1943 NEW ZEALAND

ACTUARY'S REPORT ON THE VALUATION OF THE

NATIONAL PROVIDENT FUND

AS AT 31st DECEMBER 1942

Laid before Parliament in pursuance of Section 73 of the National Provident Fund Act, 1926

Wellington, 3rd December, 1943.

- 1. In accordance with the provisions of section 73 of the National Provident Fund Act, 1926, as amended by section 8 of the National Provident Fund Amendment Act, 1942, I have the honour to submit the following report on the National Provident Fund as at 31st December, 1942.
- 2. The Fund is divided broadly into two sections the Main Fund, established in 1911 to enable individuals to purchase pensions commencing at age sixty, and the Local Authorities' Section, established in 1917 to provide pension facilities for employees of local authorities. In the former, membership is voluntary, new members being enrolled by representatives of the Department appointed for the purpose, while in the latter membership as contributors on behalf of their employees is compulsory in respect of Hospital Boards and optional for other local authorities.

Employers other than local authorities are accepted as contributors on behalf of their employees under both the Main Fund and the Local Authorities' Section. The published accounts of the Department relate to the whole Fund, and in consequence the financial positions of the two sections cannot be viewed separately.

3. The receipts and expenditure of the Fund for the quinquennium 1st January, 1938, to 31st December, 1942, were as follows: --

Consolidated Revenue Account, 1st January, 1938, to 31st December, 1942

	Income	£	Outgo	£
Amount of Fund at 1st Ja	nuary, 1938	 4,992,587	Maternity claims—	
Contributions		 1,593,826	National Provident Fund members	6,328
Interest, less investment e	xpenses	 1,108,555		
Fines		 1,962	Refund of contributions on lapse, withdrawal, a	kc. 516,992
State subsidies		 392,370	Incapacity allowances	. 46,861
 Refund of maternity claim 		 69,631	Death claims—	
Benefits refunded on exit.		 83,668		170,745
Miscellaneous receipts .		 21	Widows' and children's allowances	. 63,325
Refunds unclaimed		 4,517	Retirement allowances	447,941
Premiums on conversion .		 5,751	Investment Fluctuation Account	. 75,000
			Amount of Fund at 31st December, 1942 .	6,862,358
		£8,252,888		£8,252,888

4. All contributions paid by contributors—with minor exceptions noted in paragraphs 7 and 8—attract a 25-per-cent. State subsidy, and, in addition, expenses other than the charges by the Public Trustee for his administration of the assets of the Fund and legal charges incurred in connection with investments are met by the State. The Public Trustee's charges and legal expenses have been regarded as investment expenses and deducted from interest in the Consolidated Revenue Account. The State also guarantees the solvency of the Fund.

Prior to 1939 members of the Fund received, subject to certain limitations as to income and duration of membership, a payment of £6 on the birth of a child or children. Members of approved friendly societies attracted a like benefit, the payments being made through the National Provident Fund. In both cases the sums so paid were recovered from the State. The benefit is payable now only in cases where a full maternity benefit has not been paid under the Social Security Scheme. Payments under this heading have fallen from £40,602 in 1938 to £74 in 1942.

5. The average annual rates of interest credited to the accumulated funds for each year of the quinquennium were as follows: -

Year ended 31st December,				Average 1 of Interest, p	er Cent.
				£ s. (١.
1938	 	 	 	3 18	9
1939	 	 	 	3 19	3
1940	 	 	 	3 18 1	1
1941	 	 	 	3 18	()
1942	 	 	 		0
	 	 	 	•• • • • • • • • • • • • • • • • • • • •	**

In calculating the above rates investment expenses have been deducted from interest, and allowance has been made for the fact that the State subsidy taken credit for in the accounts of any year; is not received until some months later.

