THE ECONOMIC OUTLOOK FOR BANANAS.

by

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An account of the development and organization of the New South Wales banana industry, with an analysis of seasonal and other factors affecting supplies and prices, has been published in the last two issues of this journal[1]. The main purpose of this present and final article is to discuss marketing costs and comparative movements in wholesale and retail prices. The survey concludes with some comments on matters associated with the immediate outlook for the industry.

1. DISTRIBUTION COSTS.

Some indication of the nature of the various services associated with banana marketing has already been given[2]. It is now proposed to discuss costs associated with these services and, more particularly, the relationship between wholesale and retail prices, marketing margins and returns to growers. There are numerous causes of deviations from the average and it is necessary to make certain assumptions in order to facilitate the analysis. Different wholesale prices are recorded for the five grades (and also for "clusters" and "hands"). However, a large proportion of supplies are graded "nines," "eights," "sevens," or "sixes" and an average of prices recorded in these categories has been used in discussing changes in wholesale price levels. It has also been necessary to assume an average weight of cased fruit since this varies considerably due to the nature of the fruit itself and the way it is packed. For purposes of computing retailers' returns per case an average net weight of

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[1] See *Review of Marketing and Agricultural Economics,* Vol. 19, No. 1 (March, 1951), pp. 5-23, and Vol. 19, No. 2 (June, 1951), pp. 82-95.

[2] See G. C. McFarlane, "Organization in the New South Wales Banana Industry," *Review of Marketing and Agricultural Economics,* Vol. 19, No. 2 (June, 1951), pp. 82-87 and 92-95.

66 lb. has been assumed. This does not mean that all bananas are sold by weight; in many cases retail sales are by the dozen or "so many for a shilling." Costs of distribution to the different consumption centres naturally vary but this fact does not greatly affect the main trends and the analysis has been confined to receivals and prices of New South Wales bananas at Sydney markets.

TABLE I.

Analysis of the Price Spread for Bananas (per case), Sydney, 1948-1950.

Item.	1948.		1949.		1950.	
	Amount.	Per cent. of Retail Price.	Amount.	Per cent. of Retail Price.	Amount.	Per cent. of Ret a[1] Price.
	s. d.	per cent.	s. d.	per cent.	s. d.	per cent.
Retail price	47 3	100.00	52 9	100.00	56 8	100.00
Wholesale price ...	26 1	55.18	31 8	60.04	34 8	61.08
Agent's commission	1 11	4.02	2 4	4.49	2 7	4.57
Ripening charge ...	1 0	2.11	1 0	1.89	1 6	2.65
Gross return to grower ...	23 2	49.05	28 4	53.66	30 7	53.86
Freight charges ...	2 8	5.62	2 8	5.11	2 9	4.85
Local cartage	1 0	2.11	1 0	1.89	1 1	1.94
Case material	2 6	5.28	2 6	4.73	2 7	4.55
Net return to grower ...	17 0	36.04	22 2	41.93	24 2	42.52

Table I contains figures showing the actual and percentage distribution of the price paid by consumers in the last three years (1948 to 1950). It can be seen from this table, and more clearly from Figure 1, that retail prices have risen during this period and most of the increase that has occurred has been reflected in higher returns to growers. The average price to consumers increased by 9s. 5d. per case, the return to growers by 7s. 2d. and marketing costs by 1s. 5d. per case[3]. Commission remained at 7½ per cent. througout the period and the rate per case, therefore, varied concomitantly with prices paid by retailers. The ripening charge was 1s. per case until February, 1950, when it was increased to 1s. 6d., and freight, cartage and costs of case material remained stable except for a slight rise in 1950. The share of the retail price retained by retailers has remained about the same, varying between 21s. 1d. and 22s. per case. In Figure 2 it can be seen that the percentage of the retail price taken up by marketing costs has remained almost constant whereas there has been a decline of 5.90 per cent. in the retailer's share and an increase of 6.48 per cent. in the farmer's share.

