

MARKETING INSTITUTIONS  
FOR NEW ZEALAND SHEEPMEATS

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PREFACE

The past two years have witnessed considerable difficulty in the marketing of New Zealand sheepmeats. The marketing system for sheepmeat is currently under close examination.

This paper, written by Dr A.C. Zwart, Senior Lecturer in the Department of Agricultural Economics and Marketing at the College, makes a special input to this examination. The point is well made in the paper that the debate so far has centred on the type of marketing institutions required (central control versus free enterprise) rather than on how best to carry out the required marketing functions. In concentrating on marketing functions, Dr Zwart draws out some important principles for future sheepmeat marketing systems, rather than arguing for central control or free enterprise per se.

P.D. Chudleigh  
Director

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## SUMMARY

This paper has been prepared in recognition of the fact that there is little available information, or research about the most suitable form of marketing institution, which might lead to the development of an appropriate marketing strategy for the New Zealand meat industry. Although there has been considerable debate on this issue in the past decade, many responses have been conditioned by political views, or individual roles within the industry, and this has led to a polarisation of views. Rather than discussing the functions which an institution might perform, or the essential elements of a marketing strategy, views have centred around preferences for "central control" or "free enterprise".

A more general approach is developed in this paper, by firstly analysing the difficulties which currently face the industry, and then discussing the primary functions which a marketing institution might be expected to perform. It is important to distinguish between apparent or perceived problems such as instability, and the fundamental causes of such problems. Whilst it is tempting to suggest that industry problems can be overcome simply by increasing the degree of central control, it is realised that creation of this type of intervention can create further costs and difficulties in the future. It is also important to recognise that the so-called "free enterprise" system which has been in operation for many years is not necessarily an ideal form of competitive structure.

From the general discussion of problems and functions of marketing institutions, and how they are related to the characteristics of the New Zealand meat industry, two alternative proposals are discussed in some detail. These proposals are suggested as examples of industry structures which utilise the advantages of more effective competition, while at the same time allowing for more centralised control from the Meat Producers Board. The first of these proposals which is discussed in the most depth, utilises a competitive market to establish prices for carcass meat in New Zealand. The second proposal is essentially the same, except the competitive establishment of prices is replaced by prices determined by the Meat Board.

The essential elements of both of these proposals include the following points:

- (1) The retention of competitive elements wherever possible within the processing and marketing sectors of the meat industry.
- (2) The establishment of base prices for carcass meat in New Zealand and relatively free access by all exporters to that meat. This is seen to be necessary to ensure that meat exporters are placed in an environment which will be conducive to maximum use of further processing and sophisticated marketing techniques.
- (3) The Meat Board is seen to retain control over the setting of the price levels and possibly differentials between grades within New Zealand.
- (4) The Meat Board would also retain control of stocks of meat which are necessary to maintain price levels, and also to become the major contractor in single buyer, and possibly development markets.



In the development of appropriate marketing institutions, the Government's role is seen to be that of ensuring that the solution reached is one which will serve the best long term interests of the industry. A tendency is noted for solutions of this nature to become compromises which protect the interests of those organisations which currently exist within the industry. It is the Government's role to ensure that roles within the industry are clearly defined, and that means are set up by which the efficiency of the industry can be continuously monitored.

## INTRODUCTION

Over the past few years disruptions in the marketing of New Zealand sheepmeats have led to a continued discussion of alternative institutions which could be developed to control and co-ordinate the marketing of these products. Although the perceived problems of unstable prices, low returns, and increasing levels of stocks have been all too obvious, there has been relatively little investigation into the true causes of such problems. There has been continued debate over the most suitable form of marketing institution to overcome these problems and there has also been relatively little research into the most desirable structure or functions which should be performed by such an institution. At times the debate has been reduced to the level of comparing single sellers with free enterprise without any attempt to outline the mechanisms whereby these institutions might overcome the problems. While this general debate has continued, the attempts to develop operational institutions to overcome the problems would not appear to have been particularly successful. The various solutions proposed over the period have clearly reflected a compromise between the various parties involved. It would appear that the Meat Board has acted to maintain price levels in the farmer's interests, but their lack of personnel and facilities for the marketing of meat has led to a compromise in ensuring the profitability of export marketing firms at least in the short run.

From an economic point of view, it would be surprising if compromises of this nature were in the best long run national interest and for this reason, there is an urgent need to consider the wider economic implications of alternative institutions.

Unfortunately, there is a lack of research in this area and the time available does not allow for a detailed study of the participants and their role in the New Zealand meat industry.

This study does, however, attempt to discuss the problems and proposed solutions from as wide a perspective as is possible. In the first section of this paper, the problems facing the industry are discussed in some depth in order to distinguish between the common "perceptions" of the problems, and the fundamental causes and factors which could lead to such problems. The second section outlines the major functions which are commonly expected to be performed by marketing institutions and these are linked to the characteristics of the New Zealand meat industry. Because of the tendency to debate "institutions" rather than "functions" which are expected from a marketing system, the wide range of industry structures which could overcome the industry problems are often not appreciated. The final sections of this paper present two alternative industry structures which provide an example of how problems can be faced by utilising elements of both competition and central control. The paper concludes with a brief discussion of the government's role in the development of a meat marketing system.

### 1. THE NATURE OF THE PROBLEMS

The development and understanding of the problems currently facing the meat industry are largely developed from an earlier study, based on a survey of a wide range of meat exporting companies [Ross, Sheppard and Zwart (1982)]. This section briefly states those problems and provides

a brief economic analysis of each in an attempt to understand causes of these perceived problems. It should be noted that there can often be wide discrepancies between the apparent or perceived problem and the underlying cause. Naturally, this has major implications when providing solutions to problems.

(1) The unstable nature of the United Kingdom market. Although closely inter-related with other problems, this is probably one of the most widely discussed causes of problems in our present meat marketing system. It would appear that one of the major concerns in the industry has been an increasing instability in the prices received from the United Kingdom market. Because of the traditional importance of these prices in setting both schedule payments in New Zealand and prices in other markets, this has become a growing concern to the entire industry. Suggested causes of this problem include the increasing use of larger ships, the selling ex-docks, the system of pool selling and the general diminishing size of the United Kingdom market.

