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THE SUPERMARKET

AND

ITS INFLUENCE UPON

THE NEW ZEALAND MARKET STRUCTURE

FOR FRESH FRUIT AND VEGETABLES

by

A.N. LAIRD

A dissertation submitted at Massey University of Manawatu in partial fulfilment of the requirements for the degree, Master of Agricultural Science.
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The Study:

Since 1958, supermarkets have been selling fresh fruit and vegetables, (otherwise known as fresh produce), in New Zealand. Their merchandising policies differ in many ways to those which characterise the traditional market structure of grower, wholesaler and greengrocer. Accordingly, the subsequent effects of these policies upon the three parties mentioned have been many and varied. Of paramount importance in this respect is the practice which involves the supermarket's bypassing of the wholesaler and purchasing his supplies directly from the grower. Obviously, this must adversely affect the wholesaler, and it is for this reason that the constraint upon the extent of direct procurement by supermarkets receives particular attention. The determining legislation behind this constraint is enforced by the wholesale industry, and it limits the realisation of cost economies by growers and supermarkets from purchasing direct. Furthermore, the grower views a laissez-faire policy of direct sales as a step towards his domination by monopoly interests at retail. This is a point of conjecture, but its importance lies in the fact that auction is viewed by growers as the means whereby this possibility can be prevented.

The wholesale industry unequivocally determines certain activities of the growing and retailing industries for fresh produce. Whether or not it should possess this right is a further point of conjecture, because by virtue of its operations and the present lack of competition, it engenders monopsonistic-monopolistic practices, and carries a negligible amount of the risk involved in the distribution process.

Study Plan:

The writer is first concerned with giving an overall impression of the supermarket, explaining what it is, and how it operates. This is followed by the factors which led to its inception in the United States of America, and its subsequent adaptation in Western Europe and New Zealand.

Consideration is then given to supermarket merchandising policies as they apply to fresh produce in New Zealand. Chapters Two and
Three detail procurement and selling policies while Chapters Four and Five discuss the effects which these policies have had, and are likely to have, upon both the greengrocer and the grower, particularly if the constraint on direct procurement were lifted.

Data relative to the New Zealand scene was largely obtained from personal interviews with supermarket chainstore executives, grocery store operators, wholesalers of fresh produce, greengrocers, growers, shoppers*, and others having a direct interest in supermarket development (e.g. real estate agents, bankers, butchers and drapers). This extensive nature of interviews was necessary because of the paucity of literature available on the subject, and the very limited amount of statistical data, often of dubious value, which has been published in New Zealand. Consequently, much of the statistical data and general information that was made available to the writer was done so on the understanding that it would be treated as confidential with respect to identification of source.

* Some 100 housewife-shoppers were interviewed in supermarkets, grocery stores and greengrocery stores, using a questionnaire which inquired after reasons for patronage.
1.1 Introduction.

The inception of supermarketing has caused a revolution in food retailing over the past 35 years. These changes were initiated in the structure of distribution and led to the dissolution of lines of demarcation distinguishing the traditional forms of retailing. The aim of this chapter is to introduce and define the supermarket and, in so doing, to put into perspective its position in the market structure of food distribution.

The reasons for, and factors behind, the growth and development of supermarketing in various market structures, are discussed at some length. Emphasis is laid upon the United States because supermarketing evolved in this country. In other parts of the world it has adapted to the prevailing market conditions, and has subsequently tended to orientate the respective environments into which it is introduced, towards its own merchandising policies. This is evidenced by the rapid adoption of self service merchandising activities in all fields of retailing besides that of food.

The development of supermarketing is further shown in Western European countries, along with the factors in a nation's "total environment" which facilitate its adaptation. Accordingly, from this point it is a natural step to consider the New Zealand general market structure since this is a combination of conditions to be found in both America and Western Europe. For example, New Zealand has a standard of living similar to that in America, whereas it retains, in fresh produce marketing, much of the British and West European form and mental attitude.
Therefore, although supermarketing evolved in America, a description of its growth and development in other countries is necessary in order to account for past and current trends, and to postulate the possible future effects of its establishment in New Zealand.
1.2 The Supermarket Defined.

"The feature characterising the supermarket is not turnover, but what it purports to do, namely, to bring together under one roof and channel, thru' one money transaction, the wares of the specialised food stores, which were once the only outlets for provisions." - (Abbot).

For the purposes of this analysis, a supermarket is a self-service retail outlet of 4,000 sq.ft., or more, selling space, and whose inventory includes a complete range of food products - meat, produce, grocery, frozen foods, dairy, delicatessen, dry goods, bakery, and some non-foods, soft goods and general merchandise. The grocery and meat departments must be self-service, and adjacent car parking facilities provided.

There is no general agreement as to the definition of a supermarket because such institutions differ between countries, to the extent of having only the name in common. The accepted United States trade definition is 'a retail food store which carries food in various departments, provides a parking lot for customers, does an annual volume of business of at least $(U.S.)500,000, and in which there is self-service in the grocery department'. In contrast to the American definition, a supermarket in the United Kingdom is defined as 'a store of not less than 2,000 sq.ft. sales area, with three or more check-outs, and operated mainly on self-service, whose range of merchandise comprises all food groups including fresh meat and fresh produce, plus basic household requirements'. Nevertheless, the basic retail operating methods are the same, e.g. self-service and the price-inventory-stock turn relationship. The prime

2. Refers to the following basic features of supermarketing operation: a high rate of stock turn, discriminatory pricing, and a large diversified inventory.
requirement of its makeup is that it be a departmentalised retail food store, comprising the five departments of meat, produce, dairy, grocery and non-foods, with the grocery department at least being self-service and check-out. The size of the supermarket (or self-service store) therefore, is really irrelevant, as many West European, as well as New Zealand self-service stores which are called supermarkets would in American terms be called superettes or bantam supermarkets. Particularly does this become apparent when the 2,000 - 6,000 sq.ft. selling area of the West European 'supermarket' is compared with the 25,000 sq.ft. and more, of its American counterpart. As a consequence of this difference in size, meat and produce departments in American 'type' supermarkets virtually become self-contained butchery and greengrocery stores. 3

1.3 Factors Facilitating the Growth and Development of Supermarket Operations.

1.3.1 Introduction.

The growth and development of supermarketing (as with any innovation), is determined by the environment into which it is introduced. In this instance, a highly developed marketing system and favourable total environment are the two factors determining the successful adoption and adaptation of this retail entity.

By 'a highly developed marketing system' is meant one which approaches 100% fulfilment of the definition of merchandising - the name given to the operation which ensures that the correct goods are at the right place, at the right time, and at the right price.

The term 'total environment' comprises the syndrome of economic and social factors associated with the acceptance of Supermarket merchandising policies.

3. In the larger New Zealand supermarkets this is almost true, as each of these department's is divorced from the general grocery etc. operation, and must return a certain gross and net profit % on sales.
The modern supermarket has gone a long way towards satisfying the inherent desire of customers for attractive and convenient shopping facilities, as "shopping convenience" no longer means simply the provision of personal service, credit, delivery and the location of the shop. It now also implies the hours which it opens, the ease with which it can be approached by car, and whether merchandise is easily visible and obtainable to facilitate quick selection. Finally, convenience implies the speed with which purchases can be wrapped up and paid for. Therefore, much of the appeal of supermarketing to the consumer depends on the techniques of self-service selection, scrambled merchandising, and continual alteration of product mix in length and depth. These introduce such economy and utility values as lowered prices, economy of time in buying, and the associate usefulness of concentrating shopping under one roof (i.e. one-stop shopping). The rising levels of living increase the ability and willingness of consumers to pay more for convenience and to adopt supermarket merchandising techniques.

Through its internal characteristics the supermarket has realised the advantages of price-cutting, of displaying a wider product line and of non-price competition. These competitive forces will tend to increase the elasticity of the demand function and initiate an exodus from the marketing system of small stores which possess inelastic demand functions. This process shall recur with a further lowering of prices and subsequent departures.

However, the major determinants of supermarket growth in any market system are the factors external to and characteristic of operations.

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5. Price reduction and non-price competition are analogous in effect.
1.2.2 **External Factors.**

The interaction of the supermarket's affecting and being affected by its environment will determine its growth and development within the market system. In the first instance, the environment within which the supermarket operates, must favour its particular form of operations. One classification of the forces comprising the total environment could be demographic-geographic factors; technological factors; the economic environment; and psychological factors. Markin calls such "the forces of demand".

1.3.2.1 **Demographic-Geographic Factors.**

A large potential and homogeneous market for the individual supermarket based upon either a high population density or transportation facilities to shoppers, is necessary. Important here are the spatial changes in urban structure. As Zimmerman states, "Supermarkets have from their inception been a suburban phenomenon."  

Population growth leads to location shifts to suburban areas ("the race to the suburbs"). Here are found higher income levels and, consequently, transportation which increases the individual's mobility, thereby further dispersing population and decentralising industry. The popularity of suburban living has weakened the functional links between city centres and their adjacent suburbs. However, associated with these developments is a strong demand for goods and services. Fulfilling this demand has caused the suburbanisation of retailing, namely, shopping centre development in which the supermarket plays the major role. The suburban environmental characteristics of low rentals, relatively affluent and mobile consumers, and reduced competition, facilitate

---

6. Those factors over which the supermarket has little if any control, and which are conducive to this type of shopping.


supermarket development, which is an adjunct to the suburban movement of population.

1.3.2.2 Technological Factors.

The following developments initially facilitated the development and growth of supermarket retailing, and ensure its continued growth and expansion.

1. **The Automobile.** As already stated, the acceptance of this as a shopping aid gives the consumer mobility, thereby decentralising retailing. This is the American pattern, where 86.6 per cent. of all food shoppers always use an automobile, an additional 1.8 per cent. using it only part of the time. Such is not the case in Great Britain, where only 10 per cent. of all shoppers arriving at a supermarket use the car as their means of transport. Reliance is on public transport (47 per cent.) and foot traffic (43 per cent.).

2. **Refrigeration.** This is essential for the merchandising of perishables (and complementary supermarket merchandising techniques, namely, self-service), from refrigerated display units. Through this was fostered the rapid expansion of frozen food lines, its influence on shopping habits furthering the concept of one-stop-shopping.

3. **New Processing and Preserving Techniques.** Quick freeze, instant mix and dehydration also facilitated self-service operations. Such market orientated innovations provide the housewife with a year-round supply, quality maintenance being assured. Furthermore, there is the growth of pre-packaging of perishable products which, besides complementing self-service, improves presentation and adds convenience.

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Consumer Income - the Economic Factor.

Consumer income per capita is the main concern of this section, the level of economic development, and whether the economic environment is favourable to change being its determinants. These apply as much to the modern supermarket which requires that its customers have a high standard of living and a high per capita disposable income, as they did to the early "cheapy" supermarket,10 associated with a low standard of living. In this regard, the rising standard of living, post World War II, was the major contributing factor to the growth of supermarket merchandising operations, particularly in North America, and latterly in Western Europe.

The increase of a country's overall economic activity, (as reflected by its gross national product, personal disposable income and personal consumption expenditure), and the consequent increase in consumer purchasing power, narrows the 'gap' between the high and low income groups resulting in the increasing size of the middle income class. This group is the dominant supermarket customer, as it is alert to change, responsive to bargains, and possesses the major percentage of consumer purchasing power.11

The Spanish Government overlooked this point in its "Operacion Supermercados", in that although the Spanish market possesses the wide extremes of income, (as reflected by the successful establishment

10. Analogous in form and operation to the Discount House of the 1960's.
11. The growth of supermarkets in Puerto Rico illustrates these points, in that a fortuitous economic climate has been present from the mid-fifties. This increase in the island's economic activity is reflected in the rise of per capita incomes from $437.00 p.a. in 1955 to $750.00 p.a. in 1964. In addition Puerto Rico's supermarkets (25 in 1964) are spotted throughout the middle class neighbourhoods. Business Week. May 16th. 1964. 'Food Chain with a Latin Flair'.
of supermarkets in high income areas\textsuperscript{12}), the average per capita disposable income is only $360.00 per year.\textsuperscript{13} Except for Portugal, this is the lowest level in Western Europe, the figure being only one-quarter of that possessed per capita in leading West European countries such as the United Kingdom, West Germany, Switzerland, Denmark and the Netherlands.

If the number of automobiles per thousand head of population is taken as a measure of a country's standard of living, Spain's position as compared to that of the United Kingdom and to the United States can be illustrated by the following figures taken in 1960 -

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The Spanish housewife, (and to a lesser extent the West European housewife), does not have the discretionary buying power of the American. Consequently there is a lesser desire for convenience in produce use and preparation, and a slower acceptance of 'convenience foods'. In addition, cooking in West Europe is still regarded as an art, a fact which places emphasis upon staple food items.\textsuperscript{14}

On the other hand, the American housewife, as well as desiring labour saving products, can afford the associate expense of convenience foods, and she is highly susceptible to those merchandising techniques designed to promote impulse sales. This is because the relatively higher income level means fewer budget restrictions, and an

\textsuperscript{12} J.R.Guerin. 'Limitations of Supermarkets in Spain'. Journal of Marketing. Oct. 1964. p.23. 'Supermarkets in Spain are located in the high income districts'.


\textsuperscript{14} J.R.Guerin. op.cit.p.23. "Even in Madrid where per capita income is about 50% above the national average, 54% of the population in 1960 spent only 28 cents (U.S.) per person per day for food. Over 27% of this was spent for items (bread, sugar, oil, eggs) whose margins are low, and in Spain are kept at very low levels by Government controls. "For these low income customers, purchases of high margin items would be negligible."
increased willingness to buy frills and variations, the consumer becoming increasingly vulnerable to competitive forms of selling. Price has become subordinated in the buyer's mind by other utilities such as variety and quality of merchandise offered, more food items available under one roof, and courtesy shown by supermarket personnel.

The fact that the family of the typical American shopper possesses a car, has an income of $5850.00 per year, and spends about $1125.00 in supermarkets each year, further illustrates the difficult economic situation that the supermarket operator has to face in Western Europe. Thus, the number of supermarkets in a country can be said to be an index of the size of its middle class since successful supermarket operation requires consumer income to be at or above a level which permits the purchase of commodities possessing high as well as low margins.

1.3.2.4 Psychological Factors.

It is difficult to determine whether changes in consumer purchasing behaviour preceded, and as a result induced changes in supermarket operations, or whether it was the changed selling techniques themselves which brought about the different outlooks and methods in food retailing. According to Charvat, the changes in shopping habits occurred concommitantly with the development of the supermarket. Such developments initiated the concept of 'simplified selling', with self-service and cash'n'carry merchandising the basic precepts.

The housewife in the supermarket is able to roam at will through the varying types of merchandise 'taking-in' the attractive presentation of items which are displayed to their fullest advantage.

15. F. Charvat. op.cit. p.46.
16. Cash paid by customers for purchases, no credit given by retailer, and customers usurp retailers' traditional delivery function.
There is independence in the buying process, and opportunity to compare and contrast different commodities inter- and intra-generically. Consequently there is complete relief from sales pressure, (unless otherwise desired), in that the housewife can make her own selection without having to ask to be shown a cheaper item.

There is also an inherent desire to purchase whatever catches the eye and always the temptation to buy more than was intended, and thus to over-spend. The mass presentation of merchandise coupled with self-service selection complements the length (number of items stocked), and depth (varieties of each item stocked) of inventory. Attractive advertising\(^{17}\), creates an in-store atmosphere which stimulates the tendency to impulse buying. This practice is defined as "the purchase resulting from a decision made on the spot in the retail outlet where the consumer sees the product displayed." Various consumer research studies\(^{18}\) state that this has become a significant practice among supermarket shoppers, accounting for 51 per cent. of United States retail grocery purchases in 1959. The consumer's total demand curve is moved out and upward to the right by this practice, whilst the elasticity of demand for each commodity presented for sale is increased. These are actions which indicate a reduction in the rigidity of adherence to traditional tastes, preferences and habits.

While impulse buying and its increasing incidence demonstrates the effect of supermarket merchandising upon consumer purchasing behaviour, the supermarket's inventory appeals to the housewife's vanity and induces the feeling that she is buying wisely, and to the needs of herself and family.

\(^{17}\) Serving to create favourable brand images and to presell commodities through price and non-price appeals.

1.3.2.5 Other Factors.

Various other external forces have contributed toward supermarket growth and development. Three, which initiated and continue the demand for "convenience foods" are: 19

(1) The steadily increasing percentage of married women employed outside the home. 20 This increases disposable income per household and reduces time for preparation of meals.

(2) The increase in the number of people living in flats and small households who prefer to buy food in small standard portions.

and, (3) The scarcity of cheap household help.

In addition, promotional activities, which identify manufacturers and supermarkets with their respective brands, serve to presell the customer and facilitate further self-service operations.

Furthermore, with respect more to Western Europe and the United Kingdom, population shifts are of importance, as migration has the effect of watering down restrictions of habit and tradition. 21

Finally, aggressive retailing leadership determines supermarket growth. Two examples of this are the MIGROS chain of supermarkets in Switzerland, and the initiation of supermarketing by the American firm of WESTONS in West Germany and the United Kingdom.


20. C.Fulop. op.cit. p.27. ("In 1961 more than half the women in paid employment in the United Kingdom were married". i.e. 4 million in a total female labour force of 7.8 million.

1.3.3 Internal Characteristics of Supermarket Operations.\textsuperscript{22}

The supermarket successfully entered marketing systems at the expense of the resident retailers. For this reason, concern is with those characteristics which induced consumers to patronise the supermarket rather than its competitors - (the chain store, country store, small store and specialty store).

The basis of the supermarket's competitive advantage is its ability to operate on a low gross and net profit margin;\textsuperscript{23} both taken as a percentage of sales. One way in which this is demonstrated is in its ability to feature products at prices which on an average are less than those of its competitors.

Major emphasis is placed on turnover to bring the supermarket 'into-line' with its capacity and optimum profit potential. The reason for this is that capacity is a direct function of inventory size. Consequently, possession of excess capacity makes possible an inventory increase without a large increase in marginal cost. This requires that inventory and sales be increased to the point where marginal cost equals demand. In this way the optimum profit potential of the supermarket can be approached.

The correct manipulation of the following variables making up the merchandising mix is necessary if the supermarket is to maximize its competitive advantage:

1. Pricing Behaviour.
2. Inventory policy.
3. Promotional techniques.
4. Shopping facilitating services.

\textsuperscript{22} Factors which characterise supermarket operation and draw custom.
\textsuperscript{23} Colonial Study. Progressive Grocer. C.74.
Gross Profit 18.8 per cent of Store Sales.
Net Profit (before tax) 4.8 per cent. of Store Sales.
1.3.3.1. **Pricing Behaviour:**

The supermarket is a multi-product firm. Accordingly, to maximize its profits, prices must be set so that a greater contribution to overhead costs and profits comes from products facing a relatively inelastic curve, than from those commodities stocked whose demand is more elastic. That is, profits can be maximized only if a form of price discrimination is practised, (in the sense that different profit percentages are realised on several commodities).

As mentioned previously, fixed costs are high. This requires operating as close to capacity as possible. Pricing policy takes into consideration the varying demands for commodities making up the supermarket’s inventory. Consequently that supermarket operators set prices relative to price and cross elasticities is evidenced by staple foods possessing low mark-up margins over direct cost, whilst non-staple foods possess high mark-up margins. The demand for the former items is inelastic, the latter elastic.

Most important in this issue is the image of cheapness which the supermarket created, and has maintained, by virtue of the structural makeup of its pricing and promotional policies. Variable mark-up policies, facilitating "specialling" and advertising, for ever emphasise the low price policy of supermarkets - a constant endeavour to sell for less. Such strategies as leader pricing or specialling, (the price cutting of fast moving lines), and multiple unit pricing, use price as an aggressive tool in supermarket merchandising, to project this image of cheapness, (as well as utilising the benefits of cross elasticity of demand from increasing store traffic). These policies are actual evidence of price discrimination. Conspicuous staples, \(^{24}\) such as potatoes and

\(^{24}\) The price awareness of consumers is greatest for these commodities due in part to their high frequency of purchase.
coffee, are those utilized in specialling. The margin reduction on such commodities is a promotion cost, which serves to increase the firm's spatial monopoly over consumers, even though this influence may be limited to the short run. Exploitation of the principle of cross elasticity of demand is a further aim. The commodities specialled often possess a highly negative cross elasticity of demand relative to other commodities. Accordingly, the function of specialling is dual in nature:

1. To increase custom, and
2. To increase sales of complementary items. A positive inter-store and negative intra-store cross elasticity of demand effect.

These techniques are accepted as part of the 'normal rules of the game'. That is, 'special' price cuts are accepted as being short term (for only a few days) in nature - (apart from permanent price reductions.) This is so, because the gains accruing from such an activity are increasingly negated over time through 'erosion' by rivals meeting competition, and consequently, specialling, has the two functions of retaining present custom and increasing custom. Thus an offsetting effect results, with all firms (of necessity) taking part.

Accordingly, in this instance, the fear of retaliation is non-existent. The firm moves down the lower segment of its demand curve, in the kinked demand curve exposition. The short term gains acquired in so doing are a function of the speed with which rival firms, in meeting competition, bend the lower segment of the initial firm's demand curve back to the lefthand side toward the lower segment of the kinked demand curve - the generic demand curve.

---

25. If the demand for two commodities A and B is complementary, a lowering of the price of B will cause the demand curve for A to rise to the right. (Assuming a horizontal short run marginal cost curve.)
Retaliation, however, does not take the form of retaliation on an identical commodity which the firm is featuring, for this is price competition of the clearest form and anathema to the oligopolist. Rather are different commodities utilised toward the same end.

1.3.3.2 Inventory Policy.

A further, and dominant, characteristic of supermarketing is the mass presentation of goods. The offering of the full range of products required in normal consumption under the one roof, apart from serving to enhance the already present aura of cheapness, serves as a means of attracting custom. It does this through creating an atmosphere conducive to impulse purchasing, and facilitating the concept of one-stop shopping,26 (self-service selection playing a dominant role). As Cassady states27, one of the most important factors in the success of supermarkets is the combination of lines, qualities, varieties, brands and sizes of items which the vendor carries' - that is, the Product Mix.

The constant revision of inventory items due to new products, broadening of the product mix, and diversification to include non-food items can, in the first instance, be attributed to the highly competitive nature of the supermarket business. Operating on reduced margins, with the desire to increase returns, leads to the introduction of non-food lines which possess relatively higher margins, thereby utilizing the 'traffic pull' of basic food lines - leader pricing etc. to increase overall sales. Through increased dimensions the supermarket increases its share of the consumers' purchasing power and, as a


27. Ibid. P. 98.
consequence, enhances its competitive position in the market structure. Therefore, owing to the nature of its operations, namely a trading policy of high turnover and relatively low margins, associated with a large inventory, it can realise economies of scale in procurement and sale. This facilitates cost reduction because, in the first instance, advantageous buying prices are associated with bulk orders and a strong financial position. Economies (oligopsonistic by nature) are obtained through the heightened bargaining power arising from the increased degree of vertical integration. Secondly, mass merchandising introduces reduced costs of physical handling for the supermarket as a buyer and a seller. As the greater percentage of total supermarket costs are fixed and invariant to turnover changes, costs must be lowered by spreading overheads and operating expenses over the large sales volume transacted. Functional specialisation is an important economy of scale made possible by this merchandising form.

Both economies of scale serve to lower the costs of buying and selling incurred by the supermarket operator. As a consequence the average cost curve is lowered to the lefthand side, with marginal costs moving downward in sympathy. These actions allow the supermarket to pursue its peculiar pricing policy (of lowered prices).

   Growth in average number of items handled. 1959: 5,800
   1964: 6,900
   Number of items stocked.
   1965: 7,100
   1975: 9,200

29. Functional specialisation is made possible and, as with other activities, Purchasing (and Selling) becomes a highly skilled operation, to the extent which has been reached in the United States, where Buying Committees (and field offices for Produce), perform this function. (For a discussion on the purpose of these committees see -
   Cassady. op.cit. P.2.
   Markin. " P.98
   Charvat. " P.78)
   The extended use of said committees is said to have resulted in a more unified merchandising program, giving greater co-ordination of Buying, Selling and Promotion.
In consumer research studies, one of the prime characteristics of a supermarket mentioned is the variety of merchandise offered for sale. The characteristic is further put forward to account for patronage of particular supermarkets. Accordingly, the size of inventory of a supermarket has an influence on the demand curve which it faces. Nowhere is this demonstrated more clearly than with impulse sales and the response of consumers to specialised commodities. Thus, the product mix of a supermarket determines the elasticity of the demand curve it faces relative to that faced by its competitors - (other supermarkets and specialist retailers etc.)*

1.3.3.3 Promotional Techniques.

These are of two forms, out-of-store and in-store, with two functions, attraction and retainment, respectively, of customers.

As volume is a necessary facet in the success of the supermarket's operations, the purpose of promotional techniques is to promote sales. This is accomplished by co-ordination with other strategies, e.g. specialising and loss leader pricing. The principle is to attract with advertising, (newspapers* have the greatest penetration), sell with in-store displays, and retain with in-store characteristics and promotional activities (namely, courtesy of store personnel, store appearance, trading stamps, contests and premium plans).

Display techniques, from the point of view of presentation of the individual item and siting of the merchandise, utilize the point-of-contact concept, (as with special displays), which is facilitated by self-service and serves to increase sales and profits.

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* Suggested that relative to sales, small-size stores operate in an inelastic region of their demand functions, whereas large stores in urban markets are operating in the highly elastic region of their demand functions.

* Percentages of the Retailers Advertising Dollar 0 Prog. Grocer, April 1966. Newspaper Advertising - 45 to 60% Sales bills - 15 to 23% Point of Purchase - 15 to 20%
For this reason, special displays are a prominent in-store promotional activity. The Dillon Study indicates that the average special display boosts sales 536 per cent. over normal shelf position movement.  

Furthermore, in this regard, Markin makes the point that 'because of the inherent features of its operation the supermarket offers one of the greatest opportunities in the retail field to capitalize on the psychological displaying of products'. (That is, the impact upon the customer of mass display and special discount offers). The section 1.2.2.4 bears this point out. Amongst the reasons given for the success of special displays is the creation of a buying psychology on the part of the customer, through psychological techniques of mass, colour and arrangement. This serves to create a "price" atmosphere which stimulates impulse purchases, as well as increasing the sales of related line products. Advertising, in the sense of presenting a product for sale, has the tendency to move the demand curve to the right. Thus, in differentiating his product-service from the generic product-service, the supermarket operator increases the elasticity of the demand curve he faces, relative to that for the generic product.

1.3.3.4 Shopping Facilitating Services.

These are further forms of non-price competition, (apart from advertising and variety-of-merchandise-offered), which serve to enhance the position of supermarketing in the market structure, as well as being effective intra-supermarket competitive devices in the form of providing convenient and attractive shopping facilities.

1.3.3.4.1 Store Location.

One of the most fundamental non-price factors is store location, the choice of which must fulfil one precept of merchandising,
namely, ensuring merchandise is at the right place. The right place, relative to sales volume, is determined in part by convenience to the consumer, for whether the supermarket is located in the city centre, or an adjacent suburban area, customer convenience as regards ease of access and egress is essential. A high density of foot and car traffic are the respective requirements sought. Accordingly, selection of location involves reviewing community features such as diversification and permanence of industry, characteristics of potential consumer trading area, and site features - for example, foot and car traffic arteries.

The location problem in the United States differs from that in the United Kingdom and Western Europe. American consumers utilize the automobile as their shopping aid, whilst the British consumer arrives on foot at the supermarket, or uses State transport services (buses or rail) as an aid in shopping. Consequently, the supermarket is more of a suburban entity in the United States (as it is in Auckland); whereas, in the United Kingdom and Western Europe it evolved in the city centre. However, in the latter areas there is an increasing trend toward suburban establishment to avoid the high rentals associated with city trading - typified by shopping centre development. The limited number of sites in the city or town centres contributes to this. In addition, suburban sites allow for the necessary supermarket adjunct, a parking area, for there is no doubt that sales may be directly reflected by the size of the parking area. Consequently, the provision of 'adequate' parking space is essential if the potential of specialising is to approach full realisation.

34. Shopping in Suburbia. Ibid. P.56. Table 5. Method of travel to shops.

<table>
<thead>
<tr>
<th>Method of travel to shops</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking</td>
<td>72%</td>
</tr>
<tr>
<td>Car</td>
<td>14%</td>
</tr>
<tr>
<td>Bus</td>
<td>15%</td>
</tr>
<tr>
<td>Train</td>
<td>1%</td>
</tr>
<tr>
<td>Other means</td>
<td>5%</td>
</tr>
</tbody>
</table>

Note: The percentages add to more than 100% because some used more than one means of travel or sometimes travelled one way and sometimes another.
Thus, location and size of parking area are contiguous factors in the determination of sales volume, (the former prime, the latter contributing.)

1.3.3.4.2 **Self Service.**

Self-service selection, as aptly put by Cassady, is the sine qua non of supermarket operations. The strategies comprising the merchandising mix are sufficient facets, but none, as is self-service, is the necessary facet for supermarketing growth and development. Techniques of mass merchandising complement self-service supermarket operations by reducing operating expenses and increasing the volume of sales, thereby giving supermarketing a competitive advantage on two fronts.

As regards the reduction of operating expenses, there are economies to be obtained from the advanced techniques of inventory handling and checkout operations. Moreover, the resulting rationalisation and specialisation of functions facilitate the division of labour with the consequent reduction of wage costs in relation to sales as self-service transcends the difficulties inherent in counter-service. For example, the operation of price listing and adding is mechanised, and the processing of goods is separated from that of attending customers. Furthermore, a more economic use is made of selling area by self-service, in that a wider and deeper range of merchandise can be stocked. Therefore, this is a method which reduces the average total cost of selling merchandise, as well as

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35. May be defined as a system in retail stores whereby the customer chooses her own merchandise and waits on herself while shopping.
37. P.G. Thomas. 'Modern Retailing Techniques'.

Average weekly sales of £95 per head of staff using counter-service; corresponding figure for supermarkets is £177; many stores, particularly in the London area, average £250 and over. Whilst wages as a percentage of turnover range from 8 to 10 per cent. for counter-service stores to 5 per cent. for supermarket type outlets. Moreover, the average increase of sales with self-service is about 50 per cent; with the average transaction being 4/- to 5/- and 12/6 for counter-service and self-service respectively.
reducing the marginal cost of stocking and selling an extra line.

As mentioned, self-service is an effective means for increasing sales, in that the act of browsing induces an emotional appeal which initiates impulse purchasing. Moreover, the time-saving attribute, the conferred ability to select at will and on own volition prior to purchase, with relief from sales pressure and the fear of brand substitution, are characteristics of self-service selection which customers appreciate.\(^{38}\)

All of these factors serve to increase the elasticity of the demand curve facing the supermarket, an action which has given and continues to give the supermarket a competitive advantage over its rivals.

1.3.3.5 Others.

Finally, with regard to shopping facilitating services, consumers desire:

1. **Courtesy and friendliness.** These two important characteristics can constitute a competitive advantage through the personal approach, for consumers respond markedly to friendly and courteous service.\(^{39}\)

2. **Attractive and Convenient Shopping Facilities.** The trading up, or improvement of stores in appearance, and the in-store facilities, e.g. powder room; kiddy corner; information, 'phones and courtesy counters, all further enhance the supermarket's competitive image.

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39. Progressive from 'Colonial Study'. 'The quality and personality of store personnel and the services they perform for customers stand out as the greatest difference among supermarkets. 73% of all customers interviewed gave this as their reason for shopping at the particular colonial supermarket.'
Financial Considerations in Supermarket Development and Growth.

Financial economies of scale accrue because the degree of risk associated with investment is lower. There is a wider variety of sources of credit available, more particularly in the sale of securities to the public, whereas the independent relies largely on retained earnings.

Economies of scale also accrue in market risk management, because risks can be reduced or eliminated by grouping them. The diverse nature and size of supermarket operations as regards output, sources of supply markets, and processes of manufacture, serve to nullify to a large extent the adverse ramifications of market change. Thus the large organisation, (as a unit and/or a member of a corporate chain), can hedge against incorrect decisions which would cripple the small independent firm. Particularly is this the case in merchandise selection, for the large retailer can spread the risk of error over a diverse number of lines and variety of trading areas.

Furthermore, large units can acquire the personnel required for market research studies. These studies can be conducted at low cost to sales, their use lying in their ability to serve as a partial counter to chance market changes, an opportunity which is not available to the small firm.

To summarize, the integration of the multifarious activities inherent in supermarket grocery retailing, facilitates the realisation of various economies of scale. Operating economies are realised from the integration of wholesaling and merchandising activities with retailing, especially as regards linked processes. The prementioned elements of competitive strategy give rise to the competitive advantage
which is possessed relative to the limited line specialty retailer.

The aggregate effects of these elements of competition - economies and merchandising strategies - account for the success of large scale grocery retailing; in this instance, supermarketing as opposed to limited-line retailing. They reduce the average and marginal costs of operation below those levels characteristic of the conventional retailer, and increase the elasticity of the demand schedule faced by the supermarket.

1.4 The Development of Supermarketing.

1.4.1 Introduction.

Although corporate chains, e.g. in the United States - The Atlantic & Pacific Tea Company: The Kroger Company; and in New Zealand - Woolworths (N.Z.) Ltd. were the main initiators of supermarketing, (subsequent to its inception by individual companies, viz., King Kullen Ltd. in the United States and Foodtown Ltd. in New Zealand), they are not the only organisations behind its growth and development. Affiliated chains contribute as well, and have come to assume a dominant position. This has been the case in most countries where supermarketing is present, regardless of the environment into which it was introduced.

This section commences with a brief discussion on affiliated chain development. (Having a knowledge of these 'chains' will enable the reader to better understand the following subsections which make mention of them.) The history behind the establishment in the United States, Western Europe and New Zealand, is brought up to the present day, and future developments hypothesized. Furthermore, the forces behind inception, adaptation, and development are compared in each nation, along with the reasons for the supermarkets subsequent success or failure.
1.4.2 Retail Buying Groups and Voluntary Chains.

The affiliated independent chains are of two kinds:

1. **The Voluntary Chains.**

A wholesaler sponsored group of five or more stores each individually owned, possessing the same trade name. Operated by independent retailers as franchised units of a group of similar stores which follow the same advertising, buying and merchandising patterns, e.g. in New Zealand, the Independent Grocers’ Alliance, I.G.A.

2. **The Co-operative Chain** - (Often called a retail co-operative).

Differs in that it is a wholesale operation jointly owned by retailers who are the customer stockholders. e.g. In New Zealand, the Four Square Organisation.

The financial and market position of the food wholesaler was jeopardised by direct selling arrangements between the supermarket retailer organisations and the manufacturers. Abbot\(^40\) supports the opinion that the wholesalers were the most important force in initiating the voluntary chains, as their survival is dependent upon the survival of their customers, the independent retailers. Accordingly, with the movement of corporate chains into supermarketing, and the attendant intensification of competition, these affiliated groups encouraged their members to adopt self-service techniques and enter into supermarket merchandising. The formation of affiliated groups in food marketing strengthens the wholesalers' position and enables the small and independent retailers to take advantage of bulk buying discounts and a new means of price and non-price competition, as well as other economies precluded to them as individuals, but available to the corporate chains. At the same time,

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their position in the market structure is enhanced. Thus, pressure from
the food wholesaler gave birth to voluntary chains which have interjected
themselves between the manufacturer and retailer, and in which the separate
strengths of the independent members are combined.

Their successful growth is due to three characteristics of
their market.

1. The inherent power of the independent retailer due to
his location, shopping tradition, personal contact with consumers, and large
numbers.

2. The relative marketing weakness of small food
manufacturers, which has created the opportunity for strong distributive
organisations.

3. The growing desire of the housewife to concentrate her
food purchases in one store - a trend which has strengthened the retailer's
willingness to expand his lines, and caused the wholesaler to parallel this
move.

In the Netherlands, 70% of independent grocers belong to
such chains, which in 1960 accounted for 50% of all retail grocery sales. 41
In Canada, voluntary groups transacted 5% of food sales in 1951 and 36.7% in
1965, whilst non-affiliated independents' sales fell from 62.8% to 17.3%. 42
In Australia, wholesalers and independent retailers have combated
competition from the large retail food chains in the same two ways, viz.
by opening up their own self-service wholesale warehouses and setting up
their own manufacturing facilities and retail outlets.

The same trend is present in New Zealand with the
difference that such wholesaler and retailer sponsored organisations have

42. A. Lerner & T.S. Patil. "Changes in the Market Structure of Grocery
Retailing". Canadian Journal of Agricultural Economics. No.1, 1965. See also
Table 10, p.32.
been present in the market structure for some thirty years. These organisations have encouraged their members to adopt self-service and supermarket merchandising techniques. Consequently, they occupy a dominant place in food retailing, accounting for over 60% of the total grocery sales in 1965, the heightening competition from supermarkets and supermarket merchandising operations forcing more and more independent retailers to become affiliated to such voluntary chains.

Self-service food warehouses are also present - a scheme which offers an alternative to and/or supplements the voluntary chain.

1.4.3 The United States.

The supermarket is an American innovation, therefore, as effects of its growth and development are most marked in the United States, the American supermarketing industry is used as the basic model for prediction and explanation in other marketing systems. In the United States of America there has been a change from a system dictated to by the small corner store to one dominated by the supermarket. Such a radical "about face" has not been experienced elsewhere in the Western world, yet the trend is a present and growing one.

