

7. The income and outgo of the fund since the previous valuation were as follow :—

CONSOLIDATED REVENUE ACCOUNT OF THE TEACHERS' SUPERANNUATION FUND FROM THE
1ST FEBRUARY, 1927, TO THE 31ST JANUARY, 1930.

<i>Income.</i>			<i>Outgo.</i>		
	£	s. d.		£	s. d.
Funds at 1st February, 1927 ..	1,083,155	2 11	Retiring and other allowances ..	617,711	19 9
Members' contributions ..	405,630	19 0	Arrears of retiring-allowances under		
Arrears of contributions under section			section 115 of the Act ..	969	13 9
115 of the Act ..	1,725	1 6	Contributions refunded ..	82,365	15 7
Government subsidy ..	204,000	0 0	Transfers to other funds ..	867	7 5
Subsidy, Fiji Government ..	691	16 10	Commission ..	5,015	14 7
Subsidy under section 114 of the Act..	11,058	19 4	Reserve for bad debts ..	1,820	14 11
Transfers from other funds ..	978	7 2	Other payments ..	5,803	15 2
Interest on investments ..	201,109	8 11	Funds at 31st January, 1930 ..	1,198,711	3 8
Interest on arrears of contributions ..	4,065	2 2			
Interest on back contributions under					
section 115 of the Act ..	851	7 0			
	£1,913,266	4 10		£1,913,266	4 10

8. Strictly speaking, the funds shown above should be increased by £39,416 13s. 4d., which sum the Board has received as subsidy, but apparently regards as unearned, and therefore to be included in the Balance-sheet as a liability. In this connection I would point out that the accounts of a superannuation fund are obviously not designed to show the annual profit or loss of the fund, nor does the balance-sheet purport to show the real contingent liabilities of the fund in connection with pensions or other benefits. Under the circumstances, no good purpose is served by so understating the funds, and the Superannuation Board is recommended to bring its accounting methods into line with the world-wide practice of life-assurance offices and other financial institutions controlling funds whose liabilities involve contingencies which cannot be measured by ordinary accountancy standards.

9. *Income.*—On the income side the chief item requiring comment is the Government subsidy. Compared with the annual subsidies reported as necessary in the last actuarial report, the subsidies paid in during the triennium exhibit a shortage of £315,000, apart from the loss of interest thereon.

The effective rates of interest credited to the fund during each year of the triennium are given below, together with those of the previous period for the purpose of comparison :—

<i>Year.</i>		<i>Rate per Cent.</i>		<i>Year.</i>		<i>Rate per Cent.</i>	
		£	s. d.			£	s. d.
1924-25 ..	..	6	2 1	1927-28 ..	..	6	1 4
1925-26 ..	..	6	1 11	1928-29 ..	..	5	19 11
1926-27 ..	..	6	1 1	1929-30 ..	..	5	19 4

The fall in the interest yield is due to a progressive increase in the proportion of funds invested in Government securities.

10. *Outgo.*—Retiring-allowances are increasing, and may be expected to do so for many years to come. It will be noted that the outgo for benefits during the triennium exceeded 110 per cent. of the total of the contribution income and the Government subsidy, and was more than 85 per cent. of the combined income from contributions, interest, and Government subsidy, as compared with 90 per cent. and 70 per cent. respectively at the previous valuation. As was pointed out in my last valuation report, these high percentages are somewhat disturbing, since the liabilities are essentially of a deferred nature, and consequently the funds should be increasing rapidly while the fund is young and the membership is expanding.

DATA.

11. The preliminary particulars required for this actuarial examination have been obtained from cards supplied by the Secretary of the Teachers' Superannuation Board—a separate card being compiled for each member who was in the Service at the valuation date, or who had died or withdrawn since the inception of the fund—and these particulars form the main basis of this investigation and valuation.

THE VALUATION.

12. The main object of an actuarial valuation is to ascertain whether the current funds, together with the present value of the future contributions, are sufficient to meet the future liabilities. Before the valuation can be carried out it is necessary to make a careful estimate of the various factors on which the payment of the benefits and contributions is dependent. These factors may be briefly summarized as follow :—

- (a) Rate of interest ;
- (b) Mortality-rates of pensioners ;
- (c) Average salary scales ;
- (d) Mortality-rates of contributors ;
- (e) Withdrawal-rates of contributors ;
- (f) Retirement-rates of contributors ;
- (g) Marriage-rates of contributors ;
- (h) Probability of a member leaving children under fourteen years of age, and the average number of such children ;
- (i) Remarriage-rates of members' widows.

13. The rate of interest used in valuing benefits and contributions was $4\frac{1}{2}$ per cent., as the constitution of the fund includes a Government subsidy varying with the requirements of each year.

14. The mortality-rates adopted for pensioners were those used in the previous valuation, and were based on an investigation of the combined experience of the three Government Superannuation Funds (Public Service, Railways, and Teachers) for the period 1919-27.