MAIN FUND

- 6. Any resident of New Zealand who is over sixteen and under fifty years of age may become a contributor to the Main Fund, provided that his average annual income during the three years prior to his joining did not exceed £300. The benefits granted are:—
 - (i) A pension commencing at age sixty of 10s., 20s., 30s., or 40s. per week, as the contributor may elect.
 - (ii) The first 10s, of any such pension carries with it the right to the following subsidiary benefits:—
 - (a) An allowance of 7s. 6d. per week for each child under the age of fourteen years, and 7s. 6d. per week for the contributor's widow, payable from the date of his death, provided he has contributed to the Fund for five years. The widow's allowance is payable only so long as a child's allowance is payable.
 - (b) An allowance of 7s. 6d. per week for each child under the age of fourteen years, payable during the fourth and subsequent months of the contributor's total incapacity to work while he is under sixty years of age, and provided that he became incapacitated after contributing to the Fund for five years. The total weekly allowance so payable is not to exceed the contributor's pecuniary loss, and no allowance is payable if the contributor's income from other sources during his incapacity exceeds £4 per week. Contributions cease while such allowances are payable.
 - (iii) On the termination of the contract through any event, including the contributor's secession, a return to him or to his beneficiaries of all contributions paid less any benefits received.

The contributions payable for the above benefits range from 9d, per week for age sixteen at entry to 9s, 4d, per week for age forty-nine at entry. Contributions for all ages at entry are shown in Table I of the appendix to the report on the 1937 valuation of the Fund.

- 7. An approved friendly society may become a contributor to the Main Fund on behalf of any of its members. The benefits granted are pensions of 10s., 20s., 30s., or 40s. per week commencing at age sixty, and a return of contributions paid, less benefits received (if any), on the death of the member, whether before or after attaining age sixty or on his withdrawal. Such members pay low rates of contribution, which their societies supplement by payments from their sick-benefit funds, the funds being reimbursed by release from liability of equal value in respect of the member's sickness after age sixty. These contributions—both members' and societies'—which are given fully in Table I of the Appendix to the 1937 valuation report, attract a 50-per-cent. State subsidy.
- 8. Special provisions enable employers to become contributors to the Main Fund on behalf of their employees. The benefits are as described in paragraph 6, but the scope is widened by admitting employees irrespective of their income or age at the date of joining, and by granting pensions up to 80s. (by 10s. intervals) per week. Where, however, a pension is contracted for when the employee is fifty years of age or over, and where the pension exceeds 40s. per week, the whole of the contribution payable in the former case and that portion of the contribution payable in respect of the excess of the pension over 40s. per week in the latter, does not attract a Covernment subsidy. The Fund receives all contributions from the employer, who may or may not pay the whole or part thereof, according to his arrangement with his employees.
- 9. Females are admitted to the Main Fund on practically the same terms as males. There are, however, minor modifications in the conditions precedent to the grant of the subsidiary benefits described in paragraph 6, and where advantage is taken of the widened provisions of entry in employer groups the rates of contribution payable are somewhat higher than the corresponding rates for males. There are comparatively few female contributors to the Main Fund.
- 10. At the valuation date there were 17,912 members of the Main Fund contributing £1,344 per week for prospective pensions amounting to £11,490 per week. Of these, only 49 were contributing through approved friendly societies and 300 through forty-two employer groups. Pensions amounting to £487 per week were being paid to 612 pensioned contributors, and 151 widows and 243 children were in receipt of allowances of 7s. 6d. per week, the total annual charge for pensions being £33,039.
- 11. Examination of the experience of the Main Fund during the quinquennium indicated that the basis used for the 1937 valuation was suitable for this valuation without major amendment. The valuation results are as follows:

Present value of—				£
Existing pensions			 	281,980
Prospective pensions			 	2,415,375
Existing widows' and orphans' allow	vances		 	33,138
Prospective death benefits			 	208,009
Present and prospective incapacity	allowance		 	108,966
Prospective refunds on withdrawal			 	184,470
Total benefits			 	£3,231,938
Present value of				£
Future contributions			 	737,603
Future State subsidies			 	177,459
Total		• •	 	£915,062

LOCAL AUTHORITIES' SECTION

12. All Hospital Boards must, and other local authorities may, contribute to the Fund on behalf of their permanent employees. A local authority electing to become a contributor may exclude any of its employees at the time of its election, but it must contribute on behalf of all future entrants to its permanent staff. Employers other than local authorities are accepted as contributors on behalf of their employees on the same terms as are local authorities.