The American supermarket is a "depression product". Its successful entry into food retailing was made possible by its ability through low cost merchandising of food to answer the heightened consumer demand for cheapness at this time. The economies inherent in mass

43. These wholesale food warehouses are designed primarily to deal with the independent grocer who can neither afford to buy in bulk nor cut prices. Their main advantage is that all prices can be adjusted to the economies of bulk buying and special price offers made periodically by manufacturers. Grocers serve themselves, pay cash, and personally remove goods to their stores.

44. Hepner, p.274/5. The first real Supermarkets were products of the Depression - housed in barn-like structures and stock-piled on crude pine tables.
distribution enabled supermarket operators to cut costs and prices, and thereby complement the economic environmental factors of low per capita income and unemployment.

Cassady states the following successive developments as having led to the genesis of the supermarket as a new retailing institution:

1. The growth of chain store operations.
2. The increasing acceptance of self-service.
3. The expansion of retail outlets to large-scale size.
4. The widening of merchandise offerings to include non-food lines such as soft goods, hardware and drugs.

In evolving to its present form, however, supermarketing passed through four main stages.

1. Prior to 1930. The growth of large retail stores and the inception of self-service with its associated aspects of check-out and cash'n'carry.

2. 1930 to 1935. The inception of "cheapy supermarkets" (by independent individual operators who foresaw the financial advantages arising from heightened rates of turnover and drastically reduced margins), reflected the depressed conditions of this time.

3. 1935 to 1946. The period of experimental growth and development in supermarketing saw the entry of chain organisation into this sphere of retailing.

4. 1946 to present time. The post-war period of modern supermarket development and expansion. 45

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As the supermarket was a depression product, it was expected to disappear with the subsequent improvement in economic conditions. However, its approach to food retailing gave it a major competitive advantage over the associated groups of the market structure. This was demonstrated by supermarket's acquiring in a relatively short time the major proportion of grocery sales in their market areas. The marked increase in supermarket sales as a percentage of Food-store sales in the U.S. for the decade 1935 to 1945, shown in table 1.1 below bears this out.

**TABLE 1.1**

The Growth of Supermarkets* in the United States, in Store Numbers and Dollar Sales for the Years 1935 - 1965

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Supermarkets</th>
<th>Sales $Millions</th>
<th>Supermarket Sales as % of Food Store Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>1935</td>
<td>300</td>
<td>150</td>
<td>1.7</td>
</tr>
<tr>
<td>1940</td>
<td>6,175</td>
<td>2,000</td>
<td>10.3</td>
</tr>
<tr>
<td>1945</td>
<td>9,575</td>
<td>4,500</td>
<td>22.7</td>
</tr>
<tr>
<td>1950</td>
<td>14,217</td>
<td>10,250</td>
<td>31.3</td>
</tr>
<tr>
<td>1955</td>
<td>24,700</td>
<td>23,535</td>
<td>59.7</td>
</tr>
<tr>
<td>1960</td>
<td>33,300</td>
<td>36,175</td>
<td>66.6</td>
</tr>
<tr>
<td>1961</td>
<td>30,100</td>
<td>38,200</td>
<td>70.1</td>
</tr>
<tr>
<td>1962</td>
<td>27,125</td>
<td>37,975</td>
<td>67.6</td>
</tr>
<tr>
<td>1964</td>
<td>30,900</td>
<td>43,150</td>
<td>69.6</td>
</tr>
<tr>
<td>1965</td>
<td>31,950</td>
<td>46,510</td>
<td>70.7</td>
</tr>
</tbody>
</table>

* Note: Prior to 1951 Supermarket definition sales of over $250,000
    1952-61 over $375,000
    1962- over $500,000

Sources: Progressive Grocer. Annual Reports April 1965, April 1966
Supermarket Merchandising.

Increasing awareness of the enhanced financial returns which could be realised from this form of food retailing gave rise to a continuing increase in supermarket numbers. The consequent heightening

46. Charvat. op. cit. P.153. From its genesis in Los Angeles in 1928, by 1953 there were some 250 supermarkets, accounting for about 40% of the total grocery business of the territory.
of the competitive effects which this had upon the retail grocery market structure; \(^{47}\) caused chain stores and independent operators to reorientate their operations accordingly. This was reflected in the subsequent chain domination of supermarketing and the rapid adoption of self-service by independent retailers.

The big swing to supermarketing commenced in 1946, with affiliated independents attaining a major operating position as their members shifted into supermarket operations (38.5\% of total supermarket sales in 1965). Small corner stores selling mostly dry groceries with limited lines of fresh meat and other perishables became organisations of supermarkets offering for sale 5,000 and more different items (1964 average number of different items stocked for sale was 6,300). The rapidity with which this movement from product-line specialisation to scrambled or mixed merchandising has occurred is indicated by the increase in supermarket numbers and grocery sales, illustrated in table 1.1.

In 1964 the voluntary and co-operative groups' form of operations had succeeded to the point where the affiliated independent retailers' share of the total market available to independents was 34\%. This was equivalent to 50\% of total food sales for the same year. In 1965 these, and corporate chains, all possessing centralised procurement and merchandising policies, controlled 90\% of the food sales made through retail stores.

The trend in American food retailing is one of concentration. This continuous merger activity, has led to a reduction in the number of outlets and an increase in the average size of outlet. From 1950-1964 corporate chains reduced their store numbers by 12\%, and

\(^{47}\) Charvat, p.21 - for example in 1935 a study of advertised staple merchandise prices in 16 cities throughout the U.S. found that Supermarkets undersold the chains on comparable products from 4.8 - 22.9\%. 

increased sales per outlet by 300%; independents reduced their numbers by 48% and increased their sales per outlet by 400%.

A further outcome of supermarket operations has been the emergence of discounting as a competitive force in food retailing. The term "Discount House" is the name given to a retail store which offers large savings to consumers on items it sells. It has taken the place of the 'cheapy' and early American supermarket of the thirties through its low pricing techniques. The modern supermarket of the 1960's has become more concerned with non-price competitive measures which increased operating expense ratios, raising gross margins (as a percentage of sales) from 12% - 18%. As a consequence of this, the Discount House, through eliminating trading stamps and reducing advertising premium plans and customer convenience, was able to price stock lower than the supermarket and so penetrate the market structure. It retained the same high volume, low overhead principle that gave rise to the supermarket industry. Its normal markup on groceries approaches 12%, as compared with the 18% margin imposed by supermarket operators. Accordingly, its appeal to the consumer is price, (as compared with convenience). That supermarket operators have become aware of this is demonstrated by the combination of a Discount House with a supermarket in a shopping centre. Therefore, the present situation suggests that the American supermarket has run its full cycle; from cheapy supermarket to the modern supermarket of today, and back to the cheapy supermarket typified by the Discount House.

To conclude, the place occupied by the supermarket in present American food distribution is further illustrated in Table 1.2. However, the place which it possesses in the American economy is quickly realised in that it ranks second on a $ sales basis to the automobile.
industry. In 1965 the 51,750 supermarkets making up the "industry" transacted an estimated volume of $46.5 billion, which represented 71% of all grocery stores sales and 65.5% of the total food store sales in this country.

### TABLE 1.2

**United States Retail Food Store Sales by Ownership and Size, 1965.**

<table>
<thead>
<tr>
<th>Category</th>
<th>% of Total</th>
<th>% of Sales (billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Grocery Store Sales</td>
<td>100.0%</td>
<td>65.860</td>
</tr>
<tr>
<td>Specialty Stores</td>
<td>7.2%</td>
<td>5.100</td>
</tr>
<tr>
<td>Total Retail Food Store Sales</td>
<td>100.0%</td>
<td>70.910</td>
</tr>
</tbody>
</table>

**Chain Store:** A retail unit, one of a group of 11 or more similarly identified stores under one corporate ownership.

**Independent Store:** A retail food store under individual ownership and management; or, one to ten stores under individual corporate ownership and management.

**Unaffiliated Independent:** Not a member of a buying or merchandising group or association.

**Affiliated Independent:** A store owned and operated by an independent retailer who is affiliated with a voluntary chain organization, or who is a stock holder in a co-op, wholesaling corporation.

**Source:** Compiled from data in Progressive Grocer Annual Report 1966.

48. Any store, chain or independent, having a sales turnover of $500,000 or more per year.

49. **Grocery Store Sales:** (1965 - $65,810 billion), is the sum of sales through the retail food stores comprising the supermarket, superette and small store.

   **Superette** - any store transacting from $150,000 to $500,000 per year.

   **Small store** - any store transacting less than $150,000 per year.

50. **Total food store sales:** (1965 - $70,910 billion), the sum of grocery store sales and specialty store sales.

   **Specialty stores** - meat, seafood, fruit and vegetables, confectionery, bakery and other stores not classified as Grocery stores.
1.4.4 Western Europe.

In Western Europe, the lead in the inception of supermarketing came mainly from outside the grocery trade. In Italy, 75% of the new supermarkets were set up by retail chains, which were already experienced in the organisation of mass distribution, but not previously active in the food trade. In Britain, a Canadian biscuit and bread manufacturer, a large milk chain, and a department store group were responsible for the establishment of supermarketing. In Spain, the first fifty supermarkets were set up by the Spanish Government, whilst in France a department store led the way. The initiative in adopting such a form of merchandising varied from consumer co-operatives in the United Kingdom and Sweden to multiple and department stores in West Germany, France and Denmark, and finally through the voluntary organisation of independents in the Netherlands.

Supermarketing is a natural consequence of self-service in retail food merchandising. As a result, following the commencement of self-service in Western Europe in 1947, the first supermarkets began appearing in the mid-fifties.

---

**TABLE 1.2**

<table>
<thead>
<tr>
<th>Year</th>
<th>United Kingdom</th>
<th>Denmark</th>
<th>Italy</th>
<th>France</th>
<th>West Germany</th>
<th>Switzerland</th>
<th>Spain</th>
<th>Belgium</th>
<th>Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>1948</td>
<td>130</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>1950</td>
<td>483</td>
<td>-</td>
<td>26</td>
<td>1</td>
<td>39</td>
<td>93</td>
<td>-</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>1952</td>
<td>1,240</td>
<td>61</td>
<td>1</td>
<td>121</td>
<td>232</td>
<td>-</td>
<td>26</td>
<td>-</td>
<td>61</td>
</tr>
<tr>
<td>1954</td>
<td>2,000</td>
<td>207</td>
<td>1</td>
<td>380</td>
<td>326</td>
<td>487</td>
<td>-</td>
<td>53</td>
<td>204</td>
</tr>
<tr>
<td>1956</td>
<td>3,000</td>
<td>375</td>
<td>2</td>
<td>603</td>
<td>1,379</td>
<td>900</td>
<td>-</td>
<td>150</td>
<td>512</td>
</tr>
<tr>
<td>1958</td>
<td>4,875</td>
<td>541</td>
<td>99</td>
<td>9,676</td>
<td>1,264</td>
<td>23</td>
<td>200</td>
<td>1,140</td>
<td>-</td>
</tr>
<tr>
<td>1960</td>
<td>8,100</td>
<td>2,160</td>
<td>146</td>
<td>1,775</td>
<td>22,619</td>
<td>1,787</td>
<td>430</td>
<td>374</td>
<td>2,252</td>
</tr>
<tr>
<td>1961</td>
<td>9,212</td>
<td>1,600</td>
<td>-</td>
<td>2,700</td>
<td>30,680</td>
<td>2,000</td>
<td>700</td>
<td>576</td>
<td>2,860</td>
</tr>
<tr>
<td>1962</td>
<td>11,650</td>
<td>2,330</td>
<td>4,305</td>
<td>40,094</td>
<td>2,453</td>
<td>1,192</td>
<td>709</td>
<td>3,536</td>
<td>-</td>
</tr>
<tr>
<td>1963</td>
<td>11,900</td>
<td>-</td>
<td>40,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1965</td>
<td>20,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3,150</td>
</tr>
</tbody>
</table>

**Sources:**

1. 1948 to 1959. 'The Economic Performance of Self Service in Europe'.
   Dr. K.H. Hankemeier, G.E.C.,
   For other years, from the Department de Autoservicio, Cajas, Registradores, National, S.A. Nacional, S.A.
Table 1.3 above illustrates the rapid growth of self-service in Western Europe, particularly in West Germany and the United Kingdom. The numbers of supermarkets increased during the early sixties, as described in Table 1.4 below, with those countries possessing a more favourable socio-economic climate showing the greater increase in numbers.

### Table 1.4

<table>
<thead>
<tr>
<th>Year</th>
<th>United Kingdom</th>
<th>Denmark</th>
<th>Italy</th>
<th>France</th>
<th>West Germany</th>
<th>Switzerland</th>
<th>Spain</th>
<th>Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>1957</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1960</td>
<td>367</td>
<td>17</td>
<td>0</td>
<td>26</td>
<td>300</td>
<td>103</td>
<td>31</td>
<td>38</td>
</tr>
<tr>
<td>1961</td>
<td>572</td>
<td>104</td>
<td>45</td>
<td>108</td>
<td>420</td>
<td>120</td>
<td>32</td>
<td>53</td>
</tr>
<tr>
<td>1963</td>
<td>1,366</td>
<td>250</td>
<td>220</td>
<td>H.A.</td>
<td>600</td>
<td>80</td>
<td>4</td>
<td>182</td>
</tr>
<tr>
<td>1964</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>2,130</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:**
2. 400 square metres.

Johnson goes so far as to say that 'there is no reason to suppose that growth in the United Kingdom will not follow a similar pattern to that in the United States'. By taking self-service food sales as a percentage of total retail food sales, self-service stores are shown to be of major significance in West Germany, the Netherlands and the United Kingdom. The Table 1.5 below illustrates this point.

### Table 1.5

<table>
<thead>
<tr>
<th>Country</th>
<th>1957</th>
<th>1961</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>10.1</td>
<td>15.5</td>
</tr>
<tr>
<td>West Germany</td>
<td>6.9</td>
<td>40.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>13.0</td>
<td>32.0</td>
</tr>
<tr>
<td>Switzerland</td>
<td>22.0</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
2. 1960 figure.
3. 1958 figure.
Self-service and supermarketing will become more important in Western Europe as changes in the economic and cultural environment of the respective countries take place. Some important factors would be:

1. Changes in dietary habits.
2. A rise in per capita disposable income.
3. The possession of refrigerators, deep freeze units and automobile encouraging large purchases per shopping trip.
4. An increase in the percentage of married women employed, who as a consequence have less time to shop and prepare meals.

Finally, the success of supermarketing in these countries is greatly dependent on the presence of the following conditions:

1. A large potential (and homogeneous market) for the individual supermarket, based upon either a high population density or transportation facilities available to shoppers.
2. A willingness of consumers to abandon traditional buying habits, as reflected by the readiness to accept change.
3. A well-organized system of distribution below the retail level, to provide adequate supplies of graded merchandise.
4. Consumers with high and growing levels of disposable income, allowing purchase of items other than low margin staples and advertised specials.
5. Packaged and branded merchandise for self-service, and
6. Properly located store sites of appropriate size and adequately trained personnel.

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51. OECD. No. 68. p.35. Self-service stores are growing rapidly but Supermarkets are finding strong competition from the traditional butcher shops.

52. Staples may be defined as low gross profit food and household commodities in a grocery department. Commodities which are in general used in most households.
Two countries, Spain and the United Kingdom, are used as examples to illustrate the importance of these factors, and why the growth of self-service and supermarketing differs in each.

1.4.4.1 Spain.

Spain has been chosen as an example because it possesses a 'total environment' which is in marked contrast to that of the modern American supermarket of the sixties, (which possesses the demand and supply factors required for successful national supermarket operation).

The Spanish Government achieved only limited success in its "Operación Supermercados" in 1958. The aim of this programme, was to lower retail food prices and nationalise food distribution in Spain, through the introduction of supermarketing into the Spanish food marketing industry. It was hoped that the example set by the Government would be followed by private enterprise, and a subsequent growth of supermarketing. Such an action did eventuate, but only to a very limited extent. The various inhibiting supply and demand factors enlarged upon below are the reasons for this.


Only a small percentage of the population has the income, tastes and location to constitute an adequate demand for a limited number of supermarkets. Coupled with this, consumers generally lack refrigeration facilities and private means of transportation. This means daily 'hand-to-mouth' shopping which precludes large volume purchases, as shopping is done on foot, and exemplifies the fragmented structure of Spanish food retailing.

53. Indices of Retail Food Prices, 1954. 100.0;
    1956. 112.8;
    1958. 144.9.
2. **Consumer Income.**

As consumer incomes are low, purchases of high margin commodities are negligible\(^{54}\) (except in the high income urban areas.)

3. **Consumer Preferences.**

The shopper is not always prepared to forego the services offered by the traditional store for the advantages typical of supermarket operation. As low incomes create a demand for credit, the presence of illiteracy slows the adoption of self-service, and shoppers prefer the personal touch which is characteristic of the traditional one-man form of retailing.

4. **The Survival of food retailers.**

The impact of supermarket merchandising policies upon traditional stores has been negligible. In Spain, the previously mentioned cultural and economic condition, coupled with an excess of labour and low wage rates, have served to retain customer goodwill with existing small scale food retailers. In addition, the majority of such shops are family owned and operated, (viz. the greengrocer), with married women assisting instead of being employed elsewhere. The survival of these shops is a reflection of their willingness to impute lowered returns to themselves and so reduce their gross margins to a point less than that of the supermarket.

5. **Efficient wholesaling operations.**

Self-service selection requires packaged and graded produce, but the fragmented nature of the Spanish manufacturing sector precludes this and, as a consequence, the realisation of bulk purchase and distribution economies. Moreover, there is a shortage of trained personnel, with no organisational structure, i.e. an efficient wholesaling and

\(^{54}\) Shopping the specials - Cassady calls such shoppers 'cherry pickers'.
distribution system, within the market structure, to build on. (This was present in the United States in the early thirties and is present in the United Kingdom, as it lies behind the operation of departmental and variety chain stores). 


There is a lack of suitable locations, as the market for this retail entity is in the centre of urban areas, where land for building is at a premium.

7. Credit Facilities.

The limited availability of credit to finance such an undertaking all but precludes the entrance of private enterprise, and therefore slows down the transformation desired.

---

Despite these limitations, supermarketing is growing in Spain in those areas of above average income where the respective demand and supply factors of a market and location are present.

Between the two limits of conditions in America and Spain are many West European Nations. In these countries the demand and supply factors mentioned have limited, and are limiting, supermarket growth and development, but to a lesser extent than in Spain. This is illustrated in Tables 1.3 and 1.4, which indicate the growth of self-service and supermarketing in these countries.

1.4.4.2 The United Kingdom.

Great Britain typifies the situation where the economic environment is favourable to change, but where the process of adaptation is hindered by psychological factors, competitive pressures and government action. Self-service began to spread rapidly from 1947 onwards, but the
British Government maintained post-war consumption and credit restrictions until 1954 and 1958 respectively. Furthermore, it was not until building restrictions were eased in 1954 that it was possible for supermarket development to commence. Obtaining permission to build is still a major problem and similarly, the refusal of manufacturers to supply merchandise to price-cutting firms, (often because of pressure from their traditional retailer customers).

The vulnerability of the traditional retailer to price competition is increased by the continual revokement of resale price maintenance on various items. Resale price maintenance eliminates competitive pricing from a large proportion of the lines sold in supermarkets and, therefore, precludes the use of flexibility in pricing as a means of attracting custom. The reasons for the continuance of resale price maintenance were to avoid loss leader sales practices, and to save the small specialist shop. These were coupled with the depressing consumer argument that "without exception" branded articles should carry a fixed retail price as it is convenient to know in advance what an item, or group of items, would cost. This also makes it easier to plan and check household expenditure. The argument implies the presence of unskilled shopping behaviour.

Despite these constraints, supermarkets were introduced by the co-operative societies, who also initiated self-service.

---


<table>
<thead>
<tr>
<th>Year</th>
<th>Co-operatives</th>
<th>Large Multiples (10 or more branches)</th>
<th>Independent &amp; Small Multiples</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959</td>
<td>52.2</td>
<td>32.1</td>
<td>12.4</td>
<td>3.3</td>
</tr>
<tr>
<td>1961</td>
<td>42.6</td>
<td>32.9</td>
<td>21.2</td>
<td>3.2</td>
</tr>
<tr>
<td>1963</td>
<td>33.9</td>
<td>36.0</td>
<td>28.0</td>
<td>2.1</td>
</tr>
</tbody>
</table>

According to Fulop\textsuperscript{57} "the two major factors influencing the supply side of retailing have been self-service and full employment, and they have interacted on each other. The relative cost of labour compared with that of machines and salaried staff has accelerated self-service and supermarket operation". This is in marked contrast to the success of the American supermarket, which was due to slump conditions and the presence of a large volume of consumers whose main concern in shopping was economy. Self-service and supermarket introduction were developed during a period of almost constant inflation, the stimulus coming primarily from the high cost of labour and location. (Self-service and supermarket operation reduced the average and marginal costs of operation through the realisation of economies associated with bulk procurement, presentation and sale).

The supermarket has the highest breakeven point of all retail forms of trading. Fixed costs are very high, and consequently losses are made if, and when, turnover falls below the breakeven level. Accordingly, a high sales density, as regards population density and a satisfactory income, is the principal requirement for growth, as the maintenance of a profit margin associated with price cutting necessitates a high turnover to offset overheads and return a net profit. So, although Britain's greater density of population (compared with that of the United States) makes sites for stores and parking space for customers expensive, it helps the supermarket operator attract the much higher turnover needed to cover his high fixed costs (and breakeven point). In addition it still makes economically possible some home delivery service, which is a further counter against the service offered by the traditional retailer.

\textsuperscript{57} C. Fulop. 'Competition for Consumers'. I.E.A. 1964, p.19.
Although supermarkets were introduced by the co-operative societies, since 1954 the industry has come to be dominated by multiple organisations (as Table 1.6 below indicates). In 1963 these controlled 934 (i.e. 68%) of the 1,366 supermarkets in Great Britain compared with 45% in 1960. The co-operative societies controlled 24% with department stores, voluntary groups and independents, sharing the remaining 8%.

**TABLE 1.6**

SUPERMARKET OWNERSHIP

<table>
<thead>
<tr>
<th></th>
<th>1958</th>
<th>1960</th>
<th>1963</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-operative Societies</td>
<td>47</td>
<td>42</td>
<td>24</td>
</tr>
<tr>
<td>Multiples</td>
<td>40</td>
<td>45</td>
<td>68</td>
</tr>
<tr>
<td>Others:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department Stores</td>
<td>13</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Voluntary Groups</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


By 1963 supermarket numbers accounted for 1% of the total grocery shops in the British market structure. The fact that this 1% had acquired 11% of the total sales made through grocery outlets reflects the rapid growth of supermarketing (see Table 1.7 below), considering that it did not begin to develop until 1954.

**TABLE 1.7**

THE GROWTH IN THE NUMBER OF SUPERMARKETS IN THE UNITED KINGDOM

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No:</td>
<td>3</td>
<td>8</td>
<td>50</td>
<td>80</td>
<td>175</td>
<td>286</td>
<td>367</td>
<td>572</td>
<td>996</td>
<td>1366</td>
<td>N.A.</td>
<td>1750</td>
</tr>
</tbody>
</table>

Sources: 'Self-Service & Supermarket Directory', London.
2. As at 30th March 1965, reported by the Supermarket Association of Great Britain, London.
Another effect which supermarket activity had upon food retailing in Great Britain (and elsewhere) was (and is) its catalytic action in the initiation and subsequent growth of voluntary (or affiliated) retail food chains. As was stated for the United States, these organisations maintain the competitive position of the independent operator, by making available to him many of the economies in purchasing and functional specialisation. In 1961 60% of retail food sales was transacted by multiple chains with central wholesale buying departments. Buying terms similar to those offered to multiple stores enable the independent operator to purchase more cheaply, whilst a reduction of sales promotion expenses is made possible through collective action. These chains are of two types: wholesaler sponsored and retailer sponsored. The former type shows the greater development, a direct contrast to the United States where the latter type is the more dominant. The last ten years since 1954 have seen the successful introduction and growth of both these types of chains, to the point where they now transact 18% of total food sales in Great Britain.

McClelland hypothesizes that by the end of 1966 supermarkets will have 22% of food shop sales; by 1976, 50%; and 1981, two-thirds, assuming growth and development is comparable with that which occurred at the corresponding stage in America. Accordingly, the situation in which the independent British retailer increasingly finds himself must be reminiscent of that of his American counterpart in the 1950's, as each supermarket has the turnover of 20-30 smaller units.

58. This has also happened in the U.S. Canada, Australia, N.Z., Germany and France, where chain organisations, co-operative (Woolworths in N.Z.), and voluntary (Four Square in N.Z.) have come to dominate the supermarket industry because of the financial economies accruing to them which facilitate horizontal and vertical integration, and the consequent reduction of expenses from co-ordination of functions.


Supermarketing is becoming increasingly acceptable to the United Kingdom consumer because:

1. It is cheaper to shop in supermarkets.
2. It has under one roof those articles which the consumer needs regularly.
3. The size of the supermarket allows a much larger number of different varieties of an item to be stocked in the same shop.

However, the subsequent growth of supermarketing the United Kingdom is subject to the following factors (which may influence favourably or adversely supermarket growth relative to that in the United States):

1. Population density is ten times greater in the United Kingdom (536 : 53 persons per sq.ml.)
2. As a consequence of the first, land is relatively scarce for such building projects, so costs, e.g. rent, are heightened.
3. A highly developed civic transportation system (buses etc.) takes the place of the American automobile for consumer mobility.
4. Consumer loyalty to the traditional forms of retailing is very strong (as in other Western Europe countries, e.g. Spain).

Of the four factors mentioned, the last is the major determining one of the supermarket growth in the United Kingdom. It is a question of whether or not consumer tastes and preferences will re-orientate toward the supermarket type of shopping, such that consumers are switched en mass to

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Finally, supermarket development in the United Kingdom shall continue to increase, as overheads (particularly wages) rise, and the difficulty of staffing increases. These factors will further change from service to self-service shops. It is felt that individual supermarket size will not increase to that of its American counterpart, because the problem of space for parking, the risk of pilfering, and economies of scale are less important at more than 5,000 sq.ft. and are likely to keep the United Kingdom supermarkets to a more modest 10,000 sq.ft. or less.  

As there is the risk of being too large for the demand at a particular site to support, there is likely to be, relative to the United States, a greater number of supermarkets per 1,000 head of population, but smaller in size (to compensate for such factors as the limited amount a housewife can carry - bus versus own car - and the inability to provide adequate parking space.)

Shopping Centre development shall also promote supermarketing as it has in the United States, New Zealand and West Germany, because the supermarket is the major "draw card of the centre" and shopping is more pleasant here than in the city. The attracting features of these institutions are easy access by car, abundant parking, a wide assortment of offerings and pleasant surroundings.

64. Cassady. op.cit. p.88-9. "Traditionally, firms choose locations on the basis of independently made studies, but some firms now prefer to locate along with other stores in a shopping centre, thus obtaining the advantage resulting from the drawing power of several merchandising institutions rather than just one."
65. See Business Week. Issue August 15th. 1964. 'Germans Park and Buy'.

In conclusion, the rising level of consumer income and the standard of living over time will give rise to an economic climate more conducive to such shopping behaviour, as the degree of consumer mobility increases, limited refrigeration facilities are overcome, and traditions are broken down.66 In the latter regard, the younger generation is that which shall determine the subsequent growth and status of supermarket merchandising, as their "way-of-life" shall better complement this form of retailing and its requirements.

1.4.5 New Zealand.

In New Zealand, as in Western Europe, supermarketing was initiated (in 1958), by retailers other than those in the grocery trade - greengrocers. This lead was followed in 1961 by a national variety chainstore organisation, which has subsequently come to dominate the supermarket scene, possessing 40% of the total numbers in New Zealand by 1966. Group wholesaler voluntary and retail co-operatives did not commence supermarket operations until 1963. The speed with which these groups of independent grocers adopted supermarket-type merchandising methods was evidenced by the rapid change-over from counter-service to self-service. Concomitant with this was the increase in supermarket numbers from 1963, which Table 1.8 below indicates.

<table>
<thead>
<tr>
<th>Year</th>
<th>No.</th>
<th>Year</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>1</td>
<td>1964</td>
<td>28</td>
</tr>
<tr>
<td>1961</td>
<td>3</td>
<td>1965</td>
<td>50</td>
</tr>
<tr>
<td>1962</td>
<td>5</td>
<td>1966</td>
<td>72</td>
</tr>
<tr>
<td>1963</td>
<td>11</td>
<td>1967</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1970</td>
</tr>
</tbody>
</table>

1. Estimate.

Source: Compiled from communications received from Supermarket organisation executives.

66. R.T. Davis. "The Changing Pattern of Europe's Grocery Trade". Stanford University Press. "Once past the stage of purchasing basic commodities, the shopper is faced with multi-product choices - cake mixers, frozen specialities, all of which invite expenditure not specifically planned."
Self-service retailing and supermarketing have been accepted by the New Zealand consumer, the trend tending to follow that of the United States, e.g., using the automobile as a shopping aid because the New Zealand standard of living approaches that of the North American shopper. 67

**TABLE 1.9**

<table>
<thead>
<tr>
<th>Private Transport</th>
<th>Income per Capita</th>
<th>Food Consumption</th>
<th>Communications</th>
</tr>
</thead>
<tbody>
<tr>
<td>(cars, per 1000)</td>
<td>(Calories/head/day)</td>
<td>(Telephones/1000 pop.)</td>
<td></td>
</tr>
<tr>
<td><strong>United States</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>362.7</td>
<td>1,670</td>
<td>3,090</td>
<td>362.7</td>
</tr>
<tr>
<td><strong>Canada</strong></td>
<td>293.0</td>
<td>3,060</td>
<td>253.0</td>
</tr>
<tr>
<td><strong>New Zealand</strong></td>
<td>238.3</td>
<td>3,518</td>
<td>238.3</td>
</tr>
<tr>
<td>(1965)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Australia</strong></td>
<td>229.3</td>
<td>3,140</td>
<td>229.3</td>
</tr>
<tr>
<td><strong>Sweden</strong></td>
<td>204.6</td>
<td>-</td>
<td>204.6</td>
</tr>
<tr>
<td><strong>France</strong></td>
<td>166.2</td>
<td>-</td>
<td>166.2</td>
</tr>
<tr>
<td><strong>United Kingdom</strong></td>
<td>-</td>
<td>3,290</td>
<td>-</td>
</tr>
</tbody>
</table>

**Source:** United Kingdom Statistical Year Book.
See also, Article by Canterbury Chamber of Commerce Economic Bulletin No. 448. "Standard of Living", J.B. McKinney, who also states that a point which should not be overlooked is that in New Zealand the division of income is fairly uniform compared with many countries.

Demographic characteristics - population per square mile - and suburban development also approach those of the United States.

Nowhere in New Zealand is this better found than in the Auckland urban area. Supermarketing commenced here and in 1966 contained 35% of all New Zealand supermarkets. These environmental factors favour continued supermarket growth and development in New Zealand, the one constraint being market size as regards population density. This is reflected in the nation-wide growth of superette-cum-supermarket type stores called "supermarkets". This is a psuedonym, for although similar merchandising

67. The term "North American Shopper" refers to the countries of United States and Canada. The purpose of linking these two is demonstrated by the indices used above in Table 1.9 to highlight New Zealand's position in an international comparison of standards of living.
practices (including self-service) are utilised, and implemented, the physical size of such stores (viz. three check-outs and an average selling area of 3,000 sq.ft.) is much less than the modern American supermarket of some 12,000 sq.ft. selling area.

A further point is that this type of self-service store, or superette, makes up the affiliated co-operative chains, whilst the larger supermarket, possessing an average of 8 check-outs and a selling area of some 10 to 12,00 sq.ft. is financed and operated by national and regional corporate chains - the initiators of supermarketing in New Zealand.

The actual size of the New Zealand supermarket varies in selling area from about 6,000 sq.ft. to 12,000 sq.ft. with up to 10 check-outs possible and a sales turnover between £200,000 and £800,000 per annum.

Its growth to date has been due to its ability to fulfil a need for lowered prices and to provide greater ease and convenience in shopping. In this way, development followed that of the more advanced West European countries, (West Germany, United Kingdom, Denmark, France and the Netherlands), rather than arising from depressed conditions as happened in America. In all these parts of the world, however, the driving force behind inception and adaptation was the increased net returns and competitive advantage which could be gained from increasing the turnover of stockholding up to fifteen times per annum. The effects of this upon the small grocer differ between America and New Zealand and Western Europe. The affiliated chains of America arose because of this, whereas in New Zealand and Western Europe, where they were already present, membership increased. Generally, however, the supermarkets financed by these chains in New Zealand are smaller than those of the corporate chains, and approximate in size the British - West European type of supermarket.
Moreover, in New Zealand they are characteristic of small urban areas, as the market populus (or size) cannot support the larger supermarkets to be found in the four main centres (Auckland, Wellington, Christchurch and Dunedin), and major secondary areas (Hamilton and Tauranga).

Associated with the growth in numbers of supermarkets in New Zealand is the movement of large volumes of retail trade into Shopping Centres, away from what might be thought their natural locations. The importance of supermarkets in these centres is the ability to draw customer traffic, apart from benefitting from the numbers of shoppers which the centre itself attracts. In addition, as the size of the centre increases so does the number of supermarkets contained, e.g. Lynmall possesses one large supermarket and one superette, whereas Pakuranga possesses two large supermarkets and two superettes.

This association of up to forty odd retail outlets ranging from small specialty stores to department stores and supermarkets, and possessing an adjacent parking area capable of accommodating up to 1,000 cars at any one time, is in fact an extension of the "one-stop-shopping" concept. The advantages offered are:

1. Easy access by car.
2. Abundant parking.
3. A wide assortment of goods and services.
4. Pleasant surroundings.

As with supermarketing, shopping centre development commenced in the Auckland urban area, and has since then been conceived in other major urban areas of New Zealand, viz. Christchurch and Wellington, extensive suburban development and population being the major contributing factors. For obviously, when a shopping centre of the size of Pakuranga and Lynmall in Auckland, or Bishopdale in Christchurch, is contemplated the density and
affluence of immediate shopper populus within a market radius of, say, three miles, must be sufficient to make such an undertaking economic.

The most recent development in New Zealand food retailing is the Discount House. This self-service form of operation, as described in section 1.3.3, has been operative since 1964, but for two reasons has achieved only limited success. **First**, customers are offered a minimum of service and convenience when shopping these stores. **Second**, margin widths have not been sufficient to permit the Discount House to achieve any degree of market penetration. For whilst the cost reductions associated with the first point allow economic operations at lowered prices, size of selling area (which averages above 1,200 sq.ft. with 1/2 check-outs), and presentation of stock (dust covered and poorly displayed), has detracted from what price appeal the Discount House possesses. This is evidenced in the close similarity of prices of self-service stores and supermarkets with those quoted by Discount Houses, as shoppers are prepared to forego the small difference in price in return for greater ease and convenience in shopping at self-service stores and supermarkets.

Initially, most supermarkets did encounter difficulties in total management, particularly in meat and fresh produce operations. Problems such as these, however, have been largely overcome with experience.

Looking ahead, the growth of supermarketing up until 1970, (on information received from those organisations concerned), appears likely to follow the trend of the past two years, provided the present 'tight-money' policy of the Government does not prove a hindrance (as considerable capital for supermarket establishment is required). The current tendency in the establishment of supermarkets, particularly in the main and larger secondary urban areas (viz. Auckland), is a doubling-up in those suburban areas which were previously supplied by only one of the
larger type of supermarket. A continuation of this must lead to increased competition over time on a supermarket-to-supermarket and supermarket-to-limited line retailer basis. Lowered prices would result and would have increasingly adverse effects on small grocery and specialist retailers. Also, it may indicate a future slowing down in the growth of supermarket numbers.

The conservative nature of New Zealand shoppers, with respect to their purchases of meat and fresh fruit and vegetables from the traditional retailer of these items, is typical of their European counterpart, and must serve as a short run buffer to the intrusion by supermarketing into these market structures. This will be more so with the greengrocer than the butcher, as the technological advances in standardisation and presentation of meat cannot be applied to the same extent in fresh produce merchandising. As a consequence of this the 'personal touch' required in procurement and presentation retains pre-eminence. Given this, the long term effects of educating housewives to supermarket shopping must serve to further the present effect of supermarketing upon these retailers.

Shopping centre development will continue, but as a population of some 30-40,000 within a market area radius of three to four miles is required, only a limited number of these is possible. In addition, 'Pedestrian Malls', where string street development is utilised through closing the street to 'thru traffic' and using the area for parking and pedestrian movement, seem a likely counter to these centres.

In conclusion, therefore, it seems that New Zealand retailing in the next decade is likely to see the following events.

1. The decline in importance of the butcher and greengrocer in the distribution of meat and fresh produce.

2. Fewer small stores and more large.
3. An increase in the number of supermarkets.
4. A limited increase in the number of regional shopping centres.
5. Far reaching changes in the planning of Shopping Centres in both city and suburban areas.
CHAPTER TWO

SUPERMARKET PROCUREMENT POLICIES AND PRACTICES FOR
FRESH FRUIT AND VEGETABLES

2.1 Introduction.

This chapter is concerned with how, where, and why various procurement policies are implemented by the supermarket section of the market structure for fresh fruit and vegetables.