There has also been considerable discussion about the prevalence of what has become known as "weak selling". This practice has generally been attributed to the fact that there are considered to be too many exporters operating in the United Kingdom market. This term has no meaning in an economic sense, but in commercial practice it would appear to be a situation where individual sellers undercut one another in order to make a sale. From discussions in the industry it is generally felt that this practice is caused solely by the presence of too many sellers in the market and that the limiting of these sellers would remove the problem to a large extent. In economic terms, this argument has little meaning as there is no guarantee that merely removing the sellers from the market would limit any effective competition. It is interesting to note that of the thirty-three sellers active in the United Kingdom market, five have sales shares totalling 93% (Cullwick, 1980). The only benefit which would occur from limiting exporters would be if those exporters were to become collusive in their pricing behaviour. Of course it should be realised that if they are able to collude over pricing of the final product, it is also possible for them to collude over the pricing of the marketing services which they provide, which may not be in the best interest in the long run.

In searching for alternative causes of this apparent problem it is possible that the practice of pool selling may have been more important than previously recognised. Under the pooling system, which has increased rapidly over the past ten years, the exporter who makes the selling decision in the U.K. is effectively only a commission agent of the individual producer. In these cases the product is effectively consigned to an exporter by the individual farmer at time of slaughter and the exporter's objective is simply to maximise the revenue from the sale of that product. Because the exporter's costs relate to services rendered such as killing, processing, transport and handling, it is likely to be in the exporter's best interests to carry that product as far down the marketing chain as possible, but at the end point he is not responsible for the price of the product. It is possible that this system of selling could very readily lead to a situation where exporters undercut each other in order to dispose of the product. It is interesting to speculate how such a practice has grown over the years when it is effectively equivalent to consignment selling which has been condemned for many years.

It is commonly argued that price pooling was not the major cause of this instability because not all of the product was in fact shipped in pools, and some product purchased on schedule and owned by exporting companies was also being sold on the same market. Whilst this would appear to be reasonable argument, it must be noted that schedule price itself is not a true market price, but a reflection of what exporters expect to receive for future shipments, and this price is based to some extent on current U.K. prices. Thus, in a situation where weak selling was occurring in the pools, there would be considerable pressure to reduce schedule prices in future periods. It is perhaps this type of behaviour which meant that for a number of years there was only a relatively small margin between returns which producers could receive from selling on schedule and exporting on pools. Although the ability to use the open door policy and sell through pools was seen by farmers as being their protection against exploitive pricing on the schedule, this was almost certainly not the case. From the above reasoning it can be seen that the exporters' margins for marketing services were assured regardless of whether the farmer shipped through pool or sold on schedule. This was probably made even easier by the fact that many of the charges for these marketing services were not made apparent in schedule pricing.

This alternative explanation of the cause of unstable United Kingdom prices and weak selling suggests that perhaps the problems lie not in the number of exporters, but in the manner in which the product was sold, and the manner in which the product is priced to the producer in New Zealand.

(2) Instability caused by large contractual purchases. With the increased diversification away from the United Kingdom market, there has been a dramatic increase over the past years in the use of large contracts with purchasing agents from particular countries. It has long been argued that the size of these contracts and their potential impact on prices has made it important to consider ways in which these purchases can be controlled so that all producers may share in the benefits of the returns from these contracts without creating excessive instability.

The presence of this type of contract has led to the creation of a wide variety of arrangements between private companies and the Meat Board to facilitate trading with the individual nations concerned. Although these arrangements have been satisfactory in many cases, they have still not removed the impact of these contracts on the market. It was well recognised that during 1982 and 1983 seasons, the absence or presence of Iranian contracts had a considerable effect on prices in other markets. Rather than finding ways of coping with the requirements of these importers it may be worthwhile to search for alternative procedures which might limit these effects. For example, it may be better to guide these importers towards purchasing from a competitive market on a more continuous basis. In this case the implications of the purchases are revealed immediately, rather than being a topic for discussion in contract negotiations.

It is generally considered that contract negotiations where a single buyer is faced by a single seller are in our best interest. This may not always be the case. For example, consider the alternative

situations. In the case of a rising market it would be expected that negotiators would argue that the importer should pay a price higher than ruling world prices because of the effects that their substantial purchases will have on the price. In this situation, negotiators must attempt to estimate the impact that these purchases are likely to have on the price. In an alternative case, such as existed in 1983, where market conditions are generally weak, the situation would be reversed and one would expect that the negotiators would be prepared to accept a price somewhat lower than the existing market price because of the effects which the contractual purchase will have on prices in other markets. It is these different situations which can lead to extreme fluctuations in prices, and the outcome depends on the individual negotiating abilities and the current market situation. It would almost certainly be in the nation's best long term interests if these type of purchases could be converted into smaller and more continuous purchases which may be made at times when market conditions are most appropriate.

(3) Increasing level of vertical integration in processing and marketing. Previous studies have noted the movement towards increased vertical integration in the processing and marketing of New Zealand meat. This may not necessarily be a cause of concern, as in many industries vertical integration can lead to increased efficiencies and economies, but it is important to consider the particular causes of this movement. The vertical integration appears to have come from both directions, as many companies previously involved in only the marketing of meat have become involved in processing, and similarly, companies previously involved only in processing have seen fit to expand their operations to incorporate marketing. Many of the marketing companies claim that they have become involved in processing to ensure suitable access to stock. In theory, this should not have been a problem as the "open door" policy was intended to ensure that any producer could have his stock killed and supplied to the exporter of his choice, but there did appear to be problems arising from this arrangement. Problems in ensuring that stock could be killed were aggravated by pressure on killing facilities caused by drought conditions and strikes at individual processing plants. For these reasons many producers felt that their interests could be better served by selling stock through larger processing companies with their own slaughter facilities. This may not have presented any major problem if individual marketing companies were able to purchase carcass meat from the processing companies themselves, but this option was limited by the integration of many purely processing companies into the marketing of meat. Although the exact causes of this movement are unclear, it is possible that the protection offered by relatively fixed marketing charges and commissions made this an attractive option for these companies. In general, there appears to have been a very protective attitude amongst exporters towards maintaining control over supplies of product.