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[3] Average retail price was 8.6d. per pound in 1948, 9.6d. per pound in 1949 and 10.3d. per pound in 1950.
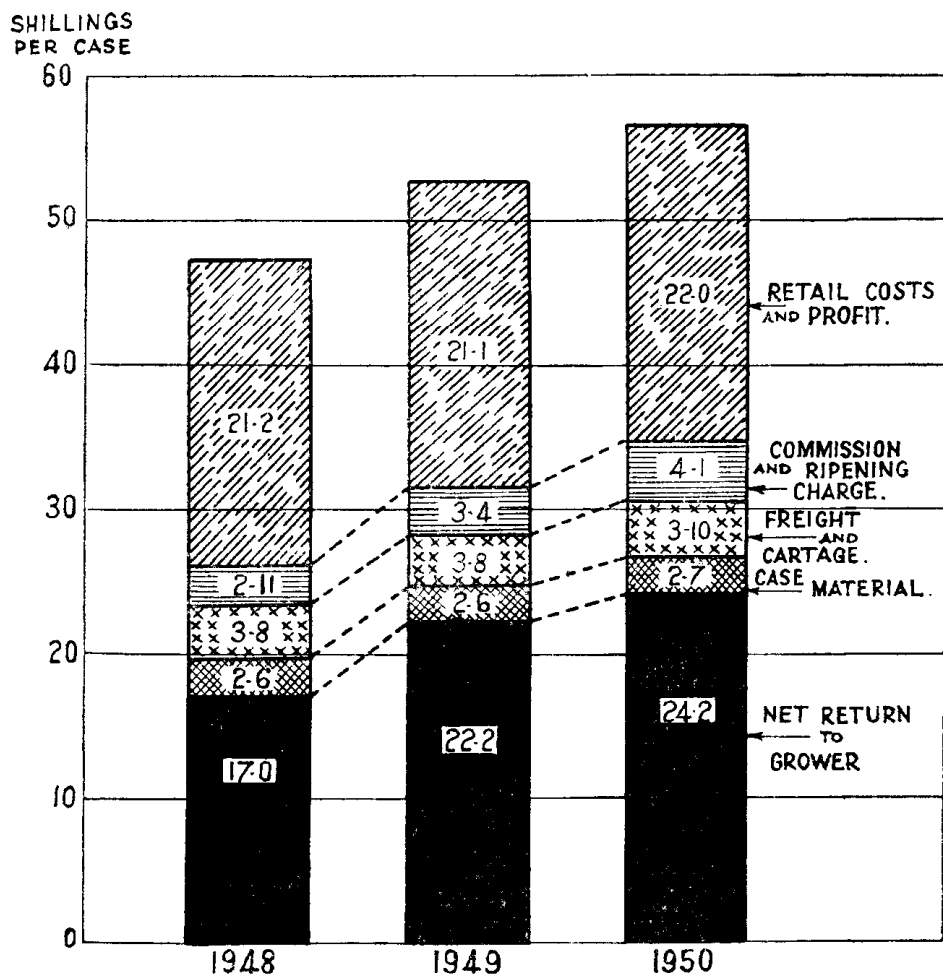
SHILLINGS
PER CASE

Fig. I.—The Price Spread Between Producer and Consumer.

The figures contained in Table I are in the nature of averages and, therefore, conceal individual differences in costs, both between farms and different markets. The item, freight charges, does not represent simply the charge imposed by the Railways Department but is the amount payable to the Banana Growers' Federation Co-operative Ltd., for the service of arranging rail transport on behalf of growers, and includes other contributions such as the bunchy-top levy. These other charges are relatively small and change from time to time. The bunchy-top levy, which is the principal item, has been as high as fivepence per case. For supplies to Sydney and Newcastle, where the B.G.F. has contracts with the Master Fruit Carriers' Association, cartage from the rail terminal to the market is also included. In other states, in which the service is arranged independently by the agents and merchants, this is a separate cost.

