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THE ORGANIZATION OF THE SYDNEY POTATO TRADE

J. VAN DER MEULEN
Economics Research Officer

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1. SUMMARY

The established system of marketing potatoes in Sydney differs in many aspects from the methods of distributing other vegetables and fruit. An elaborate marketing system has grown up, comprising, in addition to the retail level, primary and secondary wholesale levels. This system is complemented by wholesalers in other States, so that, unlike the typical means of distributing other vegetables, where usually only one wholesaler (commission agent) is employed, in this case at least two, often three and sometimes even more wholesale levels are involved.

In the first part of this article a demand relationship for potatoes is established with rather surprisingly high correlation coefficients on the wholesale levels. As could be expected, the elasticity of the curve increases as the potatoes move towards the consumer. From the calculated data, it would appear that when farmers increase the production of potatoes by 10 per cent the primary wholesale price declines by some 24 per cent. Provided that margins remain the same, this means that their gross income declines by roughly 16 per cent.

A brief description of the channels of distribution as given in the second part of the article must necessarily simplify the situation, particularly as the traditional selling methods which have arisen during the past and which vary from season to season and according to the district of origin, are often modified during periods of gluts or shortages. Furthermore, at the time of writing, considerable changes in the wholesale markets occurred, with at least one of the old "price leaders" losing ground rather rapidly.

Whilst the intricate selling system is partly due to a "division of labour" between the distributors and cannot, therefore, be condemned on the grounds that "there are too many middlemen" *per se*, there can be little doubt that this division has gone too far in certain areas, and that there is scope for improvement.

This improvement would also provide the most logical means of easing the economic pressure on the growers, who have been unable to offset higher costs of production and marketing by an increase in prices.

Faced with a very steep supply-price curve, increased production is certainly no solution to this problem as it must be expected that the resulting fall in price would more than offset the increased quantities sold, so that the net result would be that growers' incomes would decline. An increase in the retail price also seems impracticable as potatoes are not subject to "impulse buying" and are a very difficult article for sales promotion. Furthermore, it is doubtful whether any resulting increase in retail prices would be passed back to the grower, even partially.

Whilst, therefore, it is possible for the individual grower to increase his income by raising his output or improving the quality and presentation of his product, this cannot be a general solution to the problems facing the industry. If producers are not able to absorb future increases in the costs of production and marketing, the only solution to this problem appears to be concerted action to improve marketing methods.

2. INTRODUCTION

It is hardly necessary to emphasize the fact that potatoes are an important commodity. In Australia potatoes are of special significance as their price has been included in the C Series Retail Price Index. Inefficient functioning of the potato industry, therefore, has widespread repercussions throughout the economy. This became abundantly clear during the 1956 shortage.

At times of scarcity, and even at other times, the distribution system has usually borne the main burden of public criticism. Some of this criticism is ill informed, some of it may be justified, very little of it, however, is concerned with giving an unbiased appraisal of the marketing apparatus.

If it is desired to gauge the efficiency of a marketing system, it is necessary, first of all, to look at two factors; does the system make the goods available where and when needed and does it fulfil its functions at the lowest possible cost? Neither of these two questions is easy to answer. Price differences between markets or between different points of time may indicate whether the goods are delivered where and when wanted, whilst margins between the producers' returns and retail prices give some

indication as to whether distribution is expensive or not. But only the rash and the very dogmatic would be willing to say that, for instance, a mark-up of 50 per cent between wholesale and retail price is not enough or that 100 per cent is excessive, and only a detailed study of the cost of distribution, which is outside the scope of this article, would provide us with a measuring stick by which we could determine reasonable margins.

Difficulties in the appraisal of margins were well argued in the report of a recent Canadian Royal Commission where the Commissioners wrote:

"The Commission has experienced considerable difficulty in coming to grips with the concept of a "fair and reasonable" spread. A spread is presumably "excessive" if it is greater than "fair and reasonable". The key to the problem presented to us is to determine how much is "fair and reasonable", but we know of no objective test."

However, in our inflationary economy there is an additional function of the marketing system in which the producer is primarily interested, namely, the capacity to pass on increases in costs of production in so far as these cannot be absorbed by the producer. Up to date no satisfactory theory dealing with competitive markets during inflation has been put forward. The Marshallian model is certainly not suitable to explain price movements during inflation by merely assuming that in a competitive market, if producers do not find it profitable to supply an article, the price will go up until a new equilibrium is reached, at which point a higher price will be paid for a smaller quantity than previously. There are two objections to this smoothly working model. Firstly, producers of primary products usually find it very hard to curtail production. There is evidence enough that in many cases a fall in price will be met by an increase in production at least in the short run. But this is not all, for secondly, what is needed during inflation is not a move along any established demand curve, but a bodily shift of this curve to a higher level. Unless this occurs both producers and consumers may be worse off, although in the short run, the latter may pay lower prices for the commodity.

Some 100,000 tons of potatoes pass through the Sydney markets annually, with an approximate retail value of over £5 million. To handle this quantity an intricate distribution system has grown up which in many aspects is altogether different from the systems of marketing other vegetables and fruit. It is with a description of this system that this article is mainly concerned.

