

main cause of depression in recent times is, in my opinion, the high value of land which changed hands, especially during the years preceding and up to about 1923, together with the increase in mortgage charges and other forms of interest charges which accompanied it. There has been no exhaustive inquiry into the movement of land-values in New Zealand as a whole, but figures have been collected and compared by means of index numbers for Canterbury by Mr. R. H. Rodwell, M.A. These figures cannot be taken as an exact picture of the movement of land-values over the whole of New Zealand, but my own view is that they understate the extent of land inflation in the country as a whole, and are certainly conservative as an index of conditions in such districts as Taranaki and the Waikato. Except for the year 1925, in which the rise in the index may not be paralleled elsewhere, we shall err on the side of safety in using the Canterbury figures. These are as follows (*Economic Record*, May, 1927, p. 50):—

Year.			Index Land-values.	Year.			Index Land-values.
1914	..	..	.. 100	1920	..	..	.. 160
1915	..	..	.. 111	1921	..	..	.. 143
1916	..	..	.. 113	1922	..	..	.. 135
1917	..	..	.. 115	1923	..	..	.. 114
1918	..	..	.. 115	1924	..	..	.. 108
1919	..	..	.. 133	1925	..	..	.. 141

If it is correct to assume that the Canterbury figures do not overstate the case, it is my view that the farmer who bought land between the years 1915 and 1924, and especially between the years 1917 and 1923, paid more than the land is at present worth. In this connection it is important to make clear what is meant by the economic value of land. By the value of land I mean the value of established farms per unit of area, taking into account all the improvements thereon. The demand for land—in this sense—is a derived demand, dependent on the fact that it is an agent of production. Its economic value is not closely related to the cost of the improvements upon it, but at any given time is measured by the residual, capitalized at current rates of interest, obtained after all costs and a reasonable return to the farmer have been subtracted from the gross value of the product. This “reasonable return” should be commensurate in the long-run with the return which can be obtained in occupations requiring similar ability and enterprise after special advantages and disadvantages have been allowed for. If, over a period of years, the income the farmer derives is less than this, he has paid too much for his land. It is my belief that during the whole of the twenty years prior to the war most land changed hands at a price which at the time of transfer did not yield a reasonable return, and so was too high; but the persistent upward trend of prices, accompanied by a lag in costs, rectified the position, until a further transfer was made, when the process was repeated. The process was dependent on the fact that the farmer based his opinion of the future value of land on his experiences of the past (or on the communal experience), and projected into his present price an element to allow for his anticipation of a future rise. This process continued up to the post-war boom of 1920. It is my opinion that the present economic value of land is, at most, not greater than in 1914, and that, apart from an appreciable (and economic) expenditure in improvements, land which changed hands at a higher figure than in 1914 did so at an uneconomic price.*

It is important to ask what proportion are likely to have purchased at a higher figure than, say, during the years 1915–24. The total occupied area in 1926 was just over 43,000,000 acres. Official statistics make it difficult to estimate accurately the area of land which changes hands. Allowing for retransfers, my own estimate places the area which changed hands during 1915–24 as slightly under half the total occupied area, and I conclude that annual charges in respect to this land are the greatest real burden pressing on the majority of such farmers as are in difficulties, together with the increase in the rate charged on loans. Those who bought during the years 1919–22 are in an intolerable position, if they have not already “walked off” their farms; but the mere discussion of the movement of land-values does not complete the picture. Land has been a depreciating asset since 1920. Farmers who owned the whole of the capital invested in the land between, say, 1917 and 1923 would have been better off since 1920 had they invested their capital in first-class securities and worked for wages or salaries; but those who owned an appreciable proportion of the capital invested are probably small in number, and the position of the remainder is much more serious, since their equity has often completely disappeared or been reduced to insignificant proportions. In fact, the labour income of the small farmer is probably often less than he would earn as wages.

In estimating the actual burden of mortgage charges, we are again faced with the difficulty that official figures do not differentiate between urban and country properties. The total value of all mortgages remaining on the register was £283,000,000 in 1926, as against £106,000,000 in 1914. Of these figures, some represent mortgages paid off and not discharged, and this, together with other factors, leads to a cumulative error; but if we allow a sum of, say, £50,000,000 for cumulative error in the figures for 1926, and no cumulative error up to 1914, this leaves an increase in mortgage charges of, say, £130,000,000. Of recent years the value of mortgages registered on rural lands has been about 55 per cent. of the total. In earlier years the percentage was greater. If we err on the side of safety by taking rural mortgages at 55 per cent. of the total, this leaves an increase of some £70,000,000 in rural mortgages during the period of 1914–26. We will again err on the side of caution by placing the rate of interest on mortgages at 6 per cent., and will neglect other forms of indebtedness not secured by a registered mortgage. On this basis the increase in annual mortgage charges since 1914

* The general problem is discussed more fully in the *Economic Journal* article referred to. It follows that other things being equal, the value of land, as defined, will be increased by (a) an increase in the gross value of the product per unit, (b) an increase in productive efficiency, (c) a reduction in the rate of interest.