It must be remembered that price spread studies of this nature have a limited usefulness unless considered in a wider context. Statements regarding the cost of distribution tend to be reduced to value judgments unless some account is taken of the institutional framework in which
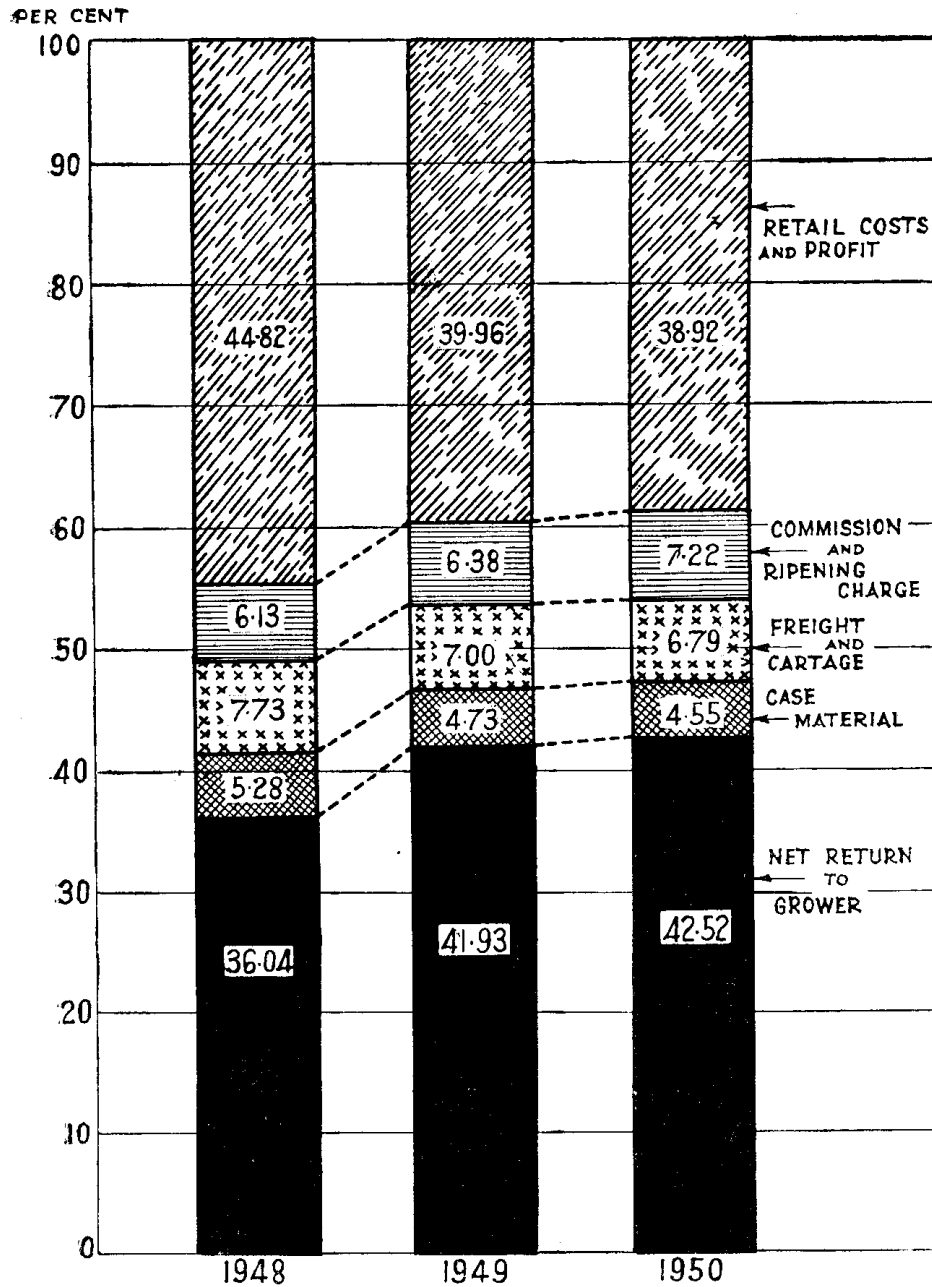
PER CENT

Fig. 2.—Percentage Distribution of the Price Paid by Consumers.

prices are worked out. To do this it is necessary to examine (a) whether wholesale and retail prices are reached in a competitive spirit or by collusion or some form of understanding between operators, (b) whether certain types of services (which are also costs) are, in fact, explicitly demanded by consumers, and (c) whether any services though not demanded by all consumers, have developed universally as a result of non-price competition and form part of the price of the commodity. It is true that these factors are difficult to measure, but the influence they are likely to have should not be overlooked.