3. THE SUPPLY

In order to meet the demand for potatoes in New South Wales supplies are drawn from a very broad geographical area. Only about one-third of the State's requirements are met by potatoes grown in the State; roughly 40 per cent come from Tasmania, 25 per cent from Victoria and 5 per cent from Queensland. In addition, from time to time, substantial quantities are also received from South and Western Australia.

In estimating the supply of potatoes considerable difficulties are encountered. Data concerning arrivals by ship are available for a number of years but it is impossible to determine with any degree of accuracy the

¹ *Report of the Royal Commission on Price Spreads of Food Products* (Ottawa: Queen's Printer and Controller of Stationary, 1959). Vol. 1, p. 37.

quantities which are imported from other States, either by road or rail, or the supply on the Sydney market. However, with regard to imports into New South Wales, the years 1955 and 1956 are an exception, and for these years arrivals on a monthly basis are available.² A breakdown of the potato imports during these two years and the quantities produced in New South Wales are set out in Table 1. It should be pointed out, however, that 1956 was an abnormal year when much of the crop in the Eastern States failed.

TABLE I

Imports of Potatoes into New South Wales and New South Wales Production, 1955-56

	1955		1956	
	Tons	Per cent	Tons	Per cent
New South Wales Production* ..	48,650	29.1	44,300	37.3
By Ship, Sydney†	56,898	39.3	35,276	34.5
By Ship, Newcastle†	8,763		5,726	
By road, across Victorian border ..	44,355	26.5	25,434	21.4
By road, across Queensland border	8,575	5.1	8,099	6.8
Total available	167,241	100	118,835	100

* Commonwealth Bureau of Census and Statistics.

† Practically all from Tasmania.

When it comes to the supply of the Sydney area proper even less is known. The quantities which are traded daily in the Alexandria (primary wholesale) markets are recorded, but it is quite impossible to make even a guess at the quantities arriving in Sydney to be transported directly to the wholesalers' stores, nor at the quantities which arrive at the Sydney Municipal Markets.

Supplies are drawn from different areas throughout the year. Figure 1 gives an impression of the origin of potatoes in the Sydney market during the year. However, significant departures from the schedule may occur when market conditions warrant this. The digging period may be extended, whilst the period of marketing can also be stretched out over time, particularly in the case of the winter crop, which can be stored for some time without its quality being affected to any great extent.

4. THE PRICE-SUPPLY FUNCTION

Whilst a discussion of the structure of the potato market is deferred to the following section, it is necessary to note here that the market consists of three levels; a primary wholesale market, a secondary wholesale

² These figures have been extracted from the records of the Import and Export Branch, New South Wales Department of Agriculture. Until 1957 all potatoes were subject to inspection either at the State border or in the Markets. However, figures prior to 1955 were destroyed by fire, whilst border inspection was discontinued in 1957.

District	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<i>New South Wales</i> —												
North Coast*												
Hunter Metropolitan*												
South Coast ..												
Northern Tablelands												
Central and Southern Tablelands ..												
<i>Queensland</i> —												
Early ..												
Winter ..												
<i>Victoria</i> ..												
<i>Tasmania</i> ..												

* Sold as "new potatoes" except February and March.

Fig. 1: Main Marketing Periods of Potatoes on the Sydney Markets.

market and the retail market. The bulk of the potatoes traded in Sydney pass through these three levels, although some enter at the secondary wholesale level.

It may be expected, therefore, that not only will the price of potatoes at the various levels differ, but the elasticity of the relevant demand curves will differ as well. This question may be first considered.

In calculating a demand curve of this nature the main problem faced is the collection and choice of suitable data. The Division of Marketing and Agricultural Economics collects prices at all three levels, but for the purpose of this analysis it was found that only the prices at the two wholesale levels were suitable for analytical calculations. The retail prices were collected in a fairly narrow geographical area, whilst collection has not been continuous. With regard to wholesale prices a difficult choice had to be made. The supply on the market at any one time comprises potatoes from various areas and with a wide range of quality. For instance, New South Wales potatoes, No. 1 Grade, may vary considerably in quality, depending on the time of the year and the district in which they have been produced. To combine prices of New South Wales No. 1 Grade in order to arrive at an average price would, therefore, be quite unacceptable. For this reason, the prices of Victorian No. 1 Grade, which is somewhat less variable in quality, were used in the analysis of wholesale prices. A further difficulty was that any given type of potato is not available on the market during the whole year. It was therefore necessary, once the choice of type of potato was made, to use only data for the period during which the quality of these potatoes remained more or less comparable. Again, the Victorian potato proved the best choice as these are on the market longer than any other type, except perhaps Tasmanian potatoes which were excluded on the ground that their price was determined in an oligopolistic fashion.

For retail prices, use has been made of potato prices collected by the Commonwealth Bureau of Census and Statistics and incorporated in the C Series Retail Price Index. This price is, of course, a composite one, but proved the only suitable series available.