H.—17A

The principal benefit is a pension based on length of service and modified final salary, granted on retirement through ill health or after attainment of normal pension age—i.e., after attainment of a specified age or after completion of a specified period of service. In nearly all cases service with a local authority prior to its adoption of the scheme ranks for pension purposes.

A full description of the standard benefits is given in Table II of the Appendix.

13. The standard method of assessing contributions payable to the Fund is unusual. When a local authority brings an employee into the Fund an assessment is made, on the basis for the time being in use, of the cost of his prospective widow's and orphans' benefits and of the pension which will accrue on his retirement having regard to his present salary and to the years of service which he will have completed on attaining normal pension age. As and when his salary is increased, further assessments are made of the cost of the increases in pension which will become payable in virtue of the increases in salary. Increases in prospective pension bear the same proportion to increases in salary as the original prospective pension bears to the original salary.

The cost so calculated is divided among the contributing parties as follows: -

- (i) The State, as mentioned earlier in this report, pays an annual subsidy equal to 25 per cent. of the contributions paid by both the employee and the local authority.
- (ii) The employee contributes a percentage of his salary fixed by his age at entry into the Fund as follows:—

Age at Entry into Fund.			Employee's Contribution, per Cent.
Not over 30	 	 	 4
Not over 35	 	 	 5
Not over 40	 	 	 6
Not over 45	 	 	 7
Not over 50	 	 	 8
Over age 50	 	 	9

These contributions cease on retirement and are usually reduced to a nominal amount during such period as the employee remains on the active staff after attaining normal pension age.

- (iii) The balance of the cost is met by the local authority's contribution, which in the past was usually made payable throughout the employee's future lifetime as an active or pensioned member of the staff, excepting for such period as the employee remained on the active staff after attaining normal pension age.
- 14. In recent years some departures from the standard scheme have been introduced. Under some contracts the percentages of salary contributed by employees are 1 per cent. of salary greater than the standard rates set out in the preceding paragraph, and the allowances which will be granted to the widows and children of these employees have been increased by approximately 100 per cent. In other cases the pensions which employees will attract on retirement are not fixed in relation to salary and service. Wherever possible contributions payable by local authorities (or other employers) are being put on the more satisfactory basis of termination with cessation of employment.
- 15. At the valuation date 43 Hospital Boards, 84 local authorities, 5 Government Departments, and 11 other employers, including 1 commercial company, were contributing to the Fund on behalf of 5,260 male and 5,336 female employees for prospective pensions of £1,387,588 per annum accruing in respect of present salaries. Pensions amounting to £87,906 per annum were payable to 497 male and 194 female retired employees, and 189 widows and 81 children were in receipt of allowances amounting to £4,455 per annum. The contributions available amounted to £270,328 per annum, £132,576 per annum being contributed by employees and £137,752 by employers.
- 16. After examination of the experience of the Local Authorities' Section, the valuation has been made on the basis used for the 1937 valuation, with the following results:--

				0		
Present value of—						£
Existing pensions				 		828,504
Prospective pensions				 		5,914,008
Existing widows' an	d orph	ans' allow	ances	 		49,612
Prospective death b	enefits			 		560,730
Prospective refunds				 		345,415
Total benef	its		••	 		£7,698,269
Future contributions -				£		
Employees				 1,253	,286	
Employers				 1,732	,706	
						2,985,992
Future State subsidies	• •			 		725,596
Total				 		£3,711,588

COMBINED VALUATION RESULTS

17. The combined valuations disclose the following position for the Fund as a whole:--

	VALUATION E	BALANCE-SHEET		
Present value of benefits— Main Fund Local Authorities' Section Surplus	 £ 3,231,938 7,698,269 558,801	Future contributions—		$\begin{array}{c} \pounds \\ 6,862,358 \\ \hline 737,603 \\ 2,985,992 \\ \hline 177,459 \\ 725,596 \end{array}$
	£11,489,008		£1	11,489,008

The 1937 valuation disclosed a surplus of £293,331, £75,000 of which was appropriated to the Investment Fluctuation Account. It will be seen, therefore, that the financial position of the Fund has improved during the quinquennium by some £340,000. The main items contributing to this improvement were interest on the previous surplus, interest earned in excess of $3\frac{1}{2}$ per cent. per annum, and high rates of withdrawal from the Fund especially in the Main Fund and amongst nurses.