In hindsight, it would appear that there was considerable degree of competition between exporters and exporter processors as to who would control the marketing of the stock on the producers' behalf. These observations further support the idea that many meat exporters were not accepting a significant part of the financial risk involved in the marketing of the stock which may also go part way to explaining the attitude of many firms towards market development.

(4) The lack of market development. Over the past decade there has been repeated discussion of the need to develop a more sophisticated approach to the marketing of New Zealand meat products. Reports such as those by Silcock and Sheppard (1981) and Beckman and Bourke (1980) have discussed the benefits to a nation and individual firms of an increased expansion in further processing, but have concluded that there has not been a very rapid uptake of these ideas. Although there has been a rapid diversification away from the United Kingdom market, much of this development has been through larger contractual arrangements such as those discussed previously. Such developments are not as attractive as the securing of more steady markets for more sophisticated and possibly higher valued product.

It has been argued by some exporters that this lack of development is attributable to the fact that market development expenditures cannot be recouped by an individual firm without other firms acquiring a share of that particular market. Theoretically one would expect that a firm might retain control over a particular market through the development of specialised products and goodwill associated with marketing services.

One major problem appears to have been the lack of access to supplies discussed above. Whilst it may have been possible for smaller companies to initiate markets in particular countries any growth in demand was likely to cause problems through that company's lack of access to meat supplies. With the vertically integrated system described previously any growth in demand would have to be met by a firm's moving into processing or alternatively making arrangements with further producers to sell stock to their particular company. In fact, the firm which had developed the market would be vulnerable to having the market taken away by a company which had access to supplies of meat. In a more flexible or competitive system this firm should have been able to have purchased access to more meat or alternatively to form a merger which would make use of the goodwill and possibly the brand name which had been developed.

The lack of market development has been one of the major reasons why many producers have been concerned about the current industry structure. Before it can be said that a competitive marketing system cannot cope with the problem of market development, it is necessary to ensure that firms are competing in the most appropriate manner. Many commentators on the current marketing problems have presumed that the existence of free enterprise in the marketing system for meat products had led to a suitable form of competitive behavior.

(5) The lack of a planning environment. Over the past two years a relatively new problem has emerged and is becoming increasingly important. During this period there has been continued discussion and re-negotiation of the basis for conducting New Zealand's trade in meat. To the author's knowledge there have been at least three proposals which were at the time stated as being solutions to the meat industry problems. At best these proposals have been mere compromises which have been arrived at usually in great haste. While this may be a necessary part of the evolution towards a superior system, it has created considerable uncertainty and a complete lack of a suitable environment for individual firms to plan. In economic terms the uncertainty of the market place has been replaced by the uncertainty of the environment in which the producers must operate. It is totally

unrealistic to expect firms or organisations to invest time and financial resources in market, or further processing development, when they are uncertain of the future in which they are likely to be trading. Instead, as these various schemes have evolved individual institutions have sought to maximise or protect their short term returns.

The particular problem areas discussed above are certainly not an exhaustive list of the problems which a marketing system has faced in the past, or is likely to face in the future, but the list does show the highly inter-related nature of many of these problems. This fact becomes more obvious when one looks beyond the simple perceived problem and considers why that problem might arise. To many people, the observation of a problem in something like a marketing system leads to the conclusion that increased control over the behaviour of the individual operators in the marketing system can control that problem.

It is an obvious temptation to state that market instability for example, can be controlled through the use of price guidelines. Unfortunately however, the consequences of that control or regulation is often not fully appreciated, nor is it often appreciated that the creation of more effective competition can lead to the solution of many of the problems. In order that some of these relationships might be better understood, the following section outlines some of the major functions which we would expect to see performed in a system for marketing New Zealand meat products, and discusses the nature of the institutions which might carry out such functions.

## 2. CHARACTERISTICS OF MARKETING SYSTEM AND EXPORT MARKETING INSTITUTIONS

The form of the marketing system which is best suited to a particular industry is conditioned by the characteristics of that product and the functions which the market must perform. The characteristics of the product include such factors as the production methods used, the storability of the product, the responsiveness and number of markets, as well as the external policies which affect that product.

The functions which markets are expected to perform can vary markedly. At its simplest we would expect the market system for a product to determine an appropriate product flow between producers and consumers, and also, to determine a set or level of prices which would allow this exchange to take place. Many economists would argue that a completely free and unrestricted market where producers and consumers are allowed to interact amongst themselves would fulfil these functions, but it must also be recognised that there are relatively few completely free market systems operating in the world. Whether it is a case of true market failure or merely one of a market generating undesirable characteristics, there are further functions which people have come to expect markets to perform and which often result in intervention. For example, it is commonly expected that market prices should be stable and that producers' incomes should be at a reasonable level, even though it can be argued that these functions can be performed by a simple market system where storage or risk spreading schemes are used to stabilise prices and incomes and free entry and exit of firms to maintain incomes to producers.

The degree of intervention in agricultural markets around the world indicates that governments do not consider that these functions can be performed satisfactorily by a purely free market system. This does not imply that competitive elements of such markets do not remain, and particular agricultural markets are probably some of the most competitive in the world. The form of any intervention varies considerably, and includes both macroeconomic and agricultural policy administered by governments.

This discussion is limited to considering the forms of intervention which relate to controlling markets through the creation of market institutions. Although these institutions are usually operated as autonomous bodies, it must be recognised that they are often created by government legislation and in many cases it is possible that the government views the creation of such institutions as a means of granting protection to that industry. In such a situation, the government can grant to producers the right to create a monopoly institution which might be used to support producers at the expense of local or international consumers. While the former is not uncommon in New Zealand, the latter is generally considered to be a more acceptable situation and is the basis of the development of single selling export marketing institutions in New Zealand.

In an attempt to try to identify the relationships and trade-offs which can exist between market functions, market institutions, and the product characteristics, it is instructive to consider some of the major functions which might be expected to be performed in a marketing system for New Zealand sheepmeats.

