

prices for changes in the volume produced, and for changes in the cost of processing, transport, and marketing. It is unfortunate that, after careful inquiry, I have been unable to discover any reliable bases for such correction. Even if these were available, we should still be faced with a difficulty in estimating the effects of these corrections on our measure of changes in net real income ; for we should be forced to make a further correction for changes in the quality of farm requisites used in production. In order to estimate changes in the net income of that mythical person the average farmer, we should have to correct also for changes in the number of farmers.

Although official statistics do not give a very precise answer, it seems probable that the *per capita* production of agricultural and pastoral products has increased of recent years, though by an uncertain amount. Against this increase must be set the cost of increased quantities of manures and other requisites ; but, despite this offset, it is likely that as the result of increased efficiency, especially of recent years, the economic position of the farmer is somewhat better than the analysis which follows would suggest. On the other hand, it is probable that, despite the reduction in freights and other charges brought about by the various marketing boards, the farmer receives a somewhat smaller proportion of total receipts at the market than in 1914. I have shown elsewhere that marketing and transport charges tend to lag behind prices at the market, so that the fall in prices at the farm is somewhat greater than the fall in prices at the market.*

It is probable that the errors involved in using export prices as an index of changes in gross income to some extent counterbalance, but it must be borne in mind that this index does not allow for two factors, one of which is likely to improve, the other to injure somewhat the farmer's economic position. Nevertheless, comparison of other factors with the index number of export prices does enable us to set out in order of importance why the farmer obtains a smaller proportion of the returns from a unit of produce than he did before the war. There is abundant evidence that any increased returns due to increased efficiency have certainly not been sufficient to offset the burdens pressing on the farming community ; and it is of some use to evaluate the various items on the debit side, even though we cannot express them to the nearest penny.

Examination of column 2, Table 1, shows that the index number of export prices rose rapidly from 100 to 167 in 1919, fell sharply to 114 in 1922, rose to a new maximum of 170 in 1925, and fell appreciably thereafter. It should be remembered that these figures refer to the average of all export prices, and that individual commodities may rise and fall less than the average. It is, of course, a truism that if all prices, including costs of labour, requisites, charges against fixed capital, and retail prices of consumer's goods, moved exactly in the same way and to the same extent, no serious economic and social consequences would result. In fact, however, different prices move at different rates. The present economic position of the farmer is due primarily to a lack of harmony between the movement of different sorts of charges and the prices of agricultural commodities. During the period of rising prices, 1895–1920, especially 1914–20, the farmer stood to gain by the disparity ; in fact, there is little doubt that the long continued “bouyancy” in agriculture prior to the war was due as much to this cause as to any other. With the downward trend of export prices since 1920, the farmer has stood to lose by the disharmony.

3. EXCHANGE VALUE OF AGRICULTURAL COMMODITIES IN TERMS OF GOODS BOUGHT RETAIL.

The first question to be answered is : Assuming that the farmer's outgoings move in exactly the same proportion as export prices, is the farmer better or worse off than in 1914 ? To answer this, export prices are expressed as a ratio of retail prices by dividing retail prices into (a) the export price of all commodities, (b) the export price of dairy-produce, the latter being included because of its special interest to Auckland Province. The retail index has been calculated from official figures, and includes groceries, clothing, footwear, and miscellaneous items, but excludes fuel and house-rent. The figures are given in Table 1.

TABLE 1.—COMPARISON OF EXPORT PRICES OF (1) DAIRY-PRODUCE, (2) ALL EXPORTS, WITH RETAIL PRICES 1914-26. (Base prices, 1914 = 100.)

Year.	Export Prices.*		Retail Prices.†	Column 1 : Column 3.	Column 2 : Column 3.
	Dairy-produce.	All Exports.			
	(1)	(2)	(3)	(4)	(5)
1914	100	100	100	100	100
1915	108	119	110	98	108
1916	130	138	122	107	113
1917	150	157	142	106	116
1918	151	162	165	92	99
1919	168	167	190	88	88
1920	174	164	221	80	75
1921	214	152	217	99	70
1922	144	114	189	76	60
1923	156	140	143	109	100
1924	159	159	173	92	92
1925	146	170	168	87	101
1926	136	138	165	82	84
1927	125‡	134‡	164§	77	82

* Recalculated to Base 1914=100.
† Unweighted average of (1) groceries ; (2) clothing, drapery, and footwear ; (3) miscellaneous, as given in New Zealand Official Year-book 1927, p. 812. The items within each group are weighted.
‡ January–June average monthly figures.
§ Average quarters ending February and May, 1927.

* “The Profit Cycle in Agriculture,” *Economic Journal*, March, 1926.