

ALTERNATE METHODS OF COORDINATION FOR
AGRICULTURAL PRODUCERS

A Dissertation
Presented to
the Faculty of the Graduate School
University of Missouri

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by
Harold James Loyd
August 1971

Harold F. Breimyer

Dissertation Supervisor

ACKNOWLEDGEMENTS

The writer wishes to express his sincere appreciation to his advisor Professor Harold F. Breimyer for his assistance and encouragement throughout the preparation of the manuscript. The author is also deeply indebted to Professor V. James Rhodes for his valuable assistance.

TABLE OF CONTENTS

	Page
LIST OF TABLES	
LIST OF FIGURES	
 Chapter	
1. INTRODUCTION	1
Economic Coordination	1
Prices	5
Historical Background	6
Pricing Systems	11
Selection of a Price Discovery System	15
2. THE OPEN EXCHANGE SYSTEM	19
THE AGRICULTURAL PRICE DISCOVERY SYSTEM	19
Development	19
The Market and Its Assumptions	21
DECLINE OF THE OPEN EXCHANGE SYSTEM FOR AGRICULTURAL COMMODITIES	23
Dissatisfaction With the System	23
Basic Changes Occurring Within the System	24
Changes Within the Information Network	28
Changes Within Agriculture	29
Overloading the Exchange System	31
Where to Now?	33
CRITERIA ON WHICH TO JUDGE THE PERFORMANCE OF A PRICE DISCOVERY SYSTEM	35
Basic Consideration	35
General Criteria	38
Pricing Accuracy Criteria	41
Summary	41

Chapter	Page
3. BARGAINED AGRICULTURE	43
BARGAINING AS AN ALTERNATIVE	43
Introduction	43
Economic Basis for Bargaining	45
Assorted Definitions of Bargaining	47
What is Bargaining	49
Role of Bargaining	50
Bargaining Power	52
Who Can Bargain	55
BARGAINING IN THE MARKET SYSTEM	56
Potential Results of Bargaining	56
Price Elasticity and Potential for Bargaining	60
Limitations on Bargaining and Bargaining Groups	64
Bargaining Fish or Fowl?	67
Performance of a Bargained Agriculture	69
4. CONTRACTUAL AGRICULTURE	72
INTRODUCTION	72
Horizontal and Vertical Integration	72
THE CONTRACTUAL SYSTEM	74
What is Contracting?	74
Contract Development	75
Contract Types	77
EVALUATION OF A CONTRACTUAL SYSTEM	79
Incentives for Contracting	79
Contractual Thorns	83
Formula Pricing	84
Performance	89
Overview	93

Chapter	Page
5. AGRICULTURAL DISCONTENT	95
Introduction	95
The National Farmers Organization	99
American Agricultural Marketing Association	106
Interstate Producers Livestock Association	110
Comparison of NFO and AAMA	113
6. MARKETING ORDERS, MARKETING AGREEMENTS AND MARKETING BOARDS	116
MARKETING ORDERS AND AGREEMENTS	116
Introduction	116
Fluid Milk Orders	119
Fruit and Vegetable Marketing Orders and Agreements	124
Price Enhancement under Marketing Orders and Agreements	131
Price Discovery Systems and Marketing Orders and Agreements	134
MARKETING BOARDS	135
A Brief Look Into Marketing Boards	135
OVERVIEW	138
7. INTERVIEWS WITH MISSOURI AND MIDWESTERN AGRICULTURAL LEADERS	140
Introduction	140
The Open Exchange System	141
Alternatives	148
Alternate Price Discovery Mechanisms	158
Bargaining	160
Miscellaneous Ideas	164
Summary	166

Chapter	Page
8. SUMMARY	170
Introduction	170
The Agricultural Open Exchange Market System	174
Alternate Price Discovery and Enhancement Systems	178
Evaluation of Alternate Systems of Coordination and Control	182
Overview	184
BIBLIOGRAPHY	186
VITA	192

LIST OF TABLES

Table	Page
1. Packer Purchases of Livestock at Public Markets and Other Outlets, United States, 1960, 1965, 1969	26
2. Packer Purchases of Livestock, by Type of Market Outlet, United States, 1965-69 . . .	27
3. Fruit, Vegetable, and Tree Nut Marketing Agreement and Order Programs in Effect During Fiscal Year 1970	126

LIST OF FIGURES

Figure	Page
1. Milk Marketing Areas Under Federal Orders as of January 1, 1971	121

Chapter 1

INTRODUCTION

Economic Coordination

Every economic system must perform three basic functions; it must decide: (1) what goods and services will be produced; (2) how they are to be produced, that is, by whom, and with what resources and in what technological manner; and (3) for whom they are to be produced and by whom they are to be consumed.