(1) Stabilisation activities. As noted previously, intervention in order to stabilise markets is probably one of the most common forms of intervention which exists and can be performed by a wide range of institutions. The need for such intervention is largely determined by the characteristics of the product, and include delayed supply response, inelastic demand, perishability of the product, and possibly even the large number of producers and consumers in the market which limit the information flows. These characteristics are often sufficient to generate high levels of instability in agricultural markets.

There are two fundamental methods of stabilising prices in these markets. Product storage is probably the most common method of stabilising prices between periods. The function of purchasing product in one period for resale in later periods is often performed in purely competitive markets by traders who attempt to profit from price changes between periods. This activity however, is often not viewed as sufficient to provide the required degree of stability, and product purchase and resale is often undertaken by a central organisation. The reasoning for aggregate intervention rather than individual must lie in the fact that society sees the benefits of this activity to be greater than those which can be attached to speculative profits.

This function can be performed by a wide variety of institutions and whilst it does require the organisation to be involved in ownership of the product it does not require complete ownership of all the product available. What it does require however, is a well designed pricing system upon which the purchasing and resale activities can be based. An alternative



method of operating effective storage stabilisation without involving the creation of specialised trading facilities might be to simply offer a subsidy to private operators to perform this function. The subsidy offered should provide a measure of the difference between the private valuation of the benefits from stock holding and the value which society attaches to this activity.

The second major form of stabilisation activity is via price smoothing or, alternatively, income smoothing. It must be noted that these two concepts are not identical, but are obviously related, and particular schemes may have different objectives. Again, it would normally be assumed that a private system could perform this function by farmers investing surplus income in the periods of higher prices in order to boost income in less favourable periods. The great pressure for centralised intervention in price smoothing schemes must again arise from the fact that society views the spin-off effects of these price fluctuations as impinging on other areas of the economy. A wide variety of these schemes have been used in the New Zealand meat sector with the combination of government and Meat Board control. The only resource requirement for such activity is availability of finance. Conceptually, the schemes are merely transferring price risk from individual producers to a central organisation. Whilst in theory such schemes could be run on a costless basis, it is important to identify where elements of subsidisation may also become involved. As in the case for storage stabilisation, there is also an important requirement to identify well-defined markets upon which this activity can be based.

In general, price stabilisation activity is viewed to be important in the New Zealand meat markets and various versions of price smoothing schemes have been used over the years. In recent years these have become confused by the presence of alternative schemes which involve high degrees of subsidisation. The use of product storage as a stabilisation activity has been limited to attempts by the Meat Mark organisation to stabilise prices in the United Kingdom market. While these attempts appear to have been successful, it is recognised that the United Kingdom is only a relatively small part of the market.

More recent activities of the Meat Board which have led to an accumulation of meat stocks, might also be interpreted as an attempt at stabilisation in order to overcome the instability caused by the uncertainty of large contractual arrangements. Unfortunately, it is very difficult to evaluate the efficiency or expected gains from such behaviour, largely because of the difficulties involved in determining the reasonable level of prices in the long term. One of the great dangers in excessive use of this type of activity, without a clearly defined market base, is that stabilisation activities can very easily become confused with price supporting activities that are trying to maintain long term prices. Failure to realise the danger from this type of behaviour, has in the past led to confusion in many agricultural markets.

(2) Market signals to producers. Because of the large number of producers involved in meat production, it is extremely important that clearly defined information about what and when to produce is provided to producers. In economic theory of course, it is presumed that in a market of this type, price differentials and changes are sufficient to indicate to

producers how production should change, but there is often a large degree of intervention in such activities, which can occur by either altering the market price signals, or by directly dictating the quantity of output to be produced.

In a free market situation, price signals offered to agricultural producers are often perceived to be either excessively unstable or, alternatively inequitable between different classes of producer. The equity considerations are important when market prices vary both over time and between quality levels. The two most common forms of price intervention involve the pooling of prices over time, or over product qualities, and the practice of price fixing which can affect time or quality differentials.

Price pooling has become a very common feature of many agricultural marketing systems. It is generally seen to provide a more equitable distribution of income to farmers as well as possibly smoothing out short term price fluctuations. These functions can be performed by a wide variety of institutions including privately organised cooperatives. Price fixing on the other hand, is often stated to have the same objectives, but in some situations can have a very different effect. While price pooling is effectively a sharing of risk among individual producers, price fixing usually involves a transference of risk between producers and other participants in the marketing system. This is a very fundamental and important difference which must be recognised when developing a marketing system which involves activity by a number of parties in the marketing chain.

Unfortunately, relatively little is known about the impact that changing market signals have on individual producers. For example, despite the very large amount of discussion which has taken place about the requirements of consumers for New Zealand carcass characteristics, very little use has been made of market signals to attempt to pass this information back to farmers. The recent study by Scobie and Jones (1983) has indicated that while farmers are responsive to these signals, relatively little use has been made of them in the past. It is of some concern that so little information is available in this field, especially as the choice of marketing institutions is very likely to have a profound effect on the manner in which price signals are passed back to farmers. There appear to be real trade-offs involved in this problem; between the equity of sharing product returns between producers who produce different qualities and at different times, and the benefits of attempting to produce a product which is most compatible with consumer requirements. The fact that there has been so much criticism of the lack of this activity under the effective price fixing scheme, which has been used in New Zealand for decades, suggests that it is arguable whether these functions can be performed by a central organisation.

Quality signals usually involve the imposition of some restriction on producers as to the quantity of product which they can produce. This type of restriction is not generally seen to be a part of a competitive enterprise, and is considered to be undesirable by most agricultural producers and many governments. It can however, be a very precise method for passing particular types of signals to producers. As will be discussed later in reference to other market functions, the use of such signals can be associated with specific types of institutions. For example, it has been noted that in recent weeks the New Zealand Dairy Board has been discussing the need for some control over quantities.

In summary, the lack of clear market signals to producers in the New Zealand meat industry has led to some of the problems discussed in the previous section of the paper. Many exporters have argued that the inability to signal to producers that they personally require more produce to service a particular market has led to their loss of that particular market to other exporters. While this may not appear to be a major difficulty since the particular market is still being serviced, it can lead to a general lack of incentive to develop markets, since exporters find that they cannot capture sufficient benefits for themselves. At the same time, the inability of our previous system to reflect true quality signals has often been blamed as an impediment to further market development where specific product characteristics are required.

