A previous article (which appeared last month) dealt with the size of the annual gross income fund resulting from the labours of all who work on the land or aid in the marketing of rural products. This article will deal with the extent to which the gross income fund is drawn upon to meet costs and the consequent size of the net income fund available for distribution among producers. In particular, attention will be paid to the differing ratio of net to gross income from year to year and from industry to industry and the significance of this for instability of incomes.

It has been shown (Diagram 1 of April issue) that, since the depression, the gross value of production of all rural industries has averaged nearly £250 million per annum. However, only part of the gross proceeds obtained from the sale of Australia’s wheat, wool, butter and other rural produce is available to producers as income. The remainder goes to meet costs—railway freights to carry the goods to market, agents' commissions, seed for crops and fodder for livestock, kerosene and petrol, duplicate parts, fencing-wire, bags, fertilisers, insect sprays, etc. As pointed out in the previous article, such items as wages and interest do not represent a cost from the point of view of the economy as a whole.

The Net Income Fund.

How big a share of gross income is "eaten up" by costs? Diagram 5, herein, which refers to the year 1940/41, shows not only the balance remaining as net rural income after costs have been deducted, but also the importance of the different items of cost. In that year it cost £24 million to market £226 million worth of goods. In addition, £22 m. worth of seed and feed were consumed in the process of production, and £12 m. of other raw materials. Finally, depreciation of buildings and plant amounted to approximately £5 m., leaving a net income of £163 m. This is the sum which had to be divided among farm operators, sharefarmers, employees and mortgagees. In that year, net income was 72% of gross income. This is in marked contrast to secondary industries where, owing to the greater value of raw materials consumed at a later stage of the production process, only about £40 out of every £100 of product represents value added in the process of production.

In Diagram 6, a more complete study is made of the relationship of net to gross income. The values are compared over the fifteen-year period from 1928/29 to 1942/43. It will be seen that the net income fund has ranged from as low as £1.05 million in the depression to as high as £226 million in 1942/43. This represents a tremendous range of fluctuation in the sum available

<table>
<thead>
<tr>
<th>Agriculture</th>
<th>Dairying</th>
<th>Pastoral</th>
<th>Poultry</th>
</tr>
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<tbody>
<tr>
<td>Net Income</td>
<td></td>
<td></td>
<td>Feed</td>
</tr>
<tr>
<td>53.5%</td>
<td>77.5%</td>
<td>85.5%</td>
<td>49%</td>
</tr>
<tr>
<td>D. 6%</td>
<td></td>
<td></td>
<td>M.R.M.</td>
</tr>
<tr>
<td>M.R.M. 12.2%</td>
<td></td>
<td></td>
<td>Feed</td>
</tr>
<tr>
<td>F. + S. 13%</td>
<td></td>
<td></td>
<td>38%</td>
</tr>
<tr>
<td>M.C. 15%</td>
<td></td>
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<td>M.C. 3%</td>
</tr>
<tr>
<td>M.R.M. 2%</td>
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<td></td>
<td>M.C. 9%</td>
</tr>
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<td>F. + S. 14%</td>
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<td>M.R.M. 2%</td>
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<td>D. 0.5%</td>
<td></td>
<td>D. 0.5%</td>
<td>M.R.M. 2%</td>
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<tr>
<td>M.C. 6%</td>
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<td>F. + S. 3%</td>
</tr>
</tbody>
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Notes: M.C. : Marketing Costs  
F. + S. : Feed and Seed  
M.R.M. : Miscellaneous Raw Material  
D. : Depreciation.
for distribution among rural producers. At the commencement of the depression not rural income fell in two seasons from £172 million to £103 million. The depression years from 1930/31 to 1934/35 stand out clearly.

The second important aspect of Diagram 6 is that the ratio of net to gross income is a variable one. In the face of big changes in gross income, the absolute share claimed by costs tends to remain very steady over a matter of two or three years at least. Costs are "sticky". In consequence, year-to-year fluctuations in the gross value of production are almost wholly transmitted to the net value of production and hence the percentage variability in net farm income is even greater than one would expect from the well-known instability of farm prices and the ups and downs in seasonal conditions. While the highest figure for gross income is 78% above the lowest, the equivalent figure is 120% in the case of net income.

Because the "stickiness" of costs is such an important factor in increasing the instability of net incomes, the ratio of costs to gross income has been shown throughout the fifteen-year period. Two points emerge:

(i) The proportion of costs is always higher, and the proportion of net income always lower, in bad years than good. During the depression years costs represented from 33% to 40% of a shrunken gross income fund, compared with 24% to 29% in non-depression years. In 1939/40 an incipient depression was checked by war.