There is no one best system of economic coordination--that is, information and control system--which can accomplish these three functions to the satisfaction of all members of the society. Various systems have been used historically and current ones are being modified. Each of the various systems of coordination which achieves rapid industrial development may become a great handicap at a later stage in development in meeting the demands of consumers.

The United States has historically relied on the exchange economy to perform the functions of coordination. In a basic sense, within the exchange economy the role of coordinator of economic activity has been performed by price. Moreover, it is a market price: the three basic functions of the system are solved through a market mechanism which both generates and responds to price. An exchange economy which did not specifically rely on an open market price as the

instrument of coordination would need to rely on some other form of price discovery by which fair value would need to be determined, or employ barter for a similar function. This problem of value determination is treated at length in a later section of this chapter.

In an exchange economy relative prices determine the priority with which various products will be produced on the basis of consumer demand working through the entrepreneurial search for profits. Our exchange economy places a basic reliance on the sovereignty and wisdom of the consumer in allocating many of the resources used in the production of goods and services. Prices in terms of the interest rate also govern the rates and directions of savings and investment within the exchange economy.

There is no purely exchange system of economic coordination in existence--only mixed exchange systems. For example, in our society, education, care of the underprivileged, defense, administration of justice and many other activities are carried on outside the price system. Even commodity trading is likewise subject to a number of influences and controls other than price alone. Society and society's representatives frequently establish priorities for which the exchange economy solely guided by price is not adequately prepared to satisfy. Thus, administrative controls and regulations are much a part of our mixed exchange system.

Other possible systems of economic coordination include a threat system where economic functions are carried out under the threat of punitive action by a ruling body or despot--or even any large economic organization. Another possible system of economic coordination is a centrally planned method where complex calculations and reiteration and communication occur within a central governing body and managers before a central plan can be formulated without the aid of exchange type prices and price discovery. Another possible system of economic coordination is based on customs and roles for members of the society. The basic economic functions are performed as a matter of custom by certain individuals or groups within the society. There are other systems of classification for economic coordination such as an integrative system.

Various combinations of these pure systems of economic coordination can be formed which also performed the three basic functions for a society. The system of coordination with which a society seeks to solve its economic problems often involves more than one means of coordination at various levels and in use by various institutions within the society. Various of these systems of coordination attach different degrees of responsibility to the consumer guidance of the economy and to the degree of guidance assigned to regulatory bodies.

Because of a choice existing among the systems of economic coordination within a society, the systems which are chosen to perform one or more of the functions should do so efficiently with a minimum of resource misallocation and a maximum of satisfaction for the members of the society. The mechanism for change and dynamic innovation must be present within a system of economic coordination in order to guard against rigidity of the system at any level of the economy.

Coordination of production, marketing and consumption decisions is vital to the performance of any economic system. The absence of efficient coordination results in unwanted goods and services and in lower producer incomes and in lower social satisfaction.

In a mixed exchange economy such as prevails in the United States the relative prices of goods and services are still relied on basically to perform the functions of economic coordination for the society. Our mixed exchange economy places great emphasis on the basic knowledge provided by market information and the communication of that knowledge to other levels of the economy. The mixed exchange system also places importance on the ability to switch to alternative endeavors should the individual economic unit so desire. All this is true even though supplemental means of both control and remuneration also are employed.

Prices

The prices that an exchange economy uses to guide individuals and businesses in their consumption and production decisions could be arrived at in a number of ways. In our society the "automatic" price discovery mechanism of the open exchange market has traditionally established prices and thus performed the functions of economic coordination for agricultural producers. Nevertheless, even the open exchange prices are not as "truly automatic" and impersonal as sometimes declared, since they are formulated and function only as a result of human actions and reactions. Kohls states this succinctly:

" . . . prices are made by men using whatever information they have and each trying to get the best possible deal at the place and moment in time which they find themselves."¹

Hence, the institutional mechanism for arriving at prices is highly important.

