# AN INTEGRATED FRAMEWORK FOR ANALYSING AGRICULTURAL MARKETING ISSUES

A Summary Report

of the

CAPS/AERU Marketing Study Group

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#### PREFACE

The CAPS/AERU Marketing Study Group consisted of Professor A.N. Rae of the Centre for Agricultural Policy Studies, and Professor A.C. Zwart and Ms S.K. Martin of the Agricultural Economics Research Unit. It was established by the Economics Division, Ministry of Agriculture and Fisheries to address those marketing issues that were of concern in 1985 and 1986.

The Study Group acknowledges the contributions made to its deliberations by Dr W.R. Schroder of the Department of Agricultural Economics and Business, Massey University, and Dr P.L. Arcus, of Arcus Consultants Ltd, Vancouver, Canada. Dr Arcus was a Marketing Consultant to the Ministry of Agriculture and Fisheries in Wellington from February to June 1986.

The detailed results of the Study Group's research, which are summarised in this document, are available in the following two publications:

Rae, A.N., "Frameworks, Theories and Methods of Analysis of Marketing Channels: A Marketing Literature Review", Agricultural Policy Discussion Paper No. 7, Centre for Agricultural Policy Studies, Massey University, July 1986;

and

Martin, S.K. and A.C. Zwart, "A Contractual Framework for Evaluating Agricultural and Horticultural Marketing Channels", Research Report No. 178, Agricultural Economics Research Unit, Lincoln College, August 1986.

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## Chapter 1

# AGRICULTURAL MARKETING ISSUES

#### 1.1 Introduction

In recent years, new directions have begun to emerge in agricultural export marketing. Emphasis has been placed on managed marketing to target market segments, rather than on bulk commodity trading. This has resulted in an increasing focus on product and market development and concern exists as to whether the marketing structures which now exist most appropriately meet perceived industry needs in these areas. In addition, there is a greater awareness by Government that the granting of statutory rights to a sector of an industry involves a redistribution of property rights, which has both efficiency and equity implications.

In New Zealand, a variety of marketing arrangements have emerged to cope with the export marketing of New Zealand's primary products. At one end of the spectrum is a controlled marketing structure typified by the dairying industry which has essentially existed in this form for over fifty years. At a lesser level of regulation are the statutory boards which trade alongside existing marketing channels when they feel it is necessary. These include the wool industry and the meat industry prior to 1983. Other statutory options which partially regulate marketing activity are also in operation. An example would be a restriction on the number of private exporters who are licensed by an industry authority, as with kiwifruit.

In addition to this wide variation in statutory marketing alternatives, there exist a number of unregulated structures. For example, in the barley industry, a voluntary producer cooperative operates alongside private exporting merchants. On the other hand, in newly-emerging export industries such as cut flowers, there is no collective organisation of marketing activity by producers as a group, and a variety of export arrangements appear to exist between individual producers and their agents.

Two broad issues emerge with respect to the range of marketing alternatives which are in operation. The first has a positive orientation, and addresses the questions of why alternative marketing structures evolve in different industries, and why different structures may emerge in the same industry at different periods in time. The second issue is of a more normative nature, and concerns the evaluation of these alternative marketing structures with respect to their performance. To some extent, the two issues are interrelated, since it may prove necessary to understand why structures have evolved in a certain way in order to evaluate factors influencing their performance. These two issues will now be discussed briefly.

#### 1.2 The Evolution of Marketing Channels

From a cursory examination of the historical evolution of alternative marketing structures in New Zealand, it is not clear why different structures have emerged in different industries, despite a perceived stimulus to change which appears to be similar in a number of cases. For example, some industries such as dairying and pipfruit adopted highly regulated marketing structures in response to low prices in the 1920's, and several statutory boards were established in the United Kingdom in the depressed 1930's to provide farm income

relief. However, during the same period, other industries in New Zealand such as wool, which were initially regulated in response to perceived low prices, reverted to private enterprise marketing after international wool stockpiles had been cleared. In more recent years, the kiwifruit industry instituted licensing of exporters. This move was partially in response to a perceived threat of oversupply and hence lower threatened producer prices in the future, but also related to a perceived lack of coordination of the pricing and distribution activities of exporters. On the other hand, barley producers responded to what appeared to be a similar stimulus on the surface (that is, perceived low prices) by forming a voluntary marketing cooperative which trades alongside existing channels.

What appears to emerge from the above discussion is that the stimulus of actual, perceived or threatened low or uncertain prices may lead to some change in existing marketing arrangements in an industry. However, the reasons why different structures may then emerge appears to be more firmly embedded in the politics and economics of the situation.

For example, perceived low prices in the kiwifruit industry were seen to arise from an oversupply of product, particularly of poorer quality fruit. Therefore, it was felt that greater industry-wide coordination of exports was necessary to arrest this threatened price decline. In the barley industry, on the other hand, growers perceived an inadequate link between the relatively low prices which they received from merchants and the higher world price for barley. This led to the formation of a producer cooperative, which can be envisaged as having the dual effect of providing growers with an alternative marketing channel, and of allowing them to use this new channel as a means of exercising countervailing power against existing merchants. In industries which were even less coordinated, price uncertainty resulted in changes in marketing options. For example, exporters of linseed initially offered growers a forward

contract to induce them to produce a crop which was unfamiliar to them. However, when they were not able to realize these forward prices, they withdrew from further contracts of this nature, and operated as commission agents on behalf of growers.

Therefore, while low or uncertain actual or perceived prices may be a catalyst for a change in marketing options, the form which such change might take is likely to vary according to the political and commercial/economic environment of the industry. In order to understand how marketing channels might emerge, it would seem to be necessary to focus on both the political and economic linkages which are established among the producers, other individuals and the organisations who together constitute the marketing system.