2. MOVEMENTS IN WHOLESALE AND RETAIL PRICES.

The above discussion has drawn attention to similarities in the movements of average annual wholesale and retail prices during the years 1948 to 1950. However, a comparison of short-term movements throughout the period indicates that there are some additional significant points to be considered. In Figure 3 average weekly prices in 1949-50 have been plotted on semi-logarithmic scales so that rates of change, and seasonal movements, may be directly compared. Similar results were obtained for a longer period but it is not convenient to reproduce the whole chart here.
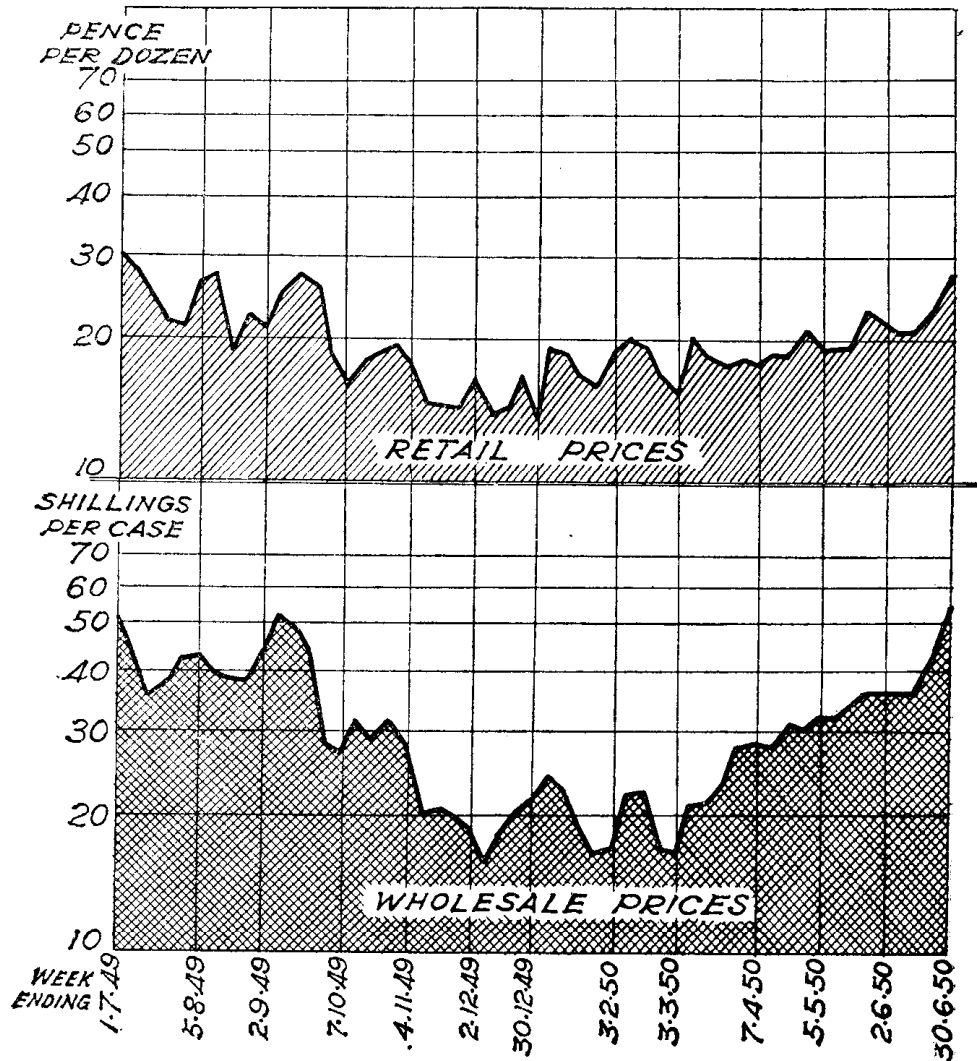

Fig. 3.—Comparative Movements in Average Weekly Wholesale and Retail Prices, 1949-50.