Prices presumably measure the amount of sacrifice in terms of resources or opportunities in the acquisition of factors of production. The question arises as to whether price as determined by an exchange process on an open market accurately reflects this cost for agricultural

¹Richard L. Kohls, "Can Cooperative Bargaining Associations Succeed"?, Proceedings of the 10th National Conference of Fruit and Vegetable Bargaining Cooperatives, Farmer Cooperative Service, United States Department of Agriculture, (Washington: Government Printing Office, 1966), p. 3.

producers. Thus, prices can be viewed as a cost for the economic system as a whole. Price in this context is not a cost in the classical economic sense where price was closely associated with theories of the cost of production and typically associated with a form of the labor theory of value. Price is a cost directly to one of the parties in the exchange process to which the price involves an outlay of resources for the acquisition of goods and services. Price is a type of opportunity cost--in that one gives up the chance to buy alternate goods and services.

Historical Background

To obtain a perspective with reference to the past and the future of agricultural prices and pricing systems a brief review of the basic economic thought on value and price will be helpful. Early Greek, Babylonian, Roman, and Chinese writers expressed value in monetary terms and referred to it in the context of a price. These early writers interpreted value as involving an amount of labor necessary for the production of a good or service. This is the origin of some labor theories of value.² The labor theory of value, is still widely used as a basic method of price determination. This theory of value was satisfactory in a barter or simplest market exchange economy, where money had no other

²Albert Arthur Fitzpatrick, Pricing Methods of Industry, (Boulder, Colorado: Pruett Press, Inc., 1964), p. 11-14.

value than to facilitate exchange. But, in an industrialized economy where producers and consumers are widely separated and where a proliferation of differentiated goods and services exist and industrial techniques introduce the important time dimension the labor theory of value loses power in practical application.

Through the Middle Ages prices were largely determined by custom and tradition. As towns grew in population and trade developed the level of competition increased between and within towns. Thus, price came to be established and regulated by government. This created a need for a basis on which government could base price. But government had no system for determining this "just" price. Later this basis for a "just" price came to be provided by the exchange process at the central assembly markets. Theologians believed that every good or service had a "just" price based on a fair value estimate taking into account the social utility of the product.

Mercantilism first overlay and then gradually replaced Feudalism as a system of social organization. This led to establishing the rate of market exchange as the measure of the value or price of a good or service. Adam Smith declared that the value through use which a consumer attached to a good or service determined price rather than price being determined by the cost of production.³ This

³Ibid.

method of price determination would involve the empirical problems of determining an individual price for each consumer based on the value in use the consumer received from the good or service. Obviously this value in use would also depend on the number of units of the good or service already possessed or consumed.

Adam Smith later developed the concept of value in exchange. The value of a good or service is equal in exchange to the quantity of labor which the individual can obtain the form of other goods and services. In practice the terms of exchange are expressed in monetary units and the cost is the amount of effort expended in producing the good or service for exchange. Again, this involves empirical measurement problems in a more industrialized society, but is nevertheless a refinement of previous thinking on value.

Adam Smith considered both value in use and value in exchange and reconciled his dilemma by distinguishing between two basic types of prices as follows: (1) the natural price, or the price which just covered the normal rate of wages, rents, and profits necessary to the marketing of the commodity; and (2) the market price or the price at which the commodity is actually sold. Smith's thought was that in a competitive environment the market price would approximate the natural price, which is determined by free

competition, is the lowest price which the sellers can afford to accept and continue to remain in business.⁴

Utilitarianism, under the guidance of Jeremy Bentham, soon developed as a different explanation for economic action. Bentham believed that consumers were governed by a balance calculated between pleasure and pain and that money was useful for comparing the two measures. Price was arrived at by balancing the pain expressed in monetary terms, which the seller incurred in producing the good, with the pleasure which the buyer received, expressed in monetary terms, from the consumption or possession of the good or service. This concept produced a measure of value, but did not explain the process of price discovery in a world where pain and pleasure are not subject to accurate measurement in the market place.

The Austrian Marginalist school of economic theory which followed the classical school defined value in terms of an individual subjective judgment. Variations in value existed because individuals placed different amounts of satisfaction on individual wants and needs. The marginalists disavowed any direct connection between value and the cost of production whether measured in either capital or labor terms.

⁴Adam Smith, Wealth of Nations, Book 1, (New York: The Macmillian Co., 1913), p. 53-65.