With regard to supply the position was even more difficult as the quantities available on the market at any one time were unknown. Therefore, the figure published by the Commonwealth Statistician concerning the Australian consumption of potatoes per caput were used. Fortunately it was possible to compare these figures with the quantities consumed in New South Wales during 1955 and 1956 as set out above. It appeared then that for the "normal" year, 1955, the discrepancy between the Commonwealth Statistician's figure and the consumption calculated on the basis of New South Wales production and imports, was less than 5 per cent. A considerable difference existed, however, between the Statistician's figure for 1956 at 88.7 lb. per caput and the calculated figure, which for that year amounted to 76.1 lb. This difference can be explained, however, by the fact that the Statistician's figure is based on consumption in the whole of Australia, whilst the potato shortage of that year was felt mainly in the Eastern States and did not affect consumption in the other States. It may be accepted, therefore, that the Statistician's consumption figures

are a reliable indication of the supply during most years, but that for 1956 the "adjusted" figure, calculated from New South Wales production and imports, gives a more reliable indication of consumption.

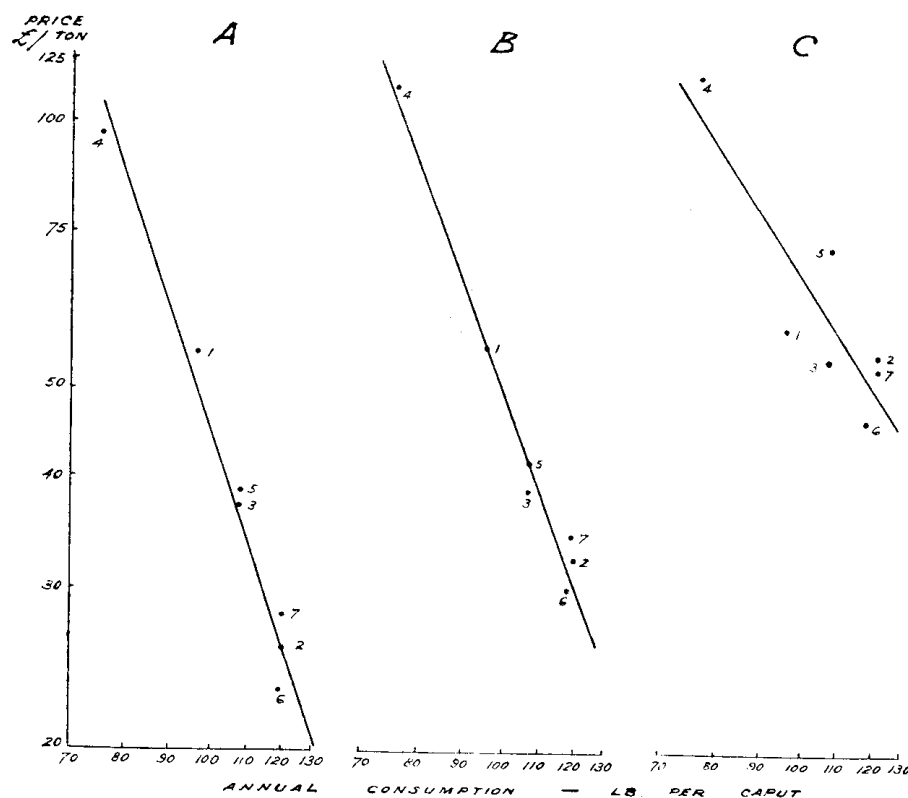


Fig. 2: Demand Curves of Potatoes in the Sydney Markets.

- A. Primary Wholesale Market.
- B. Secondary Wholesale Market.
- C. Retail.

Note.—Numbers on each curve refer to years, e.g., 1—1952-53; 2—1953-54, etc.

When the data for the years 1952-53 to 1958-59 were plotted on logarithmic scale (Fig. 2), a surprisingly close correlation became evident in the case of the two wholesale markets, whilst on the retail level the correlation between annual consumption and annual average price was also significant. If the annual average price in shillings per ton is denoted by Y and the average annual consumption in lb. per caput by X, then the curve for the primary wholesale market can be expressed by the equation:

$$\log Y = 8.7747 - 2.9102 \log X; r = - 0.983;$$

the curve for the secondary wholesale market by:

$$\log Y = 8.2013 - 2.5944 \log X; r = - 0.984;$$

and the curve for retail sales by:

$$\log Y = 6.1658 - 1.5170 \log X; r = - 0.878.$$

In all three cases $N = 7$.

The differences in elasticity between the levels are as might be expected, with elasticity increasing as the product moves towards the consumer.

Whilst these curves can be used to demonstrate the differences in elasticity of the price-supply curves at various levels, for obvious reasons, they do not allow comparison of the absolute price differences between the various sales levels; that is the margins charged by operators in the various markets. These margins are discussed in section 7.

5. THE STRUCTURE OF THE MARKET

The potato market in Sydney comprises three sales levels, which are distinguished as *primary wholesale*, *secondary wholesale* and *retail*. The boundary between the wholesale and retail levels is well defined and self explanatory. The distinction between the primary and secondary wholesale level, however, is not so clear. Several firms operate in both spheres and the functions of the two levels often overlap.

The easiest and most clear-cut means of separating the two levels is probably quantitative. Broadly speaking it may be said that the commodity enters the primary level in trailer, railroad truck or shipment parcels, comprising several tons at least. Sales by the primary wholesaler are made in lots of one ton or more, which are further split up in bag lots by the secondary wholesaler for sale to the retailer. In selling, the primary wholesaler, therefore quotes his prices per ton, the secondary wholesaler per cwt.