(3) Responsiveness to consumers and market development. It is generally presumed that an agricultural marketing system will be responsive to changing requirements of consumers and will also lead to the exploitation of opportunities in new markets as they are created. Normally, in a free market situation the interaction of price information between producers and consumers generates this type of activity. Unfortunately, the large number of operators and the lack of contact between the producers and consumers can at times cause considerable problems in markets for agricultural products such as sheepmeats.

In many cases this problem can be overcome by the provision of market information which is usually subsidised. Such subsidised information is presumably provided because the social benefits from the stability created exceed the private benefits of carrying out such research. The grading of agricultural products is a further activity common to agricultural marketing institutions, and is often seen to increase the consumer's choice and to aid the producer by isolating different demands for a particular product. Other forms of intervention which attempt to increase the market responsiveness to consumers and the rate at which markets grow, involve the provision of such activities as promotion and other more sophisticated forms of market management. Generic promotion of agricultural products is now a very common function of agricultural marketing institutions around the world. While such programmes are generally thought to be effective, this effectiveness has often proved difficult to measure. These forms of intervention which are generally seen to be low cost can be provided by a wide range of marketing systems, and are often carried out by the government.

The growth of marketing management as a field of business science has led to increasing discussion of the role of many other alternative techniques in making agricultural markets more responsive to consumer wishes. Whilst it is generally presumed that full use would be made of such approaches for the individual exporting firms, it is also commonly argued that such techniques should be used by centralised marketing institutions. While there are undoubtedly many aspects of market management which are extremely important for agricultural markets, it must be recognised that the body of theory in this field has been developed with particular emphasis on firms operating within a certain type of market environment. In almost all of these cases the fundamental assumption is that the firm involved in marketing is also the firm involved in production. These conditions are not met in the marketing of most agricultural products. Whilst the use of marketing management techniques may be very appropriate in terms of responding to

consumer requirements, the danger in pursuing these through a single institution lies in the fact that the all important linkage between producers and consumers may be broken. This may not be particularly important in cases where the quality or form of the product which the consumer purchases is not fully determined by the producer of the raw product. For example, in the dairy industry this linkage is not particularly important as the marketing channel is able to convert milk into a wide range of products of different quality and standards. With meat production however, this is certainly not the case. As is so frequently acknowledged, the quality of the product is effectively determined by the producer. Whilst various characteristics of the product can be changed through packaging and processing, the fundamental bone and fat content, and the weight of the carcass are determined by the producer. For these reasons, it is imperative that very clear and concise linkage be made so that the appropriate signals are passed back to producers. This can be ensured through the maintenance of a responsive pricing system.

It is important to recognise that the system of pooling or consignment selling which had been increasing in New Zealand over the past few years is a very undesirable system from a market development point of view. This method of selling which had been criticised so much over the years, is almost certainly the least responsive to consumer requirements, as it is simply a case of taking the product to the consumer and realising the price that consumers are prepared to pay, with returns to producers pooled over time and product qualities.

It is commonly asserted, that the formation of producer-controlled marketing organisations is one way that producers can become 'closer' to consumers' needs, but to the individual producer this depends critically on the pricing mechanism developed. For example, if a producer's payment is based on an annual pooled price then he is no better informed than if he were selling on a consignment basis. The presence of a producer controlled organisation is no guarantee that all producers will be better informed about market requirements. This function is dependent on the particular market mechanisms which are developed.

(4) The allocation of product amongst markets. While this function is not independent of the other functions discussed above, the manner in which a marketing system allocates quantities between alternative markets can be extremely important when designing export market institutions. In the discussion of problems in the first section of this paper, the difficulties created by the United Kingdom market were outlined. One of the main points brought out in the discussion was that a considerable amount of this instability was created by the fact that the product was shipped to the market before it had been sold. This was seen to be especially important since prices determined in that market were seen to be affecting prices around the world. In a free market, the quantities to be shipped to different destinations would normally be determined by price linkages between the markets, caused by the ability of market intermediaries or even consumers to transfer the product between markets. With products such as meat, such activities are limited by the ability to ship product between final markets. This is due not only to the distribution of these markets, but also by storage requirements, and other barriers to trade between regions. In a market of this type, it would normally be expected that prices would be related back to a market at the source of the product.

Unfortunately, it is exactly this type of market which has been absent in New Zealand for many years, and has led to some of the problems encountered in New Zealand meat marketing. Because of these problems, it is often felt that there is a major need to carefully control the quantities which are allocated to particular markets. If however, careful base point pricing had been utilised over the years, many of these problems may not have arisen.

Alternative reasons for intervention and controlling market flows relate to the concept of market segmentation. Market segmentation is an economic concept, which basically relies on controlling product flows between sub-markets in which varying sources of demand for the product concerned have differing price responses. Market segmentation can occur both between regions and also over various forms of the product. In some agricultural marketing systems there has been extensive use of this concept. The most common and the most clearly advantageous use occurs where segmentation has been used to allocate output to different products. The most obvious examples of these are the apple and pear marketing system in New Zealand where the product is allocated between local and overseas fresh markets and also processed markets such as juice. Another example is the New Zealand Dairy Board which produces a wide range of different products and has considerable flexibility in altering the flows between the different types. The objective of this segmentation is to maximise revenue through monopolistic control by attempting to equate marginal returns across the different markets. While segmentation over different forms of the product is often regarded as being successful in increasing total producer revenue, the benefit from segmentation of a relatively homogeneous product between alternative markets is more suspect.

The difficulty in increasing revenue by segmenting markets between countries lies in the fact that an exporter such as New Zealand is usually not a monopolist in that particular market. There have been times in the past when this might have been true; for example, in the period when the United Kingdom market was extremely dependent on New Zealand sheepmeats. At the present time however, there is not only competition from domestic production of sheepmeats in most of our markets, but probably more importantly, competition from alternative meats such as poultry and pork which provide very little latitude for any attempt at monopoly pricing. Because of the highly competitive nature of meat consumption in most of the western developed countries where our products are sold, there must be very limited opportunity for New Zealand to exert any market power or to create substantial price differentials between countries.