#### 1.3 An Evaluation of Marketing Channel Performance

In addition to the positive question of why alternative channels arise or co-exist, the normative issue of whether these channels meet specified performance criteria is also of importance. In general, such performance criteria are based on broad efficiency concepts, such as whether existing resources are efficiently allocated, whether marketing functions are performed at minimum cost, and whether alternative channels have the ability to capture market opportunities and to adapt to changes in them.

In some cases, these issues of efficiency may manifest themselves in terms of more specifically perceived problems. These could include issues such as "weak selling" behaviour, a lack of marketing and promotional activity, insufficient innovation, unclear price signals and an inability to monitor the performance of alternative channels.

When evaluating these efficiency issues, attention would have to be paid to indicators such as channel contestability, (either directly or at arms length, as suggested by barriers to entry or inhibitions to channel selection), the level and volatility of sales, prices and profits, innovation indices, production and marketing costs including those of entering and completing transactions, productivity ratios and market shares. If any such evaluation of marketing channel performance indicated that efficiency criteria were not being met, then Government may have a role to play in rectifying this situation. Any such role would depend on the source of the inefficiencies. For example, if it is difficult for existing or potential entrants to assess the performance of alternative channels, then Government may be able to assist by providing relevant information. Alternatively, if regulatory barriers to channel entry exist, or situations of conflict cannot be resolved internally, and inefficiencies are seen to arise from these, then it may be appropriate for Government to remove such impediments. Consequently, the perceived sources of channel inefficiency would be important when determining any appropriate Government response.

# 1.4 Alternative Theoretical Frameworks

The agricultural economics literature has explored to a limited extent the positive issue of why channels evolve. Such research includes the reasons for the emergence of producer cooperatives, the causes of integration, and the rationale for statutory intervention in its varying forms. By and large, however, this research has not attempted to explain why different degrees of regulation appear to emerge in different industries, nor has it addressed changes in uncoordinated and unregulated options.

Normative issues of efficiency in agricultural marketing channels have also been addressed using the traditional tools of economic analysis. The major thrust of this "economic" approach, which utilises industry organisation theory, includes the consequences of economic power within imperfectly-competitive channels, the structure-conduct-performance paradigm, measurement of marketing margins and their behaviour over time as quantities sold and channel structure undergo change, technical and economic efficiency with which marketing functions are performed, the efficiency of information and pricing systems and the effects of integration within the channel.

This traditional approach to agricultural market channel analysis, however, does not incorporate insights which may arise from more recent development in economic theory, nor does it include some approaches emanating from the marketing literature. For example, less well utilised economic concepts include the "new" theories related to non-zero adjustment and transaction costs, contestability theory, contract and agency theory, recognition of externalities due to market failure in competitive channels, the implications of emerging organisation forms, and the creation of competition in administered (public or private) marketing channels.

A review of the recent marketing literature in relation to distribution channel issues reveals a heavy emphasis on behavioural/ sociopolitical relationships, especially those among power and its sources, intra-channel conflict, satisfaction and performance. In general, the approach is oriented to micro-managerial issues such as how a firm should use its power and how to design influence strategies without deleterious effects on conflict and performance, and the design of conflict management strategies. Less common are macro issues such as the consequences of a change in existing structures, or power balances among firms within the channel. Nor has the linkage between the behavioural issues of power and conflict

with the economic variables characterising performance been well-established.

The microeconomic (neoclassical) paradigm, with its central belief that competition brings about allocative efficiency, provides the foundation for much of the economist's theory building and hypothesis testing in relation to the workings of marketing systems. Further, the approaches of the marketing profession with their concentration on power and conflict can be viewed as in the spirit of the marketing management tradition (itself rooted to the microeconomic paradigm) with its emphasis on determination of "best" strategies for individual firms.

In addition to the possibility of integrating both the economics and marketing approaches to the analysis of marketing systems, another recent view is that such analyses need to be extended beyond the constructs of microeconomics. If the objective is to explain and prescribe changes to marketing structures, a model designed essentially to assist individuals will be inadequate, and extensions to encompass constructs from political science, sociology and organisation theory may be required.

Such a paradigm would therefore encompass a wider political economy world view than does the narrow microeconomic focus. However, economic theory can provide some of the normative prescriptions for behaviour which often appear to be lacking in marketing research.

#### 1.5 Research Objective

The objective of this paper is to present a theoretical framework for analysing marketing channel issues which incorporates insights from recent economic theory and from marketing paradigms. The research issues which this analytical framework addresses are of both a positive and a normative nature. Positive questions include why alternative marketing channels emerge, while normative issues focus on the evaluation of these alternative marketing structures with respect to their performance.

In Section 2, developments in market channel analysis from the marketing literature are summarised, while in Section 3, recent advances in economic theory are evaluated with respect to their ability to analyse some of these marketing channel issues. Finally, in Section 4, an attempt is made to integrate some of the insights from both these strands of literature, thereby allowing a wider analytical perspective to be taken on the marketing channel issues which have been identified.

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#### Chapter 2

# THE POLITICAL ECONOMY OF MARKETING CHANNELS

#### 2.1 Introduction

Not until the early 1980's did the published work of marketing scholars on distribution channels comprehensively tackle the need to develop a comprehensive framework for analysis. This framework, which suggests the integration of the political, economic, social and behavioural components of marketing channels, has been referred to as the political economy model.

This approach views the marketing channel as a social system, as well as an economic system, comprising social units (e.g. firms, groups) who interact through exchange processes, and whose individual and collective behaviour is the result of both economic and socio-political forces.