The ever increasing trend in Western Europe to follow America's development in direct buying from growers is discussed, but the major emphasis is placed on the situation as it has developed here in New Zealand. In this regard the present system of fresh produce distribution is outlined, and particular reference made to a constraint which prevents changes of the magnitude which have occurred elsewhere in the Western World. Accordingly, the continued existence of this constraint is questioned with respect to direct shipment of produce from grower to supermarket, for although the wholesale channel is bypassed as much as is economically feasible, the economic and technological cost reducing changes which would arise through increased direct procurement are stultified.
2.2 **Sources of Produce in America and Western Europe.**

The impact of supermarket operations upon the American wholesale market structure for fresh produce differs markedly to that experienced by the Grocery Wholesalers' Association. This is due mainly to the perishable nature of the commodities handled, which precludes the basis of defence and retaliation the grocery wholesaler possesses - namely, affiliation.

Fresh produce distribution in Western Europe (and Australia and New Zealand) is likely to follow the direct procurement policies of America as supermarketing initiates and increases the mass movement of produce to pre-arranged outlets within the market structure. As the demand for movement of large volumes of standardised produce increases, marketing costs can be reduced by direct buying of growers' supplies. For as Zimmerman 68 states, that there are "inherent opportunities for saving in produce distribution channels, where one-third of all produce grown is wasted in handling from grower to consumer". In America produce is moved and shipped en mass to the multiples' own warehouses 69 and retail outlets, utilizing the services of either their own agents or those of commission and broker agencies. Specialisation in production, along with the high speed and efficiency of transportation makes this possible. Accordingly, as the channels of distribution in the United States are aligned to mass production and mass distribution of produce, the auction market does not occupy the position in the American

68. Zimmerman. "The Supermarket".
69. Agricultural Handbook No. 214. U.S.D.A. 'Wholesaling'. "Many supermarket chains and large independent supermarket operators now own and operate their own warehouse facilities and perform many of the functions formerly done by independent wholesale houses". As a result more fruit and vegetables move directly from supplies to retailers or retail owned wholesalers, e.g. the volume of fruits handled by terminal fruit auctions was reduced by 63% from 160,000 car lots in 1929 to about 55,000 car lots in 1957."
wholesale market structure for fresh produce that it still does in Western Europe. (See Table 2.1 below). Table 2.1 below illustrates the minor importance of auctions as wholesalers of fruit and vegetables.

**Table 2.1**

Sales of Fruit & Vegetable Wholesalers in 1958 Dollars, by Type of Operation, U.S. Census Years 1929 to 1958.

<table>
<thead>
<tr>
<th>Type of Operation</th>
<th>1929 %</th>
<th>1935 %</th>
<th>1939 %</th>
<th>1948 %</th>
<th>1954 %</th>
<th>1958 %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(a) (%)</td>
<td>(a) (%)</td>
<td>(a) (%)</td>
<td>(a) (%)</td>
<td>(a) (%)</td>
<td>(a) (%)</td>
</tr>
<tr>
<td>Merchant Wholesalers:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Truck Jobbers</td>
<td>6</td>
<td>13</td>
<td>13</td>
<td>31</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>Exporters,</td>
<td>8</td>
<td>(2)</td>
<td>6</td>
<td>20</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Importers</td>
<td>17</td>
<td>125</td>
<td>154</td>
<td>38</td>
<td>65</td>
<td>51</td>
</tr>
<tr>
<td>Other Wholesale Handlers</td>
<td>2630</td>
<td>64.3</td>
<td>1726</td>
<td>48.5</td>
<td>2546</td>
<td>56.0</td>
</tr>
<tr>
<td>(a) TOTAL</td>
<td>2661</td>
<td>65.0</td>
<td>2120</td>
<td>57.2</td>
<td>2719</td>
<td>59.0</td>
</tr>
<tr>
<td>Agents &amp; Brokers:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commission Merchants</td>
<td>620</td>
<td>15.2</td>
<td>641</td>
<td>17.3</td>
<td>594</td>
<td>13.1</td>
</tr>
<tr>
<td>Auctions</td>
<td>256</td>
<td>6.5</td>
<td>305</td>
<td>8.2</td>
<td>339</td>
<td>7.4</td>
</tr>
<tr>
<td>Brokers</td>
<td>345</td>
<td>8.4</td>
<td>376</td>
<td>10.1</td>
<td>413</td>
<td>9.1</td>
</tr>
<tr>
<td>Co-op'Vee Sales Agencies</td>
<td>135</td>
<td>3.4</td>
<td>290</td>
<td>7.8</td>
<td>420</td>
<td>9.4</td>
</tr>
<tr>
<td>Selling Agents</td>
<td>55</td>
<td>(2)</td>
<td>-</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Export Agents</td>
<td>9</td>
<td>(2)</td>
<td>11</td>
<td>2</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Import Agents</td>
<td>1</td>
<td>(2)</td>
<td>4</td>
<td>101</td>
<td>188</td>
<td>188</td>
</tr>
<tr>
<td>Other Agents</td>
<td>(4)</td>
<td>(2)</td>
<td>44</td>
<td>-</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>(b) TOTAL</td>
<td>1451</td>
<td>35.0</td>
<td>1583</td>
<td>42.6</td>
<td>1825</td>
<td>40.2</td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>(a) &amp; (b)</td>
<td>4092</td>
<td>2703</td>
<td>4544</td>
<td>5295</td>
<td>5295</td>
</tr>
</tbody>
</table>

1. Establishments with paid employees. 1929, 1935, 1946 figures. These for all establishments.
2. Not available.
3. Revised to exclude auctions outside of terminal markets.
4. Less than $500,000.

Source: Data compiled from Table 101, p. 103. Agricultural Economics Report, No. 45. USDA, ERS.
In America the supermarket chains, wherever possible, purchase direct from big growers, shippers (who may be growers), brokers and co-operatives in the producing areas. This is shown in Table 2.2, and as in New Zealand.

**TABLE 2.2**

<table>
<thead>
<tr>
<th>CHAINS AND AFFILIATED GROUPS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sources of Produce</strong></td>
</tr>
<tr>
<td><strong>1958</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Shipping Point</th>
<th>Local Growers</th>
<th>Other Out-of-town Agencies</th>
<th>Brokers &amp; Sales</th>
<th>Local Wholesalers</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Chains</td>
<td>70</td>
<td>7</td>
<td>6</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Regional Chains</td>
<td>52</td>
<td>8</td>
<td>8</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>Local Chains</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(with warehouse)</td>
<td>28</td>
<td>4.5</td>
<td>4.5</td>
<td>16</td>
<td>47</td>
</tr>
<tr>
<td>Local Chains</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(without warehouse)</td>
<td>1</td>
<td>0.5</td>
<td>0.5</td>
<td>12</td>
<td>86</td>
</tr>
<tr>
<td>Retailer Co-operative</td>
<td>21</td>
<td>5</td>
<td>13</td>
<td>39</td>
<td>22</td>
</tr>
<tr>
<td>Voluntary Group</td>
<td>30</td>
<td>7</td>
<td>26</td>
<td>24</td>
<td>13</td>
</tr>
</tbody>
</table>

*Source: U.S.D.A. ERS 1128-62 (5).*

As in New Zealand, (but to a far greater extent), the differences in America between policies of national, regional and local supermarket chains are determined for the most part by the size of the particular organisation.

**National Supermarket Chains** are decentralised for procurement. Field buyers in the producing areas, (who account for 90 per cent. of produce purchases), select and purchase merchandise direct from growers in compliance with orders from their chain's various branches. About 70 per cent. of their total supplies are purchased directly from primary shipping points (independent and/or co-operative grower packhouses). Furthermore, the advantage of being completely cognizant with the market situation is a major economy of scale, especially with

---

70. 'Of the shipping-point marketing firms in 1958, 59 per cent. were growers, 30 per cent. were shippers, and 10 per cent. were buying brokers.' U.S. FRESH YEARBOOK ISSUE, 1958.
regard to any planned promotional activities. Consequently, the
terminal markets (the complement of primary wholesalers in New Zealand),
fulfil a convenience function in that they are used for fill-in,
replacement and specialty purchases. The services of shippers and
brokers are utilized for the same reasons and are of similar importance.

**Regional Chains** differ from the national chains merely
in degree. Field buyers are of lesser importance, with dependence more
upon direct carlot purchasing through shippers (52 per cent.), and on
occasion through brokers. Purchases are also made in the terminal
markets, and most have permanent affiliations with local growers.

**Local Chains** make use of the same channels as the
regional chains for procurement of produce, but to a much lesser extent,
as the **greater proportion** of their purchases (48 per cent.) are made
on the local markets.

The increase in direct buying by chains and affiliated
groups brought about a decline of some 10 per cent. in wholesale turnover
from the late 1930's to the late 1950's. Moreover, with reference to
the structure of the American wholesale markets, there is very little
auction selling and what there is is declining absolutely in terms of
dollar sales and as a percentage of total sales (see Table 2.3). As
a further example, the auction sales of citrus and deciduous fruits in
1937 declined from 33 per cent. and 10 per cent. respectively to 15 per
cent. and 6 per cent. in 1957.

Table 2.3 below uses carlots as an index of sales by
each type of firm, and shows the actual position of auction and the
various other types of firm in the wholesale market structure for fresh
produce.
TABLE 2.3

Sales by each Type of Firm, United States Wholesale Produce Markets 1958-59

<table>
<thead>
<tr>
<th>Type of Firm</th>
<th>No. Carlots (000)</th>
<th>% to total sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale Handlers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Handlers</td>
<td>792</td>
<td>29.6</td>
</tr>
<tr>
<td>Secondary Handlers</td>
<td>335</td>
<td>12.5</td>
</tr>
<tr>
<td>Shippers &amp; Truckers</td>
<td>31</td>
<td>1.2</td>
</tr>
<tr>
<td>Importers &amp; Exporters</td>
<td>68</td>
<td>2.5</td>
</tr>
<tr>
<td>Brokers &amp; Agencies</td>
<td>849</td>
<td>31.7</td>
</tr>
<tr>
<td>Brokers &amp; Distributors</td>
<td>495</td>
<td>18.5</td>
</tr>
<tr>
<td>Sales Agencies</td>
<td>257</td>
<td>9.6</td>
</tr>
<tr>
<td>Others (includes Auction)</td>
<td>97</td>
<td>3.6</td>
</tr>
<tr>
<td>Retail Organisations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chains</td>
<td>542</td>
<td>20.3</td>
</tr>
<tr>
<td>Retailer Co-operatives</td>
<td>35</td>
<td>1.3</td>
</tr>
<tr>
<td>Voluntary Groups</td>
<td>25</td>
<td>0.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,677</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Wholesale Handlers - Firms which physically handle the merchandise.
Brokers & Agencies - Firms which do not physically handle the merchandise, although they may provide for such physical handling by others.

Source: Data compiled from Agricultural Economics Report No. 45, U.S.D.A. ERS. Table 7, p.11.

Auction firms71 handled only 46,000 carlots, or 1.7 per cent. of total carlot sales for 1958-59, whereas receivers72 (grouped under primary handlers) and Selling Brokers73 (grouped under brokers and distributors),

---

71. Auction - Acts strictly as a selling agency, providing facilities and organisation for selling, and handling merchandise, but having no financial interest in the merchandise.

72. Receiver - Purchases produce for own account, usually in full carlots or trucklots. Direct receipt from shipping point accounts for more than half of his purchases. Performs the physical functions of unloading and handling in his own facilities or team track, or at the terminal. More than half his sales are to other wholesalers, chain store warehouses, or processors.

73. Selling Broker - Negotiates sales on behalf of a number of shippers, but does not take title and does not physically handle the merchandise.
accounted for 13.6 per cent. and 13.3 per cent. respectively of total carlot sales. Thus the latter two types have emerged along with the chains (particularly the national chains - 9.7 per cent.) as the dominant wholesale firms.

The auctions in the United States are becoming more and more specialty distributors rather than mass distributors, as the attractions of direct buying by chains, wholesalers and others are much greater for the large quantity commodities. The increased co-ordination of retailing with wholesaling and other functions of the marketing system has served to shorten the distribution gap between grower and consumer, resulting in greater economies and savings in the ultimate cost of fresh produce. However, there is very little sign of vertical integration by supermarket and chain store procurement activities into growing by ownership and contract. (This is also lacking in Australia and is the factor precluding direct sales from grower to multiple outlets bypassing the central market; instead vegetables are sold by private treaty and fruits are auctioned).

The Canadian situation is much the same as that in America. Table 2.4 below points out that supermarket organisations, in Metropolitan Toronto, purchase as much as possible direct from growers, brokers and dealers resident in the growing areas.

| TABLE 2.4 |
| -------------- | -------------- | -------------- |
| **SOURCES OF PRODUCE FOR CORPORATE & VOLUNTARY CHAINS IN METROPOLITAN TORONTO, 1965** | **Quantity.** | **% total.** |
| Source | tons. | |
| Brokers & Dealers. | 58,000 | 15.7 |
| Primary Wholesalers. | 117,000 | 31.7 |
| Direct from local Growers & outside. | 194,000 | 52.6 |
| TOTAL: | 369,000 | 100.0 |

Source: Canadian Department of Agriculture. Ottawa. 1964.
In Great Britain and West European countries, the major percentage of fresh produce is still sold by auction and private treaty. These firms acquire large numbers of variable lots and are responsible for their subsequent breakdown into smaller lots for sale to secondary wholesalers and retailers (see Table 2.5).

**TABLE 2.5**

**UNITED KINGDOM GROWERS' SELLING OUTLETS**

(1955)

(as percentage of total sales.)

<table>
<thead>
<tr>
<th>Commodity &amp; Unit of Sale</th>
<th>Sold Direct.</th>
<th>Sold on Commission.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To Wholesalers in markets.</td>
<td>To retailers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Others</td>
</tr>
<tr>
<td>Cabbage (1lb)</td>
<td>44.7</td>
<td>18.3</td>
</tr>
<tr>
<td>Carrots (1lb)</td>
<td>34.7</td>
<td>25.0</td>
</tr>
<tr>
<td>Lettuce (doz)</td>
<td>50.1</td>
<td>8.7</td>
</tr>
<tr>
<td>Apples Cox. (bushel)</td>
<td>12.5</td>
<td>12.4</td>
</tr>
</tbody>
</table>

Note: (1). The markets included under the heading "major markets" are:- Convent Garden, Spitalfields, Borough, Brentford, Birmingham, Brighton, Cardiff, Coventry, Glasgow, Hull, Leeds, Liverpool, Manchester, Newcastle-on-Tyne, Sheffield and Wolverhampton.

Source:

However, the variable form of offerings, as regards grading and pack size, shall, as Abbot bears out, cause such markets to fall in importance. Already, in the United Kingdom, there is an increasing growth in the number and market stature of grower co-operatives within the market structure for fresh produce. In 1962 these organisations handled 4.4 per cent. of United Kingdom production, (produce to the value of about £72 million).

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The situation now is that there is at least one producer marketing organisation, in each of the main production areas, which operates a comprehensive marketing service with grading facilities. An increase in prepackaging and a general improvement in grading have also facilitated direct sales to supermarket and chain store outlets.\textsuperscript{76}

Therefore, although in total, the percentage of produce bypassing the traditional wholesale channels is small relative to the quantity passing through these channels, it is present and increasing, and must give wholesalers in the United Kingdom (and other West European countries) some cause for alarm. In the Netherlands, however, this is unlikely to eventuate as it is compulsory, (through Government Legislation), for growers to sell their produce through auction.\textsuperscript{77} The organisation of the wholesale market in this respect differs from that to be found elsewhere, as all the auctions are grower co-operatives. This reflects the intensive organisation by Dutch growers of their industry.

\textbf{2.3 The Situation in New Zealand.}

There are only two sources of produce open to the supermarket produce buyer in New Zealand - the wholesaler and the grower. As supermarket outlets are becoming more significant, the auction system is becoming increasingly inadequate, because its form of operations does not complement supermarket merchandising practices. However, wholesale remains the dominant source of produce, in spite of the increasing interest (of both grower and retailer), in direct procurement. The reason for this (the constraint present in the market

\textsuperscript{76} 'Prepackaging for Fruit & Vegetables'. O.E.E.C. E.P.A. No.10. 1959 series. p.94. "Because the prepack is of consistent standard, and can be purchased on sample, direct distribution from packhouse to retail warehouse is the most efficient method of distribution."

structure), is reviewed, and consequently a case could be put forward for making a radical change, allowing other associated ramifications to exert a fuller effect upon the marketing system.

2.3.1 Organisation for Buying.

Every supermarket organisation makes use of the marketing agencies, some relying continuously on all of them. In New Zealand the services of three purchasing agencies are utilized. These are:

1. Their own buyers in the wholesale markets (comprising wholesale sections of auction and private treaty outlets), whose main responsibility is to purchase for own outlet(s). This agency is used by national and regional chains and most local independents.

2. Commission agents who purchase the requirements of medium and small scale superette outlets and independents from wholesale, i.e. auction.

3. The use of wholesalers as brokers, i.e. the wholesaler does not take title to the goods. Produce goes direct from grower to retailer, the wholesaler retaining commission for this service.

Realisation and awareness of the characteristics of consumer demand for fresh fruit and vegetables, and interpretation of seasonal and social demands, are concerns of the buyer. In his purchasing operations he must take cognizance of any local preferences. The characteristics appealing to the consumer are freshness, colour, size and uniformity of size, and absence of physical defects. In consumer interviews these descriptive terms were predominant and price was always ranked second in importance to quality.

The differences which exist in procurement policies between supermarket institutions are primarily due to the varying sizes of the institutions themselves and their own particular form of organisation.
National and Regional Chains.

The national and regional chains have their own produce buyers, known as produce-controller buyers, for the respective centres. According to the number of outlets (numbers may range from one to ten, or even more), purchasing is usually shared between two or more buyers. Orders for the produce required originate from the produce department managers of the institution's various branch outlets.

Buying is partially routine, in the re-ordering of merchandise of a "basic" nature, and partially decision-making, in the selecting of new commodities and in the continuance of basic commodities. The produce-controller buyer is associated with the selling function to the extent of pricing of produce, and is kept in touch with customer preferences through close contact with the produce department managers of the respective supermarkets for which he purchases.

Decentralisation of produce procurement by the national chains, to the extent of inter-centre liaison between produce-controllers, facilitates the shipment of produce between centres and leads to subsequent economies.

In the smaller centres, the produce department manager assumes the role of produce-controller, doing all the local purchasing of produce for his department. He may, as mentioned above, act either as a shipper for his opposite number in another centre, or use him as a shipper to obtain produce when substantial inter-centre price differences exist.

The produce-controllers of these chains also act as field buyers with regard to direct purchases from growers. Many of these chains have had special buying arrangements with local and distant growers for a number of years. These agreements are usually on a permanent basis.
Local Independents (1-2 outlets).

In the majority of cases, the produce department manager performs the procurement and merchandising functions, although a few utilize the services of a commission agent. Very little direct procurement from growers is carried out, the size of operations limiting employment of certain features of the organisation of larger firms.

2.3.2 The Wholesale System.

The wholesale system in the New Zealand market structure for fresh produce is divided into two major channels, and further subdivided into four sub-channels:

1. Primary Wholesalers
   - Auction
   - Private Treaty

2. Secondary Wholesalers
   - Order Companies
   - Commission Agents

The need for these traditional forms of wholesaling is primarily due to small scale production and small scale retail outlets, where the wholesaler acts as the intermediate liaison link in the marketing of fresh produce.

Apart from the minor quantity of sales through channels of roadside stalls, and direct to retail, auction is the major centre of fresh fruit and vegetables sales. The Table below indicates this with something over two-thirds of all growers supplying commission wholesalers exclusively, viz., supermarket retail organisations as a group obtain about 95 per cent. of their total supplies from the local auctions and wholesale handlers.

<table>
<thead>
<tr>
<th>GROWERS' MARKETING CHANNELS</th>
<th>% of No. of Growers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solely Commission Wholesaler</td>
<td>68</td>
</tr>
<tr>
<td>Other Wholesaler</td>
<td>2</td>
</tr>
<tr>
<td>Stall and Gate Sales</td>
<td>18</td>
</tr>
<tr>
<td>Other Direct Sales</td>
<td>9</td>
</tr>
<tr>
<td>Direct to Retailer</td>
<td>9</td>
</tr>
</tbody>
</table>

As the commission wholesalers are auction firms, most growers sell over the auction floor, although wholesalers may act as shippers, becoming a liaison between grower and retailer (i.e. the wholesaler endeavours to fill the retailer's demand quote specifying quantity, quality and price.)

The traditional function of wholesale is that of acquiring large lots and breaking them down into smaller lots for sale to secondary wholesalers and retailers. In theory, through both competitive purchasing and competitive selling, the auction system equates supply and demand. Buyers and sellers are concentrated on to one market floor, so it is assumed that operations are conducted at minimum cost and that consumer preferences are reflected accurately. Moreover, as a large variety and quantity of produce is at the primary wholesaler's disposal, and is offered over a short period of time to a large number of buyers, it is further assumed that the true demand and supply situation is approached, and that competition is ensured. By virtue of its operations, the auction is a flexible price forming institution, as it is purported to take explicit cognizance of all factors affecting demand and supply of fresh produce. It is a clearing house, as it were, for all forms of fresh produce whether imported or produced locally.

Such a form of marketing as practised in New Zealand has its greatest application where day-to-day (or "hand-to-mouth") trading, and movement of produce to nearby consumption centres, is involved. A daily fluctuating trading market is the result, as realisations at auctions are a sensitive reflection of supply and demand, (demonstrated when the "floor" is a trifle over or under-supplied).

Thus primary wholesalers have a double function to perform, one complementing the other:

1. The concentrative function - the assembly of produce from local growers and outside areas for sale.
and, 2. The distributive function - the sale of produce to secondary wholesalers, institutions, retailers and the public.

Dissatisfaction of the Supermarket produce-controller.

Although the wholesaler performs a useful function through making produce available at the right time and place, the present system of marketing and pricing is unsatisfactory for it provides neither alternatives for buyers and sellers, nor the opportunity to exercise any alternatives.

The supermarket produce buyer would like to be able to order large quantities of fruit and vegetables to a standard specification as does the grocery buyer. However, the present wholesale market caters for variable lots and lots of odd size, colour, and grade, acting as an intermediary link between the traditional retailer who purchases relatively small quantities and the grower who presents variable lots. The buyer for a multiple must have access to a greater volume than would normally be required by an individual tender. But this requirement of bulk precludes examination of each package and lot item78, and accordingly the following problems are accentuated:

1. Bad Grading.
2. Variations in grade of same produce, but from different sources.
3. Deterioration caused by the sum of induced delays in distribution.
4. Lack of consideration given to produce on the auction floor.

78. The Coleman Committee Report. (1937). p.76. "Owing to the congestion of space, the large number of lots disposed of, the crowded condition of the auction marts, and the limited time available, it would be almost a physical impossibility either for the buyer to demand, or the auctioneers to give, anything like an adequate opportunity of inspection".
A further purchasing requirement of the supermarket is consistency of supply and sample which the wholesaler cannot satisfy. Moreover, it is felt that the supermarket could accomplish with less resources, functions that are at present the concern of the wholesaler. The wholesaler carries relatively little of the risk associated with marketing of produce, so it hardly warrants its present market position, since, "the business of selling consignment goods on commission is not hazardous or speculative".\(^79\)

Thus the auction system lends itself to monopolistic practices, as there is no immediate alternative for procurement. Consequently, the presence of such a monopoly element in the distribution process furnishes grounds for believing that the interests of growers, large scale retailers and consumers are suffering. This is due to the constraint present in the market structure for fresh fruit and vegetables in the form of the Charter held by Fruit Distributors Ltd.

2.3.3 The Charter Held By Fruit Distributors Ltd.

The monopoly power conferred upon wholesalers as a group in New Zealand's marketing system is the reason for wholesalers remaining the main source of produce. Under this system of monopoly, which concerns the importation as well as the distribution of fruit and vegetables, the facilities for wholesaling fresh produce have reached a static level, with rigidities present and entering the system.

The Charter held by Fruit Distributors Ltd. allows wholesalers (fruit and vegetable merchants throughout New Zealand) to operate as a monopoly. It has become the backbone of the auction system in its present form as it is a compulsory cartel, set up by the State in

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conjunction with the aforementioned wholesalers, all of whom are shareholders. It was initiated for the purpose of importing into New Zealand adequate supplies of fresh citrus fruits, bananas and pineapples, and of distributing these at reasonable prices throughout New Zealand. Moreover, during the currency of this Agreement, the Company is entitled to buy, sell, distribute, export or otherwise deal in citrus fruits grown in New Zealand, affording always, when importing, a reasonable degree of protection to the New Zealand citrus growing industry.

The large number of wholesalers and retailers in the produce market system have to agree to specified rules and to accept these in behaviour. Price orders—(which are invoked for each shipment imported into the country)—and the quota system of allocation for imported produce solve the problems associated with price fixing and quantity sharing, where the marginal cost curves of the various outlets differ.

The quota of imported produce allocated to each fresh fruit and vegetable retailer is a direct function of his purchases from the wholesale market. Therefore he is compelled to deal through this channel. His allocation is determined by the Company initially and, subsequently, by changes in his total turnover. Consequently according to the extent of his dealings outside auction, the retailer prejudices and reduces his allocation of imported produce. In this way the Charter solves the problem of adherence or concentration of demand, as it

"A cartel can survive by policing the members' behaviour and threatening believable and punitive retaliation against cheating."

81. A fresh fruit and vegetable retailer in this sense is one who purchases his fresh produce requirements on the auction floor. The allocations of other retailers who 'purchase' their requirements through commission buyers are determined by this agent, and are usually in proportion to their purchases. Country-order departments operated by wholesalers operate in a like fashion.
possesses compulsory powers of attendance, and prevents any appreciable sales of produce through independent channels.

Allocation of produce inter-province (i.e. as between Auckland, Taranaki, Wellington etc.) is said to be a function of the population of each province, whilst allocation intra-province (i.e. to wholesalers within the Auckland province) is based on their respective annual turnovers. Accordingly an increase in the market share of one wholesaler (auction floor) necessitates a reduction in the quota of another.

**Domination by a Minority.**

As a consequence of monopolistic activities, the market system for fresh fruit and vegetables has come to be dominated by a minority. Power is concentrated into a few hands and is becoming more so over time (see Table 2.6).

**TABLE 2.6**

**FRUIT AND VEGETABLE WHOLESALING FIRMS AND BRANCHES IN 1964**

<table>
<thead>
<tr>
<th>No. of Establishments per Firm</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 or more</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firms.</td>
<td>23</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>34</td>
</tr>
<tr>
<td>Establishments.</td>
<td>23</td>
<td>10</td>
<td>6</td>
<td>8</td>
<td>16</td>
<td>63</td>
</tr>
</tbody>
</table>

**Source:** Ridler, Enting and Philpott. op.cit. Table 6,3. p.97.

40 per cent. of these establishments are controlled by four firms through our right ownership or partnership, (approximately 12 per cent. of the total number of firms). Moreover, if urban area retail turnover figures can be used as an indication of probable wholesale turnover, then something over 60 per cent. of wholesale sales are controlled by these four firms. This is because of the fact that each of these four firms is well represented in at least two of the four main centres and in many major secondary urban areas. One firm in particular possesses some nine
establishments, all to be found in the North Island where over 60% of New Zealand total retail trade is transacted. The incidence of merger activity and little growth within the wholesale market structure provides a means for, and indicates an increase of, monopolistic activities, (e.g. the encouragement of supplies at abnormal cost and speculation through merchant-to-merchant dealing). Under the present system a minority group of wholesale organisations are in the position to dictate to their associates as well as to the grower and retail sections of the fresh produce market structure. The volume of produce directed through their markets permits this situation, thereby stultifying to a large extent any competitive force which would arise. Such conditions facilitate pressure group formation as Charter retention suits the convenience of this minority by allowing them to retain strong control over the New Zealand producer and retailer. Thus the minority’s monopoly position is maintained and any financial loss which would arise from a laissez-faire policy applied to direct sales is prevented.

Control of Entry into Wholesaling.

Power is being increasingly retained in a few hands, even to the extent of deciding who shall have the legal right to enter the wholesaling industry. The restrictions applied to entry applications largely preclude new entrants into wholesaling, as the following excerpt from the Charter shows:

**CLAUSE 5.** "DURING the currency of this Agreement the Company shall give full and proper consideration to the claims of applicants for distributing rights in respect of the said fruits and the following provisions shall apply to any application so made:

(a) An applicant for distributing rights must satisfy the Directors of the Company, as a pre-requisite to the consideration by them of this application, that:

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82. Where wholesalers forward contract for crops, instances recorded where growers reimbursed, but crop 'ploughed-in' to maintain market prices at a 'profitable' level.
(i) The applicant enjoys a substantial share of the wholesale trade in fruit and vegetables in the said district;

(ii) The applicant has satisfactory premises, staff, and plant; and

(iii) The applicant is sound financially and is of good standing and repute in the business world.

(b) If an applicant shall have so satisfied the Directors, the grant or refusal to such applicant of distributing rights shall be considered and determined by the Directors on the basis:

(i) The inadequacy of Company's existing distribution service; and

(ii) The service to retailers and consumers provided by existing distribution; and

(iii) The likelihood of the applicant being able to maintain an efficient distribution service in the interests of the Company, of retailers, and of consumers, and

(iv) The public interest generally.

(c) In the event of an application being refused the Directors shall, subject to the provisions of sub-clause (a) of this clause, consider any new application that may be made by the same applicant at any time after, but not before, the expiration of two years from the date upon which the previous application was finally refused.

Company policy is obviously that of keeping the number of wholesale outlets at a static level. This state of affairs is reflected by the fact that from 1953 to 1964 there was a gross increase of three in the number of wholesale firms, and a net increase of two. Consequently an opportunity exists for the realisation of supernormal profits as sales through the wholesale channel increase.

The lack of consideration given by the Company to the claims of two of these new entrants, for distribution rights of imported fruit, resulted in one instance in Court Appeal and, in the second, a token quota of some 2 per cent. of imported fruits. Both these actions took place after several years of fruitless negotiation with the Company. Besides illustrating the restrictive nature of this cartel, the inability
of the Company to resolve its internal problems, particularly of that of inter-wholesaler quota allocation, is indicated.

The basis of such monopolistic intra-industry practices is the voting rights possessed by shareholders, which are a function of the individual shareholder's turnover. Such an inequitable system allows the dominant firms to dictate the policy to be followed by the remainder of the wholesale trade.

**Allocation of Imported Fruits.**

Foundation members of this Company were those wholesale distributors of imported fruits trading in New Zealand at the date of incorporation of the Company. The shares of these members were proportional to the quota of imported fruits received from the Internal Marketing Department prior to Company inception.

Quota allocation is said to be determined by a wholesaler's fresh fruit and vegetable turnover. However, some wholesalers' present quotas appear to be a function of their initial turnover rather than of their current turnover. For such companies to possess quotas of their present extent would require impossible turnovers - in one case, to the order of £800,000. (In this situation the wholesaler concerned has had his provincial market area eroded by auction firm competitors). Consequently, other companies in the same quota "province" are facing an inequitable situation. Furthermore it is debatable as to whether or not the turnover of allocated fruits should be included in the turnover figures, as it applies to quota review. For example, if one wholesale firm has a banana quota of 1,000 cases more than his competitor(s), worth say £2,000, this puts him that much ahead in turnover. In addition, should one wholesaler be permitted to encroach into an adjacent wholesaler's province, (as has happened), by selling bananas to retailers in that area,
it is debatable as to whether or not this is competition or a further extension of monopoly. Such channelling of supply means either that retailers serviced elsewhere by the "offending" wholesaler are not receiving their full quota, or that relative to other "provinces" the province entered is under-supplied in such produce. For the wholesaler concerned to be able to accomplish this further serves to illustrate the monopoly position which he must possess in the market structure. This is in fact an example of discriminating monopoly, because he must be limiting supplies to retail outlets in his own province to allow him to adopt such a market penetration policy in another province.

A similar practice concerns wholesaler's allocation of imported fruit to retailer clients, wherein one wholesaler endeavours to improve his competitive position at the expense of another through offering imported fruits at a discounted rate. e.g. On a £100 purchase, one wholesaler gives to the retail buyer concerned ten cases of imported fruit, whereas another wholesaler offers twelve in an effort to increase his custom. In this way the wholesaler implementing such a 'competitive' measure can move his demand curve to the right as he is in effect offering produce at a lowered price, (which is analogous to 'blatant' price cutting). The short run effect of this action would be to reduce the gap between the average revenue and average cost curves of the wholesaler concerned, but in the long term it is anticipated that through increased sales to retail, the cumulative effect back upon quota allocation warrants such an exercise. Moreover, the fact that first there is no alternative to wholesale as a source of supply open to the retail buyer; second, that the supply of the produce concerned, particularly oranges, is relatively inelastic, as well as being highly sought after by consumers, and third, because the wholesaler concerned is of sufficient size to be
more than able to withstand any punitive measures taken by competitors, makes this practise, and the previous inter-wholesaler exercise, both possible and profitable.

Reconsignment.

Reconsignment (a means by which turnover can be boosted) ensures that certain members obtain a greater quota allocation than their wholesaler associates. This is primarily a function of supply imbalance between centres, and can become a profit making issue in the first instance, and, by devious means, a measure to increase the turnover of the particular wholesale organisation. The former instance arises from the growers being "encouraged" to supply one wholesale firm, resulting in double commission. The second instance occurs for the purpose of increasing the quota allocation of imported produce. Merchant-to-merchant sales within the same organisation are another malady, encouraging speculation. The extent of operations of dominant wholesale firms makes possible this abuse of the reconsignment function.

Collusive Activities.

Stigler states that "it is a general characteristic of compulsory cartels that their basis of participation leads to the inefficient use of resources". The opportunities existing for collusive activity subsequently lead to a reduction in the number of effective

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83. See Ch.4 with respect to price cutting on fresh produce by Supermarket retailers, and the inability of the Greengrocers to 'meet' such price reductions through lowering their own prices.

84. "Those firms able to exert the greatest pressure on the central organisation may receive the larger quotas".

85. F.Benham. 'Economics'. London Pitman 1955, P.310. "If the cartel succeeds in providing a high rate of return on capital, firms may be tempted to expand their capacity in order to claim a larger quota when the quota arrangements are next reviewed."

bidders, giving rise to a situation wherein price leadership is exercised by a small number of retailers. The activities of these traditional retailers are permitted because of the relative lack of competition to that which would be invoked if technical and economic innovations were allowed to exert their full effect. More important is collusion between wholesalers to maintain their position in the market structure, which is the present form of the Charter.

The survival of this monopoly condition is to a large degree dependent upon the marketing system as it exists at present. Monopolistic practices are translated into the conventional retail trade, and growers are prevented from selling direct when they so desire, through:

1. The "tie" on multiple retail organisations (as regards imported fruit allocations), and
2. The ability to temporarily boycott or "black" growers' produce (demonstrated by a reduction of auctioneer sales effort).

At present the effect of the constraint has been to bring the cross elasticity of demand between produce sold by the wholesaler and that sold by the grower direct to retail to something approaching very close to zero. Thus a "complete" oligopsonistic-oligopolistic situation is exhibited by wholesalers, who through joint action can tend to maximize the profits (possibly supernormal) of their system. If the present constraint were lifted, several of the maladies described would be negated since wholesale would no longer be the dominating force in the marketing system, and both grower and buyer would have the choice of employing the distributive channels of either wholesale or "direct sale". This ability to purchase direct from growers would introduce a competitive element into the present monopolistic market system and should result in a more economic distribution of produce (as is shown in Chapter 5).
2.3.4 A Shift in the Point-of-Purchase.

As conditions within the market structure for fresh produce have become increasingly conducive to direct grower-supermarket marketing practices, a conflict of interests has arisen between the institutions making up the New Zealand market system for fresh produce. The supermarket and growers have been forced to accept a system which in certain circumstances is uneconomic and inefficient. Consequently there is an increasing trend towards a shift in the point-of-purchase away from the wholesale market to the grower (or, as in America, to the shipper, who may be a grower, and the broker). Despite the monopoly position occupied by the wholesalers, up to 10 per cent. of a firm's produce is recorded to have been purchased direct from grower, although much lower percentages in the order or 2-5 per cent. predominate. The extent of direct procurement varies markedly between organisations, and appears to be a function of size as well as individual initiative.

By arranging direct contacts with growers as far as is economically possible, supermarket produce buyers circumvent the deficiencies of the wholesale system. As has been seen, these introduce an element of instability and uncertainty into both price and quality, whereas the bypassing of wholesale serves to eliminate much of the speculation associated with the fresh fruit and vegetable market, and facilitates merchandising operations. 87

Since the wholesale market cannot fulfil the demands of the supermarket, the buyer is conveying his wants to the grower on an

87. Such sentiments are echoed by supermarket operators in the United Kingdom - S.M.A.1965. 'Few, certainly of the bigger supermarket operators, like buying in the wholesale market. In order to get the quality they require they prefer to purchase direct from the producer or importer. They will only top-up in the wholesale market. Naturally there is always an element of bargaining present, but where obtainable, they would like to buy forward at an agreed price, so that they know where they stand.'