Both wholesale and retail prices appear to move up and down together but the amplitude of fluctuations is greater, and the seasonal pattern more pronounced, in the former. The fact that seasonality is reflected less in retail prices is demonstrated more clearly in Figure 4 where monthly prices in 1950 are shown as percentage deviations from average annual prices. It is noted, in particular, that the seasonal fall in prices

during the summer months of peak production is greater at the whosesale, level. This phenomenon is probably due in part to the fact that retailers do not necessarily aim to increase turnover proportionately as the wholesale price falls. They also bear in mind the price they expect to receive, their most convenient (and, possibly, most profitable) turnover and the relative market conditions for other fruits. However, most retailers do expand their trade in bananas to some extent, and make some
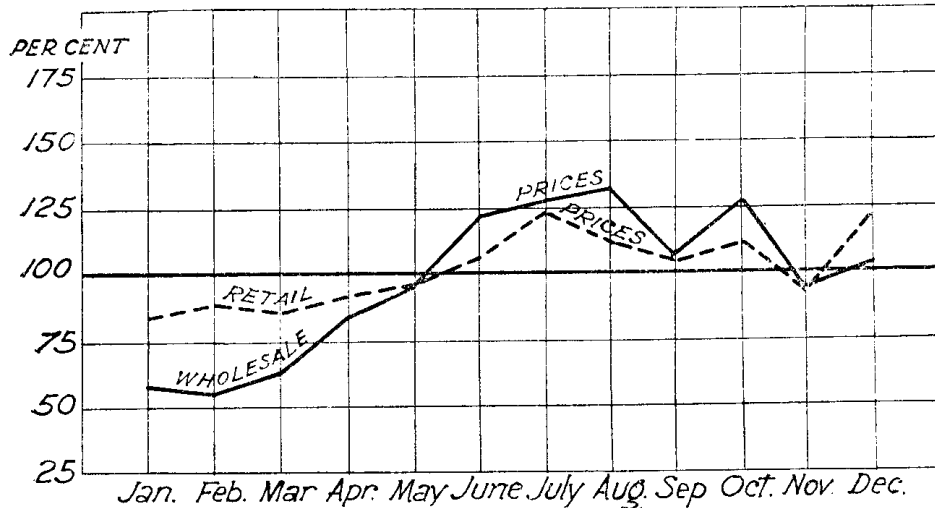

Fig. 4.—Percentage Deviations of Average Monthly Wholesale and Retail Prices from Average Annual Prices, 1950.

reduction in price, when plentiful supplies are available. But, in addition to this, some establishments specialize, at such times, in selling large quantities at cheaper rates. Thus, although a large reduction in the wholesale price is, at times, necessary to clear heavy supplies an equivalent reduction is not widespread among retail distributors. During the period of heaviest production, agents have to clear their supplies to make room for subsequent receivals but the multiplicity of retailers are free to choose the extent to which they will increase their purchases. Some aim to make a small increase in turnover at slightly lower prices while others plan a much larger turnover at greatly reduced prices.

3. FACTORS AFFECTING PRICES.

The main factors affecting banana prices have already been discussed briefly[4]. It was hoped that it would be possible to provide a more detailed analysis of this aspect of the study by employing the graphic method of multiple correlation. In an attempt to do this, other variables (that might logically be expected to influence banana prices) were introduced in addition to receivals. These included population, receivals of other fruits, "real" wages and wholesale prices of basic materials and foodstuffs. However, the results did not prove entirely satisfactory, mainly because the pattern for the latter war years differed from that for the years 1938 to 1942 and 1948 to 1950. In each instance it was found that the years 1943 to 1947 were exceptional. This situation was probably due, at least in part, to the increased demand caused by the armed services' requirements.