If a functional distinction is required then it may be said that the primary wholesaler directs the flow of potatoes into the Sydney area, whilst the secondary wholesaler makes these potatoes available at the place visited daily by the retailer, namely, the Sydney Municipal Markets. That it is understood by primary wholesalers that it is part of their function to distribute the available potato supply over a wide area is shown by the existence of a "Co-ordination Committee" comprising three representatives of the Commonwealth Wholesale Potato Distributors Association and one each of the Tasmanian, South Australian and Western Australian Potato Marketing Boards. In practice, however, this committee, which meets once a year and which attempts to allot the crops from various areas to the different markets, has little influence and merchants are guided rather by differences in price in the various markets in their distribution function, than by planned distribution.

The third distinction between the two wholesale levels is geographical, for whilst the bulk of secondary trading takes place in the Municipal Markets, primary sales are made in three different localities, according to the means of transport by which the commodity arrives in Sydney. Potatoes arriving by rail are usually sold in the Alexandria Railway Goods Yard, and arrivals by road at Perry's Park, a parking allotment in the Sydney suburb of Alexandria at a distance of approximately two miles from the Railway Goods Yard. Both these markets are held Monday to Friday, from approximately 6 to 10 a.m. each day. The commodity is usually inspected by buyers whilst still on the truck or trailer in which it arrived and after a sale has been made it is loaded on to the buyer's vehicle. The third market, "Sussex Street market", as it is usually called, is only a market in a very wide sense of the word, Sussex Street being the location of most of the offices of the primary wholesalers.

Potatoes are said to be sold in the "Sussex Street Market" when they arrive from other States by ship. The usual procedure here is that after unloading the ship the potatoes are block stacked on the wharf, where they are inspected by prospective buyers, who take delivery of these potatoes on the wharf.

Potatoes are not always sold immediately after having been offered. When it is hoped that a sale can be made the following day or so, the potatoes are often left on the truck or trailer or on the wharf for the night and offered again the next day. When this is not practicable they are stored and may be inspected in the storage space. With the high cost of handling and

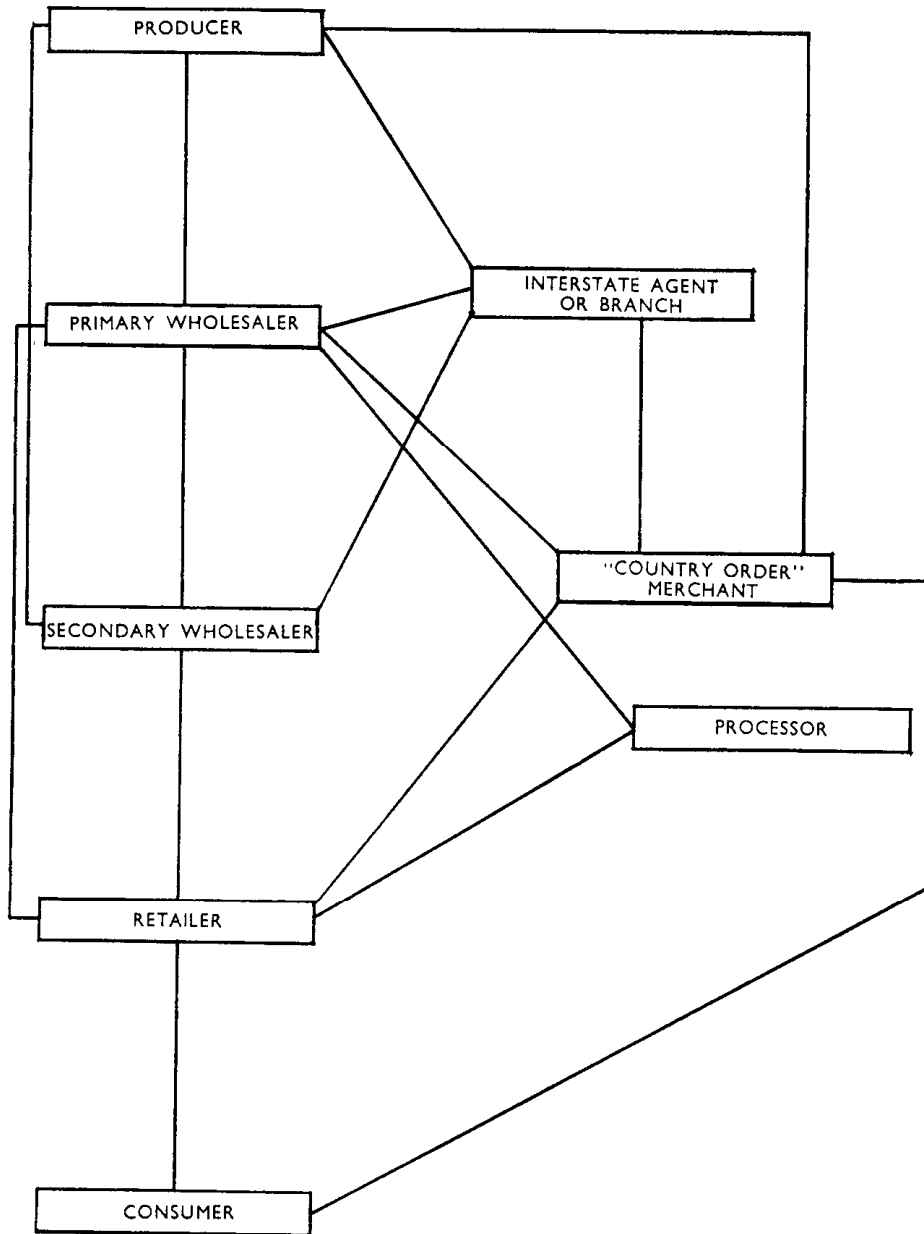


Fig. 3: Trade Channels from Producer to Consumer.

storage taken into account, it is clear, however, that this is done only when it is expected that the market price will increase considerably, or when no other alternative is available.