It is interesting to note that this is a function which the proponents of single marketing institutions claim is very important for an efficient marketing system. It is of some concern that such positions are taken without very careful research into the actual situation in many of these markets. The only information which appears to be available is that presented in Cullwick (1980). In this particular paper the figures would suggest that there is, in fact, quite a strong similarity between prices in different countries, except for some cases which are special contractual arrangements and one case which is obviously a development market. In other cases, however, the major differences between the f.o.b. prices quoted appear to be attributable to the form in which the product is presented. There certainly does not appear to be sufficient evidence to suggest that very different prices are being charged or should be charged

for the same product destined for different countries.

In the case of the exports of New Zealand meat, it would appear that there are very few prospects for any real gain to be made from market segmentation. In the first place, unlike many of the other agricultural products exported from New Zealand, there are only limited opportunities for changing the form of the product in such a way that it would leave original markets undisturbed. The only suggestion which appears to have been made in this area, is the idea of converting surplus meat to meat meal for livestock feed. Whilst this may initially appear a very dramatic change of product form, if the evidence can be presented to show that it is in the best national interest, then it is certainly a viable alternative.

Secondly, the opportunities for segmentation by controlling quantities allocated to particular markets appear to be somewhat more limited. There are some exceptions however. In cases where there are absolute access restrictions such as import quotas it is very important to ensure that that quota quantity is allocated to exporters from New Zealand to allow the exporters to reap the benefits from the quota, rather than have such benefits accrue to the importers in the other country. Other situations may occur where there is an obvious advantage to be gained by exerting monopoly power in particular markets, although particular examples are not immediately obvious, and it must be realised that the cost of such activity is the holding back of product, which must be sold elsewhere. The situation of developing markets is also another case where it may be advantageous for product to be sold at different prices, but this can only be a temporary situation as in the long run, this market must compete with other markets as a destination for the product.

While it is often very attractive to visualise a market allocation system in which very carefully selected quantities are allocated to each market so that optimal prices are charged in every destination for our product, it must be remembered that this takes absolutely no account of the level of supply of the product. In an industrial product, this would not be a problem as production could be carefully tailored to suit the required demand with minimal stock levels, but unfortunately, in agricultural production this is seldom the case and surpluses can very quickly develop. It is exactly this type of problem which has caused the current concern in the meat industry, and the call for limitations on production in the dairy industry.

Even where such limitations are required, there is no reason why the necessary price differences between regions cannot be maintained by means other than the creation of a single selling marketing institution. Whilst that may appear to be the most simple and straight forward solution to many of these problems, it must be recognised that it can also create many difficulties such as imbalances between supply and demand.

(5) Access to innovation, technology and marketing skills. From the survey work carried out by Ross, Sheppard and Zwart (1982) it could be seen that much of the new market development which has been carried out in past years has been initiated by very small firms. In fact, in a highly competitive business situation the seeking out and development of new markets is often the only way in which new firms can become established and

remain viable. This surely provides one of the greatest incentives possible to initiate market developments.

In attempts to design market institutions which meet short term goals such as profit maximisation and stability it is not uncommon to overlook the importance of these longer run functions of marketing institutions. As has already been stated, many people feel that the problems of the marketing of meat can best be served by the creation of single selling institutions which carefully control production and the handling of products within the marketing system. Whilst there may be many advantages in such a proposal from a market management point of view, it must be recognised that this is different from the use of market management in situations where firms compete actively with one another. Although it can be argued that agricultural export institutions must compete with other exporters in other countries, this is not complete competition because they do not compete for inputs, and competing on both output and input markets is the mechanism which ensures efficiency within the complete industry. This is not the case in many agricultural examples, where these institutions become the sole marketing body. Although this situation makes it extremely difficult to measure the efficiency of these organisations there are some studies available. As an example of this, Borrell and Zwart (1982) study the distributional efficiency of the New Zealand Wheat Board which is the sole agency for handling distribution and sale of wheat and flour within New Zealand. Problems caused by the lack of freedom of entry and exit to an industry are often ignored because they are associated with long run rather than short run problems, but unfortunately, the institutions are developed to operate in the long run and are often very inflexible in adapting to these problems.

Even where single marketing institutions are considered to be desirable, it is imperative that competitive elements be retained in the marketing system wherever possible. Individual firms associated with a marketing system are often very quick to point out the benefits of longer term contractual arrangements which may ensure their returns, or at least pass some risk on to other parts of the marketing system. This however, is often not in the nation's best interests, as it leads to lack of free entry and exit and subsequent loss of efficiency and innovation amongst these firms. Examples in the New Zealand meat industry would include the livestock slaughter sector, transportation and any other marketing agencies which could develop.

### 3. MARKETING INSTITUTIONS FOR THE NEW ZEALAND MEAT INDUSTRY

In the past few years many alternative institutions have been proposed and discussed as a means of overcoming many of the problems which are currently faced by the industry. Points of view range from general observations based on political ideas and sweeping generalisations based on superficial comparisons with other industries, to highly detailed proposals which attempt to reach an apparent compromise between the various interest groups. The most important task is to decide on the functions which are required in a marketing system and then to determine how these functions can be obtained in the most efficient and equitable manner. Too often the solutions proposed are based on the merits of a very clearly defined institution such as single sellers, market authorities or the free market system, without searching for alternatives which may utilise the

benefits of these extremes.

The general functions of markets discussed in the previous section of this paper are certainly not an exhaustive and exclusive list of activities which might be expected to occur in a market system, but it is hoped that they are the main functions which relate to the problems presented. This section of the paper attempts to demonstrate how carefully designed marketing institutions may provide solutions to many of the problems without leading to far reaching changes in the structure of the industry. The first alternative presented is that developed in the study by Ross, Sheppard and Zwart (1982). In comparison to many of the alternative plans which were put forward at that time, the somewhat detailed nature of the proposal caused some concern. This concern appears to focus on the problems of how a national auction system could work. This aspect of the proposal was not meant to be the major element of the plan. The most important concept was seen to be that of establishing a national export price in New Zealand which would ensure equal access for exporters to the product at a price which was seen to be desirable to the producers. It was also seen to be important to design a system in which private exporters could operate alongside a Meat Board which was involved in the buying and selling of meat. The essence of such a system is that it allows for a continued comparison of the efficiency of both large controlled sellers and competitive marketing firms.