A point of exchange between any pair of such agents will be termed a dyad, and is the unit of analysis in the political economy approach. Such an exchange could involve two independently-owned firms, a firm and a regulatory agent, or two profit-centres within a vertically-integrated corporate channel. The framework applies to any such dyads. Exploration of the behaviour and performance of the channel system as a whole will then require analysis of all such interactions among the participants who comprise the channel system. The general term "contractual arrangements" is used in later sections to describe the nature of such interactions.

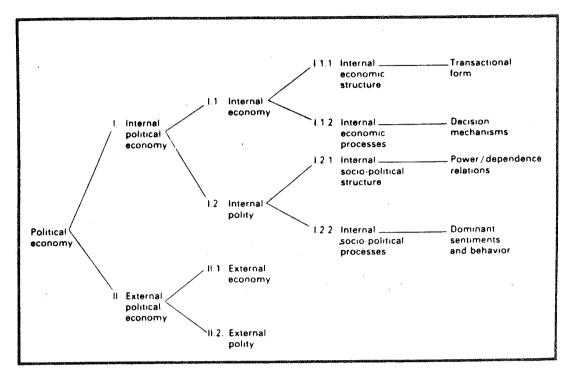
The political economy framework can be viewed as two major subsystems, the internal and external political economies. The first of these comprises the structuring and functioning of the distribution channel, i.e. the setting in which the institutions that make up the channel interact and pursue their own and collective goals, while the second comprises the channel's environment.

# 2.2 The Internal Political Economy

Figure 1 gives the major concepts within the internal system. This suggests that marketing channel analyses should consider both the "economy" and "polity" issues, along with their interactions. Each in turn can be analysed with respect to structures and processes.

The internal economic structure refers to the types of transactional form that link channel members, ranging from market-based exchanges to administered or hierarchical transaction methods. Within these extremes are a variety of formal and informal contractual arrangements.

Internal economic processes refer to the decision and control mechanisms that are adopted within the chosen economic structure, decisions with respect to pricing and other terms of exchange, incentive systems and the allocation of functions among dyad members. Within market-based systems, terms of exchange are often determined through competitive pricing, while hierarchical structures involve centralised administered decision making. In between these structural extremes, contractual processes and bargaining are often employed.



Source: Stern and Reve 1980

Figure 2.1: Key Concepts in the Political Economy Framework

Such a framework allows many hypotheses to be tested with respect to the efficiency and effectiveness of different decision processes across a range of transactional structures, employing modern economic concepts of market failure, agency theory, transaction costs and control losses. Indeed much of the previous work of economists and industrial organisation scholars fits into this format. A value of the political economy framework, however, is that the analyst's attention will be turned to other variables in either the internal polity, or the external environment, that might be crucial to explaining observed performance and evolution within the internal economic structure, and that may have been ignored in more narrowly-focussed paradigms.

Whereas the "economy" of the marketing channel allocates scarce resources, the internal "polity" can be viewed as an allocation system that allocates power and authority among channel members. As with the internal economy, the internal polity can be broken down into structural and process dimensions. The former refers to the initial pattern of power-dependence relations within the channel. and can range between the extremes of minimal power in perfectlycompetitive systems to completely centralised power. While in the latter case the channel administrator is undisputed, the issue of channel leader may not be clear, or may be a matter of dispute, in intermediate cases. Or, different channel units may exercise some degree of power and control over different marketing functions or commodity flows. Also, the internal socio-political structure will change through time as firms' power-bases undergo change, perhaps in response to aspects of the external political economy or to regroupings of the social units that comprise the channel.

The internal socio-political processes refer to the dominant sentiments (attitudes) and behaviour that characterise channel member interactions, determined at least in part by the sociopolitical structure. Potential behaviours include those along a cooperation-conflict continuum, and actual behaviour will be influenced by the way in which firms choose to use their power. Relationships also exist between the internal economy and the attitudes and behaviour of channel members, e.g. consider the sentiments that may arise in centrally-administered channels versus market-based structures. Also, a key behaviour variable in transaction cost economics is opportunism, defined as "self-interest seeking with guile", examples of which are distortion of information and failure to fulfil (contractual) promises. Such behaviour can lead to situations of conflict, and the scope for opportunism may vary between market exchange systems and administered or integrated exchange structures.

# 2.3 The External Political Economy

There would be little argument that external conditions play a role in determining the evolution of marketing institutions. Agricultural marketing boards arose, for example, in response to both perceived power imbalances within existing channels (an internal variable) and economic depression and instability in the channel's external environment. Through time, the internal structures and processes of such administered marketing channels have been modified in response to other environmental variables, such as consumer pressure groups, changes in governments' philosophies, competitor behaviour and international trade barriers. However, explicit study of the ways in which such external variables impact on the structure, processes and performance appear to be lacking, in agricultural marketing analyses as well as in more general marketing research.

The external political economy framework is approached in somewhat different fashion from the internal framework, where a classification scheme based on economic and political structures and processes was adopted. Instead, the following three environments are defined:

- The Primary Task Environment, comprising the immediate customers and suppliers of the focus dyad (or network of dyads);
- The Secondary Task Environment, comprising suppliers and customers of the immediate suppliers and customers (i.e. "one-off" relationships) and regulatory agents and interest groups.
- The Macro Environment, comprising sociopolitical, economic and technological forces that influence the primary and secondary task environments.

Because the dyad or channel of interest enters into direct exchange on a one-to-one basis with members of its primary task environment and sometimes those of the Secondary Task Environment such as regulatory agents, these relationships can be thought of in terms of economic and political structures and processes (e.g. type of exchange, power distribution and behavioural attitudes) as per the internal framework. It may be less useful to identify economic and political variables separately in the remaining environments, however, because of the complex way in which such forces interact to influence behaviour and performance. Hence definition of a manageable number of higher order constructs will probably be necessary to capture such environmental impacts.