Later William Stanley Jevons amended the marginalist theory by adding value in use of a good, which was the total utility received from the good, plus the value in exchange, or the desire that a person has to possess one more unit of the good. Jevons implied that price was equal to the final addition to utility of another unit of the good or service to the buyer. In terms of establishing a price in the real world, this measurement of the additional unit of satisfaction or utility of an added unit of a good or service becomes an economically impossible task.

Alfred Marshall welded the classical viewpoints of the labor theory of value with the Austrian marginalist theory of value into a model commonly referred to as the neo-classical theory of value. Marshall believed that value was established by equilibrium between the forces of supply and demand. The interaction between buyers and sellers determined a market price and a natural value which corresponded to the cost of production. Marshall developed his theory for an exchange economy and did not foresee the degree of mixed exchange economy which characterizes today's economic environment.⁵ Marshall's theory of value and price has long been accepted by agricultural economists. The developments of the last half century have amended Marshall's theory and this then becomes the basis for the subject matter in this study.

⁵Fitzpatrick, loc. cit.

Pricing Systems

The price system is an economic theory of organization in which each individual and firm decides what to contribute to the economy with the understanding that each can sell that contribution at a price acceptable to him and the purchaser, and that each can obtain the goods and services contributed by other individuals at prices acceptable to them.⁶

There are various methods for arriving at price and each has its implications and consequences. Nourse mentions three basic types of price determination systems: (1) authoritarian determined prices; (2) administered prices; and (3) automatically determined prices. Authoritarian prices are determined by a ruling body such as a committee or public service commission. Administered pricing occurs when established margins are added to purchase costs and adjusted to fit the local market conditions. The administered price is established by successive approximation and the consumer is given the choice of take-it or leave-it. Administered pricing includes much of the price determination systems in modern retail and industrial pricing. This type pricing is characteristic of supermarket retailing where prices are largely determined by purchase cost plus a margin dictated by the rate of turnover and the competitive strategy of the supermarket.

Prices are said to be automatically determined when the interaction of supply and demand is allowed to arrive at

⁶Robert Dorfman, The Price System, (Englewood Cliffs, New Jersey: Prentice-Hall, 1964), p. 3.

them as would occur in a central market. This method of price discovery was once characteristic of price determination systems for many agricultural products.⁷

Another method of classifying price determination systems has been developed by John Maurice Clark. Clark's division is similar to Nourse's classification. Clark divides price determination into three main types and a larger number of sub-types. The three main types are: (1) supply and demand pricing; (2) the quoted price; and (3) the negotiated price. Clark defined the price determined under a supply and demand pricing system as a market clearing price, assuming no outside intervention disturbs the market forces. Clark's quoted pricing determination is the price established by a firm which does not permit arbitration in the establishment of a price. It resembles Nourse's administered price. Negotiated pricing occurs when the buyer and seller meet jointly and together mutually agree on a price satisfactory to both parties.⁸

Clark's classification essentially represents an assumption of buyers and sellers each seeking to obtain the best possible market terms under existing market conditions.

⁷E. G. Nourse, Price Making in a Democracy, (Washington: The Brookings Institution, 1944), pp. 3-22.

⁸John Maurice Clark, Competition as a Dynamic Process, (Washington: The Brookings Institution, 1961), pp. 10-110.

The basic knowledge is provided by the market information available to them. The basic power lies in their ability to refuse to reach an exchange unless the terms are mutually satisfactory. The mutual protection of the buyer and seller lies in the existence of alternative to which either may resort. If either party allows their alternative to diminish or lapse, then their market status becomes feudal rather than competitive in nature.⁹

There are other systems of price determination classification which follow the same general scheme of Nourse and Clark. Rhodes discusses a pricing determination classification which is particularly well suited to the present state of agricultural price determination. Rhodes refers to four main categories of price discovery: (1) open market trading; (2) individual negotiation; (3) committee price discovery; and (4) group bargaining.

Open market trading refers to the transactions which typically occurred at a central market or to any other arrangement whereby a large number of buyers and sellers were able to interact.¹⁰

⁹Ibid.

¹⁰V. James Rhodes, "Pricing Systems--Old, New and Options for the Future," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action, North Central Regional Extension Publication 30, (University of Missouri, Extension Division, C911, June 1971), p. 9.