88. H.F. Breimeyer - 'through mass handling and advance contracting for supplies, some large distributors are attaining efficiencies in cost and performance. In so doing they circumvent the competitive trading that has been the protection of producers, market firms, and consumers.'
informal basis prior to purchasing. The grower is "educated" as to what is required, and a direct liaison, which provides the basis for mutual understanding, is initiated. In this situation, reliance is placed on general quality terms rather than detailed specifications (except for size specifications on such items as peaches - minimum 72's, optimum 54-58's; apples 78's; and potatoes). Decisions made at this point of sale are of transcending significance for they determine the success of subsequent merchandising effort. In this instance the grower is facing a concentrated rather than a fragmented demand situation. This precludes the excessive costs which would be associated with direct sales to a large number of dispersed and small limited line retailers. However, those growers who welcome this trend must be prepared to assume the responsibility of supply, taking explicit cognizance of activities normally performed by the wholesaler, in particular those involved in the selling process.

Some Advantages of Direct Procurement.

As the average size of lot purchased by the supermarket buyer is far greater than that of the greengrocer, so must the associated demand for uniformity in size and pack assume greater importance. The advantage of direct procurement in this respect is that the supermarket buyer can make his purchasing-point at, or very close to, the point-of-production. Thus a far greater degree of quality control is made possible, through a selection of sources of supply and inspection of produce at the dispatch point, for it enables the buyer to convey his wants to the grower. In purchasing large truck lots direct from

88. Obviously the supermarket produce controller in one urban area (e.g. Auckland) has to rely on the discretion of his counterpart in another urban area (e.g. Palmerston North) if he utilizes his services, as he cannot inspect the produce concerned prior to purchase.

89. With reference to the United Kingdom Market, "generally speaking, standardised, accurately graded produce has only come on to this market from overseas. The chain stores themselves had had to pioneer the idea with growers in this country. Extract from 'The Financial Times, Sept.14, 1964 "Streamlining the Fruit and Vegetable Trade". 
growers, in whom confidence has been established, supermarket produce buyers have an advance assurance of the desired qualities and quantities, these being obtained earlier than if produce were bought on a day-to-day basis from the local wholesale market. On the basis of reasonably assured supplies at known prices, the consequent reduction of risk and uncertainty associated with the wholesale market, as it is known in New Zealand, facilitates the planning of advertising and merchandising campaigns.

**A Reduction in the Total Costs of Distribution.**

The long chain of distribution is an inherent characteristic of the orthodox channel of marketing, the cost situation associated with it being one of the major reasons for purchasing direct from growers. For, apart from the saving of wholesalers' commission, the economies associated with mass procurement accruing to the grower and buyer, can serve to reduce the width of the marketing margin between the grower and consumer, i.e. the farmgate-retail price spread. In this way the growers' percentage share of the realised retail price is raised and the demand for his produce increased through lowered consumer prices.

Direct procurement increases the speed of distribution, i.e. transport time as between "farmgate and consumer basket" is reduced. The importance of this lies in the freshness attribute. Accordingly, the direct and indirect costs of damage in transport, in particular the rapid rate of physical deterioration, can be all but avoided.

Finally, produce is purchased at lower average prices, (of more concern to multiples than to independents, as quantities purchased are far greater), and costs of handling are reduced.

The total costs of a distribution channel can be

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interchanging of the work load among the various institutions of the channel. That is to say, the marketing functions of concentration, sale, distribution, grading and standardisation can be dispersed across the three major institutions of grower, wholesaler and retailer, (as is the situation at present), and/or, concentrated to become the responsibility of grower and retailer. For this reason it is postulated that combining the current wholesale system of distribution with the "alternative" distribution pattern of direct sales would facilitate improved management in the flow of fresh produce from point of production to retail point of sale. This means that compared with the present system of distribution, service would be improved and costs reduced.

An Example of Direct Purchase.

In New Zealand peaches are purchased direct from growers on a quality guaranteed basis, f.o.b. into store. A forward contract price is negotiated and an understanding given by the producer as regards weekly supplies. Transportation to the supermarket outlets concerned is the responsibility of the grower. The retailer might receive 1,000 cases of peaches per week, which he sells at 12/6d. per 20 lb. case, the minimum and optimum size specifications 'laid-down' being 72's and 58-60's respectively. Therefore, there is the advance assurance as to the availability of adequate supplies of satisfactory quality at a known price (which is based upon the price paid by processors and transport costs). In addition, to have purchased such a quantity at wholesale would have meant collating a number of individual lots, and paying a possible price of 20/- per 20 lb. case for the quantity required.

91. The produce is placed free on board at the shipping point, the transportation charges from thence to the buyer are borne by the seller. That is, the sale is f.o.b. as to grade, quality and condition, and delivered as to price.

92. Auction price for like line as to type, quality and size of pack, 14/-d. per 20 lb. case.
2.4 Conclusion.

In New Zealand the tendency has been to follow American and West European trends, but for direct procurement to be allowed to increase "at will" the present Charter held by Fruit Distributors Ltd. would either have to be revoked or certain of its terms of reference altered. That such a course of action would be justified has been shown here by maladies which have crept into the market structure, all of which give force to the argument that the Charter is fostering malpractices which could be eliminated if an alternative plan were implemented; for example, open importing. In Chapter Five alternatives are put forward and discussed, along with what are considered to be the likely effects of such a change upon the wholesale marketing system.

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CHAPTER THREE

SUPERMARKET SELLING POLICY, ORGANISATION, AND THE PLACE OF
THE FRESH FRUIT AND VEGETABLE DEPARTMENT

Introduction.

This chapter serves three purposes. The first is that of illustrating the importance of the produce department in supermarket merchandising operations. Emphasis is placed upon its role as a determinant of store custom and a contributor to store profits.

Secondly it reviews the means (sales policy; pricing procedure and sales promotion) used to realise the potential worth of this department in its determining store custom and contributing to store profits. The major issues discussed are the steps taken in pricing of produce for sale, the forms of pricing utilized, the emphasis placed on "specialling" and prepackaging, and the consideration given to commodity interdependence.

The chapter concludes with a section on competition in the selling of fresh produce. This is used as a lead-in for Chapter Four - 'The impact of supermarketing merchandising behaviour upon food retailing in New Zealand', in particular, the traditional retailer of fresh fruit and vegetables.
The Contribution of the Produce Department to Supermarket Operations.

As a "traffic builder", fresh produce is a major facet in supermarket competitive merchandising strategy. According to Schapker, the 'store image' in the mind of the shopper - the shopper's overall impression of the store and the class of customer patronising it appears to be influenced more by quality and price of perishables (fresh produce and meat), than by any other factor. This was confirmed by the comments made during the writer's interviews with supermarket managers and shoppers and served to ratify the fact that perishables present the foremost areas for the creation of a favourable consumer image as a total store concept, including the grocery department. Thus, one department complements the others, determining the whole store's subsequent sales. Further, Cooke states that "aside from bread and milk, no other commodities bring customers to the store more than fresh produce." It is, therefore, essential for supermarkets to make a success of the produce section, not only because together with meat it is one of the main sources of profit, but also because a reputation for selling good fruit and vegetables at a reasonable price is accepted as a major builder of consumer loyalty. Dry groceries and household supplies are relatively standardised as to quality, quantity and price and it is not often that complaints are voiced concerning the grocery, frozen food or dairy departments. However, in the meat and produce departments criticism can be, and is, outspoken. An American Consumer Dynamics Study explains this in that, "36.6 per cent. of the average family's food and grocery product dollars are spent on fresh meats.


94. Progressive Grocer. March 1966, K.145. 'The Selection and Quality of the Store's Produce Dept. is emphasised by 49% of the Upper Income group ($10,000 p.a.), as a major factor in judging a Supermarket. The upper income consumer places more importance on the quality of produce than any other type of consumer examined in the Consumer Dynamics Study.'

These figures serve to point out the opportunity every supermarket operator has to develop greater customer loyalty and sales in these departments. He can make this department the showcase of the supermarket because of the inherent display opportunities. The actual store appeal may be that of economy (fair average quality), or high quality at somewhat higher prices. Where no appeal is present, management is at fault and there is a genuine ignorance of the importance of the department as regards store operations and competitive advancement in the market structure. Accordingly, as the quality and reputation of a produce department depends upon the appearance and freshness of its greengroceries and fruits, it is advantageous to be able to purchase either by actual inspection or on sample direct from growers.

In New Zealand produce sales range from 10 to 25 per cent. of supermarket sales, averaging about 15 per cent., a figure much higher than those quoted for supermarkets in America and Great Britain, as Table 3.1 below indicates.

<table>
<thead>
<tr>
<th>Department Sales as a Percentage for Total Supermarket Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand</td>
</tr>
<tr>
<td>Produce</td>
</tr>
<tr>
<td>Meat</td>
</tr>
<tr>
<td>Grocery</td>
</tr>
</tbody>
</table>

a. Grocery et al - includes Grocery, Dairy, Bakery, Frozen Food and Non-Food Departments.

Sources:
1. Range of figures from several New Zealand Supermarket organisations.

97. M.Z.Grocer's Review. - 'Considered that the Fruit and Greengrocery Department should handle 15 per cent. of the volume of the store'.
98. The McKinsey Produce Study - Slide 7. Produce sales as per cent. of U.S. supermarket store sales, ranges from 7.8 to 9.9 per cent., average of 8.25 per cent.
Store size and merchandising policy determines the contribution of the produce department to supermarket sales. The size and subsequent extent of operations varies, New Zealand produce departments ranged from 300 to 1,000 square feet, depending upon the size of the store, (up to 12,000 square feet of selling area). Similarly the number of items stocked varies, apart from the seasonal influence. Something more than fifty different types of produce are stocked, with an average margin on sales of about 30 per cent. (that is, a gross profit of 30 per cent. on sales). So a gross margin approaching 20 to 25 per cent, (given efficient management), can be realised after shrinkage and spoilage (3 to 5 per cent.) have been accounted for.

The profit potential of this department is very large because the average gross margin for produce is greater than that for meat and grocery, viz.

### TABLE 3.2

A Comparison of Average Gross Margins.

<table>
<thead>
<tr>
<th></th>
<th>Fresh fruit</th>
<th>Meat</th>
<th>Grocery etc.</th>
<th>Vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'62.</td>
<td>29.9</td>
<td>19.3</td>
<td>17.9</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'63.</td>
<td>27.3</td>
<td>19.7</td>
<td>15.1</td>
<td></td>
</tr>
<tr>
<td>New Zealand.</td>
<td>25.0</td>
<td>24.0</td>
<td>18.1</td>
<td></td>
</tr>
</tbody>
</table>

**Sources:**
3. Same as for Table 3.1

However, costs of operation in this department are greater than elsewhere. This is illustrated by Table 3.3 below, which expresses labour expenses as a percentage of department sales,
TABLE 3.3

<table>
<thead>
<tr>
<th>Department</th>
<th>U.S. '59</th>
<th>U.S. '62</th>
<th>U.K. '64</th>
<th>U.Z. 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Produce</td>
<td>11.8</td>
<td>12.6</td>
<td>7.0</td>
<td>7.0 - 10.0</td>
</tr>
<tr>
<td>Meat</td>
<td>8.0</td>
<td>8.3</td>
<td>7.7</td>
<td>7.0 - 8.0</td>
</tr>
<tr>
<td>Grocery</td>
<td>2.3</td>
<td>4.7</td>
<td>4.9</td>
<td>3.0 - 4.1</td>
</tr>
</tbody>
</table>

Sources:
1. Independent Food Survey Business Summary, 1959.
2. All items excluding meat and produce sales.
4. Average of all other Departments' personnel expenses.
5. Same as for Table 3.1

and is further illustrated by the Table 3.4 which details the total operating expenses of each department in a supermarket as a percentage of their respective sales.

TABLE 3.4

<table>
<thead>
<tr>
<th>Department</th>
<th>U.S. '62</th>
<th>N.Z. 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Produce</td>
<td>23.5</td>
<td>18.4</td>
</tr>
<tr>
<td>Meat</td>
<td>16.8</td>
<td>19.2</td>
</tr>
<tr>
<td>Grocery 2</td>
<td>11.9</td>
<td>13.9</td>
</tr>
</tbody>
</table>

Source:
2. All items excluding meat and produce sales.
3. Same as for Table 3.1

Nevertheless, when one considers the contribution of the produce department to the net profit of the supermarket, its importance is realised. For example, in America -

the produce department accounts for 8.0% of the store's net profit, from 7.2% total store sales. (Meat 7.6: 24.4; grocery et al 84.4: 68.4).
in Great Britain - the greengrocery department provides 10% of actual profit from 8.7% turnover. (Actual profit = Selling Price minus Buying Price, less allocated salary costs.) (Meat 12.3: 13.1; Others 78.2: 77.1).

in New Zealand - the fresh produce department may contribute up to 25% and more to supermarket net profits from something approaching 15% of sales. (Meat 15: 25; grocery et al 60: 60).

Thus, relative to turnover, produce is more profitable than meat, for even after deducting 3 per cent. for spoilage and shrinkage, the produce department still possesses the highest margin of any food department. Moreover, despite its unusually high expenses (23.5% department sales), as shown in Table 3.5 below, its return on investment in inventory is greater than that of other supermarket departments.

**TABLE 3.5**

Comparison of Profits, Margins, and Operating Expenses Inter & Intra Department.

<table>
<thead>
<tr>
<th></th>
<th>Produce Department</th>
<th>Meat Department</th>
<th>Grocery (et al) Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Gross Margin on Sales</td>
<td>28.9</td>
<td>25.0</td>
<td>18.3</td>
</tr>
<tr>
<td>Personnel.</td>
<td>12.8</td>
<td>8.1</td>
<td>8.3</td>
</tr>
<tr>
<td>Rental.</td>
<td>2.7</td>
<td>2.3</td>
<td>1.0</td>
</tr>
<tr>
<td>Others.</td>
<td>8.0</td>
<td>8.0</td>
<td>7.5</td>
</tr>
<tr>
<td><strong>TOTAL EXPENSES.</strong></td>
<td>23.5</td>
<td>18.4</td>
<td>16.8</td>
</tr>
<tr>
<td>Net operating profit before taxes</td>
<td>5.4</td>
<td>6.6</td>
<td>1.5</td>
</tr>
<tr>
<td>% Store Net profit</td>
<td>8.0</td>
<td>25.0</td>
<td>7.6</td>
</tr>
</tbody>
</table>

**Source:** U.S. Data - The Colonial Study for 1962.
N.Z. Data - Averages of statistical information received from several N.Z. Supermarket operators. "The average mark-up for produce in Supermarkets varies between 17 and 25%" - From correspondence with the Supermarket Association of Great Britain Ltd.
3.2 Pricing Policy.

In this form of retailing, pricing procedure might be termed 'target pricing', as it involves the meeting of certain short-run turnover and net profit requirements. Logically, the cost of goods and costs of produce department operation are the prime factors in this respect. Accordingly, at the end of each month the 'actual' and 'required' figures are compared, the former realisations being compared with past performances as well. The fact that this department (and the meat department), as regards accounting practice, operates as an independent greengrocery store, within the supermarket, makes possible such a sophisticated form of cost analysis relative to the rule of thumb methods of the conventional greengrocer. Moreover, in this way, a check can be kept on department operations, particularly expenses, on a week to week as well as a month to month basis. However, it should be noted that pricing is not solely on a basis of total average cost as is commonly held. Competition and consumer demand are of equal importance. Margin returns\(^99\) assume a dominant position because of their ex-ante role, as the sales forthcoming from a lowering of the gross margin must more than offset the net return foregone.

3.2.1 Pricing and the Markup Principle for Produce in New Zealand.

In the larger urban areas, Auckland, Wellington, and Christchurch, pricing is the prerogative of the supermarket produce buyer, whereas, in other urban areas, Hamilton, Palmerston North, and Tauranga, it is performed solely by the department manager.

Consideration is given to the cost of the produce, direct expenses (cartage and labour), indirect expenses (contribution to overheads), turnover and the required net profit. The matter requiring solution is to price fifty to sixty odd items in such a way that the net profit is

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99. Margin returns - The product of item sales and the spread between the cost and the selling price of merchandise.
maximised over a period of time. Indirect expenses are relatively fixed, therefore any increase in turnover lowers, as a direct consequence, the percentage of indirect costs carried by each item. Indirect expenses are relatively fixed and inescapable, as they would be incurred even if sales were discontinued. Therefore, although any increase in turnover would lower the percentage of these costs carried by each item, the major expense is the cost of produce. This, generally speaking, is the only variable cost faced by the produce department operator. Accordingly, pricing becomes a process of determining the price for each item which will maximize its marginal revenue. Little consideration appears to be given to the competitive and complementary consequence of the 'offering' on sales of related items. Perishability, space required, handling and packaging costs all serve to raise the operating expenses of this department above those of other departments, (see Table 3.5) for as compared with dry groceries, the produce department has a higher labour cost, requires more space (display and backroom), uses more expensive display equipment, and requires more power maintenance and promotion, as well as possessing the inherent spoilage factor of 3 to 5 per cent. Accordingly, the high direct expenses, (relative to other departments), require a high markup to provide the gross margin (expenses plus profit) necessary to cover these costs. Thus, produce carries an average markup of something from 30 to 40 per cent. with a realised gross margin on sales of 25 to 30 per cent. Specialling, shrinkage, spoilage and labour costs serve to reduce the initial figure.

Actual margins imposed on individual items vary according to statute, (this applies to a very limited number of items, e.g. on imported fruit, a maximum retail price in the form of a price order is set by the price tribunal; similarly, with apples a maximum markup of 

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100. N.Z.Price Orders, pursuant to the Control of Prices Act 1947.
42% is allowed), as well as frequency of purchase, costs of handling etc., and the wholesale cost price. Weight losses are also considered, for example, a shrinkage loss of 8 ozs. in 5 lbs. of mushrooms in twenty-four hours.

Produce buyers, through experience, are aware of the sensitivity of customers to price changes for individual items. The price ceilings for produce, beyond which demand falls off rapidly, and prices at which produce moves rapidly, are borne in mind. This sensitivity is translated into the gross margin imposed. More especially is this so with those types of fresh produce, (particularly staples, e.g. potatoes and cabbages), which are items on the housewife's shopping list every week. The housewife is aware of price, and accordingly any price change is noticed. As a result of this, a standard markup of, say, 30 per cent. on sales cannot be invoked. Rather, an overall gross profit figure is worked to, and varying margins are applied to pricing of individual items, with importance laid on the margin returns from each item to achieve this figure. The margins so imposed over invoice costs are such as to allow a satisfactory profit over and above a breakeven requirement, and still maintain the competitive position of the supermarket. This latter requirement may necessitate a reduction of profit toward the breakeven point when super-normal wholesale prices are paid or a special 'is run'. Accordingly, for profit maximisation, the supermarket firm practises a form of price discrimination as it sets prices so as to receive a greater contribution to costs and profits from commodities facing a relatively inelastic demand than from those having an elastic demand. This 'imperfect' imputation of selling costs means that whilst the average of all prices allows a 'cost plus' return, the customer who purchases commodities of one type will subsidize or be subsidized by a customer whose tastes lie in a different direction. Therefore, the ability of the
supermarket to segment its demand curve enables it to establish more discriminatory prices and increase its 'monopolistic' profits; an action which serves to reduce consumers' surplus, and the extent to which the demand curve diverges from the marginal revenue curve.

Price is adjusted first, overall, in keeping with invoice cost, operating expenses and turnover considerations; second, in accordance with competition; and, third, for individual items, in keeping with consumer demand characteristics, i.e. supermarket pricing policy is orientated toward its clientele. The elasticity of the separate demand curves faced reflect the importance of the commodities concerned, in the consumer's budget, and determine in part their relative prices.

In pricing dynamics - the actual setting of prices, it appears that a system of pricing is used which involves working backwards from the 'right' price, (relative to consumer demand), to a hypothetical wholesale price, by taking costs of operation into account, then comparing this wholesale price with the actual wholesale purchase price to determine the size of the margin imposed. A further point of importance in the pricing of fresh produce, more particularly specialling, is that unlike dry groceries the shopper can see what he or she is actually purchasing. That is, a comparison of quality against price is easily made in the shopper's mind, as to how genuine a particular low price offering is. This is not possible when items such as soap powder, canned sweet corn and frozen peas are specialised. Consequently, with respect to the specialling and general low price offerings of fresh produce, the demand curve is less likely to have its lower segment as shown in Figure 3.1 positively sloped back toward

101. P.A. Samuelson. 'Economics'. (McGraw-Hill Book Co. Inc. N.Y. 1958), p.445. Consumer's surplus is a reflection of the fact that the total economic welfare of any good is greater than its total monetary value. This is because all units of good, being inter-changeable, sell for as little as the last is worth.
the vertical axis (DD'),\textsuperscript{102} as regards shoppers' association of inferior quality with low price. Rather is the demand curve likely to become more elastic, DD''.

3.2.2 Price Variation.

Flexibility in pricing, or corrective pricing, is very important with reference to fresh produce. There are two reasons why the highly perishable nature of such merchandise necessitates price adjustments, especially when sluggish demand conditions develop.

First, early moderate markdowns may preclude the necessity for drastic markdowns and subsequent losses later in the time period.

Second, some returns are forthcoming, in a situation where adherence to an inflexible policy would have meant outright loss.

Such an action may be caused by either inter or intra-store demand factors, such as a slackening of demand due to competition, or as a means of breaking even on a line which has been over-ordered, or whose quality is expected to deteriorate rapidly. In such circumstances prices are usually cut so that sales may be made whilst the produce concerned is in good condition, for example, clearing of stock on a Friday night. ("Better to cut price and sell whilst in good condition, than 'hang on'.")

That it is difficult for many employees, including produce department managers, to accept and appreciate this concept, is evidenced by the departments of many supermarkets. There is little re-pricing of items where necessary in order to move stock. Furthermore, it is stated that produce of inferior quality should be so designated by a price differential. Often down grading of lines rather than up grading is the case as poor and good quality produce items are sold as the one line.

On an inter-store basis, prices may be varied to meet competition, for the reason that store patronage is determined, in part, by its price image. This is so especially in highly competitive situations where word-of-mouth discussion as to prices is a most influential factor. Consequently, when sales slacken, price checks are made on competitors' price quotations and, where necessary, prices are reduced to their level. This implies that, relative to the kinked demand curve exposition of Sweezy, the competitive situation existing in the market structure is such that price reductions are followed. More especially has this been evidenced in secondary urban areas outside of the four main centres, between the supermarket and specialist greengrocer. The former reduces its prices where necessary to that of the latter. As a consequence the extent of the discontinuity of the 'combined' marginal revenue curve must either be very small or non-existent. Thus, pricing procedure for produce, (as for other merchandise), is according to local market area requirements, and is not based solely on a percentage markup.


This model is a possible explanation of the 'stickiness' of oligopoly prices. Graphically it can be depicted by the intersection of two demand curves which differ in elasticity. The demand schedule for the product offering of an individual store tends to be more elastic than the aggregate demand curve for the product concerned, because part of the elasticity of demand for the individual store's product is derived from a shift of customers from one store to another. Therefore, because price cuts are matched by competitors and price increases are not, there tends to be a 'kink' at the point of intersection of the aggregate and individual store's demand curves. The sharper this kink, i.e. the greater the difference in demand elasticity, the wider the range of discontinuity in the 'combined' marginal revenue curve within which the marginal cost curve can fluctuate, and as a consequence the greater the resistance to price change.
3.3 **Sales Promotion.**

**3.3.1 Concessional Pricing.**

Three forms of pricing can be distinguished where prices are reduced in an effort to increase sales:

1. **Loss leader pricing.**
2. **Multiple unit pricing.**
3. **Odd pricing.**

These forms differ in degree only, the actual margin foregone approaching zero in the first, from something quite substantial in the third. All utilize the concept of thrift, as the appeal of saving is an inherent psychological precept of the consumer. Their use provides the supermarket produce department operator with an opportunity to reap the returns of price competition, and to foster the general impression of overall low and competitive prices.

**Odd pricing** demonstrated the smallest price reduction on an article, viz., from 2/- to 1/11d, or 1/- to 10½d, but which would lead one to believe from consumers' reactions that a greater reduction were present. This is commonly used as an in-store sales promotion device.

**Multiple Unit pricing** involves a moderate price reduction, where more than one article of the item so priced is purchased. The price inducement here is, in fact, a quantity discount, which aims at encouraging multi-unit rather than individual unit purchasing, viz.,

<table>
<thead>
<tr>
<th>Potatoes:</th>
<th>10 lb. - 3/11d.</th>
<th>25 lb. - 7/11d.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 lb. - 1/-</td>
<td>3 lb. - 2/3d.</td>
</tr>
</tbody>
</table>

| Apples:    | 1 lb. - 1/-     | 3 lb. - 2/3d.   |

Such a policy successfully implemented serves to increase net profit through reducing costs of handling and increasing sales. In this way the average cost curve is lowered whilst the demand curve is moved to the right. This form of pricing may also be used in combination with odd.
Pricing, viz.,

- Parsnips: 1/- per lb. OR 2 lb. for 1/11d.
- Dessert Pears: 1/4d. per lb. OR 2 lb. for 2/6d.
- First Grade Onions: 1/3d. per lb. OR 3 lb. for 3/6d.

or, as is described further on, in loss leader pricing.

Loss leader pricing or specialling is a further application of price competition. It is a common pricing practice used by the supermarket wherein the gross margin imposed on any one or group of items is very much lower than that normally imposed. The margin foregone is, relative to the item concerned and other items in the supermarket, a promotional expense to gain a spatial monopoly over the consumer-shopper. The importance of fresh produce as a loss leader is a consequence of housewives' inability to 'inventory-build' or 'stock-pile' these commodities to the extent possible with canned foods, quick frozen foods, dry groceries and less perishable items. Items of fresh produce chosen as loss leaders are known as 'traffic items'; that is, items which are purchased weekly in large quantities, and have high repeat sales. Their purpose is three-fold -

- first, to sell the items of fresh produce in question,
- second, to maintain current patronage,
- and third, to act as a draw on potential custom and, by so doing increase store traffic.

In this way specialling is the vehicle of sales promotion through which competitive pricing can be conducted. The success of this action is demonstrated by the increased sales of the particular item, and by the increased sales of conventional markup merchandise in both the produce department and other supermarket departments. The second point is a necessary condition, as the special has only partly fulfilled its function if sales of items other than the 'leader' are not increased. To accomplish this, the produce department manager must be aware that the sales level of
any item of fresh produce within his total offering (or inventory) of fresh fruit and vegetables is influenced first, by his total offering of these items as regards the number and quality of different items stocked; second, by the prices of those items other than that under consideration; third, by associate store non-price offers; and finally, by the price and quality of the item concerned. Given 'satisfactory fulfilment' of the above four conditions in the produce department, the complementarity of items of fresh produce causes a special offer on one to increase the attractiveness to shoppers of both the department's and the supermarket's offering. This is due, in part, to the convenience to the shopper of such offers, because if the commodities concerned are so priced as to be all purchased from the one store, there is a saving to her in shopping time and costs of transportation. The awareness of this concept of commodity interdependence, however, varies widely between supermarket produce department managers.

Pricing behaviour of this type has wide application in supermarket merchandising because of the benefits which can accrue from differential pricing in this firm's multi-product inventory. In the instance of the supermarket, profit maximization has to take place under conditions of high fixed costs, so that operating as close to capacity as possible is essential. This requires setting of prices so as to take cognizance of the varied demand curves faced by the supermarket, and manipulation of the product mix to take account of the various elasticities and cross elasticities of demand. Therefore, any item of produce utilized as a draw, (i.e. priced so as to attract custom, which requires a high price elasticity of demand), is successful only if it has a high inverse cross elasticity of demand. 104 In other words, 

104. And a low cross elasticity between the "leader" and purchases of competitors' offerings.
if the demand curves for two commodities are assumed to be inter-related, and their marginal cost curves remain independent, the demand for one, lettuces, complements the demand for the second, tomatoes, (i.e. the cross elasticity of demand between the two is negative or inverse), then lowering the price of the first expands the sales of both. The greater the degree of complementarity between two, or more, commodities, the higher the inverse cross elasticity of demand each possesses relative to the other. The commodities so featured may be loss leaders by tradition (potatoes), in abundant supply (cabbages), or associated with consumer preferences. Such items figure prominently in the customer's budget owing to the high repeatability of their purchase which emphasizes associated savings. Consequently a high degree of market penetration through advertising is essential. Moreover, their use as promotional devices appears to cause only a minor disturbance among competitors and is regarded as normal.

In addition, the loss leader concept introduces price flexibility into a market situation where such flexibility would be otherwise difficult to effect. This is reflected in the ability of the supermarket to move larger volumes of produce in a period of heightened supply, as opposed to the greengrocer's inability to do so. Furthermore as mentioned, the perishable nature of fresh produce gives it an added advantage as a loss leader, as it precludes stockpiling to the extent that is possible with grocery items. Different items are introduced at different times of the year as leader items, the quality and quantity available providing an opportunity for tie-in sales with grocery items, at prices which give the produce department manager an opportunity to build up a quality image. To exploit the principle of cross elasticity of demand in this way requires:

First, that the price elasticity of demand for the items concerned be high, to encourage customer patronage of store and produce
department; and, second, that the inverse cross elasticity of demand for the item be high, so as to encourage complementary sales of an intra- and inter-department nature. Thus, besides increasing sales of the specialled item(s), customers purchase associated items carrying the conventional markup as well. This serves to increase returns to all departments as well as the produce department, - more especially is this the situation with typical deep-cut leaders such as lettuces, peaches and potatoes.

Many of the items so specialled are procured directly from growers rather than from wholesale, for only in this way can there be advance assurance as to supply and price for such a merchandising strategy. Furthermore, in many instances prices quoted are less than those realised at auction:

Peaches are sold, packed in 20 lb. cases, retailed as a special at 12/3d. per case; the auction price for a similar line was 14/6d. per case.

Potatoes sold in 60 lb. bags, retailed at 13/6d. per bag; the price realised at auction was 15/- per bag.

Others may be near, or more than, auction price, but less than the normal retail price. Accordingly, there are two policies followed. In the first instance, deep price-cut items which are genuine loss leaders are offered for sale at very little more than invoice cost.

For example, Bananas: 3 lb. for 2/6d. (limit 3 lb. per customer).

Apples, H. B. Delicious. 5 lb. for 3/11d.

In the second instance, gross margins are moderately reduced, from say, 30% on purchases to 20%. As a consequence, the particular items return a lower net profit per item.

Thus, following one form of leader policy, margin returns are practically nil, its function being to increase the sales of other merchandise. In the second policy, reduced margins may increase other sales, but the prime function is to increase gross margin
returns to the commodity concerned, as they are maximized by volume-of-sales.

Produce department operators also occasionally attempt to accentuate the rate of inverse cross elasticity between the price of specialised leader and the quantity of complementary items, by either limiting shoppers' purchases of the specialised item(s), viz.,

Grannymith apples: 3 lb. for 2/- (limit of 6 lb. per purchaser).

or, requiring the purchase of minimum quantities of other conventionally priced merchandise - viz.,

1 Pineapple for 3/- with every £3 spent in the retail outlet concerned;

which is really a 'quantity' discount. These restraints have the added effects of preventing 'raiding' by competitors and 'cherry picking' by shoppers.

Finally, a specialising campaign can be initiated by the grower, rather than the produce department operator. This usually occurs when climatic conditions during the growing season for the crop(s) concerned, have caused plantings made at wide intervals in time to mature, i.e. 'come on', all at once. Accordingly the special advertised is the normal effect of a cost reduction, which often allows the produce department manager to impose his conventional markup.

Budgeting out of specials (i.e. comparing the cost of a proposed advertising campaign against its expected returns), ensures that

Taking G as the gross margin on a unit of sale, the gross margin returns from the sale of n identical items, $G_n = n (P_r - I)$, where P denotes the retail selling price of each item, and I is the invoice cost of each item.

Similar practices are implemented with grocery and non-food items. e.g. (a) Butter 1/8d. per lb. (4 lb. limit per purchaser), in 1966 (b) 1 4oz. jar Nescafe coffee for 4/- with every £3 purchase. Of note, however, that the limits imposed are always in very small print on the advertisement.
this activity is controlled by keeping in mind the net profit requirement of this department. Markdown records are maintained in some instances for this function. Moreover, as accurate information pertaining to demand curves for the various items of produce is not available, so the items used and the depth of price cut become matters of personal judgment by the produce controller. This is subject to the two major influences of organisation policy and present competitive conditions.

3.3.2 Product Line Width.

Product line width is a custom and sales determinant, because:

1. The wider the product line, the lesser number of shopping excursions the consumer has to make outside of the store's trading area.

2. By widening the product line, the optimal margin, (and price), for each commodity can be lowered, as a consequence of scale economies realised from expansion.

and 3. Impulse sales are enhanced by any factor which increases store and department traffic.

Recognition of this varies widely between produce department managers, and seems to be related to managerial ability, although the need for certain items to be present in the product offering is appreciated. In this regard the importance of 'allocated - imported' fruits to the successful operation of the produce department is a major example of commodity interdependence.

Produce department managers and buyers are unanimous in opinion that a

106. The effectiveness of produce items as "leaders" took on an unusual form in an Auckland supermarket organisation, where sample lots of a grower's apples were advertised at 9/6d. per case cheaper than the wholesale price stipulated by the N.Z. Apple & Pear Marketing Board, as a means to increase custom and enhance its competitive image. The supermarket organisation concerned advertised through a newspaper, stating that the public could learn how to buy apples at 30/- a 40 lb. case instead of 47/6d. by shopping at any one of their stores. The supermarkets acted as the grower's agent and made available printed envelopes to the public, who were instructed to post 30/- in one of these envelopes is they required a case of apples to be delivered to them. For this service the grower made a rental payment of £1 per week to each of the supermarkets concerned, for the display space utilized, plus an additional payment for the use of the supermarket organisation's Post Office box. (For further information on this issue see copies of the N.Z. Herald dated October 21st. 1965 and December 16th. 1965).
strong complementary relationship between this produce and domestic produce is demonstrated in sales to shoppers. That is, a high degree of negative cross elasticity is present between these two groups of fresh produce, sales of the former being tied to sales of the latter through its determining influence on custom.*106A. The traditional fruiterer and greengrocer confirms this, when he enforces this tied-sales activity on his custom through rationing imported fruit sales per customer when this produce is in short supply.

3.3.3 Presentation of Produce for Sale.

Employing the practice of loss leader selling is of little consequence if it is not reinforced by satisfactory presentation and display of the total product offering, so as to encourage purchases of other merchandise besides the specials within the department and store. In New Zealand supermarket presentation of produce follows much the same pattern as the lot by lot display of the specialist greengrocer, with the difference that the supermarket has the ability to feature mass displays (highlighting of a single commodity), 107 and possesses the facilities to accommodate the demands of a high sales volume.

Because of the inherent features of its operation, the supermarket presents an opportunity to capitalise on the psychological displaying of products. Therefore it is to the operator's advantage to incur selling costs in order to attract buyer expenditure from other stores. For, just as commodities vary in their price elasticity of demand, so do their display elasticities of demand vary. Fresh fruit and vegetables, as mentioned previously, are very important in this regard, due to

*106A. This would be reflected by a shift in patronage from Supermarket to Greengrocer if the Produce Department prejudiced its quota allocations from the wholesale merchants through exclusive procurement of produce direct from growers.

107. e.g. Hands of Ecuador Bananas piled high, specially priced, colourful and of good quality.
Accordingly, presentation of produce for sale, (what is presented and how it is presented), offers the produce department manager and supermarket operator a chance to increase the elasticity of the demand curve they face, through differentiation, as the within-store inverse cross elasticity of demand and between-store direct cross elasticity of demand are determined in part by presentation. Selling costs incurred in this way serve to push the demand curve faced out and up to the right. Those supermarket outlets taking cognizance of this fact place emphasis on giving a bright impression and relieving dullness by colour breakup in presentation, a wide variety of produce and mass displays.\textsuperscript{108} Cleanliness, freshness and attractive displays characterize such departments, along with continual stocking-up, checks for deterioration, and the precluding of empty trays and wilted, decaying items - features which the customers view with distaste. In addition, items of fresh produce may be used in \textit{spot displays} to encourage a 'fuller' shopping\textsuperscript{109} of supermarket departments by customers. Cucumbers, tomatoes, peaches and strawberries are those most frequently used for this purpose. This awareness of the returns inherent in produce merchandising, and the fact that "the securing of a high volume of trade in fresh produce is determined less by price cutting than by rigid control of freshness and quality", encourages purchases by shoppers and, at the same time, adds to the image possessed by the supermarket. Product differentiation, in this way, increases the price inelasticity of demand, and inverse cross elasticity of demand, on an inter-produce retailer and inter-store basis and, therefore, provides a means of 'insulating' one store's share of the consumer market, (and total demand curve for fresh produce), against competitive 'erosion'.

\textsuperscript{108} Relative to the income groups and ethnic groups present within the community.

\textsuperscript{109} This would include shoppers' impulse purchases.
Generally, however, supermarkets in New Zealand have found it difficult to make a success of their produce departments. In a large number of the supermarkets visited the actual presentation of produce - upgrading by differentiation of lines, and the removal of poor quality lines - leaves a lot to be desired.\(^{110}\) There is obviously a failure to appreciate that the merchandising practices required for fresh produce are vastly different to those applied to dry groceries. Selling of fruit and vegetables needs experience and 'know how' even on the small shop scale, to a far greater extent than does its grocery counterpart. Insufficient cognizance is taken of the fact that rapid quality deterioration is a characteristic of most fresh produce items,\(^{111}\) with the result that such goods have to be priced so as to promptly clear the stocks of merchandise on hand.

