

10. Estimates like these, dealing with such a small portion of the future lifetime of members as the next three years, are necessarily subject to great fluctuation because, to take only one possible cause of disturbance, a single death more or less in the short period would make a material difference to such a small fund. They must therefore be looked upon merely as furnishing a rough approximation to the actual results, and the only definite statements I am prepared to base upon them are that—

- (1.) The accumulated funds will still continue to increase slowly for two or three years longer, they will then attain their maximum, and afterwards will diminish year by year, in an increasing ratio, until they cease to exist.
- (2.) The actuarial deficiency will certainly be found to have increased when the next valuation comes to be made three years hence.

11. I do not think it can be said that I have erred on the side of severity in making the foregoing valuation. Farr's Healthy English Mortality Table has been used, and $3\frac{1}{2}$ per cent. is the rate of interest upon which I have based the calculations. Although the Board has recently been authorised to invest the funds on mortgage of freehold security, thus materially improving the yield from interest, in my opinion a higher rate would not have been justified for valuation purposes, because, in the first place, there is, apart from temporary fluctuations, a general tendency for the rate of interest to fall, and the bulk of these pensions will continue as outstanding liabilities into the distant future; and, secondly, it is quite possible that a portion of any surplus revenue from interest may be required to make up for the admittedly low mortality of people living in New Zealand. In fact, as an illustration of the leniency with which I have treated the question, I may point out that £50,120 has been taken as the liability on account of the fifty-seven existing pensioners on the Fund, drawing £5,037 per annum; but it would require a payment of between £51,000 and £52,000 to reinsure these pensions with either the Australian Mutual Provident Society or the Government Insurance Department.

12. The benefits have been valued as if the pensions were payable at the age of 63—viz., three years after members have the right to retire. Although it is optional for members of the Force to retire at 60, it is compulsory for them to do so not later than 65, and I am satisfied that it would understate the liability to assume that they will, on the average, remain in the service later than age 63.

13. The necessary allowances have been made for the usual increases in salaries, as well as for the return of contributions up to the date of death as provided by the Act.

14. I have not made a special reserve for any additional liabilities which may result from future premature retirements through medical unfitness, as I think practical justice will be done by setting against them the profit which will arise from members voluntarily resigning before attainment of the pension age and leaving all, or part of, their contributions in the Fund, and which will greatly diminish, if it does not entirely obliterate, this liability.

15. Finally, I have to draw attention to the fact that the Government has saved, since the passing of the Police Provident Fund Act, the retiring-allowances which they were formerly in the habit of paying. According to the last annual report on the Police Force the relief so avoided, and which has therefore fallen upon the Fund, amounted to £14,933, and if this were recouped the liability would of course be correspondingly reduced.

16. Having concluded a rather unpalatable task I may be permitted to say that I have no fault whatever to find with the form of the Provident Fund itself, which I look upon as suitable and satisfactory in every way, and very similar to what is provided for in many other bodies of employees in other parts of the world. It is, however, seldom possible for the employees themselves to pay the whole of the heavy contributions necessary to purchase the benefits provided by such funds. That the contributions in this particular case are insufficient for the purpose is plainly evident from the fact that the whole of the accrued funds are not nearly enough to meet the well-understood liability connected with the few pensioners who have already come upon the Fund. In connection with schemes where the Government pays the benefits as they arise from year to year without building up a fund from contributions, thus assuming the whole of the liability, it is not customary to periodically estimate the capital value of that liability. As examples there may be taken the English Civil Service Superannuation, the yearly payments for which by the Government were £1,600,000 in 1888-9 and had increased to £2,035,000 in 1902-3, and the New Zealand old-age pensions, the annual outgo in support of which was £254,000 for 1905-6. In neither of these cases is it considered necessary to make an actuarial valuation in order to assess the present capital value of these (increasing) yearly payments, although that might easily be done. Where, however, the members of a Fund contribute towards its support, and a periodical actuarial investigation is required by law, it can only be supposed that the object sought to be attained by such investigation is to ascertain whether the contributions of the members will prove sufficient in themselves to liquidate the liabilities which accrue. This can only be done by reporting the excess of, or deficiency in, the funds which have accumulated in consequence of the contributions, whether too high or too low, being more than sufficient to meet the comparatively few claims falling in during the early years of the Fund. Unfortunately I have been compelled to report a deficiency in the accumulated funds, thus showing that the contributions are not in themselves sufficient, and that assistance will be required from the Government at some future date. But the assistance that will then be necessary, besides being deferred, will not of course be nearly so great as would have been the case had no contributions been payable by the members.

Respectfully submitted.

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