Individual negotiation is a process through which a buyer and seller attempt to reach an agreement on price. The parties to the exchange process draw on previous exchange information in order to arrive at a price. In Individual negotiation there is a degree of limitation crucial to open market pricing, namely, a lack of ready recourse to alternative suppliers or buyers. It is essentially bilateral. To a degree the reliance on the market information or knowledge is a defensive mechanism for the market participant. In Clark's terminology the provision of accurate market information could provide the basic knowledge by which participants to an exchange can determine the "fairness" of the prices.

Rhodes refers to committee price discovery as arriving at a price by a committee of persons or organizations which attempt to select a price which would clear the market of supplies and meet the demands for the supplies at that price. In addition, a committee would presumably pick a price so as to add stability and orderliness to the marketing system and yet provide fair returns to the major parties in the exchange process.

Group bargaining attempts to arrive at a price through an organized group action to discover or enhance prices which would benefit its members and yet operate within legal and economic constraints of the system. Within the last decade or so efforts at group bargaining have come into the

limelight as a solution for the problems of agricultural producers. Much of this is due to the apparent success of labor's collective bargaining efforts.¹¹

Selection of a Price Discovery System

The selection of a price discovery system with or without price enhancement is closely correlated with the competitive structure which exists within the industry. The structure of an industry can be measured by the number and size of firms within the industry, the degree of product differentiation and the presence or absence of barriers to entry and exit. In an industry which is characterized by few firms, significant product differentiation and substantial barriers to entry, administered pricing or Clark's quoted pricing would be expected. Pricing systems and price discovery mechanisms cannot exist in a vacuum--both must be considered together as an integral part of the marketing system for agricultural products.

The ultimate number of uses and alternatives to which a product may be channeled is an important element in the pricing system and the choice of a price discovery or enhancement mechanism for that product. The degree of processing which is added to a product, materially determines the pricing system performance through successive stages of

¹¹Ibid.

the same product. Processing results in the addition of capital inputs to a product and thus places a critical level of measurement of the performance of the pricing system on the final product.

Agricultural products are marketed in varying stages of processed form. Some products are basically a raw agricultural product. The price which is discovered for these products is closely related to retail prices. Other products are semi-finished in terms of processing. The price discovered for a semi-finished product makes up a substantial part of retail price, but substantial processing and retail margins are frequently added to the semi-finished products. Other products are finished food products and bear little resemblance in terms of both farm-form and retail price relationship to the price discovered for the raw product.

The distinction among degrees of processing is important in terms of the degree of product differentiation which can occur at the retail level. Finished products are more easily differentiated in the minds of the consumer with semi-finished products being the next easiest and raw products being the most difficult. Price as the coordinator of economic activity must perform different functions for producers who sell a raw product at retail as compared with the functions performed for those producers whose farm

products are but a small part of the value of the retail product. The picture is further complicated by the number of alternative products into which a commodity such as eggs may be used.

Some authors suggest that price discovery systems in agriculture have evolved from negotiation on each transaction to central assembly markets and then further evolved to decentralized marketing. The evolution of price discovery systems would not be expected to follow the same pattern or proceed at the same pace for all agricultural products. The pattern and pace of this evolutionary process depends, at the least, on the structure, conduct and performance of the industry sectors; the rate of technological advance; and shifts in consumption patterns.

Any alternative system for price discovery should--although it may not--perform the functions of a price discovery system with or without price enhancement in a mixed exchange economy as well or better than the method it replaced. This requires that the market information--the basic knowledge in the exchange process--be freely available to all parties, and that bargaining power be equally distributed. The existence of alternative choices is also essential if the best system is to be selected.

The subject of alternative systems of price discovery and enhancement essentially condenses into several basic

questions: (1) what systems of price discovery shall be used while independent producers still exist in agriculture; (2) what systems of price discovery will be adopted if the open exchange central market system disappears; and (3) what trade-offs exist between alternative systems and between levels of performance within a system. This study will seek to examine these and other questions, alternatives, and solutions.

Chapter 2

THE OPEN EXCHANGE SYSTEM

THE AGRICULTURAL PRICE DISCOVERY SYSTEM

Agricultural price discovery systems typically attempt to establish the value or worth of a commodity. This value expressed in monetary terms is then transmitted to the producer. The price discovery mechanism essentially functions on the basis of a supply of commodities offered by producers and a demand received from consumers for the final products of those commodities.