It would be an oversimplification to depict the market structure as merely consisting of the three levels that have been mentioned. A somewhat more complete impression of the market may be gained from the diagrammatic representation of trade channels in Fig. 3. Even this diagram, however, has been simplified. For instance, sales by producers direct to the retailers, or even direct to the consumer, occur and may, indeed, be important from the producer's individual point of view. In relation to total turnover, however, such sales are relatively unimportant and have therefore been omitted from the diagram.

It will be noted that besides the sales levels which have already been mentioned three more types of operators have been added. The "interstate agent or branch" operates on the primary wholesale level. When a Sydney primary wholesaler requires potatoes from another State, the usual procedure is that he arranges this by contacting a merchant in that State, or, if his firm has a branch in that State, by obtaining the potatoes through that branch. The same procedure applies to the secondary wholesaler who wants to augment the quantities he buys on the Sydney wholesale market.

The "country order merchant" rightly belongs to the secondary wholesale level. In so far as he is located in Sydney his functions cannot be distinguished from the other secondary wholesalers, the only difference being that, instead of selling directly to retailers in the Municipal Markets he arranges delivery in the outer suburbs or transport to retailers (often produce stores) in the country. In the country, this function is often carried out by produce storekeepers who, then, may form a direct link between producer and consumer.

The functions of the processor are quite different and fall outside the scope of this article. His quality requirements are narrowly defined and the processor operating in Sydney usually buys on the primary wholesale market, where he is willing to pay a premium price for the product which meets his requirements.

6. THE WHOLESALE MARKETS

Primary Wholesale

On the primary wholesale level an extremely complex system of selling methods has gradually come into existence, the traditional buying and selling methods being mainly determined by the origin of the potatoes and the time of the year. However, departures from these traditional methods occur frequently if the state of the market or particular requirements make this necessary. The following outline, therefore, is a general one only.

Probably the most prevalent method of selling potatoes produced in New South Wales, on the primary level is the auction sale. These auctions usually take place in either the Railway Goods Yards or in Perry's Park, depending on the means of transport employed. However, a considerable quantity, particularly during the early season, is forwarded by the producer to be sold on commission, whilst, particularly during the winter months, primary wholesalers also buy directly from the grower.

The bulk of the potatoes from Tasmania are on consignment. In the past when shipping space was scarce, the grower was obliged to consign his potatoes in the first place to a member of the Tasmanian Merchants' Association, which was allotted 90 per cent of the shipping space or to a member of the Tasmanian Independent Potato Merchants' Association, the latter Association being allotted the remaining 10 per cent of the space by shipowners. The Tasmanian merchants, in turn, forwarded the potatoes to a Sydney primary wholesaler.

Although the shipping position is now much easier and a grower applying for space would have little difficulty in obtaining this if the parcel were large enough, most producers find it more convenient to make use of the services of a Tasmanian merchant, who will look after the documents necessary for the shipment, book the space, and generally arrange for the shipment to be loaded in a satisfactory manner.

The consignment-by-producers system is also used for a very small quantity of early potatoes from Queensland, but the bulk of the early crop from that State is purchased by primary wholesalers directly from the producer. Victorian and South Australian potatoes are also bought almost exclusively by the wholesaler, whilst potatoes from Western Australia are usually consigned by the Potato Marketing Board of that State to a Sydney merchant firm.

These are broad outlines, but as previously mentioned departures from these established methods have occurred quite often. At times, during a difficult market, the Queensland main crop has presented too many risks for merchants and consequently growers have forwarded their potatoes on consignment. Western Australian growers, in the past, in defiance of their marketing board, but under protection of section 92 of the Constitution, have privately forwarded lots on consignment, during high price periods.

Due to the fact that the primary wholesale level is not clearly defined it is difficult to say how many firms are operating in it; but it would appear there are in the vicinity of twenty-five firms. However, it is estimated that some 80 per cent of the total supply is handled by less than ten firms.

During the last few years considerable shifts in the relative importance of these firms have occurred. In the past the most influential firm has been the P.I.C. Pty. Ltd., which during most of the year acted as price-leader. This organization is a combination of less than a dozen firms of wholesalers, and has been in existence in its present form since 1948. From that year until 1954, P.I.C. Pty. Ltd. was in an extremely strong position, for not only did it handle all Western Australian potatoes (it still does so), but more important, the P.I.C. Pty. Ltd. possessed a virtual monopoly of the Tasmanian potato trade with Sydney. This monopoly was made possible by the fact that shipping space was extremely scarce and the Tasmanian Merchants' Association, controlling 90 per cent of the space, co-operated with the P.I.C. Pty. Ltd.