[4] G. C. McFarlane, "Marketing New South Wales Bananas," *Review of Marketing and Agricultural Economics,* Vol. 19, No. 1 (March, 1951), pp. 18-20.
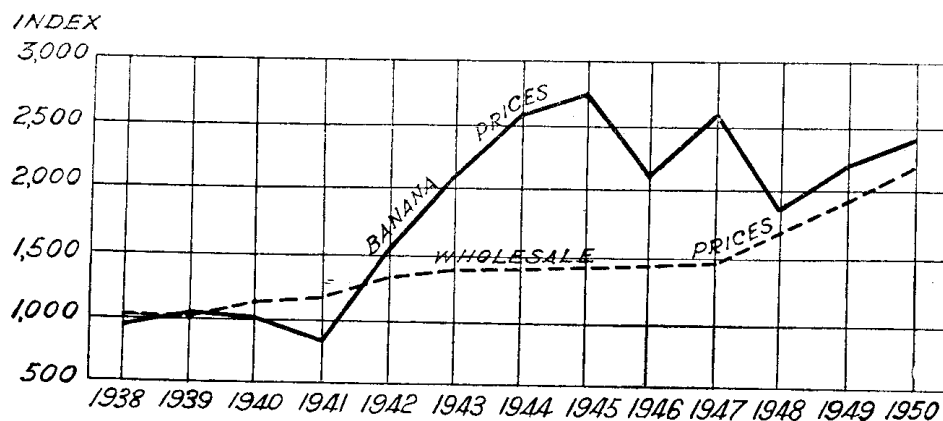
Fig. 5.—Comparison of Wholesale Prices of Bananas and Basic Materials and Foodstuffs, 1938-50.

Indices of Average Annual Prices. (Average three years ended 1939 equals 1,000.)

In Figure 5 an index of wholesale banana prices has been plotted on the same graph as the wholesale price index of basic materials and foodstuffs (all groups). The fact that each index followed a similar trend except for the years 1943 to 1947, seems to confirm the view that banana prices in those years were influenced by other factors. It is too soon to be confident that the pre-war pattern has been resumed since 1948 but if this later proves to be so, it would be possible to demonstrate that population, receivals of other fruits (more particularly stone fruits in the summer months) and consumers' incomes appear to have some influence on banana prices. Nevertheless, the predominant influence appears to be exerted, in all seasons, by the volume of supplies.

4. THE ECONOMIC OUTLOOK FOR THE INDUSTRY.

Mention has previously been made of controversies that have arisen within the industry, from time to time, due to fears of over-production. It has also been seen that there is a close association between the volume of supplies and the price returned to growers. In view of the lack of an export market for Australian bananas, as fresh fruit, it is likely that price fluctuations will continue to be primarily induced by variations in receivals. Stability of incomes from banana growing will, therefore, continue to be dependent, to a large degree, on a constant relation between demand and the level of production.

It is possible, however, that some changes might follow if there is an expansion of the market due to processing. In particular, greater production of the canned commodity, for distribution to isolated centres in Australia and for export, might permit some increase in production without adversely affecting returns to growers. It is conceivable that such a development would reduce the effect of seasonality of supplies on fresh banana prices. Additionally, although bananas are at present one of the less important quick-frozen fruits, it has been found that they can be successfully processed in this way and it is possible that this might, in the future, provide a new outlet.

Although commercial canning of bananas is a new industry in Australia, it has already been found that there is an overseas demand for the product (in the United Kingdom, for instance) as well as a

limited local demand. However, in contemplating the question of increasing Australian production in order to meet an overseas demand for the canned commodity, consideration should be given to possible changes in the world supply of the fresh fruit. To take one example, it can be seen from Table II that the United Kingdom is still importing only about half the quantity of fresh bananas she imported before World War II, but it might not be long before an increase in world supplies permits a return to the pre-war level of British imports. It is noted, for instance, that imports from Brazil, after World War II, were negligible until 1950 when 47,430 cwt. was received. Imports from that source amounted to 86,615 cwt. in the first three months of 1951. It is also significant that the Ministry of Food (the sole importer of bananas in the United Kingdom) has a contract with the growers and government in Jamaica for the purchase of that country's entire exportable surplus up to the end of 1952. Jamaica was the leading exporter prior to World War II but a severe setback was suffered during the war years due to the cessation of shipments to the United Kingdom and also to hurricanes and diseases. Despite the incentive of an assured market, Jamaican production is still only about one-third of the pre-war level.