The external political economy can be classified across the above three environments in terms of the main sectors to which any channel dyad must relate. These are:

- the Input Sector, comprising all direct or indirect suppliers to the focal dyad or channel;
- the Output Sector, comprising all customers (direct and indirect) of the focal dyad;
- the Competitive Sector, comprising actual/potential competitors of the channel dyad, and
- the Regulatory Sector, comprising regulatory groups such as government, and other pressure or interest groups.

When analysing interactions between the dyad or channel under study and the primary environment, the internal political economy framework is likely to be applicable. This is because such interactions involve a direct exchange and can be classified according to the transactional structure, decision processes, power distribution, and cooperative or conflictual attitudes. Agents in the competitive and regulatory environment can also be treated in the same way provided that an exchange relationship with the focal dyad exists

(which need not be restricted to an exchange of goods and services for money).

As suggested above, relationships between the unit of study and the secondary or macro environments are more diffuse since a direct exchange does not take place. The analysis can proceed along at least two alternative lines. The first involves detailed study of the secondary environment agents and institutions, e.g. in terms of their resources, power and influence, as well as the components of the macro environment such as technological, economic and demographic developments. Because of the immensity of such a task, a more productive alternative is likely to involve attempts to characterise the environment in terms of its abstract qualities or dimensions: initial study and surveys of the channel environment could allow construction of a list of specific environmental variables. These may then be reduced to a set of quantitative variables that in a summary way describe the major features of the environment, and which may be useful in building and testing theories. For example, in one study the external environment was represented by four variables - the product's life cycle stage, uncertainty, marketing technology and interchannel competition.

# 2.4 The Parallel Political Marketplace

The external political economy discussed in the previous section included regulatory agents and interest groups. A deeper understanding of the external environment may be obtained through closer scrutiny of the exchange relationships between such agents and groups. These exchanges are seen as taking place in a political marketplace that operates in parallel to the distribution channel, since marketing issues that activate transactions within the political market would likely be accompanied by a dynamic series of exchange relationships among marketing and political agents.

The principal actors in the parallel political marketplace include government and associated regulatory agents and authorities, trade associations, unions, consumer groups and other interest and welfare groups. Transactions between pairs of such groups typically involve information and authority rather than goods and services but all the same, market outcomes will depend upon structural linkages among such agents, power and bargaining performance, and prevailing cooperative or conflict sentiments. This would suggest that the political marketplace could be studied in the same way as the physical distribution channel.

It would appear that the implications of the existence of parallel political marketplaces in agricultural marketing systems have been either ignored in, or at least put to one side of, agricultural marketing analyses. It is not difficult to grasp the significance of such markets, however. Such political exchanges should not be ignored in public policy analyses, since those exchanges determine to a greater or lesser degree the shape of adopted public policies. An improved understanding of the structure and decision processes within the parallel political marketplace might also allow its response to public policy changes to be forecast, so that this information could in turn comprise a valuable input to the policy design process. Individual marketing firms might also find such forecasts of value to assist in formulating approaches to successfully implement changes to their own marketing strategies or adoption of innovative practices such as the introduction of cartoned milk or live sheep exports, or supply manipulation by marketing boards.

# 2.5 Progress in the Empirical Application of this Framework

The empirical studies reported in the marketing literature reveal a heavy emphasis on behavioural and socio-political relationships, especially among power and its sources, intra-channel conflict and its relation to the use of power. The approach has been heavily oriented to micro-managerial issues such as how a firm should use its power, exert leadership and control, and manage conflict. It should also be said that this literature generally approaches the issue of control from the point of view of increasing the performance of the control-ling agent with little if any discussion of the implications for total system performance. Less common are studies that explore the interaction among the socio-political and economic variables, or between channel relationships and its external environment, that take a macro approach to channel organisation and management, or that explore linkages between the political economy variables and firm or channel performance.

While the literature appears to accept as axiomatic that total channel performance can be improved through better coordination of specific tasks, little evidence is presented. Further, while improved coordination may lead to improved levels of performance and channel member satisfaction, the process of coordination implies that at least some members give up a degree of autonomy that might in turn be expected to lead to dissatisfaction on their part. However, little empirical evidence was found to support the contention that the use of power can increase coordination of activities. Little attention has also been paid to the factors likely to encourage the development of cooperative attitudes and their impact on improved coordination.

Calls to achieve higher levels of coordination in marketing channels are often accompanied by an inability to define the activities that might be better coordinated, how to achieve that result, and expected benefits. Since total system performance, as well as that of individual channel agents, may be more sensitive to some channel variables than others, a useful research focus could be the identification of such critical variables, to assist in the design of cost-effective control and coordination strategies.

#### 2.6 Conclusion

This review has indicated that the combination of the internal and external political economy models establishes an integrative framework for market channel analysis. Examination of this framework will raise issues in channel structure, management and performance, and should give researchers an improved and wider insight into the critical dimensions, relationships and variables of the system to be studied.

It provides a framework that encompasses but goes beyond the paradigms of economics, on which models may be designed to evaluate propositions in relation to many important issues in agricultural and horticultural marketing.

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#### Chapter 3

# THE ECONOMICS OF CONTRACTUAL ARRANGEMENTS

#### 3.1 Introduction

Insights which newer economic theories might offer on the evolution and efficiency of marketing channels will now be investigated. In Chapter 1, the more detailed examination of these broad research issues established that a focus on the micro-environment in which individual channel participants operated was appropriate.