The stronghold which these organizations had on the industry did not go unchallenged and in September, 1954, a Joint Committee of both Houses of the Tasmanian Parliament was appointed to investigate the marketing of Tasmanian potatoes.

In its report the Committee stated that:

"Sales are made through the Tasmanian Merchants' Association to P.I.C. Pty. Ltd. of Sydney. Evidence showed that there is a strong tendency in these Associations to resist the entry into the potato trade of new firms. When a member withdraws from P.I.C. Pty. Ltd. his share was not allotted to a new firm hitherto outside it, but divided up between existing members. Where merchants, buying from growers, are associated, where merchants selling to retailers are associated and where both groups are working in unison, it was claimed that the grower must lose, as his freedom to sell to whichever merchant he preferred either did not exist or was of no effect."³

Since 1954 the original shareholders of the P.I.C. Pty. Ltd. have steadily lost ground. In the first place the Queensland Committee of Direction of Fruit Marketing joined the P.I.C. Pty. Ltd. to become the third largest shareholder, whilst the Producers' Co-operative Distributing Society Ltd. (an original shareholder) has emerged as the largest partner. The P.I.C. Pty. Ltd. itself has, however, also lost much of its influence, and its share of Tasmanian imports has dropped from an estimated 80 per cent to approximately 40 per cent.

This, however, has not made the trade much more competitive. The price of Tasmanian potatoes, which in the past was determined by the P.I.C. Pty. Ltd. in consultation with the Tasmanian Merchants' Association, is now determined each Monday morning during a meeting of representatives of the P.I.C. Pty. Ltd. and four independent importers.

On first sight there is more competition in the trade in Victorian and Queensland potatoes. No organized price fixing methods exist, as in the case of Tasmanian produce, whilst it is relatively easy for any secondary wholesaler, who thinks this would be to his advantage, to order supplies from any of these States, as no transport difficulties arise here. However, there can be little doubt that the existence of only a small number of wholesalers tends to stabilize the price, particularly as largely the same firms are involved as operate in the Tasmanian trade.

With regard to potatoes produced in New South Wales, the position is different. When, in July, 1956, the New South Wales Potato Marketing Board ceased operating⁴ much of the primary wholesale trade in New South Wales potatoes went to the Associated Growers' Co-op. Ltd. This co-operative, almost from the outset, sold its potatoes mainly by auction, an example which was gradually followed by merchants who received New South Wales potatoes on commission. The result is that a large proportion of the New South Wales potatoes which pass through the Alexandria wholesale markets are sold by auction and only relatively small quantities are sold privately.

Secondary Wholesale Market

Only part of the potatoes sold at the secondary wholesale level have passed through the primary level. Many secondary wholesalers attend the primary market each morning, although they do not necessarily always

³ Marketing of Tasmanian Potatoes, *Report of Joint Committee of Both Houses of Parliament, with Minutes of Proceedings*, Journal and Printed Papers of the Parliament of Tasmania, 1954, Vol. 151.

⁴ Contrary to popular belief the Potato Marketing Board is still not dissolved as its affairs have not yet been wound up.

obtain their supplies there. If they believe the margin between the Sydney price and the price in other areas to be wide enough, they may obtain their supplies from a merchant in another State who is paid a commission for his services. There are even some secondary wholesalers who regard the Alexandria market as an emergency source of supply only, whilst receiving their regular supplies directly from interstate sources, with the exception of Tasmanian or Western Australian potatoes, which almost all pass through the primary level.

Practically all potatoes at the secondary level have been bought by a merchant. Those merchants who operate on both the primary and secondary level and who receive potatoes on commission from producers would almost invariably sell these on the primary level. Exceptions, however, are met with and in particular some of the smaller co-operatives receive the products of their members on consignment to be sold in the Sydney Municipal Markets. Very small quantities of potatoes are also sold in the "growers section" of the Municipal Markets; these potatoes having been produced by growers in the near Metropolitan Area. They usually demand and receive a premium over the current price, as the potatoes are carefully washed and graded.

7. MARGINS

In view of the fact that the channels of distribution are long and intricate a proper assessment of the proportion of the consumers expenditure which ultimately accrues to the producer is not easy. It is even more difficult to calculate how much of this margin between producer and consumer is due to unavoidable expenditure such as transport and waste (or evaporation).

In Tables 2 and 3 some recorded prices at various sales levels are shown. These prices were all recorded at periods of relative price stability and can be regarded as giving a fair indication of the price margins between the sales levels.

TABLE 2
Potato Prices—at Various Sales Levels
(Weekly Averages Calculated in June Each Year)
(Tasmanian "Brownell")

	1955	1956	1957	1958	1959	1960
	Pence per lb.					
Price—Retail	6.75	16.07	8.00	6.00	6.00	6.72
Price—Secondary Wholesale ..	4.61	11.79	4.46	3.21	4.34	3.95
Price—Primary Wholesale ..	4.28	11.25	4.07	2.57	3.79	3.21
Margin Charged by—						
Retailer	2.14	4.28	3.54	2.79	1.66	2.77
Secondary Wholesaler ..	0.33	0.54	0.39	0.64	0.55	0.74
Percentage Mark Up—						
Retailer	46.4	36.3	79.4	86.9	38.2	70.1
Secondary Wholesaler ..	7.7	4.8	9.6	24.9	14.5	23.0