In order to demonstrate an alternative way in which these objectives could be obtained, a second proposal is contained in this study. This alternative removes any complications which people may feel would arise from the development of a national auction system. Instead the price determining mechanism could be replaced by a price established by the Meat Producers Board. This system has some similarities to that which is currently used under the Meat Board's buy back scheme except that it has a larger role for private firms. Each of these alternatives are discussed separately in the following subsections.

#### Option A. A National Carcass Market

It is possible for many of the difficulties discussed in the first section of this paper to be overcome without the complete removal of competitive marketing. The alternative suggested here is that the export pricing of New Zealand meat take place within New Zealand. The most logical means by which this can take place is the development of a market for trading in carcass meat within the country. The major change involved in such a system would be the requirement that all carcasses be offered for sale within New Zealand after slaughter, and that all export marketing companies have access to this meat.

It would be envisaged that normally producers would own the stock until it has been killed and offered for sale on the auction system. The producer would then deduct from the auction price a killing fee which would be paid to the company who killed the stock. In effect, the farmer or owner of the stock at time of slaughter, would enter into a direct transaction with the export marketing company. This does not imply that the existing processing companies would only be limited to killing activities, as they could equally well be represented as purchasers in the market.



The mechanics of such a system could possibly depend on a daily computerised market which would incorporate all meat works within New Zealand. Such systems are currently used in many countries overseas, especially for live animal sales. With an efficient grading system such as that which exists in New Zealand, trading in carcass meat would be even more efficient. The current grading system provides an adequate description of individual carcasses for exporters to be able to purchase meat at any works in the country without actually seeing the meat involved. Although it is not a large market, these transactions currently take place between some exporters and major processing companies. What is envisaged is a more flexible and competitive market of this type which would allow the daily determination of competitive prices for each individual grade of meat produced in New Zealand. Exporters would conduct their marketing operations in much the same manner as they do at present, but there would be less opportunities for individual companies to become involved in weak selling. If all meat has been purchased on a competitive market in New Zealand, the price risk involved in weak selling is placed directly on the individual exporters, and not on the producers as it can be under a pooling system.

The major implication of these changes would be that firms whose primary interest is in the marketing of meat would have access to a larger quantity of meat, and companies who wish to specialise in killing only, would be able to ensure that their meat is sold to the highest bidder and most efficient exporter. At the same time, companies which are currently involved in both processing and marketing functions and who feel that there are economies in this situation, would be able to continue to operate, but with the added advantage of greater flexibility in terms of the quantity of meat which they would wish to market themselves.

Although the changes suggested are relatively straightforward, careful consideration would show that it could have considerable impact on pricing performance and market behaviour within the meat market. The following points discuss some of the major advantages of this proposal and at the same time clarify some of the specific mechanisms which might be involved.

(1) Probably the major advantage of such a scheme is that there would be increased access by all licensed meat exporters to meat produced in New Zealand. This is of considerable importance, because in the past development of successful meat exporting companies has largely been in the direction of increased facilities for acquiring additional livestock. This change, which has been caused by the firms inability to acquire product for marketing, has led to an increased level of vertical integration within these firms, which is possibly undesirable from a national viewpoint. The increased access to a wide range of different types of carcass meat would allow these firms to further expand their operation into the marketing or further processing field. The market would provide an ideal environment for firms who wished to develop highly specialised further processing operations. In this case, the input into the marketing process is a carcass rather than a live animal. Firms which would wish to be involved in both processing and the marketing of stock would not be disadvantaged by this system. In fact, as individual prices would be determined at each works, the firm which killed the stock would have a purchasing advantage as the carcasses would already be on their premises.

(2) The presence of a true auction system for price determination would have a major advantage in terms of its ability to establish market related differentials between different grades of meat. At present differentials are determined by either the schedule system which provides an estimate of the market differentials, or through the aggregated returns of the pooling system. The establishment of competitive differentials would be seen to provide major advantages in terms of guiding producer decisions and marketing options. The proposal also has obvious implications for the establishment of new grades such as lightweight lambs or possibly hogget markets which have been discussed in the recent past.

(3) As has been noted previously, the establishment of a firm market price in New Zealand could have considerable impact on the competitive behaviour of firms in overseas markets. Exporting firms who have purchased a product at the same price as their competitors are likely to be more responsible in the use of storage facilities and marketing than organisations which are marketing product on behalf of producers in New Zealand. If exporting companies are able to sell a product in a market at a lower price than their competitors even though they have purchased it at the same price, then it is right that they should do so, as it merely reflects increased efficiency in marketing and handling. There would be increased competition not only between competitors serving the same market, but also competitors servicing different markets. It is possible that importers in countries such as the U.K. could be involved in purchasing stock through agents in New Zealand which would mean that they are competing on a true world market and not simply for the meat which has been landed in the United Kingdom. This has the potential to lead to increased price stability in markets such as the United Kingdom. The New Zealand carcass price would become the true world price and would be used in preference to the current Smithfield price as the basis for setting long-term and large contracts.

(4) Because the carcass market would be a true auction market, it is recognised that there is likely to be instability in prices as producers and exporters react to changing international circumstances. In the past, producer prices have been stabilised through industry accounts and supplements, and exporter prices have also been stabilised to some extent by Meat Board intervention in the exporting activity. Under the proposed scheme, it is envisaged that this involvement of the Meat Producers Board would continue in the role of stabilising the national carcass market. As already discussed such a market provides an ideal basis for the operations of both industry and government supplementation and stabilisation schemes. It is obvious that direct involvement would still be required however, and it is anticipated that the Meat Board would become involved in purchasing meat on the national carcass market. This activity would be similar to that practised in the United Kingdom by the Meat Board, with the advantage that the activity would be carried out in New Zealand. The Meat Board could operate in a manner similar to the present Wool Board in that they establish floor prices and then purchase product from the market to maintain this floor price.