Development

The development of exchange at open, central markets is associated with times when producers sold their products and services in the town-square or market place. Consumers searched the market place in quest of bargains and in so doing haggled over prices and product characteristics in order to satisfy their households' needs within their budget limitations. Similar patterns of development occurred in America where the concentration of population in cities placed a dependence on purchased foodstuffs for the maintenance of life. The evolution of the agricultural marketing system is closely associated with changes which have occurred

in both the structure of society and in the nature and manner of agricultural production.

A necessary prerequisite for exchange is for the producer to have the capability to produce a surplus of a commodity. Subsistence agriculture is not constructive to the development of an organized open market exchange system, since the first goal of a producer is to provide for the survival of his family. In the process of agricultural development a plateau is reached on which some degree of family self-sufficiency is achieved and from which further production is undertaken in response to incentives for exchange provided by the economic system.

The democratic creed and the belief in the free enterprise system led to the development of an agricultural marketing system in the United States which relied on the process of price discovery at central markets to provide exchange incentives for agricultural producers. The geographically dispersed and atomistic units of agricultural production encouraged the development of a central assembly market system in the United States. The development and improvement of the rail transport system also encouraged the growth and development of the central assembly markets. The central assembly markets reached their zenith during the last half of the 19th and the first quarter of the 20th centuries.

The central assembly technique is not the only means available within the framework of a perfectly competitive

system for which the open exchange process of price discovery operates: computer matching, telephone auctions, closed circuit television systems, etc., are other means of open exchange price discovery which can operate without the requirement that the commodities be centrally assembled.

The Market and its Assumptions

A market traditionally referred to a specified geographical area in which buyers and sellers came into contact. Today's modern communications network and merchandising arrangements limit a market to few geographical bounds. The process of price discovery in such markets tend to reflect transactions dispersed over space and even over time. Price for a product at a given stage may be based on price discovered at an earlier or later stage.

The open exchange process at central markets was assumed to be perfectly competitive in theory. This implied the following assumptions: (1) sales and purchases of firms and households were so small relative to the total volume of sales and purchases in each market that participants could exert no perceptible influence on the product prices; (2) there were no restraints to the free operation of the market, and the mobility of resources was not restricted; and (3) all units operating in the market had equal access to market information and this information adequately reflected the operation of the market. These assumptions imply that

each economic unit would operate in a rational manner--each unit would seek to maximize its gains and minimize losses.¹

Theoretically in an open market trading situation, the price is established at the margin. Thus, with a given set of demand and supply conditions the price for the last unit determines the price for the product. The market is cleared of all product for which the producer is willing to accept the established price. The operation of open market trading is frequently referred to as market clearing. The open market system essentially acts as a communications device for pooling the information and actions of millions of diverse individuals and firms.

The open exchange process at central assembly markets was characterized by many individual transactions in which prices were discovered at numerous points by open trading between many small volume individuals and firms. This system implied a basic equality of opportunity and alternative choice among and between market participants.² This system emphasized the basic knowledge created by the uniform provision of market information and the basic power of

¹Walter W. Wilcox and Willard W. Cochrane, Economics of American Agriculture, (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1960), pp. 229-230.

²Kenneth E. Boulding, "Toward a Pure Theory of Threat Systems," American Economic Review, Vol. 53, May 1963, pp. 424-434.

participants to choose alternative markets should the open exchange process not function to the satisfaction of market participants at a particular market.

The process of open exchange price discovery is designed and influenced by man. It is conventional. Thus, the process of price discovery on these markets is dependent on government for regulations and for the uniform provision of market information to all participants. To a degree the regulatory agencies have been able to furnish services to the market participants so as to better achieve the performance associated with a perfectly competitive system.

DECLINE OF THE OPEN EXCHANGE SYSTEM FOR AGRICULTURAL COMMODITIES

Dissatisfaction With the System

The three basic functions of an economic system--as outlined in Chapter 1--may have been efficiently performed through the open exchange system when the units of agricultural production were atomistic and widely dispersed. Producers and consumers were a widely separated body by geographical distance and by the structure of the food marketing channel. But, even so, the reliance placed on the open exchange price discovery mechanism at central assembly markets--as a means of economic coordination and control--has been at times an unsatisfactory resource allocator for producers and at times a Pantagruelian rationer for consumers.