**Layout.**

Layout, as it applies to the produce department and its siting within the supermarket, is of importance as it contributes to the display elasticity of demand possessed by the department and supermarket, and determines the success of presentation effort.

Within the supermarket this department is usually sited on a side wall, or runs part way across the back wall and, in the majority of cases, is situated adjacent to the delicatessen-dairy and meat departments. Its location in the shopping pattern of customer traffic is generally such that it becomes the last, or one of the last, departments shopped, and is exposed to the maximum volume of customer traffic.

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\(^{110}\) Cassady. op.cit. p.187. "Just as important as repricing is the attempt to improve the attractiveness of the merchandise offerings - this may be accomplished in part at least by increasing the prominence of displays and by upgrading quality through the process of discarding items which are not up to standard."

\(^{111}\) As evidenced by the presence of fruit flies and fungal lesions on items of produce.
As regards the department itself, ease of shopping it and maximum exposure time of the shopper to the merchandise is essential. These two factors facilitate increased sales, and therefore must increase the elasticity of the demand curve faced.

Accordingly, if one assumes that good quality produce is purchased, and the requirement of a satisfactory situation is fulfilled, department management determines the subsequent success or failure of a supermarket's produce department (i.e. whether it appears to be an adjunct to grocery operations or a department of major importance). This is instanced in supermarkets employing fruiterers and greengrocers as buyers and department managers for, by so doing, the requirements of standardisation and specialisation are fulfilled through the adaptation of display practices utilized by the greengrocer. Thus, the subsequent success of the department is determined by its ability to utilize the additional merchandising opportunities offered by supermarket operations and to so differentiate itself from its specialist competitors.

3.4 Prepackaging.

Prepackaging may be defined as a means of bulking units of an article into convenient size packs for customer self-service selection. Self-service facilitates this form of fresh produce merchandising, which is also a form of sales promotion. Consumers are offered a choice between prepackaged and bulk displays on many items. This serves to satisfy the consumer who demands quantities smaller than those prepackaged, and between 50 and 60 per cent. of sales are made in this way. Some items are

Display fixtures consist of wall cabinets and dump bins. The latter are highly effective as a selling display fixture, as they break up shopping traffic. Particularly is this the case where dump bins are used to feature mass displays; e.g. potatoes, bananas, lettuces. Progressive Grocer. January 1966. K.78-9. 'Produce Tables Channel Traffic'. - "The sales potential of the produce display tables is shown by their ability to attract as much as 97% of total store traffic."
difficult to prepackage so they are displayed in bulk, and price tagged for sale. For example, bananas may be sold as hands or broken into size units. Furthermore, there are items such as butter nut pumpkins from which no advantage is gained by prepackaging.

However, as the produce department has the highest labour cost, the lowest sales per labour unit, and the highest operating expenses of all the departments in a supermarket, (see Table 3.4), prepackaging and self-service are the means by which in-store cost reductions can be achieved. The element of self-service selection increases consumer traffic through the department, reduces operating expenses through greater ease of handling, and increases the returns per man-hour. However, none of the produce departments visited were completely self-service, nor had any gone 100 per cent. into prepackaging. All were employing a form of assisted self-service selection, namely, weighing, wrapping and pricing of non-packaged items as required. Consequently, the emphasis given to prepackaging determines the amount of assisted service in the produce department of various supermarkets.

Consumer acceptance of this merchandising practice depends upon the quality of the produce so packaged. Constant maintenance of freshness and quality are essential, so that there is 'creation of a positive image, not uncertainty, in the customer's mind', i.e. a separate demand function is created for prepackaged produce. This is a consequence of the heightened standard of living and its associated demand for convenience in package size. However, as it is also argued with justification that "the reputation of the store is in each bag", some stores place less emphasis on prepackaging than others. The customer will take responsibility for her own selection of loose produce, but not for faulty items, located after purchase, in prepackaged lots. As a consequence of this, hard fruits and vegetables, - that is, those items
less subject to spoilage, diseases, and possessing a relatively low rate of physical deterioration, - are those most utilized. However, with packaging at the point-of-sale, wet vegetables such as cauliflower and cabbage can be so displayed. 113

The major proportion of prepackaging is done at retail, only a few specific items such as strawberries, celery and cherries being prepackaged by the grower, as he is of the opinion that his labour costs preclude all but a rudimentary form of packing at the farm gate, (sacks, boxed and multi-wall paper bags). Moreover, emphasis on freshness and quality with reference to store image requires prepackaging near to or at the point-of-sale, i.e. a market-orientated rather than supply-orientated merchandising policy is practised. Such a form of merchandising, in the first instance, aids display through enhancing appearance and facilitating sales. 114 Further, variable pack sizes and large pack size tend to encourage the consumer to purchase more, thereby increasing inventory turnover. Finally, in-store spoilage from handling prior to sale by customer and department personnel is reduced. Consequently, provided the produce to be packaged is of good quality and fresh, shelf life will be increased, shrinkage reduced and the overall efficiency of operations increased. Taking this a step further, the extended use of brand names in the procurement of produce can be visualised. 115 The application of

113. Use of heat sealing. CRY-O-VAC process.

114. Dupont Survey - 'the average shopper passes through a self-service (prepackaged) produce department in 24 per cent. less time than she takes for a service department. Yet she buys 16 per cent. more produce.' Packaging is important. Split second identifications must be conveyed by the packages of products sold on self-service shelves. Competition for attention is intense. The consumer is generally in a hurry, therefore must recognise contents quickly, see its cost and quantity immediately. Transparent packaging helps to meet these requirements.

115. Already buyers' confidence has been established in brand names for prepackaged celery, carrots, onions and cucumbers.
technology in the form of prepackaging makes this feasible. Such a development would reduce the need for 'coalescence' of market areas for purchase by inspection, i.e. with respect to the commodities concerned, buying would no longer need to be 'on sight'.

3.5 Competition in Selling.

Perusal of the literature on retailing enables the reader to classify the retail market structure in almost any way. Stigler classifies nearly all such markets into the competitive sector. The majority of English writers describe retailing as imperfect competition or monopolistic competition. Smith finds the "imperfect divisibility" of retail units, "imperfect imputation of selling costs", limited spatial monopoly, weak price competition, and the uninformed nature of the buyer to be strong imperfections affecting retail markets. Smith's exposition, however, gives no cognizance to the newer and more efficient types of retail services provided. Accordingly he minimises the extent of the effect which these changes have subsequently had on price competition in retailing. Supermarketing, along with self-service selection, and loss leader pricing are changes which have caused very marked alterations in shopping habits, and the rise of penetration pricing by new entrants.

Lewis suggests that monopolistic competition is the relevant model for the analysis of retail units. Others, however, are of the opinion that oligopoly may be important in retailing. Lady


118. W.A. Lewis. 'Overhead Costs'. (George Allen & Unwin Ltd. 1948). P.116.
Hall was the first writer to express this opinion,

'It is inherent in this situation that conditions of oligopoly may arise at any time. By oligopoly is meant a situation in which the seller, in determining his price and output policy, takes into account the probable reactions to changes in his policy'.

And, as Markin states, there is a temptation to acknowledge Lady Hall's statement, particularly with regard to supermarkets. Hood and Yamey, however, are at variance with the conclusion of Smith and Hall:

'It is not useful to rely upon an essentially static and long-run theory of monopolistic competition to explain the economies of retailing. It is not realistic to argue in terms of long-run stability in consumer preferences, or to assume that entry is of an equilibrating kind and that innovations are of the particular kind implied by Mr. Smith. The use of an oversimplified theory of oligopoly is equally unrealistic. Freedom of entry and chain linking of markets make it unwise to rely upon a mere counting of numbers. Tacit or formal agreements are not the simple arrangements which some theories suggest.'

Holton argues that supermarkets are oligopolistic as he indicates in the following passage that,

'Retaliation does not take the form of retaliation on the identical item which the competition is featuring, for this is price competition of the clearest sort and anathema to the oligopolist.'

The writer fails to see the 'total' application of this in New Zealand food retailing as direct price competition does take place. Whilst this may reach a certain level and remain there, viz., permanently reduced specials, 'temporary' special clashes are unintentional. Holdren is also at variance with Holton, and argues strongly that supermarkets are

123. e.g. In 1966 butter sold at 1/104d. per lb. generally, even though a few stores were retailing at 1/84d. per lb. in the same trading area.
not oligopolists but rather monopolistically competitive. However, the writer disagrees with Holdren's definition of oligopoly as competition among a few sellers, between whom a quasi-agreement on price is reached. Actual collusion (or in the form suggested by Fellner) is not a necessary condition for oligopoly, as is the 'fewness' of sellers and a large degree of interdependence between them. Both of these 'requirements' characterize supermarketing and its merchandising behaviour in New Zealand as a multi-product retail firm. This is indicated by the high price elasticities and cross elasticities of the demand curves faced, as reflected by the shopper response to loss leader selling and the geographical effect upon competitors.

3.5.1 Inter-Supermarket Competition.

In New Zealand, characteristics of the competitive market structure as it applies to inter-supermarket competition suggest that it is oligopolistic. The present and developing situation in New Zealand, especially in the four main city urban areas, is such that supermarkets are becoming increasingly aware of the impact of rivals' conduct, as the number of supermarkets per market area increase. In defining the trading area of a supermarket in terms of cross elasticity of demand between it and another's area, these values are something far greater than zero, (and are rising with the increase of competitive activity), as the merchandising behaviour of one supermarket influences the trade of a


125. Although uniqueness of location does provide some degree of monopoly power, the extent of this would depend upon the size of the market

126. What Hood & Yamey, op. cit. term 'an oligopolistic situation in an atomistic industry'.

127. Particularly does this apply to the Auckland urban area; supermarket and produce dept. operators comment on the overlapping of trading areas.
competitor, as well as its own custom. 128

Specials, for the reasons mentioned previously, are the major form of competitive influence and price discrimination. These are used, in the first instance, to attract custom—'bring your customers to your store with your specials and retain with the quality of your perishables.' In the second instance, this practice is used to retain custom against the competitive draw of competitors. Each supermarket has a certain capacity, volume-wise, of customers, therefore once this is approached promotion and advertising are needed to hold these shoppers against the draw of new entrants. 129 Thus selling costs and produce quality adjustments are the two means used by supermarket operators to expand and protect their 'share' of the peculiar market area.

The response to, and use of loss leader pricing indicates that price elasticities are relatively large in supermarkets. Given this, and the fact that cross elasticities of demand are also large, any competitive move must in the main be adverse in nature to the geographically closest competition. 130 Accordingly, the marked increase in such produce merchandising activities by the various members of the supermarket industry, taken as a cumulative function, is no doubt largely responsible for the

128. However, concerning oligopoly agreement in price determination, to the best of the writer's knowledge, (gained from interviews with supermarket and food retailing officials, and from personal experience), there is neither collusion between competing supermarkets, nor joint price fixing activity by chain institutions. One indication of this is the employment of personnel whose occupation is that of visiting the stores of competitors and checking on their prices for purposes of comparison. (The writer was actually 'charged' with this 'offence' on several occasions).

129. Illustrated by the increase in non-price offer variation costs—particularly advertising in the newspapers and hand-bills to the housewife, and demonstrated by an extension of present parking facilities by many supermarkets.

130. An example of this was demonstrated in part of the Auckland urban area where extreme specialising led to a price war, with unfortunate consequences for the initiator, because the trading areas of his supermarkets overlapped to a major degree and his action caused local retailers to retaliate by meeting his prices. (For a discussion on overlapping of trading areas see Cassady, op.cit. P.60-61.)
reduction of margins, (retail price minus wholesale cost price) on produce in the Auckland urban area, as well as for the effects on the traditional greengrocer. Such a competitive situation highlights the misnomer applied to the supermarket's merchandising technique of loss leader selling. That is, that loss leader selling is false and unscrupulous because it encourages heightened prices in other commodities (produce, grocery and non-food), thereby nullifying any net gain to the shopper. The fact that it is an obvious result of complementarity between retail items appears to have been overlooked by its critics. Loss leader selling is the direct result of an increase in competitive activity. Prices of some commodities are lowered, but there is no compensatory upward shift necessitated in the prices of other items. This particular market situation fosters, (and shall continue to foster), loss leader pricing, and by so doing give rise to a lowering of the general price level for fresh produce. Taking this one step further, as competition continues to increase so shall the number of new lines of non-staple type produce added to the product line, increase, for as these commodities possess relatively inelastic demand curves, their returns will add to those of competitive items.

3.5.2 Supermarket and Greengrocer.

The supermarket produce department operator does experience competitive effects from the orthodox greengrocer, generally as a group, and specifically as an independent retailer. The major percentage of supermarket produce purchases are made at auction and, accordingly, its bargaining power is reduced toward the level of the small traditional retailer. That is, wholesale prices to each tend toward equality as they apply to fluctuations for individual purchases from the mean wholesale price on that day for the relevant items. This puts the greengrocer on more of a competitive level with the supermarket, as in
large part they both purchase in the same way and from the same source of supply.

Strong competition from the greengrocer is experienced by supermarkets located in or near to long-established business areas. In these trading centres greengrocers have built up a substantial measure of goodwill over time. This, along with their location, is such as to ensure continued successful operations. The expansion of greengrocers’ premises should further serve to consolidate the market position of the greengrocer, given the previous two factors. Therefore, non-price variations in offering (along with the above three factors) which the greengrocer provides will move his demand curve to the right thereby offsetting the height of his average cost curve relative to that of the supermarket. This should serve to prevent his demise as the affluence of the shopper increases.

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131. Of note, however, with reference to the smaller business centres, that shopping centre development associated with the ‘opening-up’ of new housing areas could cause the demise of otherwise successful greengrocers, through channelling shopper traffic generally away from the business centre, (i.e. a situation analagous to the drift of custom from the city to suburban areas taking place in Auckland).
4.1 Introduction.

In Chapter One the reasons why supermarketing entered into American food retailing were discussed, and it was noted that many of these had a similar application here in New Zealand. Chapter Two described supermarket fresh produce procurement practices, and Chapter Three detailed the merchandising policies used by the supermarket produce department operator to sell these commodities. Now the aim is to portray the actual results of these three chapters. Passing mention is made of the effects upon food retailing generally both in New Zealand and overseas, but specific consideration is given to the effect of supermarket fresh produce retailing upon the New Zealand greengrocer.

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4.2 The Situation in the United States and the United Kingdom.

In American food retailing, the supermarket has become the major sales medium for all perishable and non-perishable foods. The shifts in the pattern of meat and produce sales have affected the specialty outlet to such an extent that in the thirty-six years from 1929 to 1965 the American supermarket industry (totalling 14% of all food stores) acquired 71% of all food sales. Moreover, including superette type stores (12.5% of all food stores), some 84% of all food sales were made. Consequently, small stores and specialty food retailers are of very minor importance as sales media which Table 4.1 below illustrates.
In 1965 the greengrocery stores made up 12.4% of the total number of specialty stores, whilst specialty stores accounted for some 7% only of the total retail food sales; (where specialty food stores are defined as those being operated by a craftsman specialising in one particular classification, e.g. fish, gourmet foods, meat and produce.)

In their predictions for future retailing in Europe, Jefferys and Knee 132 project the existing American Development, where the success of the supermarket industry's scrambled merchandising, as opposed to the conventional limited-line offering of the traditional specialty retailer, is reflected in the growth of the former institution.

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132. See J.B. Jefferys and D. Knee. "Retailing in Europe".
and the retrogression of the latter. However, the fact that only 55-60% of all food store sales in the United Kingdom are made by grocery stores, compared with over 90% in the United States, illustrates first, the extent of traditional retailing operations in Great Britain and, second, the degree to which traditional retailing procedure has been superseded in the United States. 133 The following product line analysis further compares the position of the supermarket in the United Kingdom market structure, with that in the United States.

It is estimated that by 1964 United Kingdom supermarket sales of meat and fresh produce had reached the level of 4½% and 4% respectively of the total retail sales in those trades. 134 For meat, this was an increase of 1% over the 1962 estimate of 3%, whereas in the United States in 1958 135 supermarket sales of meat and fresh produce had reached the levels of 50% and 53% respectively. A mere 15% and 9% accrued to the respective specialty line stores and the residual 34% and 37% was transacted by grocery stores and non-super combination markets.

Thus, in Great Britain, the traditional retail trade in these two perishable products has not yet been significantly affected by supermarket

133. J.B.Smythe. 'The U.S.A. Scene'. Modern Merchandising. Sept. 1965. p.25. 'An interesting development in the United States in recent years has been the emergence of the supermarket as the main supplier of all food items to the average housewife. The meat sections are very elaborate, and have almost replaced the conventional butcher's shop. The same has happened with fruit and vegetables. I do not recollect seeing one conventional fruitier in any big American city. They still have some of the fruit barrows on street corners, but the average housewife buys her complete supplies of fruit, vegetables and meat from the supermarket.


competition. However, McAnally\(^{136}\) is of the opinion that it would be rash to say "that supermarkets have as yet scarcely touched the position of the conventional butcher and greengrocer." Although these have maintained, (mainly through consumer loyalty), their level of sales, their proportionate share of the market has fallen with the rise in consumer expenditure.

The Supermarket Association (S.M.A.) of Great Britain estimates that the market structure in Britain has a place for about 5,000 to 6,000 supermarkets.\(^ {137}\) Consequently, noting that with 1,366 supermarkets in 1963, 11% of both butchers and greengrocers stated that supermarket competition was having a "big effect" on their sales,\(^ {138}\) it appears obvious that the impact of the supermarket upon the traditional retailer is going to increase markedly. This is borne out by the estimate that, with the present rate of growth, by 1970 supermarkets could account for about 25% of the fresh produce trade and number between 4,000 and 5,000.\(^ {139}\)

### 4.3 The Situation in New Zealand.

In New Zealand, nationally and regionally, the conventional fruiterer and greengrocer still remains the principal channel through which fruit and vegetables reach the consuming public. Their importance in the market structure for fresh fruit and vegetables, however, is declining as the number of self-service stores and supermarket entrants increase, since both outlets include fresh produce in their offerings.

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\(^{137}\) McAnally. Op.cit. concurs that there is more room for supermarkets.


\(^{139}\) Personal communication from United Kingdom. S.M.A. 1966.
Table 4.2 below indicates that the rate of adoption of self-service by retail grocery stores for the period 1958 to 1963, an 81% increase in numbers occurring, was such that in 1958 42.7% of all retail grocery establishments possessed self-service units, and transacted some 54% of total retail grocery store sales for that year.

**TABLE 4.2**

| Turnover Size (£000) | With Self-service Units | | Without Self-service Units | | % Self-service Units to Total |
|----------------------|-------------------------|-------------------------|--------------------------|-------------------------|
|                      | No. of Stores. | Sales | No. of Stores. | Sales | Units |
| Under 5              | 25   | 17   | -32   | 79   | 69   | -13   |
| 5-9,999              | 100  | 106  | +6    | 794  | 834  | +5    |
| 10-19,999            | 430  | 632  | +47   | 6502 | 9740 | +50   |
| 20-29,999            | 267  | 568  | +113  | 6997 | 15775| +109  |
| 30-39,999            | 121  | 318  | +163  | 4099 | 10185| +164  |
| 40-49,999            | 60   | 127  | +112  | 2652 | 5643 | +113  |
| 50 & over            | 52   | 140  | +169  | 3638 | 10298| +183  |
| **TOTALS**           | 1055 | 1908 | +81   | 24361| 51714| +110  |
| **TURNOVER/STORE (£000)** | 23.1 | 26.8 | | 2336 | 2556 | -21  |


Since this time supermarket numbers have markedly increased, therefore it is logical to assume that the number of self-service grocery stores similarly increased. This is owing to first, the economies realised in 'going self-service' and, second, its being the only way in which the small grocer can successfully compete with the supermarket. The actual undermining of the traditional greengrocer's position, however, will not become pronounced until the supermarket can offer a competitive service. This is seen where really high quality supermarkets are operating, as "the results of their skirmishes with the conventional trade" have been far reaching and effective. 140

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140. e.g. Prior to supermarket competition a greengrocery outlet had a turnover of £1,300 per week. Now, after 3 years of competition, it is scarcely breaking even, with an average weekly turnover of £500.
It has become a matter of the greengrocer's fitting in with other groups in this market structure and, at the same time, achieving a differential advantage over them. Taking this a step further, Andrews states that in a market structure which contains supermarkets (and self-service grocery stores) as well as greengrocers, the orthodox presentation of the market for fresh produce in the retail trade can no longer be defined as a combination of the demand and cost curves of a single retailer. In the first instance, the stock function (as detailed by the role of stocks) must be introduced into the analysis, an action serving to put an end to the theory that demand and cost curves are independent. Secondly, and as a consequence of this, the demand for fresh produce is no longer determined by the orthodox demand curve of the individual retailer. This is because each retail outlet of fresh produce has a different offering and, accordingly, is differently affected by commodity changes within the market structure for fresh fruit and vegetables. Moreover, the actions of each, owing to interdependence, shall affect each retailer differently, as the demand function pertaining to any one, plus his associated cost structure, is a consequence of the structure of the retail trade in fresh produce. Demand is determined, in part, by a firm's own offering and that of its competitors, in that under conditions of product differentiation the environment of each retailer is described by his demand curve and those of his competitors. Therefore, the total market demand can be visualised as a set of related demand curves, the cross elasticity of demand between retailers being a direct result of the demand curves peculiar to each.

As a consequence of the above exposition, the increased sales by the supermarket and retail grocery communities, (which may result from increased numbers and/or increased sales level per outlet),

141. Andrews. Op.cit. P.107. 'Retail competition should be seen as working through a network of oligopolies.'
will be, in part, at the expense of other retail outlets, in particular the established greengrocer. This is known as the 'transfer effect', since it illustrates the principles of direct and inverse cross elasticity of demand, as they apply to price-quantity relationships between the offerings of one seller and another. The situation in the market structure then, is such that a reduction in the price of a certain commodity offering by one store, the supermarket, results in a reduction of that commodity's sales level, and the levels of other commodities complementary to it in another store or stores, in particular the greengrocer. Specialling is the major competitive device used in an effort to accomplish this.

Piero Sraffa states that a market is commonly subdivided into regions within each of which one seller is in a quasi-monopolistic situation. But, although supermarketing in New Zealand is tending to break down the locational monopolies of the specialist retailer, and so change the nature of his demand schedule, as things stand at present both the high quality supermarket and the high quality conventional retailer will continue to realise above average turnover (£50,000 and £20,000 per annum respectively), the supermarket concentrating on a partial, and the greengrocer on a complete, range of stock offerings.

4.3.1 Cost - Price Operations of the Greengrocer.

The traditional fruiterer and greengrocer is engaged in a trade of high fixed costs. His costs of operation are his biggest problem. Among them are:

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142. K.E. Boulding. 'Economic Analysis'. Third Edition. (Hamish Hamilton Ltd. London). P. 636. 'Almost every store has a certain clientele which would buy from it even if its prices are somewhat higher than those of surrounding stores. Thus, physically identical commodities may sell for different prices even in neighbouring stores. This would be impossible under perfect competition and is proof that an element of monopoly is present.'
1. Costs of stock on which he must build his trade.
   The wholesale price (the major variable cost).  
2. Costs of small unit purchases - essential to his type of trading.
3. Labour costs - a feature of small lot sales.
4. Location costs - overheads such as shop rentals and rates.
5. Into-store costs, e.g. cartage.
6. Costs of presentation and display.

Other problems are lack of storage space and refrigeration, (as his merchandise is bulky, low in value and perishable), the small size line and the inability to utilize mass merchandising techniques, e.g. specialling. Finally, excess profits cannot be made because the industry itself is overcrowded and, consequently, the output of each greengrocery shop is small relative to the total sales of this group of retailers.

This, then, is a high cost retail outlet and on account of its inability to spread overheads over a large sales volume (as does the supermarket), the associate markup practices demand the use of a form of average cost or cost-plus pricing. To break-even high margins must be maintained, as these fixed and variable costs must be covered on a relatively low turnover of stock. Therefore, operations are conducted on an average markup over purchases of about 50%. This leaves a gross profit of some 33% on turnover, with operating expenses, (labour 12%), accounting for something between 20% and 25%. The retailer is then left with a net profit (excluding tax) of approximately 8-10% on sales, depending on the

143. E.Gornall. “Some aspects of the Retail Greengrocery Trade in an Industrial Working-Class District”. Journal of Industrial Economics. August 1954. P.209. “Greengrocery prices are based on wholesale costs. These costs have to be "covered", plus a return for the greengrocer's labour (handling the products, opening boxes, setting out the window, piling up fruit, trimming vegetables etc. and, finally, serving the customer), and the risks involved in holding stocks of fruit and vegetables”.

144. That is, where the average cost curve of each greengrocer rises at a fairly small output.
size of the store. 145

In pricing of produce, the greengrocer looks for a fixed margin rather than a percentage margin, i.e. he does not impose a standard markup of 50%. Margins expressed as percentages can give an erroneous impression. For example, on lettuces purchased at 6d. and sold for 1/-, there is a 100% markup. Yet to charge anything less than 6d. per lettuce for services rendered would be considered uneconomic if the greengrocer is to cover costs, plus a normal return to entrepreneurship. The two principles of the greengrocer's pricing policy, a "returns requirement" to cover costs, and facing a low price elasticity of demand, are responsible for much of the inflexibility in wholesale-retail margins. The limited quantity of produce he can "move", and the established clientele he caters for, are the respective demand and supply factors which contribute to the inelasticity of his demand curve. Thus margin inflexibility might be said to be a function of demand response to price changes.

The retailing cost amongst greengrocers is high, therefore this ability to impose wide and relatively inflexible margins serves to bolster such high cost services and gives rise to disproportionate costs between market groups, e.g.

<table>
<thead>
<tr>
<th>Growers’ Return</th>
<th>2.7d. per lb.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesaler’s Commission: (10 per cent.)</td>
<td>0.3d. &quot; &quot;</td>
</tr>
<tr>
<td>Auction price</td>
<td>3.0 &quot; &quot;</td>
</tr>
<tr>
<td>Retailer’s Margin:</td>
<td>32d. &quot; &quot;</td>
</tr>
<tr>
<td>Retailer’s resale price:</td>
<td>64d. &quot; &quot;</td>
</tr>
</tbody>
</table>

The greengrocer endeavours to maximize profits by lowering the markup on produce whose wholesale prices rise, and maintaining (or raising), the

145. Anon. (N.Z.) Net profit as a percentage of sales. Small store: 12% percent; Medium sized store: 10 percent; Large store: 8 percent.
146. The greengrocer knows who the major percentage of his customers are going to be week after week, and can purchase accordingly.
markup on produce whose wholesale prices are low or falling. Allen states that there are two facets in price formation by the greengrocer:

1. A variable increment, which varies in proportion to the wholesale purchase-price level.

2. A fixed increment, the wholesale price.

Retail prices to the customer vary only slightly with the price realised at wholesale. Thus inflexible margins reflect high costs, rather than supernormal profits, and evidence the lack of "effective" competition. Although this policy is logically consistent with the greengrocer's mode of operation, there is little evidence of price competition. It is as if there were a gentleman's agreement not to vary prices from the norm, nor indulge in price-cutting during periods of low wholesale prices. This "counter-contributory" effect, or action of price determination, depends on the actual level of elasticity possessed by each commodity. The greengrocer would rather reduce his prices on products with an elastic demand than on those with a relatively inelastic demand (assuming that price changes at wholesale are a consequence of changes in supply rather than demand). Any flexibility present in the gross profit margins of the greengrocer is evidenced in an upward direction only. This is to compensate for the returns foregone through the maintenance of a wide range of fruit and vegetables whose subsequent markup may be nil or anything approaching this level. Furthermore, as mentioned, the traditional retailer cannot take advantage of price falls at auction, as he lacks the facilities, labour and storage area required for the large volume of sales which could result if he could reflect price reductions back to the consumer.

The greengrocer also takes past experience into consideration when pricing, giving due respect to that price at which

147. Greengrocery retail price of 1/- per cabbage compared with wholesale purchase price, 2d.
demand is likely to fall off. This knowledge of consumer reaction to changes in the retail price gives rise to an intangible demand curve which tends to dictate the retail price suitable for each wholesale price.\textsuperscript{149}

For example, if cauliflowers were bought into-store at 2/6d. each and a 50\% margin imposed, they would be less likely to sell than if a lower margin were imposed, and there would be a demand switch to substitutes such as cabbage or beans.\textsuperscript{150} However, it is sometimes necessary to price at the "ceiling" (the price at which sales noticeably fall off),\textsuperscript{151} since to break-even the greengrocer must make so much per item. Yet, although the aggregate demand curve will now approach perfect inelasticity, some customers will still purchase owing to socio-economic reasons, e.g. dietary considerations, household production, tastes and income levels.

The wholesale group perpetrates this sales system through its tied-sales arrangement between members and retailers, yet the usual indication of imperfect competition, monopoly profits, is not present.

Ease of entry is largely responsible for this, as it has caused average cost to be equated with average revenue, as a consequence of which no supernormal profits are made.\textsuperscript{152}

4.3.2 Costs and Scale Economies in Supermarket Retailing.

Not unlike the greengrocery store, the supermarket produce department also has high fixed costs. The difference between the two lies

\textsuperscript{149} R.L. Smyth. 'The Distribution of Fruit and Vegetables', (G. Duckworth & Co. Ltd. London W.C.2. 1959). pp. 139-140. 'For each line of produce at each point of time, there is a retail price which maximizes the retailer's receipts. Should the price be too high he would lose custom, and if too low the line would not contribute to the retailer's overhead costs.'

\textsuperscript{150} There is general agreement amongst supermarket and greengrocery personnel that a high elasticity of substitution exists between and within lines of produce, quality and price being the determining factors. If either is out-of-balance with customer opinion, substitution occurs.

\textsuperscript{151} The actual 'ceiling' shall vary according to the price of substitute items, such as cabbages, for the higher the prices of such items the lower will be the degree of substitutability between them and the higher 'ceiling' priced cauliflowers.

\textsuperscript{152} Boulding. Op.cit. P.634. 'If there is freedom of entry into a monopolistically competitive industry, that industry will not in the long run show profits which are above normal.'
in the ability of the latter to conduct its operations at a lower cost per unit sale. This is subsequently reflected in the lowered prices which are placed on supermarket fresh fruit and vegetables. Table 4.3 ably demonstrates this fact for carrots, cabbages, cauliflower, hot house tomatoes, lettuce, onions and potatoes. These prices cover the twelve months for 1965 and, in the majority of cases, the supermarket prices are substantially lower than those of the greengrocer, even when allowance is made for seasonal influence.

Fundamentally, this lies in the scale economies which can be realised in supermarket fresh produce retailing, and its associate ability to attract a high volume of consumer-shopper traffic. Economies of scale in food retailing give the supermarket lower costs per unit of sale than its smaller retail competitors, the self-service grocer, the butcher and greengrocer. These economies are classified under two headings: 1. Real Economies, and 2. Pecuniary Economies. The former arise from a reduction in factors of production per unit of sale, whilst the latter result from the supermarket's bargaining power. Assuming that such savings are passed on to the consumer, lowered retail shopping prices result.

Real economies are forthcoming for two reasons. First, the indivisibility of various factors of production is overcome, for example, those items of capital equipment, particularly mechanical devices such as the CRY-O-VAC heat shrinkage apparatus, which are not infinitely divisible into small units. These factors may be termed 'chunky' inputs, and, as there is a general tendency for them to increase efficiency of operation, two points may be deduced concerning their employment. To begin with, a certain minimal scale of operations is required. Secondly, given this, the factor may be under-utilized. Accordingly costs are
### TABLE 4.3

**A Comparison of Supermarket and Greengrocer Retail Prices.**

*Monthly Averages for 1965, Auckland Urban Area*

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Greengrocer</th>
<th>Supermarket</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carrots</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d/lb.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan.</td>
<td>12.75</td>
<td>8.29</td>
</tr>
<tr>
<td>Feb.</td>
<td>12.00</td>
<td>7.70</td>
</tr>
<tr>
<td>March</td>
<td>8.08</td>
<td>8.00</td>
</tr>
<tr>
<td>April</td>
<td>8.00</td>
<td>6.82</td>
</tr>
<tr>
<td>May</td>
<td>7.25</td>
<td>5.27</td>
</tr>
<tr>
<td>June</td>
<td>7.00</td>
<td>5.79</td>
</tr>
<tr>
<td>July</td>
<td>7.00</td>
<td>5.92</td>
</tr>
<tr>
<td>Aug.</td>
<td>9.63</td>
<td>6.69</td>
</tr>
<tr>
<td>Sept.</td>
<td>8.38</td>
<td>6.48</td>
</tr>
<tr>
<td>Oct.</td>
<td>11.60</td>
<td>9.11</td>
</tr>
<tr>
<td>Nov.</td>
<td>15.63</td>
<td>13.59</td>
</tr>
<tr>
<td>Dec.</td>
<td>11.75</td>
<td>8.34</td>
</tr>
<tr>
<td>Average 1965</td>
<td>10.05</td>
<td>7.68</td>
</tr>
</tbody>
</table>

| **Cabbages**     |             |             |
| (d/lb.)          |             |             |
| Jan.             | 7.75        | 5.88        |
| Feb.             | 7.00        | 6.29        |
| March            | 7.50        | 6.58        |
| April            | 6.90        | 5.29        |
| May              | 7.00        | 6.36        |
| June             | 5.25        | 4.75        |
| July             | 6.50        | 6.73        |
| Aug.             | 5.25        | 4.75        |
| Sept.            | 7.00        | 4.73        |
| Oct.             | 8.00        | 4.70        |
| Nov.             | 6.25        | 5.98        |
| Dec.             | 5.38        | 5.98        |
| Average 1965    | 6.97        | 5.97        |

| **Cauliflower**  |             |             |
| (d/2 lb./head)   |             |             |
| Jan.             | 36.00       | 31.26       |
| Feb.             | 31.75       | 29.40       |
| March            | 27.75       | 23.00       |
| April            | 26.80       | 22.25       |
| May              | 30.00       | 26.62       |
| June             | 29.75       | 28.07       |
| July             | 31.80       | 27.10       |
| Aug.             | 25.00       | 23.52       |
| Sept.            | 25.63       | 26.20       |
| Oct.             | 26.00       | 19.17       |
| Nov.             | 24.00       | 20.55       |
| Dec.             | 24.00       | 25.35       |
| Average 1965    | 28.21       | 25.35       |

| **Hot House Tomatoes** |             |             |
| (a/lb.)             |             |             |
| Jan.                 | 31.75       | 28.28       |
| Feb.                 | 20.29       | 16.33       |
| March                | N.A         | -           |
| April                | N.A         | -           |
| May                  | 45.50       | 36.94       |
| June                 | 43.00       | 44.05       |
| July                 | 46.60       | 45.60       |
| Aug.                 | 51.00       | 45.61       |
| Sept.                | 47.13       | 42.05       |
| Oct.                 | 44.00       | 37.94       |
| Nov.                 | 41.50       | 36.18       |
| Dec.                 | 31.00       | 25.31       |
| Average 1965        | 40.18       | 35.93       |

| **Lettuce**         |             |             |
| (a/doz.-lb. head)   |             |             |
| Jan.                | 16.75       | 14.58       |
| Feb.                | 15.00       | 11.72       |
| March               | 19.00       | 14.76       |
| April               | 19.80       | 12.91       |
| May                 | 16.25       | 15.27       |
| June                | 19.50       | 22.20       |
| July                | 22.40       | 25.44       |
| Aug.                | 28.25       | 18.44       |
| Sept.               | 28.38       | 11.55       |
| Oct.                | 18.80       | 13.28       |
| Nov.                | 14.75       | 13.07       |
| Dec.                | 15.00       | 15.92       |
| Average 1965        | 19.49       | 15.92       |

| **Onions**          |             |             |
| (d/lb.)            |             |             |
| Jan.               | 8.67        | 7.75        |
| Feb.               | 8.00        | 4.70        |
| March              | 7.33        | 3.00        |
| April              | 6.33        | 4.07        |
| May                | 5.50        | 4.34        |
| June               | 6.17        | 4.66        |
| July               | 6.83        | 4.90        |
| Aug.               | 13.67       | 11.26       |
| Sept.              | 19.25       | 17.12       |
| Oct.               | 19.50       | 19.37       |
| Nov.               | 32.00       | 28.58       |
| Dec.               | 30.00       | 23.00       |
| Average 1965       | 13.77       | 11.08       |

| **Potatoes**        |             |             |
| (a/lb.)            |             |             |
| Jan.               | 5.42        | 5.06        |
| Feb.               | 5.25        | 4.48        |
| March              | 5.25        | 3.62        |
| April              | 4.83        | 3.62        |
| May                | 4.57        | 4.05        |
| June               | 4.70        | 3.78        |
| July               | 5.00        | 3.93        |
| Aug.               | 5.07        | 3.96        |
| Sept.              | 5.03        | 4.20        |
| Oct.               | 6.23        | 4.75        |
| Nov.               | 6.30        | 3.83        |
| Dec.               | 5.18        | 4.13        |

**Source:** Compiled from data provided by the Department of Statistics, Supermarket Organisations, and personal recordings.
reduced with subsequent increases in turnover as the point of 'full' utilization is approached. Spreading the cost of the 'chunky' input in this way reduces average costs. Also, a variation in the proportions of other factors of production combining with this input can result in a further decline of average costs. Consequently, because most specialised factors are chunky, realisation of their potential economies requires a high turnover, for only in this way can their cost disadvantages, to the corner dairy and greengrocer in particular, be vitiates. Second, a greater degree of functional specialisation is possible. Particularly is this demonstrated with respect to labour, the cost of which has been markedly reduced, as a percentage of sales, through its substitution by capital and the adoption of management practices which use labour more efficiently. The effect of this has been to increase the capital to labour ratio, lower the labour to output ratio, and to convert the bulk of labour costs from a variable to a fixed nature.

