent that the longer the back service of the contributor at the time the salary is increased the smaller will be the proportion of the increase in pension liability which the increase in his contributions is able to meet. This lack of correlation between the value of contributions and pensions is not confined to the Government Railways Superannuation Fund, but is common to nearly all pension schemes based on terminal salary, and supplies one of the reasons why an employer's subsidy to such a scheme is essential. In individual cases large salary increases during the later years of service give pensions out of all proportion to contributions, but they are too few in number to be of material moment as regards extra subsidy. If, however, through economic inflation or other causes, there is a general increase in the salaries of practically the whole Service, the necessity for a substantial subsidy, particularly in respect of the service prior to the increase, becomes apparent.