(5) One of the major arguments for a single trading agency was its ability to deal with large buying markets. A competitive carcass market could also aid in the handling of these types of contract. First, the market would provide a realistic price base which could be used to negotiate prices for the contracts. Second, because the meat to supply the

contract would be purchased from the market, the value of the contract would be reflected in all of the prices, and thus all farmers would share in any benefits associated with the contract even though the company they are dealing with may not be directly involved. At the present time, the handling of these contracts has often become extremely complicated as the total contract is shared between a wide number of exporters to ensure that the impacts of the contract are spread evenly throughout the market. It is possible that the Meat Board itself could act as the major contracting partner for extremely large contracts. In this case they would simply purchase meat directly from the competitive market to fulfil the contracts. An alternative, and possibly more desirable outcome, would be that the importing agency could appoint a local agent to purchase meat directly from the competitive market to fulfil their needs. This could lead to the more desirable situation where large fixed contracts become continual purchasing which is responsive to changes in market prices. At the same time, the competitive market ensures that all producers share equally in any benefits which may be associated with individual trades even though their meat may not be directly consigned to that market.

(6) In the past it has been realised by the Meat Producers Board that certain markets should be singled out as development markets and these have often attracted development subsidies or sole access rights. This practice would continue in the presence of a competitive market and a levy on all meat sales could be used to afford subsidies for purchases which are destined for specified development markets. These subsidies would allow the Meat Producers Board to have some control over market development programmes in specified regions without necessarily becoming involved themselves.

(7) Although it may not appear to be a direct benefit, one of the implications of a competitive carcass market is that both killing charges and price differentials between processing works would become explicit. The fact that these charges become explicit would help to encourage competition and increased efficiency between processing works. Profitability of processing would depend entirely on the throughput of plants which should have an immediate effect on the level of competition in setting processing charges. This competition would occur both between works and also at different times of the season. For example, it is possible that killing charges could be lower at either end of the killing season which would allow a greater spread of killing at some works.

Price differentials between works would reflect the relative transport costs for both delivering and assembling meat from those works. If the internal meat transport policies were liberalised and returned to a more competitive basis, this would mean that costs would truly reflect the relative advantages of different works and possibly result in considerable savings from transport costs between farm and works, and also between works and shipping ports. Farmers would be expected to make rational economic decisions about which works their stock should be killed at and at what time of the year. In doing this the producer would need to balance up killing charges and transport costs which he would face to get his stock killed. While this would be most desirable, the liberalisation of the existing transport system is not a necessary condition for the implementation of the competitive carcass market.

#### Option B. Meat Board Pricing

As noted previously, the idea of a national auction market in the alternative outlined above could be replaced by something equivalent to the schedule which has been used for many years. A very important difference however, would be that these prices should not be set as they have in the past by a group representing both exporters and the Meat Producers Board. Instead, it would be possible to develop a schedule set solely by the Meat Producers Board. As well as setting prices, the Meat Producers Board would be responsible for acquiring the product which private exporters are unwilling to purchase at that price. The free access of all exporters to meat and the fixed nature of the base point price in New Zealand would make it possible to receive the benefits of competitive export marketing as discussed in the previous alternative. The Meat Board would accept increased responsibility for the establishment of prices and the control of stock.

With the ability to own product the Meat Board would also be available to service particular markets or enter into fixed contractual arrangements with particular countries where it was felt to be appropriate. Although this alternative might suggest that the Meat Producers Board would have excessive influence in the setting of prices, it must be remembered that any attempt to increase prices above the market level would lead to an excessive build up of stocks, and alternatively a price set too low would result in excessive orders from exporters. This is effectively a system of determining a market price through a process of trial and error. While the process might be somewhat slower than that which would be attained under an auction system, it would produce more gradual change in prices, and hence a form of stability. In terms of its effect on the market the only difference between this and the previous alternative is that this system would not generate perfectly competitive price differentials between processing works and grades of meat. These would still be problems which would have to be faced by the price setting authority.

Under any scheme which might be developed, it is most desirable that competitive elements be retained wherever possible. In some cases this might have little effect on the structure and yet a major effect on the performance of the industry. For example, in both of these cases it is most desirable that prices established be quoted for carcass meat and not include processing and handling charges for farmers. By making farmers aware of what these charges are, and thereby indicating the difference in charges between works or operators, it is possible to induce a greater competitive element in the killing and processing industry. While such changes are unlikely to be viewed favourably by the meat processing companies, they are potentially very important for the future development of the industry.

#### 4. GOVERNMENT INVOLVEMENT

The alternatives presented in this paper suggest very little direct role for the government in the marketing of New Zealand meat products. This does not mean however, that the Government should absolve itself of any responsibility for developments within the industry. As the authority which grants the power to create such institutions, it is extremely important that the Government be continuously involved in monitoring the structure and

effectiveness of such institutions.

It is also important that the Government play a major role in the negotiations and discussions over the relevance of such institutions. As has been seen in the past year, there is a strong likelihood that solutions reached by a combination of exporters and producer organisations are likely to result in compromise solutions which transfer the sharing of risk and responsibility amongst the alternative organisations, while at the same time offering protection for everybody. The losers in this situation are those not represented in the negotiations. This became most apparent when the Meat Board proposed its "Meat Industry Trading Organisation" plan, but then offered to compromise the principles of the plan in order to reach agreement with exporters' associations. While these types of solutions may be in the individual organisations short term interest, they are not necessarily in the best long term or national interest. As roles of the individual organisations become less clearly defined, mutual responsibility, cost protection and risk protection is offered to firms within the overall structure. One of the principles stressed in the alternatives suggested in this study is that the roles of the individual meat slaughtering companies, meat exporting companies, and the Meat Board become very clearly defined. It is this clear definition and the explicit nature of charges such as killing charges, marketing costs, and market prices which will provide an on-going measure of the effectiveness of the marketing system. It must be remembered that in situations such as this claims of confidentiality may also be used to disguise industry inefficiencies.

The continuation of compromise solutions to the industry problem are obviously not in the nation's best long term interest, and can only engender further uncertainty. It is the Government's responsibility in any discussions to ensure that the national interests are best represented and that the solution to these marketing problems provides a suitable planning environment for the future for all parties in the meat industry.

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