TABLE 3
Potato Prices—at Various Sales Levels
 (Weekly Averages Calculated in June Each Year)
 (Victorian "Sebago")

	1955	1956	1957	1958	1959	1960
	Pence per lb.					
Price—Retail	6.50	16.50	6.00	6.00	5.50	6.20
Price—Secondary Wholesale ..	4.48	12.05	4.50	3.04	3.30	4.03
Price—Primary Wholesale ..	4.02	11.41	3.75	2.14	2.46	3.40
Margin Charged by—						
Retailer	2.02	4.45	1.50	2.96	2.20	2.17
Secondary Wholesaler ..	0.46	0.64	0.75	0.90	0.84	0.63
Percentage Mark Up—						
Retailer	45.1	36.9	33.3	97.4	66.7	53.8
Secondary Wholesaler ..	11.4	5.6	20.0	42.0	34.1	18.5

The outstanding impression one receives from these Tables is that the secondary wholesaler's margin has increased considerably, whilst the primary wholesale price and the retailer's margin show no pronounced increase.

No detailed information is available concerning the margins charged by primary wholesalers (other than commission rates or auction charges where applicable) in order to compare the charges of the primary and secondary wholesaler. It may be expected, however, that these margins are at least of comparable magnitude.

In Figure 4 an attempt has been made to show the distribution of the consumers' expenditure on potatoes.⁵ New South Wales and Tasmanian potatoes have been chosen for this example as the charge by the primary wholesaler can be easily calculated.

The New South Wales grower who forwards his potatoes to be sold by auction or on consignment will receive a return equal to the selling price, less 5 per cent commission. Furthermore, he is charged 3s. 0d. unloading and 1s. 3d. weighing charges per ton. His freight bill depends on the district where he lives and varies from 35s. 0d. per ton if he farms at Robertson to 90s. 6d. per ton from Glen Innes. These are rail freights. Road transport is somewhat more expensive but in that case the potatoes are loaded in or near the paddock where they have been grown and the difference between road and rail freight is ultimately narrow with rail freight having a slight edge over road freight in New South Wales. Freight rates for Victorian potatoes are higher. Average road transport from paddock to the Sydney markets amounts to approximately £8 per ton; rail charges total £6 15s. 0d. plus approximately £1 per ton for cartage from the farm to the railhead. When interstate potatoes are bought by the Sydney wholesaler, as is usually the case with Victorian or Queensland potatoes, the merchant in the State of origin who arranges the sale from producer to wholesaler receives 15s. 0d. per ton commission.

⁵ Loss of weight has been ignored.

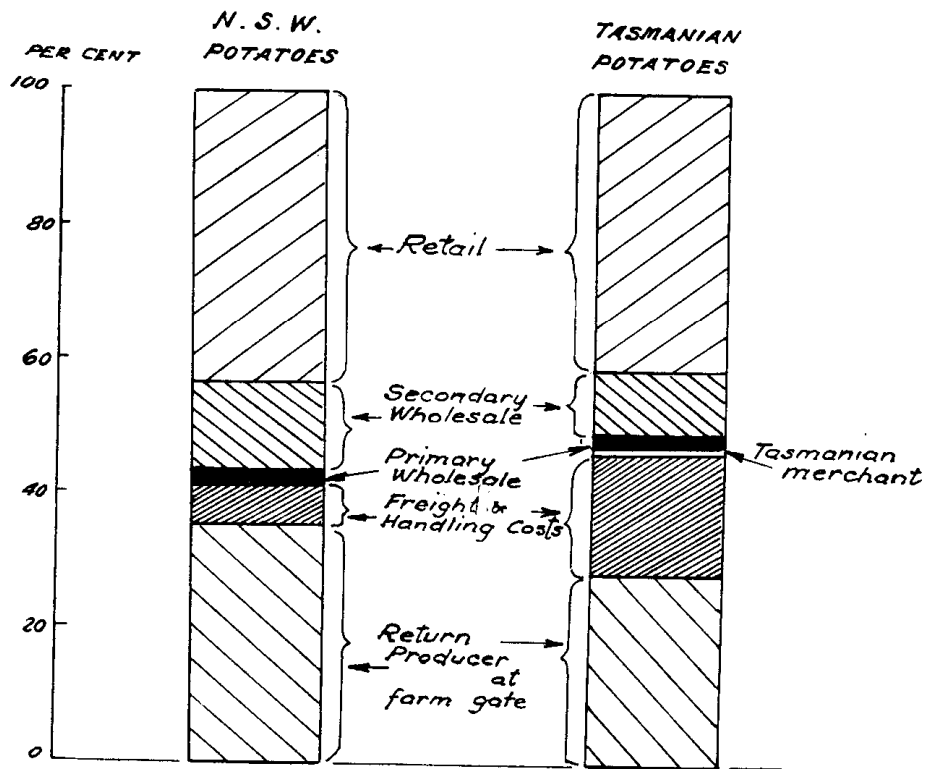


Fig. 4: Distribution of Consumer's Expenditure on Potatoes.