With this perspective and these issues in mind, recent research which focusses on the economic nature of contractual arrangements which are formed has been assessed. In particular, the implications of positive transaction costs (in a broadly defined sense) for contractual arrangements has been explored. An investigation of these theoretical concepts seemed appropriate, since they have been used to examine issues similar to those of why marketing channels might evolve, and whether resulting structures are efficient.

# 3.2 Factors Influencing Contractual Arrangements

This recent research focusses on contractual choices as the unit of analysis. That is, the relationship between a principal and his or her agent comes under scrutiny, and analytical emphasis is at the contractual level. Such a focus potentially allows a wide range

of such relationships to be investigated, both within and between firms. It must be noted, however, that contracts of this nature refer to any economic or social interaction between entities and individuals, rather than to the standard legal definition implied by this term.

It seems reasonable to assume that agents which enter into any contractual arrangement do so in order to increase the level of their utilities. This may imply that there are cost savings associated with forming such relationships. A common hypothesis advanced in the literature is that specific contractual arrangements emerge in order to minimise transaction costs faced by the principal. However, care must be exercised when utilising transaction costs concepts as a theoretical device since an investigation of the literature on this topic reveals that the concept has been defined in a range of ways, some of which are quite specific, whereas others are more all-encompassing.

For the purposes of this study, a relatively broad definition of transaction costs is adopted. In the first instance, transaction costs may be defined as the costs associated with discovering prices. In order to avoid part of these costs, a principal may enter into a contractual arrangement with an agent. However, while saving some transaction costs, this act in itself induces a further subset of these costs known as agency costs. Broadly speaking, these are costs associated with the contractual arrangement, and an important component of these costs is that element which is associated with ensuring that the agent behaves in the principal's interest, including any expenditure necessary to monitor agent performance.

In general, the nature of any contractual arrangement is influenced by a variety of factors. For a given set of risk preferences and an existing allocation of property rights, such factors include the nature and distribution of information imperfections,

which largely determines risk perceptions, and the aforementioned costs associated with the agency relationship, which are determined by a number of factors which will be outlined below.

Consider the influence of risk on the type of contractual arrangement which emerges. There are two elements of risk facing contracting parties. The first type may be referred to as natural risk. This may be composed of exogenous supply-side elements, as occurs in many agricultural industries, or it may be associated with demand, or with both aspects. When such risk is demand related, the distribution of information may be such that asymmetries exist. That is, demand conditions may be more obvious to some parties than to others, and this may influence the nature of any contractual arrangement.

An equally important component of risk is the agency problem referred to previously. That is, there are costs associated with ensuring that the agent's behaviour coincides as closely as possible with the principal's best interests. This type of risk, and therefore these types of costs, are likely to be higher under certain types of contractual arrangement.

In general, they will be higher when no mechanism exists to discipline the contractual arrangement, or when it is difficult to monitor agent performance. An example of the first factor would occur when a principal did not appear to have the option of operating through another agent in a similar contractual arrangement, or through another channel which offers an alternative type of contract. Turning to the second point, monitoring difficulties may occur when the measures of performance of alternative contractual options are not independent. In summary, agency costs will be higher when contractual options, or in a broader sense, marketing channels, are not effectively contestable.

When analysing the nature of different contracts, it may also prove useful to focus on the functions which these contracts seek to perform. In general contracts appear to signal characteristics, to provide performance incentives to the agent in a relationship, and to allocate risk between both of the contracting parties. Given information on the likely response to incentives by the agent and the risk preferences of both parties, this approach allows some judgement to be made on whether the arrangement is optimal in some sense, and hence, mutually beneficial to both parties.

The above discussion illustrates that this focus on the nature of contracts will provide some insights into why specific contractual arrangements, and ultimately marketing structures, emerge. It also indicates whether such arrangements are likely to be efficient in the sense that costs are minimised through the freedom of entry into, and exit from, these arrangements.

# 3.3 Applications to Agricultural Marketing Channels

In this section, the relationship between specific contractual arrangements and some of the factors discussed above will be examined. It must be stressed that this hypothesizing is somewhat casual, and ideally, should be subject to much more rigorous empirical scrutiny. However, the objective of this section is to illustrate how the above economic concepts may assist in evaluating market structures.

# 3.3.1 Natural risk

Consider the implications of different levels and distributions of natural risk. Take an industry which started as a result of an

exporter's effort in securing a market. This exporter would then seek product with which to supply the market. However, if the product was unknown to producers, then the exporter may have to offer forward contracts to induce the supplier to produce the crop. In this way, the exporter bears the price risk, while the supplier bears the risk associated with an unfamiliar product.

Contrast this situation with that where supply is production driven rather than market driven. In this case, the supplier has product available, and requires an agent to find a market for this output. However, the agent may be unwilling to bear the price risk associated with a product whose market potential is unknown. Therefore, the producer may have to relieve the agent of this potential price risk by contracting a commission selling arrangement.

These two examples illustrate how different contractual arrangements may arise in seemingly similar circumstances. In the first case, natural risk was greater on the supply side, thereby leading to a contractual arrangement where the exporter bears the price risk. In the second situation, such risk is concentrated on the demand side, in which case the producer may accept the price risk.

Further consideration of the balance of this risk over time may also lead to insights into why contractual arrangements in an industry change. Consider the linseed example. In this case, the stimulus appeared to come from exporters who perceived export opportunities for the product. They offered producers forward contracts as an inducement to grow an unfamiliar crop. However, the exporters were unable to realise these forward prices which they had offered. As a consequence, they declined to offer such contracts in the following season. However, growers by that time were more familiar with the crop's cultural requirements and asked exporters to operate on their behalf as commission agents in export markets.