TABLE II.

Imports of Fresh Bananas into the United Kingdom.

Country of Origin.	1938.	1948.	1949.	1950.
	'ooo cwt.	'ooo cwt.	'ooo cwt.	'ooo cwt.
Nigeria	112.1	943.3	1,108.0	1,184.5
British West Indies	4,656.7	1,345.0	1,458.8	1,316.6
Other Commonwealth	24.1	...	1.4	8.2
Canary Islands	156.5	675.5	489.6	203.6
Other Foreign	1,150.4	...	...	47.7
Total	6,099.8	2,963 8	3,057.8	2,760.6

Source : The Commonwealth Economic Committee *Intelligence Bulletin*, Vol. III No. 12 (May, 1951).

The quantity of bananas entering world trade in the years just before World War II was about 2¼ million tons. By 1949 the total level of exports had recovered appreciably, after a wartime decline, but remained about 85 per cent. of the pre-war level[5]. Some indication of trends in the world supply of bananas can be seen by reference to Table III in which post-war imports of various countries are compared with their imports in 1938.

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[5] The principal countries producing bananas for export are Jamaica, British Cameroons, Canary Islands, Honduras, Mexico, Brazil, Colombia, Panama, Cuba, Guatemala, Costa Rica, Haiti and Formosa.

TABLE III.

Imports of Bananas into the United States, Canada and Western European Countries.

Importing Country.	1938.	1948.	1949.	1950.
	'000 tons.	'000 tons.	'000 tons.	'000 tons.
United States...	1,185.9	1,184.3	1,093.0	1,023.3
Canada	58.0	56.0	50.0	n.a.
United Kingdom	305.0	148.9	152.9	138.0
Irish Republic	5.7	5.5	4.8	5.8
Belgium	20.2	28.7	36.2	38.1
France...	175.6	141.2	181.1	197.4
Germany	160.1a	...	14.0	87.7
Italy	26.2	.7	6.8	9.4
Netherlands	25.6	1.1	4.5	21.2
Norway	8.6	...	...	1.7
Spain	...	113.7	114.5	95.1
Sweden	12.1	5.3	5.3	29.6
Switzerland	6.9	9.2	11.4	12.2b
Total	1,989.9c	1,694.6	1,674.5	1,659.5

n.a. not available.

a Includes dried bananas.

b Includes small quantities of other fruits.

c Excluding Spain.

Source : The Commonwealth Economic Committee *Intelligence Bulletin,* Vol. III, No. 12 (May, 1951).

Although, in most instances, there is probably very little connection between the imports of these countries and the market for Australian bananas, it is of some interest to note that, in general, post-war imports have been less than 1938 levels. The point that it is desired to make here is that the world supply of bananas could, in some circumstances, affect conditions in the Australian industry. It is conceivable, for instance, that an increased world production could result in a decline in demand for the processed commodity. Thus, in the absence of a definite contract, increased Australian production to meet what might be a temporary demand for canned bananas could result in heavy financial losses to growers.

5. CONCLUSION.

Hitherto, the main causes of instability in the industry have been the incidence of disease and over-production. These problems have not been completely removed but neither of them are acute at the present time. There appears to be some scope for increased sales of fresh bananas in Australia as a result of the rapid increase in population and also by a further increase in per capita consumption. It does not necessarily follow, however, that there is considerable opportunity for new planting. The prospects of improved yield per acre should also be

considered because it has been found that production can be expanded very significantly in this way without any increase in acreage. As mentioned earlier, yield per acre can be greatly increased by better cultural practices, of which closer attention to irrigation, the use of fertilizers and stringent pest and disease control measures probably give the most outstanding results

The immediate outlook for the industry is, therefore, very favourable. Subsequent progress will depend upon the industry's ability to adjust itself to changing conditions in the general economy as well as upon its vigilance with respect to the problems discussed in this study.