

4. The revenue and expenditure of the Fund during the quinquennium elapsed since the last valuation are summarized in the following account:—

CONSOLIDATED REVENUE ACCOUNT, 1ST FEBRUARY, 1934, TO 31ST JANUARY, 1939.									
Revenue.					Expenditure.				
	£	s.	d.			£	s.	d.	
Fund at 1st February, 1934	1,003,184	16	1		Retiring and other allowances	1,600,804	16	10	
Members' contributions	650,454	13	5		Refunds of contributions	173,517	2	10	
Subsidies—					Expenses	17,169	5	7	
New Zealand Government	849,969	3	9		Transfers to other funds	3,040	19	5	
Government of Fiji	1,205	15	6		Transfer to Investment Reserve	2,000	0	0	
Interest	265,326	6	7		Fund at 31st January, 1939	975,734	17	3	
Transfers from other funds	1,304	1	7						
Profit on realization of securities, &c.	822	5	0						
	£2,772,267	1	11			£2,772,267	1	11	

The subsidies received from the Government of Fiji are in respect of teachers who, at the time of their appointment by the Government of Fiji to schools in Fiji, were contributors to the Fund in New Zealand. The subsidies are of such amount as together with the contributors' contributions will on the average provide the benefits accruing from such service.

5. The effective rates of interest credited to the Fund in each year of the quinquennium were as follows:—

	Effective Rate of Interest.		
	£	s.	d.
Year ended 31st January, 1935	5	16	4
Year ended 31st January, 1936	5	12	0
Year ended 31st January, 1937	5	8	6
Year ended 31st January, 1938	5	6	7
Year ended 31st January, 1939	5	1	11

The above yields are high compared with those realized on other funds of similar type during the same period. The explanation appears to lie in the facts that, except for the final year of the quinquennium under review, the funds have decreased steadily for a number of years past, and that during the same period interest-rates have decreased also. Obviously during a period of falling interest-rates the yield realized on a decreasing fund will fall much less rapidly than in the case of an increasing fund. In both cases funds invested in old high-interest-bearing securities which mature have to be reinvested at the current lower rate, but where the funds are increasing new money also is invested at the lower rate; hence the proportion of the fund invested in low-interest-bearing securities increases more rapidly in one case than in the other. It is obvious, also, that the ultimate effect on both types of fund will be the same; and it is anticipated, therefore, that the yield on the Teachers' Fund will decline still further during the next few years.

6. An actuarial valuation of any pension scheme is made in order to answer such questions as, "What funds must be in hand now if existing members are to be assured of the benefits to which they are or will become entitled?" From the nature of the case neither the amount of the payments made both by and to members nor the actual dates on which they will be made can be known with certainty, but reliable estimates can be made by the application of averages deduced from the past experience and suitably corrected to allow for future trends where evidence of such exists.

Rates of mortality, withdrawal, retiral, salary increases, and all other like functions entering into the valuation have been deduced from the experience of members during the intervalation period. Comparison with similar factors deduced at previous valuations indicated that it was necessary to change the valuation basis from that adopted at the last valuation. Where changes have been made, in nearly all cases the effect has been to place greater values on the prospective liabilities and assets, and hence on the net liability brought out by the valuation. From the conclusions drawn in paragraph 5, for example, it is evident that it is no longer safe to assume that the funds will earn $4\frac{1}{2}$ per cent. per annum, the rate of interest used in the 1934 valuation. The highest rate that can be assumed with any degree of confidence is 4 per cent. per annum, and this rate has been adopted accordingly.

A special point arose in connection with the salaries involved in the valuation. At the valuation date new salary scales for public-school teachers were being brought into operation. The process was not completed until April, 1940, but the Education Department supplied information enabling the final salaries resulting from the adoption of the new scales to be brought into account in the valuation.

7. The results of the valuation are given in full in Table IV of the Appendix. Summarized briefly, they are as follows, all amounts being to the nearest thousand pounds:—

	£(000)
Capital value of the benefits specified in the Act, both existing and prospective, in respect of present members	12,454
Capital value of future expenses in respect of present members	48
	12,502
	£(000)
Capital value of existing contributors' future contributions	1,924
Capital value of future subsidies from the Government of Fiji	2
Funds as per Revenue Account	976
	2,902
Balance	£9,600