(ii) Costs tend to adjust themselves to the price level of rural products in the long run. For instance, costs remained high until 1931/32, when they fell sharply and partially restored the balance of net to gross income. When farm prices rose again, costs remained low for a while and hence the ratio of net to gross was higher in 1936/37 than before the depression.

Differences in the Ratio of Net to Gross Income in Different Industries.

Taking rural industries as a whole, there is a long-term tendency for the value added in the process of production to represent nearly £3 out of every £4 of product. This ratio, however, is very different in different groups of industries as may be seen in Diagram 7. Taking 1930/31 as an example again, we find that for every £100 of product, costs represented £47 in agriculture, leaving £53 as net income. For dairying, out of every £100 worth of produce, £77 represented net income and in the pastoral group £85 out of every £100. In the poultry industry, costs amounted to £51 of every £100 of product, leaving net income slightly under half gross receipts.
Those striking contrasts raise two questions: Why do those differences exist? And do they hold any special economic significance?

It is interesting to note that it costs more to market agricultural than pastoral products. The former are mostly either very heavy in relation to value (e.g., wheat) or expensive to market because they are perishable (e.g., fruit or vegetables). Thus in 1940/41 it took £15 to market £100 worth of crops, whereas for pastoral products the marketing cost was £9 and for dairying £6.

Seed and feed provided another contrast. Seed costs are important for agriculture and feed costs for dairying, and particularly poultry. In pastoral industries nearly all feed is provided by grazing. Seed and feed between them took £13 out of every £100 for agriculture, £14 for dairying, and £38 for poultry. For pastoral industries they took only £3. The figure for poultry is particularly interesting as it brings out clearly the relationship between price of feed and the price of eggs as being the dominant factor in the economics of the poultry industry.

Again, agricultural industries often have heavy fuel and fertiliser costs. Bills for fuel and other purchased raw materials consume about £12 in every £100 in the agricultural group, compared with £2 in pastoral and dairying pursuits. Finally, much more machinery is used in the field-cropping section of agriculture, and this means heavier depreciation charges which, in the year in question, were £6 a £100 for crops, compared with 10/- for each £100 of produce for dairying and grazing.

The economic importance of those differing ratios of net to gross income is that, taken in conjunction with the "stickiness" of costs previously referred to, they mean a tendency towards greater instability of net income in some industries than in others. Comparing the agricultural and pastoral groups, for instance, the lower ratio of net to gross income means a greater tendency towards higher percentage fluctuations in net income in farming, in the narrower sense of the term, than in grazing. For instance, if from one year to the next there was a fall of 25% in the gross value of production in both agricultural and pastoral industries and if, as it would not be improbable, the absolute level of marketing and production costs remained unchanged in both groups, the percentage decrease in net pastoral income would be only 30% as compared with 48% in the agricultural group.

The fact that for given fluctuations in gross income, there is greater instability of net income in agriculture than in grazing is of considerable importance in the economics of agriculture. It is one of the reasons why the wheat industry is more inclined than the wool industry to require periodical government assistance. There are, of course, other reasons.
Diagram 8.

National Income and Net Rural Income.

Million £

Full Column shows National Income.
Lower portion = Rural Income.
The proportion which Rural Income bears to National Income in each year is shown by the percentage figure in the lower section of each column.
As will be shown in the concluding article of this series, average income per producer is much higher in pastoral than agricultural industries. The preponderance of larger scale production also contributes towards the ability of the pastoral industries to weather storms.

Rural Income as a Proportion of National Income.

Another matter of interest is the proportion of the Australian national income contributed by, and going to, rural workers. The correct figure for comparing with national income is, of course, net rural income. Diagram 8 shows the movements in national income and net rural income since 1928-29. (Previous to this, statistics for rural income do not permit of a comparison).

It is evident that there is a persistent tendency for rural income to run at about one-fifth of the national income. There is no definite indication that this proportion was increasing or decreasing over the period in question, although the annual figures fluctuated considerably, from 23.2% in 1936/37 to 16.8% in 1940/41. The proportion of the national income going to farmers and rural employees was lower during the depression and has been lower during the war than in the intervening years. By way of comparison, the census of 1933 showed that 23.7% of breadwinners worked in primary* industries. The proportion is certainly lower now.

* Includes mining, fishery, forestry and trapping as well as rural industries in the sense in which the term is used in this article.