Supermarket self-service and assisted service operations make possible the realisation of economies from a division of the labour function, and enable a specialisation of individual functions. In this instance there is a change in the proportions, nature and form of capital and labour used, relative to that employed in counter service. The basic labour force of a supermarket, (comprising butcher, produce department manager, check-out operators, grocery department manager etc.), remains unchanged regardless of store and department size, and may be termed a quasi-fixed cost. Employment of 'unskilled' additional labour fulfils the demands of an increase in operations. The breakdown of specialists'

153. In the short-run there is an aggregate of fixed costs (labour included), which when 'spreadover' a rising turnover gives rise to a progressively decreasing fixed cost per unit of sale.
155. The use of temporary (unskilled) labour for holiday periods and part-time labour, e.g. married women to prepackage items of produce.
functions, through the delegation of detail, into non-specialist occupations requiring relatively little skill, e.g. wrapping and prepackaging of produce, makes this possible. Moreover, replacement of the traditional shop assistant, (whose duties were both comprehensive and undifferentiated), with a specialist and non-'specialist' permits a fuller utilization of individual talents, particularly managerial ability. Also, self-service allows the continual deployment of personnel about the store and department, which increases labour utilization, through increasing sales per man-hour, and reducing the wage cost per man-hour. Pecuniary economies are a reflection of the oligopsony power possessed by the purchaser. This power may be either real in that these economies are demanded or, as is more often the case, latent. In the latter instance such economies are used as an incentive to attract custom as well as a means for retaining present custom. Lot size economies are a typical example of how economies are achieved by the store and department operator in this manner, and illustrate the instance of costs varying in response to independent variations in the price of merchandise as well as in response to variations in sales. The ability of the operator to 'bargain' with his supplier for lower prices, means that he faces a schedule incorporating quantity discounts, which relates quantity purchased to marginal returns achieved, as the prices paid can be favourably influenced by varying the quantities of commodities purchased.

These scale economies have further application in the chain form of organisation, through inter-store integration of merchandising activities. In particular, additional oligopsonistic benefits can be realised from centralised procurement policies, because of the potential elasticity demand which the supermarket multiple possesses vis-a-vis its supplier. The power which the multiple organisation possesses to buy at lowered prices, however, lies not only in its ability to place and withhold
large orders, but also in the sales volume he can offer to a supplier.

The actual realisation and magnitude of these economies depends largely upon the store and department’s stock holdings, for size of inventory, as it relates to the possibility of exhaustion during peak shopper-load periods, determines the potential customer capacity of the supermarket. Capacity can be indicated graphically as the distance of the supermarket’s marginal cost curve from the vertical axis. Therefore, the further it lies to the right, the greater the sales volume which can be achieved at any given marginal curve. This means that successful attempts to increase turnover, (i.e. net profit rises), such as lowering of prices and, or, raising selling costs, must find the supermarket conducting operations under conditions of decreasing average cost for, as the supermarket has very high fixed costs, scale economies will increase as output approaches maximum physical capacity. Operations facilitate a high rate of utilization of ‘plant’, in particular the connected opportunities for spreading overheads over a high turnover. Thus, marginal cost is equated with marginal revenue whilst average costs are still falling. From this it follows that little upward variation occurs in costs over a wide sales range, i.e. the average cost curve is L-shaped, rather than U-shaped. In this way the supermarket contrasts with the greengrocer, as the former is a high capacity outlet and the latter an outlet of low capacity - a fact which is borne out by the average daily number of customers which enter each respective store. This gives the

156(a) P.J.D.Wiles. ‘Price Cost & Output’. Blackwell 1961. Ch.12. pp210-262, inc. appendix. “Decreasing costs with size are almost universal. But the U seldom turns up again. Sharply decreasing costs with size are particularly unknown, and even slight increases are rare.” Examples in his appendix to Ch.12 bear out what he calls the Law of L-shaped costs. He refutes the presence of the U-shaped cost curve, and diminishing returns to scale. He further states that the doctrine of optimum size of firm is wrong. Rather should one speak of a minimum tolerable size of firm and thereafter of a long stretch of low costs with marginal cost roughly equal to average cost.

(b) B.R.Holdren. ‘Competition in Food Retailing’. Journal of Farm Economics. Dec. 1965. P.1325. ‘Food Retailing is a decreasing-cost industry and even the largest sales-size stores probably do not exhaust scale economies.’
supermarket a further cost advantage because the supply price per unit capacity for low capacity equipment is greater than that for high capacity equipment.

In conclusion, therefore, cost economies from scale expansion in fresh produce retailing, (and grocery retailing generally), as exemplified by the supermarket, can reduce the cost of offerings made to shoppers. This reduction is reflected in the lower prices paid by supermarket shoppers for fresh fruit and vegetables which are of equivalent quality to those stocked by greengrocers. In addition, it explains why the various selling policies detailed in Chapter Three are adopted by the supermarket produce department manager, and also provides part of the reason for the supermarket's impact upon the greengrocer.

4.3.3 A Comparison in Efficiency Between Supermarket and Greengrocer.

Comparison here is between two differing modes of business behaviour - high turnover with low margins as against low turnover with high margins - rather than between different sized greengrocery outlets. Andrews believes that the supermarket's ability to attract trade by price reductions, to which the greengrocer cannot retaliate, does not in itself make it more efficient. The fact that the greengrocer does not impute his total labour costs against his store, (i.e. working on negative returns), means that in comparison with the supermarket, which charges full costs of produce department operation, one should not confuse being competitive with being efficient. But both retail entities purchase all but a minor part of their 'stock' from auction and private treaty firms, and their purchase prices approximate equality.

157. e.g. The turnover figures from 'above average' outlets are respectively: Supermarket - 23% on £50,000 p.a. Greengrocer - 35% on £20,000 p.a.

158. Salary withdrawal of the owner very much reduced. Instead is re-invested in Company.
so it follows that the supermarket's lower prices are a result of its conducting its produce retailing operations on markup margins lower than those imposed by the greengrocer.\textsuperscript{159} Therefore the supermarket's mode of operations must be more efficient, given equivalent quality, as despite reduced prices, the net profit requirement of the produce department is still fulfilled. These lower prices are the result of a passing-on of gains made through the realisation of the supermarket's various technical, managerial and pecuniary economies. Table 4.4 below shows the supermarket's average price for fresh produce to be lower than that of the traditional retail outlet.

\textbf{TABLE 4.4}

\textbf{AVERAGE ANNUAL RETAIL PRICES OF VEGETABLES}

\textbf{AUCKLAND URBAN AREA 1965.}

<table>
<thead>
<tr>
<th>Type of Retailer</th>
<th>Commodity</th>
<th>Cabbages.</th>
<th>Carrots</th>
<th>Lettuces.</th>
<th>Onions</th>
<th>Hot-house Tomatoes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pence/lb.</td>
<td>pence/lb.</td>
<td>pence/lb.</td>
<td>pence/8oz.</td>
<td>pence/lb.</td>
<td>pence/lb.</td>
</tr>
<tr>
<td>Greengrocer</td>
<td>6.97</td>
<td>17.42</td>
<td>10.05</td>
<td>19.49</td>
<td>13.77</td>
<td>40.18</td>
</tr>
<tr>
<td>Supermarket</td>
<td>5.97</td>
<td>14.92</td>
<td>7.75</td>
<td>15.92</td>
<td>11.39</td>
<td>35.93</td>
</tr>
</tbody>
</table>

1. 10 months average excluding the months of March and April.

Sources:
Department of Statistics Data.
Data collected from Supermarket organisations.

The ability of the supermarket operator to lower his margins (an average of 25\% on sales),\textsuperscript{160} disrupts the accepted markup procedure of the greengrocer, whose high overhead costs and relatively low sales volume necessitate the imposing and maintaining of a wide wholesale-retail price spread.\textsuperscript{161} Furthermore, the elasticity of the greengrocer's wastage rates rise as prices fall, and seasonal influences cause great variations in marketed supply. Together these are sufficient reasons for margins being generally sticky and becoming almost fixed in absolute terms at very low prices.\textsuperscript{161}

\textsuperscript{159} N.Z. supermarket executive - 'Since there is very little difference between the wholesale price paid by supermarket produce buyers as against prices paid by greengrocers, the larger volume of sales at a lower markup would account for this price difference in the main.'

\textsuperscript{160} Figure arrived at after discussions with supermarket and produce department managers.

\textsuperscript{161} G.R.Allen. Agricultural Marketing Policies. (Blackwell 1959), p.136. 'Greengrocers as a whole are comparatively unresponsive to price changes. Wastage rates rise as prices fall, and seasonal influences cause great variations in marketed supply. Together these are sufficient reasons for margins being generally sticky and becoming almost fixed in absolute terms at very low prices.'
short-run (and long-run) demand curve is much less than that of the supermarket because it faces a single product demand function, as opposed to the multi-product demand function of the supermarket. Also, the multi-generic product mix and width of product line, which characterises the supermarket policy of mass and scrambled merchandising, heightens cross elasticity of demand effects, as well as enhancing the appeal of supermarket shopping and greatly facilitating impulse sales.

Andrews is of the opinion that the greengrocer cannot match the loss leader price cuts of the supermarket, because he cannot "cushion" himself, (i.e. subsidise the loss incurred), with profits from goods in other departments. However, as mentioned previously, the produce department operates as an independent economic unit within the supermarket. Furthermore, Andrews appears to take little cognizance of the fact that, in specialling, total returns are greater than total costs and that, consequently, the increase in gross returns to the goods specialled make it as profitable as it was at "normal" prices with respect to aggregate net returns. The counter-contributory effect which inter-department loss leader pricing has, i.e. specials in one department inducing purchases from another, is a merchandising strategy which is not available to the greengrocer because of his low turnover, mode of operations and high costs of selling and handling. The greengrocer's competitive weakness is his high cost structure and, as he cannot alter his mode of operations to emulate supermarket merchandising practices, and is unaided

162. Stimulation of consumer demand by the mass presentation of goods; reflected by the increasing significance of impulse buying in consumer buying habits studies. A.R.Harrington & C.Gislason. 'Demand and Quality Preferences for Deciduous Fruits'. Journal of Farm Economics, 1956, pp.1405-1414. Across 12 stores of 4 different chains. 'The Sales of Peaches, Apricots and Sweet Cherries positively related to the size of display.' Moreover, 'some controlled aspects of merchandising indicate that larger displays can induce consumers to buy more.'

by affiliations, he cannot undersell the supermarket. Moreover, price cuts are often priced below his short-run average costs (his lower limit of survival), and so it is not always possible for him to 'follow' the supermarket which tends to become a price leader, although he does endeavour to force price realisation at auction to approximate parity. Consequently, the greengrocer loses to the supermarket as the latter imposes lower gross margins and can, by drawing customers through its loss leader specialling, hold a spatial monopoly over them once they are in the store. In this way, the supermarket can keep the majority of its prices up to the level of the greengrocer, yet still increase its sales and profits at the latter's expense.

Moreover, as stated, the supermarket is able to bargain with its supplier for lower prices on large volume purchases. In this way, the large buyer can influence the price he pays by varying the quantities of commodities purchased. This is in direct contrast to the small buyer who may only accept the "going" price as given.

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164. A form of retaliation is evidenced with greengrocers obtaining black-market fruit, e.g. fruit purchased direct from the orchard — they being forced into it by competition from supermarket prices, e.g. Apples at 22/- per case at growing point, whereas 35/- per case at wholesale via the Apple and Pear Board.

165. Whilst the supermarket on average prices lower than the greengrocer, an opportunity exists whereby produce can be procured directly from growers, (and not specialled), and priced up to the greengrocer's level. Profits are increased as a consequence, and in addition to those accruing from economies scale realised in the supermarket merchandising of fresh produce. This opportunity would be increasingly precluded as inter-supermarket competition increased, and the role of the greengrocer in fresh produce distribution decreased. Andrews suggests the alternative that once the 'revolution' has gone the full circle, prices shall be at the same level or something approaching it.

Andrews, op.cit. in this regard is of the mind that large scale retail firms, through exercising their power of transferring large blocks of 'purchasing power', can in effect 'export' part of the costs into the accounts of smaller competitors. Furthermore to the extent that such reductions to the large retail firms do not imply corresponding economies in production and selling costs of suppliers, who find they are forced to allow such discounts, the retail firms concerned enjoy 'adventitious' advantages in competition with smaller retailers.

166. This does not apply to the same extent with the affiliated self-service grocer as it does to the independent butcher, greengrocer, and corner dairy.
Accordingly, the marginal cost curve rises less steeply for the supermarket produce department than it does for the greengrocery outlet, and the supply curve faced by the former does not approach perfect inelasticity, as it does for the latter.

Although differences in price on a pence per pound basis between the greengrocer and the supermarket appear to be relatively small, when magnified to normal lot size purchases, the actual disparity in prices and real saving to the shopper is apparent. To illustrate this, in Table 4.5 prices of potatoes, onions and tomatoes are taken from Table 4.3

<table>
<thead>
<tr>
<th>TABLE 4.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVERAGE PRICES, AUCKLAND URBAN AREA 1965</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potatoes.</th>
<th>(d/lb.)</th>
<th>(per 10lb. bag)</th>
<th>(per 56lb. bag)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greengrocer.</td>
<td>5.18</td>
<td>51.8</td>
<td>290.08</td>
</tr>
<tr>
<td>Supermarket.</td>
<td>4.13</td>
<td>41.3</td>
<td>231.28</td>
</tr>
<tr>
<td>Differential.</td>
<td>1.05</td>
<td>10.5</td>
<td>58.80</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Onions.</th>
<th>(per 3 lb. pak.)</th>
<th>(per 6 lb. bag)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greengrocer.</td>
<td>13.77</td>
<td>41.31</td>
</tr>
<tr>
<td>Supermarket.</td>
<td>11.08</td>
<td>33.24</td>
</tr>
<tr>
<td>Differential.</td>
<td>2.69</td>
<td>8.07</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tomatoes.</th>
<th>(per 3 lb. pak.)</th>
<th>(per 10lb. case.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greengrocer.</td>
<td>40.18</td>
<td>120.54</td>
</tr>
<tr>
<td>Supermarket.</td>
<td>35.93</td>
<td>107.79</td>
</tr>
<tr>
<td>Differential.</td>
<td>4.25</td>
<td>12.75</td>
</tr>
</tbody>
</table>

As is shown, in 1965, an average saving of some four shillings and elevenpence was possible in the Auckland urban area if a 56lb. bag of potatoes was purchased at a supermarket instead of at a greengrocer's.

From the foregoing evidence, the supermarket appears to be the more efficient of the two types of fresh produce retailer because in reducing the cost and factors of production used per unit of sale it can sell produce at lower prices than the greengrocer.
Adverse Effects of Supermarketing Upon the Traditional Retailer.

The entrance of the supermarket into the market structure for fresh fruit and vegetables has broken the oligopolistic considerations which regimented and restrained the small retailer. Chamberlain's monopolistic competition case illustrates this, in that the supermarket's "subjective" demand curve is its "actual" or "effective" demand curve. The tied-sales constraint protects the greengrocer to a certain extent, but with the emergence of this entirely different form of competition, his average revenue curve is being moved to the left and, his average cost curve to the right, with the result that uneconomic units are being forced to leave the retail market structure. The supermarket is acquiring a greater proportion of the total fresh produce sales as its member numbers increase, and difficulties, due to lack of experience in produce operations and total management, are overcome.

Penetration of the supermarket's appeal, through advertising and specialising, (competition which the small retailer cannot withstand), have enabled its market area to encroach upon the market areas of all other retail outlets within the limit of its drawing power. The greengrocer requires a certain patronage in order to break even, but his sales are reduced to varying extents by this introduction of competition into the selling of fresh produce. The increased mobility of the consumer is partially responsible for this, as, prior to the automobile, the market area of a retail store depended upon delivery cost and distance travelled from the home.

Supermarket competition has led others, (e.g. grocers and dairies), to introduce fresh produce into their product mixes. This

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168. A frequent comment passed by fruit and vegetable retailers is that "Produce department personnel do not take the same interest in department operations as does a greengrocer and fruiturer. To them it is a job, not a profession." However, it is of some note that the number of women employed in those departments in lieu of male staff is increasing.
has caused the percentage of all fresh fruit and vegetables sold by the traditional retailer to further decline, and has retarded the growth in the number of such outlets. (See Table 4.6).

**TABLE 4.6**

Changes in the Type and Number of Stores and their Share of Retail Sales in Fresh Fruit and Vegetables in New Zealand between 1958 and 1963.

<table>
<thead>
<tr>
<th>TURNOVER (in £ million)</th>
<th>1958</th>
<th>1963</th>
<th>Increase or Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per cent. share.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruiterer/Greengrocer.</td>
<td>10.9</td>
<td>13.9</td>
<td>68</td>
</tr>
<tr>
<td>Grocer.</td>
<td>2.3</td>
<td>4.3</td>
<td>14</td>
</tr>
<tr>
<td>General Store.</td>
<td>1.0</td>
<td>1.0</td>
<td>6</td>
</tr>
<tr>
<td>Dairy.</td>
<td>0.5</td>
<td>0.7</td>
<td>3</td>
</tr>
<tr>
<td>Variety Store.</td>
<td>...</td>
<td>0.5</td>
<td>3</td>
</tr>
<tr>
<td>Stock &amp; Station Agent.</td>
<td>0.7</td>
<td>...</td>
<td>4</td>
</tr>
<tr>
<td>Other.</td>
<td>0.6</td>
<td>0.9</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16.0</td>
<td>21.3</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ESTABLISHMENTS.</th>
<th>Number</th>
<th>Per cent. share</th>
<th>Per cent.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruiterer/Greengrocer.</td>
<td>1122</td>
<td>1135</td>
<td>28</td>
</tr>
<tr>
<td>Grocer.</td>
<td>2076</td>
<td>3161</td>
<td>51</td>
</tr>
<tr>
<td>General Store.</td>
<td>350</td>
<td>390</td>
<td>9</td>
</tr>
<tr>
<td>Dairy.</td>
<td>306</td>
<td>481</td>
<td>8</td>
</tr>
<tr>
<td>Variety Store.</td>
<td>...</td>
<td>47</td>
<td>1</td>
</tr>
<tr>
<td>Stock &amp; Station Agent.</td>
<td>51</td>
<td>...</td>
<td>1</td>
</tr>
<tr>
<td>Other.</td>
<td>157</td>
<td>254</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4064</td>
<td>5568</td>
<td>100</td>
</tr>
</tbody>
</table>

**NOTE:** Excludes retail turnover of wholesale produce merchants as follows -
- 1958 - 14 establishments; £1.7 million.
- 1963 - 9 establishments; £1.4 million.

**Source:** New Zealand Census of Distribution for 1958 and 1963.

Table 4.6 shows how the importance of the fruiterer and greengrocer is declining. As indicated, between 1958 and 1963, the number of specialist fruiterers and greengrocers increased by only 13, (a 1% change), compared with an increase of 187 (20%) between 1953 and 1958. Conversely, the numbers of non-specialist outlets selling fresh
fruit and vegetables increased by 50.7% (1491) between 1958 and 1963, grocers being predominant. Numbers stocking fresh produce increased by 52% and their turnovers by 89%. This increasing encroachment of self-service grocery store, supermarket and variety store sales upon the New Zealand retail market structure for fresh fruit and vegetables is further demonstrated in Tables 4.7 and 4.8, as £2.4 m. (or 48%) of the total national increase of £5.0 m. in the sales of fresh fruit and vegetables came from sales through stores other than fruiterers and greengrocers. Moreover, the sales made by these outlets over this five year period increased by 6% to 26% of national sales in 1963.

### TABLE 4.7

<table>
<thead>
<tr>
<th>Location</th>
<th>1958</th>
<th>1963</th>
<th>Increase of Sales 1958 to 1963</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auckland</td>
<td>0.3</td>
<td>1.3</td>
<td>1.0</td>
</tr>
<tr>
<td>Wellington/Christchurch</td>
<td>0.2</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Dunedin</td>
<td>0.0</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Total Main Centres</td>
<td>0.7</td>
<td>2.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Secondary Urban areas</td>
<td>0.7</td>
<td>1.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Other Urban areas</td>
<td>2.1</td>
<td>2.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Total N.Z.</td>
<td>3.5</td>
<td>5.9</td>
<td>2.4</td>
</tr>
</tbody>
</table>


### TABLE 4.8

<table>
<thead>
<tr>
<th>Location</th>
<th>1958</th>
<th>1963</th>
<th>Percent Increase 1958/1963</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auckland</td>
<td>3.4</td>
<td>5.6</td>
<td>63</td>
</tr>
<tr>
<td>Wellington/Christchurch</td>
<td>2.2</td>
<td>3.0</td>
<td>39</td>
</tr>
<tr>
<td>Dunedin</td>
<td>1.4</td>
<td>2.0</td>
<td>42</td>
</tr>
<tr>
<td>Total Main Centres</td>
<td>0.9</td>
<td>1.0</td>
<td>42</td>
</tr>
<tr>
<td>Secondary Urban areas</td>
<td>7.9</td>
<td>11.6</td>
<td>46</td>
</tr>
<tr>
<td>Other Urban areas</td>
<td>3.7</td>
<td>4.9</td>
<td>34</td>
</tr>
<tr>
<td>Total N.Z.</td>
<td>6.1</td>
<td>6.2</td>
<td>22</td>
</tr>
</tbody>
</table>

This development (i.e. the increasing number of new entrants into fresh produce distribution), has caused a reduction in the greengrocer's quota allocation for imported fruits. This is especially so when a supermarket is established within his trading area, because retailers' quotas are subject to review every three months by the wholesale system, to ensure an "equitable" inter-firm distribution. Accordingly a cumulative transfer effect of this produce, plus domestic produce and custom from the greengrocer to the supermarket, must occur over time. This further lowers the average revenue curves of the greengrocer, and adds to the cost-squeeze effect (average revenue - average cost) felt by him. 169

Rising competition from supermarkets and retailers other than greengrocers has caused the greengrocer to lower his management costs per unit of output, either through imputing smaller returns to himself or by working longer hours for the same returns. He is forced to reduce his "rents of ability", i.e. returns to entrepreneurship. 170

The trend towards increased specialisation of the traditional greengrocer appears to be a further effect of the growth of supermarketing. In Great Britain competition has caused the greengrocer to introduce canned foods, frozen foods, pickles and sauces into his product mix. However, in New Zealand, such items are being discarded and diversification of product lines seems unlikely to occur. Merging and amalgamation of greengrocery stores which has occurred in the United Kingdom, in order to help withstand competition, has not taken place in New Zealand, nor does it appear likely to do so. It is felt that the diverse ethnic character of ownership in New Zealand, and 100 percent family participation in shop operations, would be the major obstacles to

169. Upgrading of produce departments generally in supermarkets (and chain stores etc.) will enhance this effect.
such a trend.

In order to remain competitive, those greengrocers able to do so have had to lower their prices and reduce their margins, (e.g. on carrots as shown in Table 4.9). In the next five years these effects should become more pronounced as supermarket numbers increase and their competitive pricing increases in intensity.

**TABLE 4.9**

**CARROTS: AVERAGE GREENGROCERY RETAIL PRICES**

<table>
<thead>
<tr>
<th>Year</th>
<th>Auckland</th>
<th>National</th>
<th>Wellington</th>
<th>Christchurch</th>
<th>Dunedin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>7.1 (N.A.)</td>
<td>7.3</td>
<td>8.2</td>
<td>7.7</td>
<td>5.1</td>
</tr>
<tr>
<td>1962</td>
<td>7.1 (N.A.)</td>
<td>7.8</td>
<td>8.0</td>
<td>10.2</td>
<td>4.9</td>
</tr>
<tr>
<td>1963</td>
<td>6.4 (5.36)</td>
<td>6.9</td>
<td>7.9</td>
<td>7.7</td>
<td>5.5</td>
</tr>
<tr>
<td>1964</td>
<td>6.7 (5.26)</td>
<td>7.7</td>
<td>8.7</td>
<td>8.7</td>
<td>7.5</td>
</tr>
<tr>
<td>1965</td>
<td>10.05 (7.68)</td>
<td>9.55</td>
<td>10.81</td>
<td>10.06</td>
<td>7.30</td>
</tr>
<tr>
<td>1966</td>
<td>7.81 (5.61)</td>
<td>9.97</td>
<td>10.85</td>
<td>11.24</td>
<td>9.97</td>
</tr>
</tbody>
</table>

**Note:**

1. Greengrocers retail prices for the years 1961 to 1964 inclusive are an average of the price taken each month of the Friday following the Thursday closest to the 15th of the month for all 12 months.

2. National % of 4 main centres. ( ) figures for Supermarket.

3. Taken from the average prices for each of the 12 months for this year. (A year in which the growing season was very poor and resulted in very low yields).

4. 6 month average January - June.

**Source:**

Same as for Table 4.3.

Table 4.9 above indicates a lowering of prices in the Auckland urban area relative to those prices for the other three main centres, and similarly, Table 4.10 below reflects a slight lowering of markup margins.
TABLE 4.10

CARROTS: AVERAGE MARGINS IMPOSED BY GREENGROCERS
1961 - 1965 (pence/lb.)

<table>
<thead>
<tr>
<th></th>
<th>Auckland</th>
<th>National</th>
<th>Wellington</th>
<th>Christchurch</th>
<th>Dunedin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>3.55</td>
<td>4.08</td>
<td>4.98</td>
<td>5.89</td>
<td>1.92</td>
</tr>
<tr>
<td>1962</td>
<td>3.62</td>
<td>4.25</td>
<td>5.14</td>
<td>5.85</td>
<td>2.39</td>
</tr>
<tr>
<td>1963</td>
<td>3.65 (2.61)</td>
<td>4.08</td>
<td>5.02</td>
<td>5.03</td>
<td>2.61</td>
</tr>
<tr>
<td>1964</td>
<td>3.01 (1.57)</td>
<td>4.49</td>
<td>6.54</td>
<td>5.01</td>
<td>3.41</td>
</tr>
<tr>
<td>1965</td>
<td>5.99 (3.62)</td>
<td>5.59</td>
<td>7.42</td>
<td>4.33</td>
<td>4.62</td>
</tr>
</tbody>
</table>

Source: Same as for Table 4.3

It is significant to note, however, that in Auckland these effects, to date, have taken place without forcing auction prices below approximate parity with those in other centres. Table 4.11 demonstrates this point with respect to the four main centres.

TABLE 4.11

CARROTS.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Auckland</td>
<td>3.55</td>
<td>3.48</td>
<td>2.75</td>
<td>3.69</td>
<td>4.06</td>
<td>3.51</td>
</tr>
<tr>
<td>Wellington</td>
<td>4.22</td>
<td>3.36</td>
<td>3.28</td>
<td>3.86</td>
<td>3.39</td>
<td>4.25</td>
</tr>
<tr>
<td>Christchurch</td>
<td>3.01</td>
<td>4.75</td>
<td>3.27</td>
<td>4.49</td>
<td>5.73</td>
<td>3.62</td>
</tr>
<tr>
<td>Dunedin</td>
<td>3.28</td>
<td>2.61</td>
<td>3.29</td>
<td>4.69</td>
<td>2.68</td>
<td>3.31</td>
</tr>
</tbody>
</table>

Source: Compiled from Data supplied by the Department of Statistics.

Accordingly, as greengrocers do not on their own volition actively indulge in price competition between themselves, these effects can be said to be the result of the heightened competition in fresh fruit and vegetable retailing caused, in large part, by supermarket merchandising policies.

The traditional greengrocery retailer of the other three main centres, and major secondary urban areas, is being similarly affected by the introduction of supermarketing, but as yet to a lesser extent owing to lower population densities and a lesser rate of suburban
development. In the other secondary and smaller urban areas the effects of supermarketing are much less apparent. Shopping habits are different, there being greater proximity to retail food outlets within the shopping area, and there is a more leisurely and social attitude to shopping. Consumer loyalties are much stronger here and as the supermarkets are smaller in size (5,000 sq.ft.), and usually affiliated independent stores, i.e. members of the Four Square and I.G.A. organisations, their effects and ability to realise purchase economies are reduced.

4.3.5 Countervailing Measures Open to and Adopted by the Greengrocery Retailer.

There are several forms of countervallance open to the greengrocer whereby he can serve to maintain some of the spatial monopoly and goodwill which he possessed prior to the eroding effects of supermarket merchandising policy. Stocks (diversification of product line), location (ease of access and egress), and services rendered make up his competitive image. These features characterise this retail form, and determine how it fits into the competitive market structure in which it now has to share the trade in its goods with general shops who stock narrower lines of these commodities. Because of this the greengrocer cannot expect to compete successfully with the supermarket by adopting its form of merchandising behaviour. Therefore he should continue to specialise in those items in which he is best versed. The competitive advantage possessed by the greengrocer lies in those non-price offerings which the supermarket cannot imitate, with the proviso that the expected

171. The incorporation of the term "services" means that each retail outlet for fresh fruit and vegetables is not selling the same product, individual shop offerings being differentiated in this way.

172. P.W.S. Andrews, op.cit. p.119. 'Surely it must be clear that they, (the shops specialising in particular types of commodity), might play a more direct role in the gestation and maintenance of demand for all their individual specialist groups of commodities than the general shops which merely stock the more popular lines.'
prices of the commodities must be attractive enough to bring buyers to them specifically. (Competition between greengrocers also appears to be based on non-price variables of offering, rather than on price.) Expenditure on persuasion is in order to "bend" the demand curve, i.e. to increase the elasticity of the demand curve faced, through the range of products offered, their presentation for sale, and personal service given to customers. These actions might also serve to shift the demand curve to the right, so that the degree of substitutability which the greengrocer manages to invoke in his favour, between his offering and those of his rivals, will keep his demand curve to the right of the point of the tangency with his average cost curve.

Consumer loyalty to this form of merchandising is stronger than that given to any other, except perhaps the butcher. Therefore, the greengrocer's ability to fulfil the increasing demand of shoppers for services, and to provide the skilled advice and personal attention which they desire, should continue to give him a major competitive advantage over the supermarket. The before and after sales services which he offers, ('phone orders, credit delivery, extended hours of trading), are becoming increasingly acceptable as the wealth and spending power of the consumer-shopper increases. In this regard it is of some import that the class of customer patronising the greengrocer is tending to concentrate more into the higher middle and upper income groups, as these are the customers who are prepared and able to pay for extra services. Also, the greengrocer's turnover per customer has tended to rise - that is, unit

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173. Noted from interviews with above average greengrocers, i.e. annual sales greater than £14,700, subject to competition from supermarkets and shopping centres, that although the number of sales per week declined, per customer expenditure had increased. A change which lends weight to the observation that the greengrocer's custom is changing, as upper middle and higher income groups are coming to make up an increasing percentage of it.
sales volume has heightened. 174

Shop premises are being modernised as regards appearance and expansion in size, and advertising has been extended to meet competition and increase sales. Prepackaged produce is being introduced into the stock offerings along with sales of case lots, and there is an increasing use of display materials. Furthermore, the greengrocer is able to, and has, extended trading hours, e.g. to Saturday morning shopping. This serves a two-fold purpose. First, there is the added convenience to the shopper and second, there is a reduction of variable costs through the sales of unsold produce at the end of a working day or week, and the ability to further reduce overhead costs through a greater utilization of capital invested.

The major competitive requirement, however, is that the greengrocer's product-line-offering be such that shoppers purchase from him instead of selecting from the limited range of fresh fruit and vegetables available in supermarkets and self-service stores. Andrews 175 describes this as the "Active Role of Stocks". He contends that precisely which commodities, and how much of them, will be purchased at any one time will depend upon the character of the stocks which are available, i.e. the product mix, as well as their distribution in the shops which consumers visit. Because of his narrow merchandising base, the greengrocer must stock types of produce not only on account of their price and the total demand for them, but also because of the effect of their offering upon the demand for other items of fresh produce. This introduces the principle of inverse cross elasticity of demand, (as discussed previously in this

174. Interviews with greengrocers and perusal of their daily returns support these statements. Unfortunately only a few were prepared to release these figures as their positions in the respective communities precluded their use.

Chapter and in Chapter Three), demand being dependent upon stocks. Thus the greengrocer has a situation facing him where the tangible differentiation between his produce and that sold by the supermarket is currently in his favour. This is a situation that he must endeavour to maintain. Qualities are differentiated within the generic group, in the buyer's mind, some customers buying from one seller and others from another, despite moderate differences in price. That is, the individual shares of the total market possessed by supermarkets and greengrocers might be said to be unstable, relative to the pure oligopoly situation where only very slight differentiation of product is possible. Chamberlain, in his case of monopolistic competition, assumes that the elasticity of the objective demand curve does not change. In actual fact though the application of selling costs and produce quality adjustments offers an opportunity to the greengrocer to maintain, and possibly expand, his share of the trade in fresh fruit and vegetables.

A further advantage possessed by the greengrocer is his ability to meet rising costs by the imputation of reduced returns to other factors of production, in this case household labour and entrepreneurship. The supermarket produce department manager operates on a forty-hour week basis, whereas the greengrocer can put in unlimited time on his presentation, etc. This is a distinct operational advantage and a further means by which he can remain competitive, since it slows the

176. One example of this is the element of trust present in the greengrocer-customer relationship. Housewives demonstrate this in the purchasing act within the shop, and when phoning-in orders to be delivered to them.

177. J. Hadar. 'Stability of Oligopoly with Product Differentiation'. Review of Economic Studies, January 1966. "If the interdependence between the products is sufficiently weak, the system is stable."

178. (a) R.L. Smyth, op.cit. P.146. "Proprietors of small shops and members of their families tend to be willing to work for money rewards that are less than could be earned for less work in subordinate positions in other occupations".

(b) Anon. N.Z. Greengrocer. - "There is no charge for one-third of my time".
upward movement of his average cost curve. Moreover, this exercise partially alleviates the cost-price squeeze situation initiated by supermarket entry into the fresh produce market structure, which causes costs to rise and the volume of sales to fall. The greengrocer's ability to do this also offsets, to a marked degree, those economies of scale which accrue to the supermarket from bulk purchase discounts at auction, and direct procurement from growers.

Finally, growth in the size of greengrocery outlets is a possible countervailing measure. Some consolidation in the fruit and greengrocery business has occurred, as Table 4.12 demonstrates.

### TABLE 4.12

**Fruiterers and Greengrocers: Changes in Importance of Small, Medium and Large Stores between 1953 and 1963.**

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of paid Employees per Store</th>
<th>No. of Stores</th>
<th>No. of paid Employees</th>
<th>Total Labour Force</th>
<th>Percentage of Total Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953</td>
<td>0</td>
<td>495</td>
<td>-</td>
<td>843</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>253/748</td>
<td>253</td>
<td>659/1502</td>
<td>25/56</td>
</tr>
<tr>
<td></td>
<td>2 to 7</td>
<td>184</td>
<td>528</td>
<td>755</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>8 &amp; over.</td>
<td>15</td>
<td>165</td>
<td>176</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>947</strong></td>
<td><strong>946</strong></td>
<td><strong>2433</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td>1958</td>
<td>0</td>
<td>578</td>
<td>-</td>
<td>1052</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>303/681</td>
<td>303</td>
<td>805/1857</td>
<td>22/50</td>
</tr>
<tr>
<td></td>
<td>2 to 7</td>
<td>247</td>
<td>706</td>
<td>1052</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>8 &amp; over.</td>
<td>10</td>
<td>225</td>
<td>229</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>1138</strong></td>
<td><strong>1234</strong></td>
<td><strong>3178</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td>1963</td>
<td>0</td>
<td>465</td>
<td>-</td>
<td>843</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>333/798</td>
<td>333</td>
<td>848/1691</td>
<td>22/45</td>
</tr>
<tr>
<td></td>
<td>2 to 7</td>
<td>330</td>
<td>983</td>
<td>1448</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>8 &amp; over.</td>
<td>16</td>
<td>198</td>
<td>211</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>1144</strong></td>
<td><strong>1514</strong></td>
<td><strong>3350</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>


The numbers and share of total greengrocery turnover of those stores employing two to seven labour units has markedly increased, whilst the number of owner-operator units has decreased and their share of total
It is doubtful, however, whether the penetration of the market structure for fresh fruit and vegetables by supermarket and self-service stores during this decade has contributed substantially toward this trend, because the surge in the establishment of new supermarkets and the changeover to self-service did not commence until 1963 and 1960 respectively. Furthermore, the net increase in greengrocery store numbers from 1953 to 1963 was greatest in the Auckland urban area, as Table 4.13 illustrates.