Initially, risk by both parties was perceived to be greater at the supply end, which may have led to forward contracts being offered. However, as growers became more established, but markets appeared more uncertain, this balance of risk changed, which may have caused a change in the contractual selling arrangement. Hence, contractual options may have "flip-flopped" as a result of changing risk perceptions in growing and marketing the product.

The nature of this type of risk might also explain why similar channel options appear to occur in some industries. For example, where demand risk is seen to be greater, all agents may wish to offer a commission selling arrangement, and compete with each other at the margin. In this case, forward or fixed pricing agreements might not emerge.

#### 3.3.2 Agency considerations

Consider the evolution of marketing channels in the context of agency relationships. In the barley industry, companies initially offered growers a fixed price for their product. However, these prices appeared to get out of line with the world product price, thereby creating an agency problem for producers. A group of growers responded by setting up their own cooperative which sold on commission and returned growers a pool price.

It is of interest to note that the companies apparently raised their price to suppliers in response to the threat of producer coordination, and eventually switched to operating pooling arrangements as well. In this case, it proved relatively easy for producers to monitor company performance, and to force down agency costs associated with the relationship by opening up an alternative marketing option.

However, it is possible to envisage situations in which channels are difficult to contest. Take the behaviour of exporters in the meat industry prior to 1982. When schedule prices were set in this industry, they tended to reflect current market conditions. However, it can be argued that the commission agents may have been indulging in so-called weak pricing, since this type of contractual arrangement presented them with no incentive to enhance prices at the point of sale. Therefore, weak prices would suggest unfavourable market conditions, which would then be reflected in the schedule price. Hence, this schedule price would not provide a competitive check against commission selling, since it was dependent, to an extent, on the price of product sold on commission.

Therefore, unlike the barley example noted above, in this case it might not have been possible to efficiently monitor channel performance relative to alternative marketing channels, and hence the extent of any agency problems might not be perceived, which would be an inhibition to channel switching or opening up a new channel.

#### 3.4 Conclusions

The economic theory which has been investigated suggests that a focus on incentives, risk and information might prove valuable when investigating the nature of contractual arrangements, marketing structures, and their relative performance.

For example, this type of analysis could indicate the extent to which an agent is likely to behave in a principal's interest, how risk is allocated, and whether transaction costs in their various manifestations are likely to be minimised. On the basis of these observations, comment could be made on the relative efficiency of

alternative marketing channels, which would give an indication of whether government should intervene or withdraw from activity in these channels.

When applied in a positive sense, this type of analysis may be useful in determining why alternative contractual arrangements exist in different industries, and why such arrangements may be different in the same industry at different periods in time. It may also assist in explaining why specific contractual forms predominate in certain situations.

It must be noted that the various contractual arrangements which would be assessed could operate in unregulated markets or within statutorily controlled channels. Therefore, rather than considering the relative merits of statutory versus non-statutory marketing structures, an application of these concepts would emphasise incentive structures and contestability at various stages of a marketing channel, regardless of its legal status. This type of analysis may also indicate appropriate behaviour for government agencies. When regulatory barriers to entry exist which limit the contestability of marketing channels, then government may be advised to remove such barriers. Similarly, when government policies obscure the ability of producers to monitor agent behaviour, then such policies may need to be reassessed. On the other hand, when it is difficult to monitor channel performance because performance measures are not independent, then Government may need to evaluate pricing procedures, and transmit information on relative efficiency to producers.

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#### Chapter 4

#### A WIDER PERSPECTIVE ON MARKETING ISSUES

# 4.1 Introduction

In the previous two chapters, two approaches to the analysis of marketing channel issues were evaluated. The first of these emanated from the marketing literature, whereas the second had its origins in newer microeconomic interpretations of contractual behaviour. An attempt will now be made to integrate insights from both of these approaches, and to consider the implications of the resulting perspective for marketing channel analysis.

Recall that the primary concern of this paper is with marketing channel performance and any resulting implications of this for government behaviour. It must be noted however, that these performance issues are often expressed in terms of perceived problems, such as weak selling behaviour, the lack of marketing or promotional activity, insufficient innovation, or exploitation of individual channel members. In addition, it was determined that an investigation into why alternative marketing channels arise or coexist might prove useful, since this would deepen the understanding of these systems, and highlight factors which influence their performance.

The examination of the marketing literature concluded that attempts to study the behaviour of participants in a marketing channel will be enhanced by examining a wider range of both internal and environmental factors than those traditionally considered in conventional neo-classical economic analysis. That is, a wider

political economy approach to analysing marketing channels is appropriate where factors which influence both the economic or competitive environment and the political or regulatory environment are taken into account, as well as the politics and sociology of interactions among channel members. Relationships considered in this context may be either horizontal or vertical.

Much of the quantitative literature in the marketing area tends to identify internal polity variables which are associated with specific channel characteristics. However, the theoretical mechanism which drives much of this observed behaviour is often poorly defined. While the underlying motivations of individual channel members are not always made explicit, actual decision making behaviour is described and the wider perspective envisaged by this approach is insightful.

On the other hand, the economic theory of contractual behaviour which has been evaluated makes the objectives of the two parties in a relationship quite obvious by the focus on incentive structures and the allocation of risk. In this way, a normative link between behaviour and performance is established through Pareto-efficiency concepts.

These studies tend to have a somewhat narrow economic focus in that they are most appropriate when analysing why economic forms of interaction occur between two parties. In an unmodified form, they are likely to be of limited usefulness when attempting to explain why different types of horizontal associations emerge among channel members, and between channel members and regulatory agencies.