The bulk of the above surplus must be regarded as a special reserve to cover the possibility of

reduced interest earnings in future.

18. It is inferred from section 73 (2) of the National Provident Fund Act, 1926, that, if a valuation discloses a deficiency, the Actuary is to report what additional sums are required by way of State subsidy during the five years following the valuation to prevent the financial position of the Fund deteriorating still further.

As this valuation discloses a surplus, I have to report that additional subsidies are not required.

S. Beckingsale, Fellow of the Institute of Actuaries, Government Actuary.

National Provident Fund Board, Wellington.

APPENDIX

TABLE 1. MEMBERSHIP AT SUCCESSIVE VALUATIONS

Valuation at 31st December, Number.		Contributors.		Pensi	oners.	Other Beneficiaries.		
		Number.	Annual Contributions.	Annual Pensions.	Number.	Annual Pensions.	Number.	Annual Payments.
				Main	Fund			
			£ £	£ :		€		ı E
1913		5.791	22,798	173,864				
1916		9,847	38,758	302,305		• • •		, .
919		15,022	58,551	464,767			106	2,067
922		20,223	81,009	658,459	2	130	222	4,329
925		23,075	88,002	732,946	. 8	572	330	6,435
937		20,991	80,879	680,532	269	12,006	474	9,275
942		17,912	70,130	599,548	612	25,329	394	7,710
				Local Author	ities' Section			
.913								1
.916					::	:	::	
.919		1,133	32,076	116,221	14	1,171	43	634
922		1,895	58,439	239,836	87	7,038	82	1,251
925		2,687	78,715	354,898	139	12,832	94	1,462
1937		7,981	191,406	970,467	547	63,386	241	3,893
1942	!	10,596	270,328	1,387,588	691	87,906	270	4,455

TABLE II

The benefits granted under the standard scheme in the Local Authorities' Section are as follows:

I. On retirement after attaining age sixty-five (men) or age sixty (women), or after completion of forty years' service and fifteen years' membership of the Fund

(i) A pension calculated at the rate of one-sixtieth of final salary (excluding increases in salary granted within three years of retiring) for each year of service, with a limit of forty-sixtieths and subject to a maximum of £300 per annum;

(ii) Or a refund of all contributions paid, including the local authority's contributions,

less benefits received.

Where the conditions of service are such that earlier retirement is advisable, age sixty is adopted as normal retiring-age for men and fifty-five for women. In the latter case an employee may retire after completing thirty years' service and fifteen years' membership of the Fund.

II. On earlier retirement through ill health a pension as in 1.

III. On death, whether before or after retiring:

(i) Leaving neither Widow nor Children.—A refund of all contributions paid, including local authority's contributions, less benefits received.

(ii) Leaving a Widow.—An allowance of £18 per annum during widowhood or a refund of contributions as in (i).

(iii) Leaving Children. An allowance of 5s. per week on account of each child under the age of fourteen years. Where no widow's benefit has accrued a refund of all contributions paid, including the local authority's contributions, less benefits received, is granted when the youngest child attains fourteen years of age.

IV. On voluntary withdrawal or on dismissal from the service of the local authority both employee and local authority receive a refund of contributions, provided that—

(i) If the employee enters the service of another local authority which contributes to the Fund on behalf of its employees he may secure continuity of service for pension purposes by electing not to receive a refund of his contributions. In this event the local authority's contributions also are not refunded.

(ii) If the employee is dismissed within five years of normal retiring-age his and the local authority's contributions on his behalf may be transferred to the Main Fund for his benefit.

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