**TABLE 4.13**

<table>
<thead>
<tr>
<th></th>
<th>Auckland</th>
<th>Wellington/Christchurch</th>
<th>Dunedin</th>
<th>Total Main Centres</th>
<th>Secondary Urban areas</th>
<th>Other</th>
<th>Total N.Z.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Turnover (£ million)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1953</td>
<td>2.2</td>
<td>1.3</td>
<td>0.9</td>
<td>0.5</td>
<td>5.0</td>
<td>1.3</td>
<td>2.5</td>
</tr>
<tr>
<td>1958</td>
<td>3.1</td>
<td>2.0</td>
<td>1.4</td>
<td>0.7</td>
<td>7.1</td>
<td>3.0</td>
<td>4.0</td>
</tr>
<tr>
<td>1963</td>
<td>4.3</td>
<td>2.6</td>
<td>1.6</td>
<td>0.7</td>
<td>9.2</td>
<td>3.7</td>
<td>3.9</td>
</tr>
<tr>
<td><strong>Store Numbers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1953</td>
<td>229</td>
<td>150</td>
<td>107</td>
<td>61</td>
<td>547</td>
<td>119</td>
<td>211</td>
</tr>
<tr>
<td>1958</td>
<td>292</td>
<td>169</td>
<td>128</td>
<td>65</td>
<td>654</td>
<td>146</td>
<td>233</td>
</tr>
<tr>
<td>1963</td>
<td>338</td>
<td>177</td>
<td>98</td>
<td>56</td>
<td>669</td>
<td>126</td>
<td>209</td>
</tr>
<tr>
<td><strong>Average Turnover per Store (£000)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1953</td>
<td>9.7</td>
<td>9.0</td>
<td>8.6</td>
<td>8.6</td>
<td>9.1</td>
<td>10.6</td>
<td>11.9</td>
</tr>
<tr>
<td>1958</td>
<td>10.6</td>
<td>12.0</td>
<td>10.6</td>
<td>10.2</td>
<td>10.8</td>
<td>20.7</td>
<td>11.8</td>
</tr>
<tr>
<td>1963</td>
<td>12.8</td>
<td>14.7</td>
<td>16.0</td>
<td>12.2</td>
<td>13.7</td>
<td>20.1</td>
<td>13.4</td>
</tr>
</tbody>
</table>


This would be due in large part to the rapid suburban development which has occurred, and is occurring, in this urban area. Nevertheless it is worth noting that retail sales of fresh fruit and vegetables through stores other than the traditional greengrocer increased by £1 million in the Auckland urban area for the period 1958 to 1963, because the overall increase in total retail fresh fruit and vegetable sales for the same
period was £2.2 million. This means that the increase in fresh produce sales by the greengrocer only just kept ahead of those made by other retailers of fresh produce. In addition, it is a reflection of the increasing market penetration in the Auckland urban area by supermarkets, self-service stores and variety stores into fresh produce retailing. Tables 4.7 and 4.8 clearly indicate this and show the relative upsurge in sales of fresh fruit and vegetables here as compared with sales made in other urban areas of New Zealand for the same period. This is to be expected as this area contains 20% of New Zealand’s population and accounts for over one-third of national retail sales. Accordingly, if these developments can be taken as a guide, the influence of the supermarket in the decade 1963 to 1973 upon the fruiterer and greengrocer will become quite marked, and will contribute in large part to any increase in the size of these outlets.

4.4 Conclusion.

From the foregoing chapter is appears certain that the importance of the greengrocer as a retailer of fresh fruit and vegetables in New Zealand will have markedly declined by 1970 from the position held by the industry in 1963. Conversely, the supermarket will have become a major fruit and greengrocery retailer.

The major contributing factors to this trend will be the changing shopping patterns of housewives, the draw of one-stop shopping, plus the lowered prices and improved quality of offering of the supermarket produce department.

179. e.g. In the two years 1964-1966 some thirty greengrocers in the Auckland urban area had to discontinue operations.

180. The trend toward larger greengrocery shops (700 sq.ft. of selling area), is being evidenced in the Auckland urban area, particularly in shopping centre development.
This change in the market structure will also cause an increasing percentage power to move into the supermarket industry. The possible outcomes of this as they concern the grower industry are discussed in the following chapter.
CHAPTER FIVE

CHANGES IN PRODUCER ORGANISATION AND SELLING UNDER SUPERMARKETING

5.1 Introduction.

This chapter discusses the effects which certain merchandising practices of the supermarket have had and could possibly have upon grower activities.

As stated in Chapter Two, there are two major marketing channels of distribution from grower to consumer for fresh produce. One of these channels involves intermediary steps and associate charges not present in the other. Accordingly, it is hypothesized that the net return to the grower in the short term and long term differs between the two channels.

Detailed are the advantages which have accrued and could further accrue to the grower industry through orientation of its activities to take cognizance of supermarket requirements. Following this the need for grower countervailing action is discussed, and possible ways in which this could take place are put forward.
5.2 Direct Sales and Implications for the Wholesaler.

The traditional and major customer of the wholesaler is the fruiterer and greengrocer. Table 5.1 below illustrates this fact with purchases accounting for about 49% of total wholesale turnover. It also points out, however, the importance of other retailer purchases, 26%, which includes supermarkets.

TABLE 5.1

<table>
<thead>
<tr>
<th>DISPOSITION OF THE WHOLESALE TRADE IN FRUIT AND VEGETABLES</th>
<th>YEAR ENDED MARCH 1963</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruiterer &amp; Greengrocer purchases.</td>
<td>£m.</td>
</tr>
<tr>
<td>Other Retailer purchases.</td>
<td>12.6</td>
</tr>
<tr>
<td>Merchant Retail sales.</td>
<td>6.7</td>
</tr>
<tr>
<td>Merchant Export sales.</td>
<td>1.4</td>
</tr>
<tr>
<td>Wholesaler to Wholesaler, &amp; other Direct sales to Users.</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td>25.8</td>
</tr>
</tbody>
</table>

Source: Ridler, Enting & Philpott, op. cit. P.93.

Noting that total retail purchases accounted for approximately 75% of total wholesale sales, it becomes obvious that a revokement of the Charter, along with its system of "tied-sales", would result in a marked reduction of turnover to the wholesaler. This reduction would stem from first, the supermarket's by-passing of wholesale for procurement and, second, the added competitive advantage which the supermarket would achieve over the greengrocer. Many of the marketing responsibilities of wholesale management are built on close working relations with suppliers, and the wholesaler's facilities are not designed to fit the requirements of these systems. The facilities at wholesale are not designed to fit the supply system required in the mass distribution of produce by retail chain organisations. For reasons of administrative control, continuity of supply, coordination of supply with markets, and other reasons, large scale assembling and pre-packaging facilities have been developed in growing areas and in central warehouses of corporate chains and voluntary group wholesalers.

P.32. C.D.Agric. Canadian Dept. of Agriculture.
would be adopted by multiple retailing organisations, and the grower's supplies going directly to pre-arranged outlets would cause the volume of produce moving between wholesalers and supermarket organisations to become potentially unstable. The subsequent growth of direct procurement would be controlled by the expansion of supermarket (and chain store) operations into produce merchandising, whilst its extent would be conditioned in part by the performance of the wholesale market, viz., grade enforcement.

The size of each supermarket organisation would determine in large part the extent to which it could economically purchase direct from the grower. For this reason small retail outlets would have much less incentive to participate in direct procurement (except for items such as potatoes and onions which can be stockpiled to a degree), particularly if sufficient supplies are available on the auction floor. In addition, growers would be unlikely to sell direct those individual quantities which the small retailer would require, unless as has been mooted, affiliated chains initiated direct procurement contacts with growers, or groups of these retail outlets combined by their own initiative for this purpose. The larger units would utilize auction facilities to provide items which could not be conveniently or economically bought direct. Moreover, they would have the ability to shift, when necessary, some of the risk involved in purchasing back on to the wholesaler and, through auction, on to the grower. The writer believes that a ceiling as regards total volume of purchases would exist for direct buying, beyond which it is unreasonable to assume that auction business would decline because:

1. There are the needs of such institutions as restaurants and hotels.

2. Unaffiliated independent retail outlets, e.g. dairies, grocers, fruitiers and greengrocers,
would continue to purchase from the wholesale market.

3. Multiple organisations would use wholesale more as a convenience for fill-in and replacement purchases, as well as for specialty items.

Thus the wholesaler would continue to act as a market for the buying and selling of domestic and imported produce in relatively small lots. As has happened in America, it could possibly tend over time to become more of a specialty seller, in the sale of small quantity relatively high value items, becoming a more limited line distributor. Emphasis in price formation would shift back toward the grower, thereby causing the price making function to become more diffuse. However, wholesale would remain a major influence in price determination, probably as a basing-point, despite its pricing of a much smaller proportion of the total volume of produce.

For wholesale to endeavour to maintain its trade with supermarket and multiple organisations, consideration would have to be given to the requirements of this class of customer. For example, the imposition and enforcement of minimum quality standards would be necessary in order to eliminate the lack of confidence created by substandard produce in lots put forward for sale. However, the essential need for continuity of supply and standardisation of produce would require the grower's assistance. A closer relationship between the wholesaler and grower would be necessary, but this could be of doubtful acceptance to the grower, who appears to prize his independence of action. The possibility of this development is further discussed in section 5.8 where it is assumed that direct procurement would be possible through alteration of the Charter held by Fruit Distributors Ltd. Accordingly, the writer puts forward two possible situations which might result from the revocation of certain
First, wholesalers would retain the right to import and auction, or otherwise sell, imported fruits under the present auspices of Fruit Distributors Ltd. However, the licence value to each would depend upon present individual domestic fresh fruit and vegetable sales, and would not include the sales of imported produce. This would keep importation as a centralised function, retaining any economies of scale which might accrue relative to open importing. It would also remove the inequitable contribution of imported produce to sales figures. Furthermore, the tied-sales system would no longer be present. Allocation of imported fruit to each retailer for the initial period would need to be based on his present quota. Applications for subsequent quota increases would then be made every year, eighteen months or two years, on the basis of fresh fruit and vegetable purchases and turnover from all sources of supply through a submission of accounts to the Company. The Company would appoint an independent accountant to investigate these. Firms which had their accounts audited would be required to produce them for recognition whereas those whose accounts did not require the services of an auditor would submit their balance sheet as certified by their accountants. Where the applicant was operating on an overdraft account it would be of value to have these accounts certified as to acceptance by the banker concerned. In this way, purchases from both wholesale and direct from growers would be taken into account in determining a retailer's quota allocations. Second, retailers, as well as wholesalers, would possess the right to import produce, concern being with those retailers who would find such an activity an economic proposition, e.g. corporate and affiliated retail food chains. In addition, the present price order system invoked for each shipment, which fixes the maximum retail prices for such produce, would be revoked. Import licences would be issued to
both retailers and wholesalers, with due consideration given to present quota allocations and 'certified' produce sales. The specialised greengrocer and small grocer retailer would continue to purchase their imported produce from wholesale, as would large scale retailers when necessary. This situation would possibly be more socially acceptable as it could result in the consumer's having a wider choice. Furthermore, it is highly probable that such produce would be priced somewhat lower than present levels owing to the competitive situation which would be initiated. 182

5.3 Grower Contribution to Fresh Produce Marketing, and Orientation Toward Supermarket Requirements.

The grower's contribution to the marketing of his produce is still very limited. This is partly because 70% of all fresh fruit and vegetables' sales are transacted by the traditional greengrocer, to whom standardisation and improved grading of offerings for sale at auction is of little importance. Therefore, variability of lot size, unpackaged, ungraded produce and uncertainty as to supplies coming forward, continue to characterise this system of distribution where purchase is by inspection and on a daily hand-to-mouth basis. 183 Consequently the grower's interest in produce is principally in techniques and economies of production. This situation is to be expected as it is only recently with the introduction of supermarketing into greengrocery retailing that there have been demands from the retail sector with respect to the character of the grower's offering.

Presentation of produce for auction, however, is improving. For example, more washed and sized carrots are coming forward and,

182. In July 1966 the Singapore Government introduced import licensing for fresh fruit in an effort to reduce the price to consumers and break up what it describes as importing cartels.

183. 'Marketing Fruit & Vegetables'. F.A.O. Marketing Guide. No.2. "Grower interest in taking into account the end use of the product diminishes as the distance between grower and consumer increases".
recently, in multiwall paper bags, facilitating handling and storage. Celery sticks are being prepackaged in cellophane, carrots and cucumbers into cardboard containers. Premium prices, (where quality warrants), are paid for such items by the produce department buyers, since store labour expenses (of trimming and washing), are reduced.

It was noted in Chapter Two that the Charter held by Fruit Distributors Ltd. all but stultifies the trend towards direct procurement from the farm gate. But, because of the pressure from supermarkets for consistent quality and quantity, and the increasing awareness of benefits inherent in direct sales, production is gradually moving away from the market to the consumer. Where grower supply arrangements with supermarkets have taken place, the grower either sells all his produce direct to the retail outlet or sells only part direct, sending the remainder through the wholesale channel. The smaller grower tends to sell solely to the supermarket and chainstore outlets, whereas the larger grower tends to divide his produce between the two outlets. The supermarket buyer desires this arrangement because in purchasing the major percentage of his produce from auction he cannot reflect his requirements back to the grower, whereas, in direct procurement, satisfaction is gained from the arrangement of verbal contracts where produce is supplied according to certain specifications. Moreover, the buyer is kept acquainted with the crop's progress and can orientate his merchandising and procurement policies to his own advantage and to that of the grower concerned. For example, when crop supplies coming forward are heightened by climatic conditions much of the wastage and fall in revenue, which the grower would otherwise face, can be offset because of the elasticity of the supermarket's demand curve, for the reasons enunciated in Chapter Three.

184. These contracts may be termed marketing contracts. Details concerning the sale of the commodity which is being produced include price, quantity, quality, time of delivery, packaging and transportation.
Although long term verbal contracts to supply are made, prices are rarely set in advance. They are usually determined through a 'higgle' from the current ruling auction price for that week or part thereof. This procedure is subject to alteration, however, when prices at auction fluctuate markedly in the short run from the figure which might have been set, say, at the beginning of the week. When such a radical change in the supply situation does occur, a compensatory pricing policy is invoked, whereby either one party or the other is reimbursed, (accounting procedure makes this possible), according to which way the supply situation changes. Following this course of action in pricing appears to engender confidence on the grower's side in particular, as it assures him of a 'fair deal'. Moreover, as fig. 5.2 illustrates, this variable in the 'pricing equation' would have the added effect of causing grower prices to remain relatively stable in comparison with auction realisations.

The form in which produce is bulked or cased is such that it is ready for immediate sale, (apart from prepackaging and any trimming which might be considered necessary, as with cabbages and lettuces). Freighting is generally the grower's responsibility and how he presents his produce is determined in consultation with the buyer. Bulk containers are used for hard vegetables, such as cabbages, carrots and swedes, whereas tomatoes and fruits are usually delivered in case lots. The weight of each individual case depends upon the commodity, e.g.

- **Hot House and Outdoor Tomatoes: 20 lb. & 40 lb. cases**
- **Mandarins:** 7½ lb. cases.
- **Peaches:** 20 lb. or 40 lb. cases.
- **Tree Tomatoes:** 18 lb. cases.

and the distance from growing-point to supermarket. In all such arrangements quality into-store is guaranteed by the grower. A working-
arrangement is entered into whereby sub-standard produce is either replaced or financial reimbursement made. Also an allowable percentage for deterioration incurred during transit is often included. Thus, assurance of quality and quantity is gained by this purchasing of a large volume of uniform produce from dependable sources for the long term, (a situation which is not possible in purchasing from a large number of small growers, or across a large number of lots).

Bargaining Power and Price Formation.

5.4.1 The Present Situation.

This section is intended to complement those subsequent to it in this chapter, through describing the grower’s influence in the marketing of his produce, and by emphasising the point that he has little, if any, control over price formation because the present marketing system places this activity beyond his jurisdiction. Accordingly, the introduction of the supermarket’s desire to purchase direct from the farm gate is viewed with apprehension by the grower. The increased participation and associate responsibility in distribution, coupled with grower conservatism, is possibly the only valid reason for this, because, as this section endeavours to show, under the present grower-wholesale-retail system, the grower, whether or not he is aware of it, carries almost all the risk in distribution from the farm gate to the retail greengrocery store. The grower is a price-taker in the fullest sense of the word. The perishable nature of his product (in most cases) precludes the establishment of a reserve price, and therefore, any possibility of stock-piling and influence over market prices.

Taken literally, auction price formation is said to demonstrate the theory of perfect competition. However, it does not perform in this way because neither of its two prerequisites for
efficient operation - aggressive bidding and adequate knowledge - are fulfilled. Furthermore, malpractices added to over time, which are directed against the grower, serve to enervate competition and lower auction price realisations.

5.4.1.1 Reduction of Fully Competitive Bidding at Auction.

Grower price realisations from wholesale can be adversely affected through a reduction of aggressive bidding by buyers present at auction. First, when there is more than one auction floor servicing the demands of an urban area, with sales conducted at the same time, the number of buyers facing any one auctioneer is reduced, and at times can be less than the statutory minimum of six. Second, a further reduction in the number of 'actual' bidders facing the auctioneer comes about through a carryover of social relationships into business operations. The social relations between buyers and buyers and auctioneer, ethical considerations, and the nature of the greengrocery trade foster this. Opportunities for collusion in procurement are numerous, and take various forms. One practice, which might be called post-purchase 'ringing', (i.e. after the successful bid has been made), demonstrates the 'live and let live' moral consideration given by one businessman to another. In this instance the bidder subdivides the lot of produce just purchased according to the demands of his fellow bidders (he having no prior knowledge of their requirements). Deliberate ringing of buyers prior to auction is a further development of the previous activity. In this exercise a group of buyers comes to a mutual agreement prior to sale that only one of their fellow members will bid on a particular lot. If he is successful, this bidder then cites the quantity he requires of the lot, and proceeds to allow his fellow 'competitors' to state the quantities they require of the residual amount. Performed in this way, ring buying is used to obtain produce at a lowered price. It can, however, also be employed
as a means of defence against new entrants. In each instance, the successful bid is subdivided among the several buyers with what must be assumed to be the assent of the auctioneer, as he or his clerk invoices the various quantities of the non-bidding ring members quoted through the successful bidder.

Another collusive practice is that of one party's refusing to bid (i.e. 'holding-off') on a particular line so that it can be purchased by the second party. An undertaking such as this usually takes place between the 'larger-volume' buyers because they are aware of the probable effect upon subsequent price realisations of their bidding in opposition to each other, and of the fact that the market period supply curve facing them is very inelastic.

Furthermore, relations between buyers and auctioneers are such that bids from buyers detailing quantity required and price prepared to pay are often lodged prior to sale, so that the buyer will not need to be in attendance and is able to bid on another line. Consequently, auctioneers themselves in this way may be price-makers or price-takers according to the size of offering at auction, and as to whether or not buyers endeavour to push the purchase price down to a quasi-reserve level. The opposite is the case with the practice of "balance of line" sales activity. "Balance buying" is usually invoked when demand approaches saturation level. The auctioneer endeavours to sell either the remainder of the line at a markedly reduced price to that initially realised, or the total line when demand is very low relative to available supplies at auction.

The occurrence of all these forms of collusive activity has been noted at wholesale, and it appears that they have come to be viewed by auctioneers and buyers alike as an accepted practice. The auction firms use these as competitive measures to retain custom, 185 a

185. As his sales turnover determines his quota allocation of imported fruits.
custom, moreover, which has come to expect such 'discounts'.

5.4.1.2 **Lack of Adequate Knowledge.**

Adequate knowledge of the probable supply situation, as it applies to the grower and retailer in the market structure, must be considered with respect to two periods of time: the market period (or very short term), and the long term.

In the market period, the grower is a price-taker and, conversely, the retailer is a price-maker, for although the market period supply curve is inelastic, the aggregate demand curve of the retail-buyer is relatively elastic. This is because buyers have the advantage of being able to acquaint themselves with offerings on the auction floor prior to sale. In this way they become aware of the supply situation and, having done so, can deduce the likely demand situation and adjust their purchasing policies accordingly. This knowledge of supply associated with the inelasticity of aggregate demand, plus the malpractices previously mentioned, introduces possible buyer monopsonistic activity, to which the grower has no counter. In addition, the supermarket buyer can often, where facilities permit, make his demand schedule more elastic than that of the traditional greengrocer through having more than one man employed in the purchasing act, and being able to shift demand to an adjacent auction floor.\(^{186}\) In the long term, and on an inter-wholesale market basis, the grower is similarly excluded from information concerning the probable supply situation on a national and district basis at certain points in time.

The long term situation acts against the grower because of his ignorance on such matters as price and crop supplies coming

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\(^{186}\) In the main and secondary urban areas of N.Z. the number of auction firms varies from two to four.
The possessing of records of this nature would facilitate inter-area supply adjustments more in keeping with probable price realisations and demand. Such an undertaking would introduce a certain amount of stability into price realisations through an improved inter-season and inter-market distribution of produce. Clearly then, the grower requires knowledge of the short term and probable long term market situation. Lack of sufficient knowledge leads to his consigning to those markets whose services he has always utilized, and where he has built up a working relationship between himself and the respective market’s agents (usually the auctioneers of his produce). The quantity consigned may be subject to the auctioneer’s recommendation, but his familiarity with the probable supply situation is little greater than that of the grower, as is often demonstrated when auctioneers advise growers to supply auction on particular days and the actual price realisations are much less than those anticipated. Uncertainty as to supplies coming forward for auction, and the socio-professional relationship existing between buyer and auctioneer, are the basic precepts which have introduced the degree of instability present in the market structure for fresh fruit and vegetables. This instability has reflected itself in the traditional retail sector, because of the uncertainty of supply and in the growing industry, because of the ignorance of demand at retail. The fact that during periods of heightened supply, greengrocery wholesale-retail margins widen, so that lowered wholesale prices are not translated to the consumer at retail, to facilitate ‘easing’ of the supply situation, is evidence of this situation.

The main purpose of the discussion so far has been to point out first, that the auction system, although commendable in theory

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187. Although his decisions concerning centres of consignment may be influenced by the wholesale firms concerned.

188. Fluctuations in price realisations at auction necessitate practice of imperfectly competitive activity to ensure an adequate return to effort at retail.
from the point of equating supply with demand, is subject to various operational maladies in practice; and, second, that these are characteristic of a system where grower influence and interest in distribution, to all intents and purposes, stops short at the farm gate. These points supply the reasons for the grower's poor bargaining position in the market structure, wholesalers and buyers alike possessing the ability to shift risk back on to the grower, (viz., balance-of-line offerings when floor oversupplied relative to demand, and collusion to dampen upward price movements when the floor is relatively under-supplied). Accordingly, as grower interests have been merely in production, the uncertainty and variability of supply to wholesale is probably responsible in large part for those purchase and pricing practices followed by the greengrocer. The effects of these upon the grower are described in the next section. It is as well to note at this point, however, that with the introduction of the supermarket into fresh produce retailing, we have a form of retailing which demands a particular offering, something which the grower has never before experienced. To ensure fulfilment of his demands, the supermarket produce buyer purchases direct from growers, because he can translate his demands to the grower(s) concerned, an exercise which is not possible via auction. An arrangement such as this is of equal importance to the grower, as it provides him with an opportunity to shift part of the risk involved in distribution, (all currently carried by him), on to the supermarket organisation.

5.4.2 Marketing Margins and Price Fluctuations.

This section details the determining influence which retailers of fresh produce have upon the nature and extent of grower price fluctuations. Concern is with retail prices and margins as the wholesalers' commission is fixed at 10 per cent. Therefore, as the
retail sector is dominated by the greengrocer, his merchandising characteristic of imposing inflexible minimum margins over wholesale cost is of major import, because inflexibility of marketing costs at retail, (retail margin rigidity), perpetuates a destabilising influence upon production. This takes the form of cobweb-type production responses by the grower to prices realised. Furthermore, the wider the marketing margin, the greater is the fluctuation in grower prices resulting from a given price change at retail. As shown by Tables 5.2 a.b. & c. greengrocers' retail margins are wide,\(^{189}\) accounting for something over half the retail price. Moreover, they are relatively inflexible, for those reasons already discussed in Chapter Four. The subsequent effects which these features have upon the grower are two-fold:

First, price changes at retail have disproportionate effects back on the growing sector of the market structure. Second, because the price elasticity of demand facing the grower is much less than that facing the retailer, markup procedures - gross margin rigidity - accentuate production cycles thereby introducing cobweb patterns of cyclical instability.

For these reasons it is contended that the instability of grower prices is in large part caused by the weakness of the traditional market system.

The price change to the grower from a change in the volume of produce marketed is determined by the size and flexibility of the retail margin. Where the margin is rigid and wide, the absolute retail price change is passed back to the grower. It has a proportionately greater effect on the grower than the consumer because the price elasticity of

\(^{189}\) That is, it costs as much and more to retail fruit and vegetables as it does to produce, harvest, transport and auction same, viz. auction-retail spread (as % retail price) N.Z. 4 main centre average

<table>
<thead>
<tr>
<th>1961/1965</th>
<th>Carrots: 52%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabbages: 54%</td>
<td></td>
</tr>
<tr>
<td>Onions: 44%</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 5.2 a

**CABBAGES: Retail Margins, Markup, and Grower Value, as Percentages of Retail and Auction Price 1961-1965**

<table>
<thead>
<tr>
<th>Year</th>
<th>Auction-Retail Spread (as % of Retail Price)</th>
<th>Auckland</th>
<th>Wellington</th>
<th>Christchurch</th>
<th>Dunedin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>51.6</td>
<td>47.2</td>
<td>48.6</td>
<td>48.0</td>
<td></td>
</tr>
<tr>
<td>1962</td>
<td>48.8</td>
<td>44.9</td>
<td>68.3</td>
<td>47.5</td>
<td></td>
</tr>
<tr>
<td>1963</td>
<td>68.2</td>
<td>54.8</td>
<td>69.5</td>
<td>38.5</td>
<td></td>
</tr>
<tr>
<td>1964</td>
<td>54.8</td>
<td>47.1</td>
<td>44.6</td>
<td>55.8</td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>55.7</td>
<td>53.1</td>
<td>47.7</td>
<td>47.3</td>
<td></td>
</tr>
<tr>
<td>1961/65 Average</td>
<td></td>
<td>55.8</td>
<td>49.4</td>
<td>55.7</td>
<td>47.0</td>
</tr>
</tbody>
</table>

| Year | Retail Markup (%) | | | | |
|------|--------------------| | | | |
| 1961 | 108.1              | 90.4    | 23.7      | 92.7         |
| 1962 | 94.4               | 32.3    | 214.3     | 50.0         |
| 1963 | 209.7              | 122.7   | 225.3     | 61.2         |
| 1964 | 122.0              | 109.4   | 79.7      | 116.6        |
| 1965 | 129.6              | 115.1   | 92.1      | 89.6         |
| 1961/65 Average |                       | 131.3    | 103.6     | 140.8        | 90.6 |

| Year | Grower Value (as % of Retail Price) | | | | |
|------|-------------------------------------| | | | |
| 1961 | 44.2                               | 47.1    | 46.7      | 46.6         |
| 1962 | 46.6                               | 49.2    | 28.7      | 47.0         |
| 1963 | 29.4                               | 40.3    | 27.6      | 56.7         |
| 1964 | 40.5                               | 38.7    | 50.4      | 40.8         |
| 1965 | 39.9                               | 42.3    | 47.1      | 47.4         |
| 1961/65 Average |                     | 40.1    | 43.5      | 40.1         | 47.7 |

*Note:* Wholesale prices (auctioneer to retailer), those realised on the Thursday nearest to the 15th of the month.

Retail prices, those imposed on the Friday after the Thursday nearest to the 15th of the month.

*Source:* Compiled from data supplied by the Department of Statistics.
### TABLE 5.2 b

**CARROTS: Retail Margins, Markup, and Grower Value, as Percentage of Retail and Auction Price, 1961-1965**

<table>
<thead>
<tr>
<th></th>
<th>Auckland</th>
<th>Wellington</th>
<th>Christchurch</th>
<th>Dunedin</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auction-Retail Spread</strong> (as % Retail Price)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1961</td>
<td>50.0</td>
<td>54.1</td>
<td>65.0</td>
<td>36.9</td>
</tr>
<tr>
<td>1962</td>
<td>51.0</td>
<td>60.5</td>
<td>55.2</td>
<td>47.8</td>
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<td>1963</td>
<td>57.0</td>
<td>60.5</td>
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<td>1964</td>
<td>44.9</td>
<td>62.9</td>
<td>52.7</td>
<td>42.1</td>
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<td>1965</td>
<td>59.6</td>
<td>60.6</td>
<td>43.0</td>
<td>61.9</td>
</tr>
<tr>
<td>1961/65 Average</td>
<td>52.5</td>
<td>61.3</td>
<td>55.3</td>
<td>46.6</td>
</tr>
</tbody>
</table>

| **Retail Markup (%)** (Auction-Retail Spread as % Auction Price) |          |            |              |         |
| 1961           | 100.0    | 118.0      | 195.7        | 58.5    |
| 1962           | 104.0    | 152.9      | 123.1        | 91.6    |
| 1963           | 132.7    | 152.0      | 153.8        | 79.3    |
| 1964           | 81.6     | 169.4      | 111.6        | 72.7    |
| 1965           | 147.5    | 218.9      | 75.6         | 172.4   |
| 1961/65 Average| 113.2    | 162.4      | 131.9        | 94.9    |

| **Grower Value** (as % of Retail Price) |          |            |              |         |
| 1961           | 45.1     | 41.3       | 30.4         | 56.7    |
| 1962           | 44.1     | 35.6       | 40.4         | 47.0    |
| 1963           | 38.7     | 35.5       | 35.4         | 50.2    |
| 1964           | 49.5     | 33.5       | 42.5         | 46.6    |
| 1965           | 36.4     | 28.2       | 51.3         | 33.0    |
| 1961/65 Average| 42.8     | 34.8       | 40.0         | 46.7    |

**Source:** Same as for Table 5.2 a
TABLE 5.2 a

ONIONS: Retail Margins, Markup, and Grower Value, as Percentage of Retail and Auction Price. 1961-1965

<table>
<thead>
<tr>
<th>Auction-Retail Spread (as % Retail Price)</th>
<th>Auckland</th>
<th>Wellington</th>
<th>Christchurch</th>
<th>Dunedin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
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<tr>
<td>1962</td>
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<tr>
<td>1963</td>
<td>46.9</td>
<td>45.4</td>
<td>64.4</td>
<td>48.6</td>
</tr>
<tr>
<td>1964</td>
<td>56.3</td>
<td>56.5</td>
<td>61.5</td>
<td>42.0</td>
</tr>
<tr>
<td>1965</td>
<td>25.0</td>
<td>25.1</td>
<td>31.3</td>
<td>27.9</td>
</tr>
<tr>
<td>1963/65 Average</td>
<td>42.7</td>
<td>42.3</td>
<td>52.4</td>
<td>39.5</td>
</tr>
</tbody>
</table>

Retail Markup (%)
(Auction-Retail Spread as % Auction Price)

| 1961                                     |          |            |              |         |
| 1962                                     |          |            |              |         |
| 1963                                     | 88.5     | 88.3       | 181.2        | 95.5    |
| 1964                                     | 129.4    | 129.7      | 158.9        | 72.1    |
| 1965                                     | 33.4     | 33.6       | 45.6         | 38.6    |
| 1963/65 Average                          | 83.8     | 83.9       | 12 8.6       | 68.7    |

Grower Value (as % of Retail Price)

| 1961                                     |          |            |              |         |
| 1962                                     |          |            |              |         |
| 1963                                     | 47.7     | 48.9       | 31.9         | 45.8    |
| 1964                                     | 39.1     | 39.3       | 34.9         | 52.5    |
| 1965                                     | 67.5     | 67.4       | 61.8         | 64.9    |
| 1963/65 Average                          | 51.4     | 51.9       | 42.9         | 54.4    |

Source: Same as for Table 5.2 a.
demand facing the grower is less than that facing the retailer. Furthermore, the greater the share of marketing cost in the final price, the more grower-price flexibility, \( (f_g) \) exceeds that at retail \( (f_r) \), in direct proportion to difference in marketing costs, where

\[
f_g = \frac{f_r}{1-K_b}
\]

\( K_b \) is the proportion of the marketing margin in the retail price, such that

\[
K_b = \frac{1-f_r/f_g}{f_g}.
\]

That is, the larger the marketing margin as a proportion of the retail price \( (K_b) \), the greater is the difference in price flexibility, \( (f_g - f_r) \).

In this situation, either a shifting of the derived demand curve to the right, and closer to the final demand curve, or an increasing of its elasticity, would have a stabilising influence. In other words, the behaviour of a marketing firm determines the shape and shift of a demand curve, as well as determining the elasticity of the supply response schedule. This is where the differences between the conventional greengrocer and supermarket with reference to sales practices are highlighted, and they serve to illustrate why greater cognizance should be taken of the latter retail entity in this regard.

To begin with, the demand for fresh produce is inelastic. Therefore, any fluctuation in retail prices to shoppers is accompanied by wider fluctuations in the returns to growers. Moreover, inelasticity of demand causes price changes due to variations in supply to be associated with income changes in the same direction. As a consequence of this, demand elasticities at the growing-point are lower than at retail, and this disparity tends to grow with increases in marketing costs. Accordingly, as marketing costs differ between types of fresh produce retailers, \( (\text{viz. supermarket and greengrocer}) \), so shall the respective derived demand curves differ in their shape and distance from their associate primary

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190. The aggregate consumer demand curve.
demand curves. The differing merchandising policies of each individual firm are responsible for this. **First,** the supermarket's primary demand curves are more elastic than those of the greengrocer. **Second,** the supermarket's average markup on produce purchase costs is something more than 20 per cent. lower than that of the greengrocer - 33 per cent. and 55 per cent. respectively. The markup of the greengrocer, along with the 'stickiness' of his retail margins, means that fluctuations in prices resulting from changes in aggregate consumer demand, do not correctly reflect these demand changes back to the grower. The importance of this situation lies in the effects of movements along the grower's supply response curve upon price and instability as they are a direct function of the elasticity of demand for the commodity concerned. Also, (as figure 5.2 points out) income fluctuations arising from supply fluctuations in an inelastic demand situation will, when aggregated, average out less than the aggregate of returns from constant marketings of the same volume.

Thus, with respect to the issues mentioned above, the importance of supermarketing can be appreciated, because here we have stabilising possibilities which arise from the retail distribution side rather than from grower behaviour, as they have in the past (e.g. price fixing and supply controls). This is due to the ability of the supermarket to increase elasticity demand and offset oversupply of the market, (more especially chance variations in supply), both of which reduce the severity of price falls in a situation of inelastic demand and supply, when conditions of either change moderately.

The variations in price received by the grower are a function of three variables - 1. the quantities marketed.

\[
\frac{\Delta p_g}{\Delta q} = K_g/f_r.
\]

192. The price elasticity of demand = \[ \frac{\Delta p_g}{\Delta q} \] = \[ K_g/f_r \].
2. the cost of marketing the quantities concerned - the marketing margin, and
3. the price flexibility at retail.

Their importance is illustrated by the following equation -

\[ \frac{\Delta P}{P} = f_r \cdot \frac{\Delta q}{K_g} \]

where \( P \) and \( q \) denote the variables of price and quantity respectively, \( f \) is for price flexibility, the subscripts \( g \) and \( r \) refer to grower and retailer, and \( K_g \) is the proportion of the retail price accruing to the grower. Thus a reduction in marketing cost would serve to reduce the subsequent price change felt by the grower and the associated instability introduced into his production sequence. Ridler illustrates this by stating that:

"if the price flexibility at retail is 2, and producers obtain 50% of the final price (before the change in supply occurs), a 20% change in volume brings about an 80% change in producer prices. But, if margins were only one third of the final price, the resulting price change would be 60%, which is equivalent to the effect of a 15% output variation at the higher level of marketing cost.

If the final demand function is stable, a reduction in marketing volume instability by one quarter (from a 20% variation to 15% in the example) could be regarded as of equivalent effect to a reduction in marketing cost by one third (from one half to one third of retail price)."

Accordingly, as the current high marketing costs are due to the economic organisation of the industry rather than to retarded technological development and application, the importance of the supermarket and the

---

192. The price elasticity of demand \( = \frac{P_g \cdot \Delta q}{q \cdot \Delta P} = K_g/f_r \).


194. For example, it is hard to justify charging a customer 1/- for lettuce, when the grower received less than 1d. In addition, as convention with respect to markups is 'rigidly observed' by orthodox retailers of fresh fruit and vegetables, "it is quite possible to conceive of a durable constant price situation for the collective distribution factor". And it follows that price levels would be above those at which such factors could be supplied in a freely competitive trade. The entrance of lower margin retailers bears this point out.
ramifications of its sales policy of low margin and high turnover can now be appreciated. The realisation of economies of scale in supermarketing has been described previously, a decrease in costs per unit of output occurring with the increased scale of operation. Their presence, however, means that derived demand and primary demand curves are not parallel, similarly, derived average cost and primary average cost curves, for the higher the proportion which the farm-gate cost of an item of produce is of the final cost of the 'commodity' to the consumer at retail, the greater is the elasticity of its demand. That is, the lower the marketing margin, the smaller becomes the difference between elasticity of demand at the farm-gate and retail. Thus, the tendency is for the derived demand curve, (or derived average revenue curve), to converge on the primary demand curve (or average gross revenue curve), and for the derived average cost curve to likewise converge on the primary average cost curve. 'Converge' used in this sense means that the derived curves increasingly approach their respective primary curves as levels of output rise, i.e. the distance between the two curves is reduced, and the elasticity of the derived curves is increased. This contrasts markedly with the situation as it applies to the greengrocer, where, as demonstrated in figure 5.1, derived average revenue and average cost curves would tend to diverge from their respective primary curves, for those reasons detailed earlier. The 'radical modifications' which supermarketing has made to the market structure for fresh produce, and the vast possibilities which remain, ensure that the increased scale of marketing operations made possible by this retailing medium will result in increased prices to growers from $p_{g1}$ to $p_{g2}$ and lowered retail prices from $p_{r1}$ to $p_{r2}$. Figure 5.1 illustrates this

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195. The aggregate supply curve of Growers.