There would seem to be two ways in which the contributions of these two strands of literature to marketing channel analysis could be integrated. First, the economic concepts analysed in the contractual choice literature could be viewed as a specific subset

of the wider political-economy framework. In this case, the focus is on the internal economy variables, and a behavioural mechanism which links these variables by utilising transaction costs concepts has been identified, although other variables within the political economy framework might usefully explain variations in such behaviour.

Second, the analysis of marketing channel issues may be enhanced by attempting to apply some of these economic concepts to the internal polity variables considered crucial in the marketing literature. That is, it could be considered whether the theory of contractual choice as applied to the internal polity yields insights into behaviour within this realm additional to those which stem from the power-dependence types of study traditionally utilised to describe socio-political behaviour between channel members. This possibiltiy will now be investigated by focussing on some of the linkages which may occur between channel members.

# 4.2 Types of Interaction

It is the nature of these linkages or interactions between firms which determines the institutional structure of an industry and its associated marketing channels. A variety of interactions between marketing channel participants can be postulated, and it is evident that changes in the types of interaction which exist between participants will alter the structure of the marketing channel. Consider how such changes might occur.

In the first instance, interactions between individual firms may change. One of the most obvious structural changes which would occur would be integration of either a horizontal or vertical type, where a single firm assumes responsibility for the activities which

may have been carried out by separate firms. However, more subtle structural changes may occur. For example, partial control of another firm's behaviour may be exercised through share purchases. Alternatively contractual arrangements between business entities may involve more than simple market transactions and the exchange of goods. For example, firms may participate in marketing agreements which involve joint decision making, or develop complex franchising arrangements.

In addition to these linkages, less obvious forms of interaction between firms might occur. For example, associations of individuals or firms may be created. Such associations may not seek to maximise their own profits but exist for the benefit of their members. Examples of this type of association could include cooperatives, joint marketing agreements, trade associations, producer boards, or political groups such as Federated Farmers. Membership of such associations may be voluntary, or may be compulsory. In the latter case, statutory authority may have been invoked to avoid free rider problems.

The above arrangements highlight the sophisticated nature of many of the transactions which may occur between individuals or institutions. Obviously, some of these linkages involve primarily economic relationships, whereas others involve socio-political processes. In addition, they may occur vertically between channel members or horizontally, with these latter linkages reaching into the economic or competitive environment or into the external political or regulatory environment. These linkages might be defined as sophisticated contracts which describe the relationships between firms. They are obviously not explicit or legal contracts in all cases, but they are assumed to describe the total relationship between any pair of firms or organisations. Thus they incorporate both economic and non-economic elements.

## 4.3 Regulatory Linkages

Of particular interest are linkages which exist between firms and government. One reason why individuals and institutions interact with regulatory agencies might be to seek the imposition of regulations which could benefit them or their members. This may be done by forming a lobby or pressure group for this purpose. Although it is possible for a single individual or firm to become involved in such activity, the transaction costs of doing so may be prohibitively expensive, and such costs might be reduced and minimised by association with a group.

It is important to note, however, that not all associations indulge in the above rent-seeking type of behaviour. For example, cooperatives, stabilisation boards and information gathering associations may seek to benefit their members through different activities aimed at stabilising incomes or reducing costs in one form or another. On the other hand, rent-seeking activity is typically aimed at reallocating benefits between groups in an economy through mechanisms such as tariffs or licensing agreements.

In any interaction between marketing channel participants and the regulatory environment which involves rent-seeking, particular channel members typically seek to interact with regulatory agencies. However, other forms of interaction could occur where interaction with channel participants is initiated by the regulatory body. This could occur when they seek to influence behaviour in the marketing channel to correct instances of market failure. It is generally accepted that market failures are associated with externalities and common property rights.

Defining market failures has proved to be a tenuous pastime, and in this study, the rationale for, and consequences of, this type of intervention in the marketing channel will not be considered in any detail. However, it is worth noting that some interaction between firms may occur in a manner similar to rent-seeking, where individuals or groups attempt to persuade the government to intervene to correct a market failure. An example of this could occur where producer groups seek government assistance for market research, using common property arguments. However, it may prove difficult to assess whether any particular request is rent-seeking or a genuine attempt to correct market failure.

The above discussion has identified, in very general terms, some of the ways in which channel participants interact with each other. Obviously, such linkages are much wider and more complex than those typified by the standard neo-classical economic model of behaviour in a perfectly competitive environment, where all contracts are assumed to be in the form of simple exchanges.

#### 4.4 Benefits of Association

The frameworks analysed in earlier chapters provide analytical tools which might be used to evaluate some of these more complex interactions. Their features may be defined by a political economy paradigm where power structures are specifically described. In addition, careful observation of the contractual arrangements which exist could give an indication of performance incentives, the allocation of risk and the distribution of power within a channel. These features have obvious implications for the level of conflict in a channel, and ultimately, for channel performance.

When evaluating such arrangements, a useful starting point might be to consider the mutual benefits which accrue to individual parties from this association. This approach may allow the power-

dependence structure associated with any interaction to be more clearly defined.

It is important to examine both the level and the distribution of the mutual benefits to an association. Consider a situation where both parties to a contract have alternative options, such as might occur in any standard market exchange. In this case, it might be argued that the mutual benefits from the interaction are evenly spread, the power-dependence structure is relatively balanced between parties, and levels of conflict are minimal. However, because of the ability of both parties to walk away from this arrangement, the mutual benefits from this particular interaction are low.

