

keeping of a separate fund in the Temperance Section, the question arises whether the dictates of equity would not be equally well subserved by amalgamating the funds and, at each distribution of bonus, allowing the policy-holders to participate, with respect to that portion of the profit which is due to causes other than favourable mortality, irrespectively of the section—whether Temperance or General—to which they severally belong. Bearing in mind that the Temperance Section exists, not by virtue of any Act of Parliament or Order in Council, but merely by virtue of a clause in the prospectus, which makes no mention of a separation of funds, but only of separate profits, it would seem doubtful whether the department is either legally or equitably bound to keep a separate fund for the Temperance Section, provided that some other method of ascertaining the separate profits of the section can be devised and carried out. Such a method the Government Actuary believes to be possible, and it may be stated in the following words: At each valuation let the total amount of divisible profit be divided into three distinct portions—(1) that due to favourable mortality in the General Section, (2) that due to favourable mortality in the Temperance Section, and (3) that due to causes other than favourable mortality. Distinguishing these amounts as A, B, C respectively, let A be divided among policy-holders of the General Section only, B among policy-holders of the Temperance Section only, and C among policy-holders of both sections, irrespectively of the particular section to which they severally belong. It is, of course, conceivable that one or more of these three amounts may be negative; but, *mutatis mutandis*, the proposed method of distribution would still apply. The Government Actuary has embodied this method in the following draft clause, which, he suggests, might be read after that clause of the New Zealand Government Life Insurance Act which relates to distribution of profit:—

“Such Actuary or Actuaries shall determine, as nearly as may be, how much (if any) of such divisible surplus has arisen from favourable mortality and how much (if any) has arisen from other causes. With respect to the first-named portion of such divisible surplus he or they shall distinguish between the amount of divisible surplus (if any) which has arisen from favourable mortality in the General Section of policy-holders and that which has arisen from favourable mortality in the Temperance Section of policy-holders, and each of the amounts so named shall be divided exclusively among the policy-holders of the section in which the mortality corresponding to such amount has been experienced. The remainder of the divisible surplus shall be divided amongst policy-holders according to such method as the Government shall determine, but irrespectively of the section (whether General or Temperance) to which such policy-holders may belong: Provided always that, if, in the opinion of such Actuary or Actuaries, a loss has arisen through unfavourable mortality in either of the sections named, the amount of surplus to be divided amongst the policy-holders of that section shall be diminished by the amount of such loss.”

The opinion of the Consulting Actuaries is requested as to whether the method of distribution embodied in the above draft clause would be just, practicable, and expedient. As the question of its practicability or otherwise involves points of detail, it is desirable to explain that the Government Actuary would propose to estimate the amounts distinguished as A and B by a comparison of the actual and expected death-strains in the two sections, using Sprague's select tables to determine the value of q_x . He has already made such preliminary arrangements in connection with the department's books as would, among other things, enable the determination of death-strains to be made if the proposed method of distribution were to be adopted; but he recognises the vastness of the amount of labour involved in a perfectly accurate determination. The Consulting Actuaries' opinion is therefore further requested as to whether an approximate method could be devised that would do substantial justice.

(iii.) *Method of Distributing Bonus among Individual Policy-holders.*

On both occasions on which a surplus has been divided—namely, at the end of the second and third quinquennia—the cash allocated to the individual policy-holder was in proportion to the loading he had contributed since previous participation or the issue of his policy, as the case might be. The substantial fairness, under certain conditions, of this method is, it is believed, nearly uncontested; but some of the considerations already adduced relative to the future management of the Temperance Section would seem to show that there may be a special objection to it in the case of an office which has two separate sections, started at widely distant epochs, and which values at a much lower rate of interest than that earned by its funds. At least, if separate funds continue to be kept for the two sections, the anomaly may present itself that, of two policy-holders entering together at a recent date, the one who enters the old-established section will receive a bonus, while the one entering the recently-