196. This curve is commonly labelled in the literature as the ACPD curve, because it includes costs of processing and distribution. It is also a purchase curve, and a curve of net internal economics of large scale production, for it shows to the processing and distribution agency the average cost per unit of each quantity of produce procured.
FIGURE 5.1
The Effect of Introducing Supermarket Procurement and Merchandising practices into

A. A perfectly competitive market structure

B. An imperfectly competitive market structure

pr 1. price at retail prior to introduction
pr 2. price at retail after introduction (−ve change)
pg 1. price at farm gate prior to introduction
pg 2. price at farm gate after introduction (+ve change)
and shows how the technical possibilities of substitution in the marketing sector, particularly supermarketing, as well as in growing, make possible the reduction of processing and distribution costs, plus increased sales, $q_1$ to $q_2$.

Finally, although some degree of instability in supply conditions for fresh fruit and vegetables must remain, the perishable nature of these commodities is such that the market system must have the ability to absorb chance variations in supply, to the degree which prevents outright losses to growers. This is regardless of technological possibilities which can reduce the rate of physical deterioration to allow stockpiling, and of growers reacting correctly, (as far as is possible), to price expectations. That the grower-auction-greengrocer channel cannot fulfil this requirement is a proven fact. Moreover, inventory building is possible with only a limited number of items: onions, potatoes, kumeras, apples and pears, and a carryover between seasons is not feasible. As a consequence of this, the advantages of the direct grower to supermarket link assume pre-eminence. The supermarket has demonstrated that it can by virtue of its capacity to increase demand and conduct operations at a lower and more flexible per unit cost, "damp-down" much of the adverse effects which are commonplace under an auction-greengrocer market system of fresh produce distribution, particularly during glut periods. The lowered marketing cost and flexibility in pricing allow the supermarket produce department to 'quit' produce at less than normal prices (supermarket and

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197. From discussions with auctioneers, greengrocers and other fresh produce retailers, extreme highs and drastic lows in grower price realisations appear to have declined over the last four years because of the entry of large scale retailing into the market structure for fresh produce.
Applying these results to grower cobweb-type production responses, a reduction in marketing costs and inflexibility of retail prices, as demonstrated by supermarket merchandising behaviour, must have favourable stabilising possibilities and more correctly reflect consumer demand conditions at retail. This is accomplished by shifting the grower's derived demand curve to the right, closer to the final consumer demand curve, and increasing the elasticity of the derived demand curve. Also, whilst prices to the grower will tend to be more stable at a higher level, (which figure 5.2 points out), retail prices will be more stable but at a lower level as shown by Table 4.6

Viewing this issue in the long term, such developments as those described at retail will further increase scale and specialisation by growers in production. Changes of this nature in production will, in turn, facilitate co-operative grower action, the collation of market records, and increase grower-retailer merchandising relationships.

5.5

The Attitude of Growers to Direct Selling.

Despite the encroachment of processed produce into the market for fresh produce, the grower industry appears unwilling to see the possibilities inherent in orientating its activities toward the retail sector. This infers their desire to retain the present traditional system of distribution.

198. N.Z. supermarket produce department buyer. - 'During periods of over-supply of fresh produce items, both the grower and ourselves can turn this situation to our respective advantages. Specialising of the items so affected, enables us to move a large quantity of produce in a very short time. Although margins are severely reduced, the disproportionate increase in sales makes the venture profitable, as well as raising returns to the grower.'

The Grower. 19.3.66. Keymarkets Produce Department Buyer (U.K.). "By using a glut intelligently we can profit by it. The price factor is very important. We find an attractive price ticket, give the vegetable, cauliflower or whatever it may be, plenty of space for display, and it works like a dream. When there is a glut, the produce is generally at its best, so by expanding sales in this way, we not only please our customers and increase our profit, but also help the grower by moving a heavy crop in the right condition at the right price."
The growth of corporate chains and association of retail food outlets into voluntary and co-operative chains is viewed with concern by growers, (apart from the small group which has vertically co-ordinated itself to the produce merchandising operation of retail outlets). The seat of many of the fears associated with direct sales is the popular misconception that growers will find themselves face to face with a monopsonistic-monopolistic market. They believe that direct selling will cause a cost-price squeeze to be directed upon them from a depression of price levels, which it is thought will eventuate, either through collusion between retail firms, or through these firms endeavouring to meet competition without reducing distributive margins. Moreover, growers see themselves as being reduced to a "race of peasants", because of the fewer number of outlets, and their either failing to secure a 'contract' or being forced to sell at very low prices. Conditions, however, could be introduced into these 'contracts' to offset such a possibility. However, in determining the importance which should be attached to such fears, it is essential to place accent upon the fact that the danger is viewed as arising from "monopoly" and not from contracts as such.

It is not denied that in some sectors of the produce market structure relatively few firms do dominate the market, e.g. processed vegetables. Notwithstanding this, the extent to which supermarket organisations could exploit their seemingly monopolistic-monopsonistic positions in the market structure would be limited by their own desire to ensure reliable supplies and remain competitive with auction. Such an apparent monopoly of interest in fresh produce is unlikely to dominate as the diversity of business interests in supermarketing would prevent domination by one organisation, or development of collusion between the six

199. Enting, Philpott & Ridler. op.cit. fig.6.1, p.89. 9% Growers sell direct to Retailers.
major organisations so involved. That none of these events have occurred in the procurement and sale of dry groceries and meat might be taken as supporting evidence.

Finally, it is stated that channelling of produce directly from grower to retailer would reduce competition to zero levels because the grower would be faced with only one buyer. However, owing to improved communications, it is fallacious to argue that the physical presence of all buyers and sellers is essential for competitive marketing, for these allow rapid collation and dissemination of market information. The inter-centre liaison of wholesalers illustrates this point, and it would be one condition encouraging the establishment of active and equal competition at particular places at specific times.

Efforts, therefore, to regiment supermarkets toward the archaic characteristics of auction should be terminated. The various attributes of this retail outlet as a seller of fresh produce, (previously discussed and yet to be discussed), are significant, and the grower should take advantage of them. However, he appears to do little to further his position in the market structure, and endeavours to preclude others from direct selling, through deliberate ostracisation and actions tantamount to threats, instead of viewing the current examples of vertical co-ordination as 'lessons' from which conclusions can be drawn.

During the past eight years the number of growers supplying hard and salad vegetables and soft fruits to supermarkets has been steadily increasing, and the larger growers surveyed seemed desirous of having a greater percentage of their produce shipped direct to supermarket stores. The consistency of growers in continuing these arrangements year after year might be interpreted as a demonstration of a reasonable degree of satisfaction with this system of "contract" growing. In all cases surveyed, growers agreed that such a practice had enabled them
to rationalise their production and marketing patterns. Initially, grading, especially with vegetables, was rather ad hoc. However, with the maturing of relations, specifications as to size, count, pack and degree of maturity have become commonplace. One major point at issue, however, is the ability to plan growing activities, having rationalized marketing procedure. Another major advantage is that of no longer having to orientate operations totally towards supplying the two peak periods of demand, (Monday and Thursday). Also, there is less wastage with direct sales, since vertical co-ordination allows an evening out of supply over the week a more economical use of labour, and a reduction in the incidence of glut conditions, however mild, typical of two major purchasing days at auction. Moreover, the ability of the supermarket to move produce on lowered margins at short notice is an important advantage. In this way the effects of climatic fluctuations on harvest and price are lessened, since the total supply coming forward for sale can be divided between supermarket outlets and auction. This removal of produce from auction tends to keep prices realised 'up' on what would be their level if an alternative channel of distribution was not available, (cabbage sales in the Auckland urban area for the period August-September 1966 demonstrated this), because, in this way, the grower may avoid the lowered returns from 'balance-of-line' sales activity practised at wholesale.

e.g. The general quote for lettuces sold by auction was 5/- per case. Balance-of-line price quotes for lettuces of equivalent quality ranged from 2/6d. to 2/- per case.

The probable effects which this practice would have upon the growing community are discouragement of large scale production, and forfeiture of

200. For example, the carrot sales of a supermarket outlet in the Auckland urban area were 8 tons per week when priced at 3½d. per lb. during a period of heightened supply in 1966, and averaged 15 tons per week when specialised at 2d. per lb. to offset an expected glut situation.
GRAPHICAL COMPARISON OF RETURNS TO THE GROWER, OF DIRECT SALES TO SUPERMARKET OUTLETS WITH SALES MADE AT AUCTION

CABBAGES
(12 MONTHS 1965-66)

A. AUCTION PRICES.*
B. SUPERMARKET DIRECT SALE PRICES.*

* Note: prices are for the same urban area.
economies in handling, packaging and transportation.

Finally, on evidence obtained and illustrated by figure 5.2, by supplying supermarket outlets the grower receives a slightly higher net price than that realised at wholesale. The increase in efficiency of distribution through using the direct grower-supermarket channel makes this possible. Besides this, figure 5.2 also demonstrates that if the short term is taken as a month, and the long term as a year, grower price realisations from direct sales over both time periods exhibit a greater degree of stability than those for similar forms of produce at auction.

Altogether then, with direct sales, the grower can cover his overheads more fully through a reduction of his variable costs, and is in a much improved bargaining position with farm gate sales, since at wholesale he is committed to sell once his crop has been harvested and the costs of handling to auction incurred. Also, the emphasis in price determination has shifted back toward the growing point, but the wholesale market remains, and shall remain, the major price-to-growers determining agency, (just as it has in the United Kingdom and the United States).

5.6 The Growers' Present Need For Countervailing Action.

Under the present system of marketing, grower participation need not go beyond the farm gate. However, with an increasing trend toward direct sales, the grower would have to take a more active role in the sale of his product. If he did not, the buying organisations concerned would probably adopt those functions previously the concern of the wholesaler. The vertical integration of business interests into growing, in the processing industry, which has resulted in the loss of independence of action by affiliated growers, is one example of what could occur.
The favourable bargaining position currently held by trading organisations is characteristic of this market system which contains a freely competitive sector, (the grower), and a monopsonistic - monopolistic sector (the wholesaler and retailer). Those features of grower operations which made this possible, are:

1. The seasonality and biological nature of production.
2. The high ratio of overhead costs, causing growers to produce to capacity.
3. The inelastic price and income elasticities of demand for fresh fruit and vegetables.
4. The lack of organisation, characterised by its fragmented nature.

Growers are becoming aware that an ever increasing percentage of their produce is being purchased by fewer and bigger buyers. Accordingly, they fear the consequences of the real inequality of bargaining power, which would arise from the removal of the constraint on direct procurement, as it is thought that there would follow an overwhelming concentration of bargaining power at the retail level.

With sufficient foresight, growers could meet this situation and turn this merchandising practice to their advantage. Of primary importance is the fact that in the logistics of distribution, the development of direct selling is one of concentration. Its economic justification lies in the grower's ability to accomplish with less resources, those stages of distribution, which otherwise require the presence of the wholesaler. As has been discussed, produce when bulked in this way, can usually be moved at lower cost from one point to another, than could an equivalent volume in small lots.

It is worth noting at this juncture, that this trend is taking place at auction. Therefore, the possibility of collusion, which growers fear, could be heightened here, as they have no influence in the price forming Process.
For the growing industry to meet the supermarket produce buyer 'halfway' as it were, in the sale of produce, and to realise the benefits of such a sales method, some form of grouping of growers' sales activity would be required. In this way, grower knowledge and cohesion in marketing would be improved, and would provide him with a substantial measure of market power. Having increased its bargaining power, this industry would then be in the position to countervail any detrimental influence which supermarket organisations might tend to have upon the various economic and constitutional factors in the market structure. This would apply in particular to any tendency of prices to be forced below their competitive level. Moreover, the industry would be in more of a position to influence the market for its own benefit, regardless of whether or not the constraint on direct sales were removed.

Present Forms of Co-operative Grower Action and Countervailance.

In America, growers (particularly in the State of California) have been able to co-operate successfully in order to meet the demands of direct procurement and at the same time have managed to protect their own interests. This has been achieved by an orientation of activities toward the demands of the supermarket and chainstore, and through the presence of 'workable' grades and standards, which the movement of large quantities of produce and procurement demands from some distance

202. R.F. LANZILLOTTI. "The Superior Market Power of Food Processors and Agricultural Supply Firms - Its relation to the Farm Problem". Journal of Farm Economics. Dec. 1960. pp.1228-1247. Extract - p.1226. 'A given firm, or group of firms, can be said to possess Market power when they individually or in concert are in a position to follow persistently, price, product and marketing policies in a manner different from the conduct a competitively structured market would impose upon firms facing otherwise similar cost and demand conditions.' An alternative definition:

I. DUBOK. 'Market Power Problems of Agricultural Producers'. Journal of Marketing. April 1962. pp.48-53. Extract p.49. 'Market Power is the ability of one party to a Market conflict to impose its own solution to that conflict on one or more of his adversaries.'
necessitate. These give a guarantee of price and quality to both the grower and the buyer. Once a demand is made, it is known what is required, and purchases can be made accordingly at a later date. In this regard, Market Orders with uniform and industry-wide application to all growers and handlers of the commodity concerned, dictate grading and standardisation procedures. They also ensure that the buyer receives what he requires, and that a fair price, including a differential for grades, is paid to the grower.

The segregation of the items so controlled, according to their various grades, sizes and degrees of maturity, makes this possible. Compulsory adherence to the order's terms is ensured by penalty clauses, since industry-wide compliance is necessary if its purpose is to be realised. Majority approval of the particular market order by the commodity-industry concerned is primarily required, and only then is legislation invoked to 'back' the stated procedural and administrative criteria to be followed.

These orders would play a supporting role to the achievement of bargaining power through the co-operative organisation of growers, because the existence of a co-operative movement does not, in itself, guarantee the exercise of countervailing action. Co-operative bargaining associations must command sufficient support (e.g. in the form of market orders) to influence the market.

As a bargaining association, the co-operative can be differentiated into one of two forms. It can either perform the functions of processing and marketing, or possess supply management powers.

203. Who may be a supermarket field agent, a broker, a commission agent, or truck jobber.

204. The United States Perishable Commodities Act gives the grower and retailer the right of redress as to price and grading.
The co-operative performing those processing and marketing functions typical of present wholesalers of fresh produce, must operate within this industry. Accordingly, although this development does characterise vertical integration forward, it is always in competition with forms of a like nature. The acquisition of market power, therefore, is unlikely, and is made more so by the diverse nature of the supply situation. Furthermore, its influence in the market structure depends on its market standing, i.e. whether or not it is a pacemaker. The tendency in this respect unfortunately, as is demonstrated in New Zealand, is for the organisation concerned to join the existing cartel and go along with current procedures. Moreover, such organisations rarely assume responsibility for actual marketing of members' produce. They merely perform (on commission) the traditional small variable lot marketing function, of assisting members to market their produce by providing centrally, facilities of various kinds.

The co-operative operating solely as a bargaining association aims at supply management. Its success depends on its ability to obtain control over supply, and to segment the market so that its operations are insulated from the potential inflow of "unorganised grower supplies". In this way, a percentage of bargaining (or market) power is directed into the growers' hands. Also, it assumes responsibility, i.e. the risk, in the marketing of members' produce, and therefore greater interest is displayed in offerings. Grower members, however, must be prepared to relinquish some of their individual sovereignty, as this will allow the association to standardise grading and packing, and to realise the economies inherent in increased efficiency of distribution. Operations conducted in this manner would facilitate the co-ordination of production, grading, packing and marketing services.
In New Zealand because direct procurement is restricted
by the Charter of Fruit Distributors Ltd. there has not been the urgency
for growers' countervailing action. Nevertheless, co-operative
organisations have been tried. The various reasons for their establishment
were: Growers' dissatisfaction with returns from auction; their desire
for assurance of fair average prices; their need for some degree of
market power; and to ensure adequate distribution and standardisation of
produce. Each organisation has proved unsatisfactory in one way or
another. Consequently, with the present growing trend towards direct
selling and the likelihood that this will supersede auction sales, it is in
the growers' interests that an adequate system in some form, of concerted
group selling be initiated. In constructing a successful method of
countervailing action, it would be necessary to take into consideration
both the advantages and failings of present organisations. For this reason
the three major examples of grower co-operative action in New Zealand are
outlined. Only one of these three has had anything approaching a limited
amount of success. This is the Growers' Wholesale Auction Co-operative
of Market Gardeners Ltd. Although still in operation, and of some
importance, its activity and subsequent influence upon the market structure
has been negligible. It has kept the wholesalers' commission at 10%,
instead of the proposed increase to 12½%, but on matters of reconsignment,
grading and standardisation, and presentation of produce for sale, it has
in no way differentiated itself from the standardised pattern of behaviour
laid down by the Wholesalers' Federation. Moreover, with auction the sole
means of distribution, this contribution to the marketing of produce cannot
sufficiently meet the requirements of the supermarket. But it is a Grower
Co-operative, with offices in two of the four main centres, therefore its
inability to assume a dominant or pace making role in the industry is
probably a reflection of its inability to attract sufficient grower
patronage.
The second example is the N.Z. Apple and Pear Board. This organisation has returned a net profit over operations (local market) in four years only since 1955 (1957-60). This has no doubt been largely due to growers' by-passing of the Board, preferring to sell their better quality produce direct to retailers at prices much less than those stipulated by the Board. Also, inherent economies and lowered costs are precluded by the Board's insistence in channelling even bulk quantities through the wholesale agent. Furthermore, the probable increase in consumer demand from lowered prices at retail is foregone.

The third example of a Bargaining Co-operative formed in New Zealand through the initiative of growers was the Marketing Co-operative operated for some years in Pukekohe. This organisation adopted the role of a sales agency for growers' produce. Produce was sold to outlying areas at prices which were fixed by this agency. These quotations were set each Monday for the forthcoming week, by a committee of three grower and three wholesale representatives.

Although no statistical price series are available, it is the opinion of wholesalers and growers that this co-operative tended to become a price-leader, and had a stabilising influence on prices. In fact

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205. The major percentage of Growers' Apple and Pear crops are delivered to the Board (Established 1949: assumed marketing powers in 1953). The Board provides storage and prepackaging facilities, and organises the distribution of apples over time for local consumption through wholesalers who act as the Board's distribution agents. Retail prices are set by the Board for each variety under a voluntary agreement with retailers who are supposed to confine their margin to a maximum markup of 40 percent on into-shop cost. However, from personal surveys in North Island urban areas, the markup on apples appears to average something approaching 55 percent on into-store cost, which meant that the retailer's margin (in pence/lb) equalled the return to the grower. The wholesalers are paid for the use of their auction floors and cooling rooms. Thus the Board controls the major percentage of said fruit for local consumption, (apart from those sales made at the farm gate, direct to retailers, and by mail order (legal limit of two cases apples and pears per consumer), and has sole control over their export.

206. Although there is a legal sales limit at the farm gate, the volume of sales conducted in this way, (from Dept. Agric. estimates less sales by Board), approached 23.5% of the annual crop (1964). Disregard for this limit is also evidenced in the increase of demand sales to retailers, particularly by the number of Court cases brought against offenders by the Board, successful and unsuccessful.
the auction floor was 'protected' by the higher prices set, as these prices were used by the rest of the industry as 'ceiling prices' for the remainder of the week, regardless of whether they were too high or too low. (In much the same 'umbrella-like' way as the retail prices set by the Apple and Pear Board are used in the 'black-market' sales of apples and pears). This was so to the extent that merchants had difficulty in meeting competition and so encouraged the practice of sales external to the Co-operative.

The Co-operative operated successfully in the early years following its inception and experienced few difficulties until it changed its management. Then an extension of operations into export (for onions), had disastrous consequences due to both the shipping of fungus infected produce and the buying-up of shipping space by rival interests, which prevented the shipping of a compensatory order. In addition, the Co-operative's lack of power to enforce members' loyalty led to growers opting out when local market prices exceeded those quoted by the Co-operative, for membership was obtained merely by purchasing a minimal number of shares. Thus, apart from a moral obligation, growers were not obliged to sell through the Co-operative.

Accordingly, if grower contracts to supply the Co-operative had been more definitive as to the actual quantities supplied by members, and entry into export of produce had not occurred, this Co-operative could have possibly continued its operations successfully. The fact that none of the shareholders forfeited their initial investment adds weight to this suggestion.

Two further methods of countervailing action which have been put forward, are a reduction in the number of low income producers, and anti-monopoly legislation. These, however, would be of little worth,
for both would still leave much power with the trading sectors, since they do nothing to correct the imbalance.

An effective balance could not be achieved through the first method, because part-time, unspecialised growers, and small growers, provide only a small percentage of total annual production. Also, concern is with marketing practices rather than with production, therefore the removal of small growers would hardly correct the growers' present marketing position. Finally, preservation of the autonomy of the individual is an important social obligation.

The second method, could prevent any unusual accretion of market power, but it would be barely a palliative, as it would neither solve the problem of growers' lack of concerted competitive activity, nor reduce the favourable balance of marketing power held by the trading sectors.

In conclusion, co-operative grower activity is required in New Zealand, but the major forms to date have proved unsuccessful in operation. The next section utilizes the American system of market orders in suggesting a form of grower co-operation in New Zealand which the writer believes would be satisfactory.

5.8 A Suggested Marketing Form for the Growers' Acquisition of Market Power.

It has previously been pointed out that if the constraint on direct procurement were lifted, growers would require some degree of market power, as a process of reorientation and decentralisation within the market structure would occur. This would be furthered by improvements in

'Restrictive law is a poor substitute for restricted trade. We need a natural enemy of monopoly, one whose interest is different. This is provided by co-operatives of either producers or consumers in relation to their members.'
transportation and the growth of larger and more specialised produce units. Moreover, an increase in demand for uniformity of produce offering, along with an increase in the average size of lot required, would accompany direct procurement of fresh produce from the growing point. As a consequence of this, the disposal of variable and small lots, and lots of odd size, grade and colour, would become increasingly difficult.

Since one method of marketing could not be economically exclusive, a flexible pattern, one which best serves grower and consumer interests, would be required. Overseas trends and domestic produce processing trends indicate that the growers' direct liaison with multiple retailers does render necessary their association into groups sufficiently powerful to negotiate on an equal footing with monolithic retail trading organisations. This could be achieved through co-operative bargaining associations and marketing co-operatives with marketing agreements, market orders and marketing quotas. Thus the development of group marketing associations in New Zealand would be a means of countervailance against those monopoly forms present and future.

A co-operative marketing association can be defined in general terms as "an association" of growers who agree to function co-ordinately with respect to their joint activity. By so doing, the aggregate economic power gained through the combining of individual economic powers may be many times that of the individual growers summed. This and the widening of grower operations to incorporate distribution as well as production should increase the proportionate returns to individual grower participants.

208. W.W. TONGUE. "Competition in the affluent Society". Journal of Farm Economics, May 1965, p. 441. "The pressure for consistent quality had led to the formation of direct relationships between sellers and producers which have bypassed the historical terminal markets".

Although, as individuals, growers tend to have few aspirations in this direction, as a joint exercise this extension becomes both feasible and possible. The channelling of produce from many growers through a single agency would reduce the degree of inequality of inter-industry bargaining power. Further, the growing industry would be consolidated, as a pooling of activities would facilitate the improvement of present marketing methods and bring about the inception of more efficient methods. Market information, such as planting records, production estimates and price realisations would complement the improvement of produce grading, standardisation, and the safe-guarding of the interests of both growers and buyers.

The co-operative visualised could operate a warehouse-cum-packhouse, or collate supplies, subject to stringent quality and grading standards from its various members, to fill orders. Depending on the nature of its operations, it might be multi-product or mono-product (e.g. the Tomato Co-operative operating in Nelson). It is felt that the grouping of growers into mono-product trading units would be a feasible genesis and that the developments from their inception would be most likely to lead to an improvement in the growers' market status. However, as has been shown, the existence of a co-operative movement does not in itself guarantee the exercise of countervailing power. Therefore it must command sufficient support to influence the market and insulate its operations from unorganised growers.

Thus, for a co-operative bargaining association to be successful, it must have:

1. Effective control over supply.
2. A competitive offering.
3. An effective means of transmitting market information to its members.
Ways by which each of these requirements could be effectively realised are now suggested.

5.8.1 Effective Control Over Supply.

It must be appreciated that in order to realise a worthwhile improvement on the present situation, rigid membership conditions would be essential. Control over supply must be such as to preclude grower default, for it has been seen that the major problem associated with the growth of co-operative movements has appeared to be that of members either leaving the association or having divided loyalties (as between the co-operative and open market). If the co-operative is to operate successfully as a marketing agency and contribute toward more orderly marketing, it must be assured of a reasonably steady supply of produce which is of consistent quality.

Grower Contracts.

One way of accomplishing this would involve growers contracting to supply for a long period of time e.g. for ten years with a break every fourth year to allow selling on the open market if desired. The supply would thus be guaranteed, whether the member marketed his whole crop or a portion of it through the Co-operative Group. In this way the uncertainty and arbitrary character of ad hoc executive decisions would be avoided. Moreover, contracting would enforce discipline over quality of production and timing of production.

The Group (also called the Co-operative and Co-operative Group) would co-ordinate grower supplies with market demand through the filling of contracts from retailers and/or wholesale merchants. Its executive would be required to have an advance knowledge of supplies coming forward. The large buyer would therefore be attracted as it would be to his advantage to arrange long term contracts with the Group since the
advance knowledge of supplies would be invaluable to him in his planning of retail merchandising operations.

5.8.2 Competitive Offering.

Unless there is an orientation to market demands, regardless of how beneficial a contract might appear to be or how adequate the potential sales volume of the Group, it is unlikely that supernormal prices would be realised for any grade of produce offering. Growers' returns cannot be improved through the upgrading of mediocre offerings and grading is effective only when inferior produce is removed from otherwise "first" or "fancy" offering. Therefore adherence to stipulated grading standards would be essential in order to establish confidence in those grades and as a consequence, the Group's brand. Thus, if the Co-operative's offering were differentiated (in presentation, quality and grading), above the offerings of unorganised growers, buyers would be prepared to purchase and when necessary, at premium prices.

The profits in Group marketing obviously depend upon good production on the market garden or orchard - (in itself a selective measure for membership). Whilst in the short run, this would tend to increase the growers' marketing costs more than it would increase returns, in the long run (as confidence is established), it would tend to cause a contraction in the growing community, such that market prices would rise through a reduction in supplies. This could remove the opportunity for "balance" or "bargain" buying. Finally it could remove much of the excess capacity present in the growing industry, as the ambient conditions to fresh fruit and vegetable growing do not lend themselves to mergers and take-over bids commonplace in secondary industry.

Packhouses.

The Group marketing association would either physically market the supplies of its members through the acquisition and fulfillment
of contracts-to-supply, or it would assume the responsibility for offerings independently marketed under its brand. With the latter suggestion, instead of insisting upon collectivisation and centralisation, the existence of independent and collective packing operations would be accepted, and much duplication of effort avoided.

The advantage of independent operation lies in its simplicity of operations. The "collective operator" would have to buy his marketing services, otherwise covered by his 10% commission to wholesale. Furthermore, many growers have large amounts of capital invested in their crops. These "sunk" costs, where of sufficient size, would deter many growers from collective grower packhouse operations. Once such an undertaking was commenced, the associated costs of administration and of capital investment external to the growers' production unit, would be introduced. Therefore, the grower would have to equate the opportunity cost of delegating marketing and distributing functions to another organisation, with what he would save. It would be a question of whether he could use the capital involved in marketing to better effect in production.

Notwithstanding, where there is a contiguity of growers, the proposed scale of operations and the produce involved, would make collective packhouse operations an economic proposition. This would apply particularly where those commodities requiring little capital investment in grading and packing facilities (e.g. potatoes, onions and carrots) were concerned. Thus, if eight carrot growers in close proximity with, say, a total of 200 acres, were to share marketing operations, substantial benefits could accrue, especially if the same second crop were grown by each.

Grower Identity.

Growers would have to be prepared to relinquish some of their independence of purpose in order to acquire any semblence of bargaining
power in the marketing of their product. They would become "an organisation of sovereign economic units". 210

Where independent grower-packers sold under the Groups' brand, they would do so in much the same way as woollen garment manufacturers use the woolmark of the International Wool Secretariat. Therefore, the grower's identity need not be lost if he placed his label, along with that of the Group, on his produce. In doing this though, he would have to fulfil the Group's grading requirements, since it has its own interests to look after, in the creating of a favourable image and maintenance of goodwill. Accordingly, a guarantee would be given by the grower to replace faulty produce or to accept a lowered price, when circumstances warranted.

Department of Agriculture horticultural officers could play an important role here as independent arbitrators, in the policing of these grades, where the buyer requires satisfaction, as to price for quality, and invokes his right of redress.

Market Orders.

Co-operative pack-house operations need not eventuate if a condition for Group membership were the adherence to what might be termed "market orders". If compulsory grading were to improve the grower's bargaining position, the grades imposed at the farm gate would have to be utilized at all subsequent stages in the distribution process. Co-operation would commence after harvest and packing, Group marketing beginning at the farm gate. Compulsory quotation of grade in this way would facilitate some control over supplies through preventing the sale of lower grade items. Not 210.

I.V. EMELIANOFF. "Economic Theory of Co-operation". Washington D.C. 194 p.249. Which Phillips (op.cit.p.76) illustrates as being two concentric circles, and calls "The Co-operative Structure". The radials of these dissect the two circles into sectors, describing in so doing the importance of each Grower member in the co-operative. The inner circle describes what is called the 'Joint Plant', whilst the disparity in the circumferences of the two circles reflects the extent to which operations are co-ordinated or the loss of individual sovereignty.
only would these grade specifications regulate the total supply, but the successful operation of market orders would enhance grower and buyer knowledge of what is being traded. Under such a system, with contracts between individual and/or "grouped" sellers, and individual buyers, a "base-price-quotation" could be invoked using the wholesale market price. This price would be subject to a differential, when consideration were given to such variables as quantity discounts, quality-premiums and location.

5.8.3 **Marketing Information.**

Market Intelligence concerning current and future supplies, demand conditions, and prices realised elsewhere, would be another responsibility of the Group. The mutual sharing of knowledge and dissemination of market information could well result in a general upgrading of productive practices, for as the marketing co-operative would be, in essence, the Group's marketing agency, market information concerning supply and demand conditions, would have to be effectively interchanged between the Co-operative and its members. Through its direct contact with commercial and consumer markets, interpretation by the co-operative, of demand changes and trends would be possible. This would determine alternative prices paid for various qualities and quantities. Therefore, as price and output cannot be determined independently, (since pricing moves supply into consumption), the co-operative could influence production.

The keeping of market intelligence records by each Group, and the transmission of grade, quantity, quality and price realisation details to members, would be furthered through a district association of such Groups (multi or mono-product in character). It logically follows then, that rationalisation of marketing on a national scale would be plausible. The collation of supply forecasts along with consumption statistics and their subsequent reconciliation would be essential, especially where prices were written into forward contracts. Moreover, adequate knowledge
of the market demand situation on a district and national basis, as well as on a Group front, would vitiate much of the discrimination in price practised by "quasi" monopsonistic-buyers in the market structure.

Finally, grower maintenance of cost records would be encouraged. This information would enable intelligent estimates to be made if "cost-plus" contracts were entered into, besides being essential for "scientific" management of production.

5.8.4 Price Negotiations.

The Co-operative would act as the growers' sales agency. Produce would be sold under a brand name and returns made to the grower in proportion to his contribution. Consideration would be expected to be given to the variables: wholesale price realisations, the cost of production, the current supply situation and the quantity contracted or required.

However, as external contracts would involve no "firm-price" clauses, growers feel that the risk carried by them would be increased, as a commitment to one buyer or group of buyers would prevent exploitation of favourable conditions on the open market. In actual fact, the risk carried by the grower (and group) would be very small relative to that carried at auction, as most retailers and wholesaler merchants would be anxious to maintain goodwill. Accordingly, avoidance of the major percentage of risk could be accomplished through a "cost-plus" or "cost-plus-cum market-plus" form of contract, with the variable of open market price introduced and employed when necessary. This type of contract would insulate both grower and buyer against adverse price movements. Furthermore the grower would have a guaranteed outlet and the knowledge that

211. The "plus" contract would mean a return for continuity of supply, consistent quality levels and bulk quantities.
receipts over the long term would at least equal if not exceed open market returns. Moreover, on a Group basis, the risk would be distributed across all contracting members as well as being re-allocated between the Group and the buyer(s). On the other hand, the buyer is assured of supplies purchased at average market prices. Returns to growers under this system could be on a pooling basis, determined by percentage contribution to the order, by the grades, size and quality characteristic of each offering. The system used, would depend upon whether the grower supplied all of his crop or a proportion of it.

5.8.5 The Long Term Trend.

The likelihood of such developments as co-operative group marketing and collective packhouse operations taking place overnight as it were, is highly improbable. It would be a long term trend even if adequate assistance were given by the Department of Agriculture via legislation and policing of market orders.

Isolated groups of growers would probably initially combine for marketing (say six potato growers with a total of 150 acres), and then vertically integrate into production. Increased membership and numbers of these groups could lead to a district bargaining association, through horizontal integration of operations. Thus, as Group trading became more common, contracts would be more widely used. Moreover, if these were based on sound judgment, internal contracts would introduce greater unity of purpose into the Group. Where external contracts were concerned, growers would be able to take advantage of their inherent capacity

212. PHILLIPS. op.cit. 'The opportunity to pool uncertainties within the group of participating entrepreneurs is another source of increased stability of profits over time to each firm.' - horizontal and lateral diversification would give further stability.

213. A practice of informal co-operation exists and is growing in the major fresh produce producing areas of New Zealand. This takes the form of inter-grower liaison as to prices for produce, and consignment to market, and is most prevalent for those commodities which can be stored, for example, potatoes, onions and carrots.
for joint action.

The development of district bargaining associations in New Zealand would also be aided by the fact that fresh fruit and vegetables are fairly concentrated into several major areas of production. Such an institution could finally be concerned with the negotiation of price and associated terms of trade inherent in the sale of produce in one main centre of consumption. The chairman of each Group could make up the executive of these associations. This would lead to a national executive, comprised of delegates from the respective district associations.

A possible counter to this development in the growing industry, could come from wholesalers, who would expand their role as brokers (i.e. the negotiation and filling of orders placed by retailers). A commission would be charged for this service and produce would be shipped direct from farm gate to retail store. The domination of the wholesale channel by a small number of companies, and the use of sales staff as 'commercial travellers', would facilitate competitive activity of this nature, because wholesalers could for these two reasons acquaint themselves with the probable short and long term supply situations. An extension of this activity to take the place of the proposed co-operative grouping of growers is considered unlikely and unwise. Although the distribution process would be shortened, greater market power would be placed with this trading sector. Moreover, this would prevent the required direct contact between grower and supermarket buyer, and the commission cost which would be better placed between grower and retailer would still be present.

5.9 Conclusion.

This chapter has shown the weak bargaining position which the grower currently possesses in the sale of his product, and describes the advantages to growers from sales made direct to supermarket outlets.
One way that growers could improve their bargaining position is discussed, and it is felt that present advantages plus developments which would probably arise from increased sales through this channel would provide the incentive to follow such a course of action.
CONCLUSION

From the foregoing dissertation it is obvious that supermarket sales of fresh produce will continue to increase, but that the benefits which could accrue to the grower and consumer will be limited by the Charter held by Fruit Distributors Ltd.

It has been proved that the supermarket possesses the ability to impose margins lower than those of the greengrocer on an offering of equivalent quality and approximately the same into-store cost. Further, in direct procurement, the supermarket has demonstrated that it can, as well as lowering the retail price of its offerings, raise the price received by the grower for his product, introduce greater stability into his returns, and more accurately reflect to him the demand conditions at retail.

The flexibility incorporated into supermarket pricing policy, along with the above features, clearly differentiates the supermarket's sales policy from that of the greengrocer, and is largely responsible for its continuing growth at the latter's expense.

If the benefits to grower and consumer arising from supermarket merchandising practices are to be realised, the tied purchase-to-wholesale arrangements would have to be terminated. In this way, the unwarranted cartel position which the wholesale sector maintains over the market structure for fresh produce would be removed.

Cooperative action by the growing industry is required, if the direct liaison between grower and supermarket is to be further turned to its advantage. If this exercise is not initiated by growers, it could conceivably have its inception at retail, a development which would usurp the present functions of the wholesaler. The continuing increase in size and extent of corporate and affiliated chain operations, makes this feasible as these organisations could independently set up their own produce warehouses in the larger urban areas, with agents in the major growing areas.

Therefore, the adaptation of the supermarket to greengrocery retailing has had a beneficial effect in the New Zealand market structure for this product. Moreover, if it were able to exert something more than its present influence, it would probably bring about overdue changes in the distribution pattern.