Alternatively, consider the case where a supplier has product available, and requires an agent to find a market for this output. The opportunity cost to the producer of not entering into such an arrangement will be relatively high, whereas it may be quite low for the exporter, since it may represent a low proportion of his or her total business. Therefore, the perceived benefits of association are greater for the producer, making him or her more dependent on the exporter. This relatively powerful position may allow the exporter to define contractual conditions which appear to disadvantage the producer. For example, exporters may agree to act as commission agents, thereby allowing the producer to bear the entire price risk associated with the transaction. Similar examples may be envisaged with franchinsor-franchisee relationships or between manufacturers and retailers. In these cases, the power-dependence structure may appear to be unbalanced. Despite this, such arrangements may be relatively stable, conflict may be low, and the level of mutual benefits from the association may be high.

Up to this point, the term "mutual benefits" has been used to loosely describe the advantages to any association. In addition to

saving transaction costs in the vertical dimension, which has been explored previously, these advantages may incorporate a wide range of cost-reducing or revenue-enhancing activity in both the horizontal and vertical dimensions. In essence, these "mutual benefits" encompass all those advantages to an association which are not captured by a simple market exchange. Obviously it could be argued that where there are no mutual benefits to association beyond a simple exchange, then only that kind of market transaction will occur.

In general, interactions between firms, or between firms and associations or even between associations, can loosely be described as contracts which are willingly entered into in the search for mutual benefits. In some respects, such contracts can be viewed as a partial integration between two parties, the strength of which depends on the size and distribution of the mutual benefits which arise from the arrangement.

Consider alternative types of arrangement into which a producer might enter, and the benefits which will accrue to him or her from this. In the first instance, a producer may enter into a cooperative arrangement with respect to the supply of inputs, thereby reducing production costs through economies of scale. On the output side, a forward contract may be set up with a purchasing agent, the advantages of which are transaction costs savings through risk spreading. Other forms of contract could, of course, be considered in this vein. In a horizontal dimension, producer marketing associations could be entered. Such organisations may undertake activities such as generic promotion on behalf of producer members who benefit by saving transaction costs which would be incurred when undertaking the promotion individually, and by overcoming corresponding free rider problems. A producer might also enter into some type of political association where benefits accrue from rent-seeking behaviour.

Each of the above contracts will have a set of characteristics. For example, performance incentive structures will be determined, risk will be allocated, allocative signals emitted, and power-dependence relationships established. Obviously, some if not all of these characteristics are interdependent. Whether such arrangements are stable will depend upon other aspects, such as actual performance of both parties, their tolerance towards the dependence relationship, and their satisfaction with the outcomes of the association.

In summary, when analysing marketing arrangements, it may prove useful to focus on these contractual features using the concepts outlined in previous sections. This should give an indication of how structures evolve, whether they are efficient, and why they respond in a particular manner to changes in the environment facing them.

#### 4.5 An Example

An example that makes use of some of these concepts within the wider political-economy framework will now be outlined. Consider why the attitudes of meat exporters to market development have apparently changed in recent years with far greater effort being exerted in this direction.

During the period of Meat Board control, the major source of revenue for meat exporting companies was from commission sales of meat on behalf of the Board, which offered licensing arrangements to specific companies. Obviously, economic rents were associated with these licences and companies had an incentive to acquire this privilege.

The Meat Board was of the opinion that greater product development was desirable for the industry, and implied that it was more likely to award marketing privileges to firms that held the same opinion. This desire for a change in marketing emphasis by the Board appeared to induce a change in attitudes in this respect by the exporting companies.

Consider this association between the Board and each of the exporters. The Meat Board had considerable power over the companies through its control of the export licensing procedure. Conversely, the companies were dependent on the Board. To this extent, the power structure was unbalanced and the mutual benefits were perceived to be high. With the unstable nature of the situation, a high degree of conflict appeared to manifest itself within the channel. Through its change in policy, the Board effectively altered the incentive structures facing the exporting companies. It was not surprising, therefore, that the companies suddenly "saw the light" with respect to marketing activity!

#### 4.6 Implications for Policy Analysis

A number of implications for policy analysis emerge from this study. First, when considering behaviour in the marketing channel, the framework that could be most profitably adopted is much wider than that implied by more narrow economic criteria. Further, in addition to considering vertical associations between entities, it would be useful to focus on horizontal associations between these entities, and on their associations with regulatory agencies.

Second, the focus of such analysis at the "contractual" level, highlighting the nature of the interaction between each pair of firms, would yield useful insights into why particular structures

emerge, and whether their performance is satisfactory. This "contractual" analysis stresses the motivations of individual channel participants, and considers the sources and distribution of power, incentive structures, the distribution of risk and allocative signals, and the resultant behaviour of those participants.

Third, examination of the nature and characteristics of the contractual relationships among channel members across different marketing channels is one way of putting propositions to the test. Because of the large number of variables within the wider political economy framework, propositions will probably have to be rather narrowly focussed, and candidate channels for the comparative analysis carefully chosen if the relationships to be explored are not to be masked by uncontrolled variation in other variables. Selection of systems for comparison from similar cultures, product types and time periods, for example, may ensure that many variables are constant across these systems.

This type of analysis also yields insights for regulatory agencies. When assessing the performance of a privately functioning marketing channel, such agencies must assess whether these channels are contestable. Contractual-level analysis should make this explicit, since both natural and regulatory barriers to entry or exit should become obvious. In addition, it would be possible to assess whether agency costs can be minimised by an appropriate monitoring of channel performance. Where the analysis indicates that channels are not contestable, then such agencies must consider whether and how to intervene in the channel.

The wider focus on various associations at a contractual level should also allow regulatory institutions to analyse rent-seeking behaviour in an appropriate manner. It suggests that requests for intervention on the grounds of market failure should be carefully evaluated within the above framework to determine whether they are

genuine or whether they are rent-seeking attempts. In this way, it would also be possible to isolate the relative distribution of benefits from regulatory activity.

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