The Tasmanian grower usually faces a cartage bill of some 20s. 0d. to 25s. 0d. per ton for transport to the port of shipment ; he is then charged a further 15s. 0d. to 20s. 0d. per ton by the Tasmanian merchant who arranges the shipping of his product to the mainland markets. He then has to pay wharfage at 6s. 0d. to 7s. 0d. and inspection fees of 4s. 0d. per ton. Freight and handling costs amount to approximately 9 10s., whilst the primary wholesaler in the Sydney market charges 2½ per cent commission, with a minimum of £1. The Sydney primary merchant is further allowed to deduct 2½ per cent of the Tasmanian weight to allow for losses due to evaporation.

Out of the margins charged by the secondary wholesaler an amount for transport from either the wharf or Alexandria, labour, rent and losses have to be paid. The retailer also must make allowance for these items.

8. CONCLUSION

It may now be asked, how efficient is the potato marketing apparatus, both from the point of view of the consumer and producer. Although the interests of these two parties run parallel, it must be realized that they are not identical. On the one hand the consumer's main interest is to have potatoes available at the lowest possible price, but at a price which will be high enough to ensure that supplies come forward in the future. On the other hand the producer desires the highest possible price, but not so high that consumers will turn to substitutes.

Consumer and producer are therefore both vitally interested in the difference between the return to the grower and the price of potatoes in the retail shop, and with the magnitude of the supply.

The stock reply to the grower who complains that he suffers loss of income due to inflated costs and a decrease in the value of the income pound, has been the admonition that he should increase the productivity of the resources which he employs. Basically this advice is sound. But it is often forgotten that this advice is fraught with danger, for it ignores, that if all or most of the producers were to follow it the farmer may be worse off than before.

Whether or not this will be the case, depends on the elasticity of demand for the particular product and a simple calculation will show that in the case of potatoes greater efficiency is not the sole answer. Given a price-supply curve with a slope of -2.9 it must follow that if farmers produce 10 per cent more potatoes than previously the price will *decline* by approximately 24 per cent and growers' income will decline proportionately (16 per cent if margins remain the same).

This argument cuts two ways of course. A *decrease* of 10 per cent in the supply will increase prices by roughly 36 per cent and total expenditure on the primary wholesale level by 22 per cent. However, as a means of increasing farmers' incomes this is not a very advisable course to take either, for in the first place margins will rise if prices rise and only part of the increase in expenditure will be passed back to the grower, whilst the risk exists that consumers will turn to other products (e.g., rice) as substitutes.

Manipulations in order to effect a movement along the established curve do not therefore seem advisable and increased farm efficiency must be directed mainly to efforts to free available resources on the farm and to produce alternative crops with these, keeping total potato output stable. It goes without saying that if it is expected that only a few producers will follow the advice to increase productivity, they, as individuals then benefit, but to base advice on the hope that only few will follow it appears rather defeatist.

Another possible avenue which could be used to increase the growers' income would be to effect a bodily shift of the price-supply curve upward. Again, however, it is almost certain that part of this increase would be lost to the producer. Furthermore, with an "unglamorous" product like potatoes a bodily shift (that is an increased demand by the public to buy the commodity) would be a very difficult undertaking, the cost of which might well be greater than the return.

At present very little discrimination is exercised in buying potatoes by the public. This is reflected in the fact that little or no premium is being paid for certain varieties which are more palatable than others, whilst it is obvious that few retailers who are otherwise well informed, are aware of potato varieties and quality.

Whilst this does not mean that the *individual* farmer may not be better off if he raises his output or if he aims at improving the quality and presentation of his product, so increasing demand for it, for the body of producers as a whole the only speedy means of improving the economic position of the industry lies in a narrowing of the price spread between

producer and consumer. Some, indeed most, of this margin represents probably unavoidable expenditure on transport and handling. But there is some scope for economies. The margins charged by wholesalers, for instance, do not appear excessive; but added together they constitute a serious inroad into the growers' income. Improvements on this score may perhaps be effected by "broadening" the channel from producer to secondary wholesaler and by an increase in sales at the secondary level for potatoes on consignment, although this might add to the cost of the secondary wholesaler, who now is able to have only those potatoes on his stand which he thinks he is able to sell in the near future.

A shift in this direction is already discernible where a number of small co-operatives sell their products in the secondary wholesale markets. The rise of the chain store which may lead to an increase in direct trading between producer and retailer is another means of cutting across the network of trade channels, although it may be fraught with other dangers from the producers' point of view.

A more direct participation of growers in the secondary wholesale market might also provide some control over the secondary wholesale margins which have increased considerably during the past few years, as can be seen in Tables 2 and 3. Some of this increase is, of course, due to higher labour and transport costs, although the latter would only be a small part of the secondary wholesalers' outlay. Rents for most secondary wholesalers, operating in the Sydney Municipal Markets, have, however, not increased since 1953. Part of the rise in margins must therefore be explained by the difficulty which newcomers encounter in entering the industry at this level, much more so than at the primary wholesale level, where during the past six years, to the writer's knowledge, three new firms have entered, of which one in the meanwhile has joined with an older established firm.

Any action taken to improve conditions in the industry would first of all require a strong body of growers, willing to bury their extreme individualism and perhaps be prepared to forego some immediate personal advantage in order to reap more general and lasting benefits. Failing this, potato producers can expect that they will have to absorb further increases in distribution costs, whilst at the same time the value of their net income may fall due to inflation.