One observed flaw of the open exchange system is that it contained few protections against instability. The open exchange market system of price discovery is influenced by large, short-run fluctuations in supply, demand and other exogenous factors--such as strikes of labor, shortages of box cars, weather and other miscellaneous factors. Producers who attempt to schedule production and marketing decisions based on prices generated through this system cannot be assured that the prices were representative of the actual market situation or endowed with permanence. Thus, improvement was needed in the open exchange method of price discovery. But that system had become institutionalized and consequently slow to adjust to changes occurring within agriculture and the overall exchange economy.

Basic Changes Occurring Within the System

The open exchange process of price discovery performed the functions of communication, coordination and control reasonably satisfactorily in an economic system which was characterized by a substantial degree of competition between the levels of exchange. The structure of the agricultural production-marketing channel and the accompanying price discovery processes have changed to a pattern more nearly suited to the individual commodity situation as the characteristics of agricultural production changed in

response to the differential impact of technology and the workings of comparative advantage.³

The development and improvement of new systems of transportation has led to a lessened logistical need for the open exchange central markets. The decentralization of processing has also led to structural changes in the central assembly method of marketing and hence dispersed geographically the price discovery forces of the central market. This decentralization of markets was also motivated by the drive of processors and retailers to establish non-terminal sources of supply. This drive was partially motivated by the increasing imperfections of competition in processing and retailing. Tables 1 and 2 illustrate this trend of decentralization in livestock marketing.

The complexity of these changes created dissatisfaction among producers who were accustomed to selling a relatively primary product for a given price. The movement into methods of mass-merchandising and associated tactics of non-price competition left producers with a sense of alienation from the traditional open exchange system that had once served them. These forces of market change have helped to revive interest in group action by producers which is discussed later in this study.

³Harold F. Breimyer, "The Three Economies of Agriculture," Journal of Farm Economics, (The American Farm Economics Association--George Banta Company, Inc.) Vol. XLIV, August 1962, pp. 690-694.

Table 1

Packer Purchases of Livestock at Public Markets and Other Outlets,
United States, 1960, 1965, 1969^{1/}

YEAR	Cattle		Calves		Hogs		Sheep	
	1,000 Head	Percent	1,000 Head	Percent	1,000 Head	Percent	1,000 Head	Percent
Public Markets ^{2/}								
1960	13,386	61.4	3,478	57.5	30,051	39.0	6,513	46.0
1965	16,397	54.9	4,500	65.7	27,526	37.1	4,892	37.6
1969	12,344	38.2	3,033	64.8	26,535	32.6	3,032	29.2
Direct, Country Dealers, Etc.								
1960	8,420	38.6	2,572	42.5	47,104	61.0	7,654	54.0
1965	13,455	45.1	2,351	34.3	46,613	62.9	8,127	62.4
1969	19,976	61.8	1,647	35.2	54,906	67.4	7,369	70.8
Total								
(Total No. of Packers)								
1960 (1,383)	21,806	100.0	6,050	100.0	77,155	100.0	14,167	100.0
1965 (1,349)	29,852	100.0	6,851	100.0	74,139	100.0	13,019	100.0
1969 (1,205)	32,320	100.0	4,680	100.0	81,441	100.0	10,401	100.0

Source: Thomas T. Stout, Prospects for the U. S. Pork Industry in the 1970's. Paper presented at North Central Regional Farm Management Extension Committee meeting, April 6, 1971, citing Packers and Stockyards Resume, Statistical Issue, December 18, 1970.

^{1/} Summarized from annual reports of packers filed with the Packers and Stockyards Administration, U. S. Department of Agriculture.

^{2/} Terminal and auction markets.

Table 2

Packer Purchases of Livestock, by Type of Market Outlet,
United States, 1965-1969^{1/}

Year and Market Outlet (Number of Packers)	Cattle			Calves			Hogs			Sheep		
	1,000 Head	Per- cent		1,000 Head	Per- cent		1,000 Head	Per- cent		1,000 Head	Per- cent	
1965--All Packers (1,349)												
Direct, Country Dealers, Etc.	13,455	45.1		2,351	34.3		46,613	62.9		8,127	62.4	
Terminal Markets	10,162	34.0		1,127	16.5		17,375	23.4		3,321	25.5	
Auction Markets	6,235	20.9		3,373	49.2		10,151	13.7		1,571	12.1	
TOTAL	29,852	100.0		6,851	100.0		74,139	100.0		13,019	100.0	
1966--All Packers (1,337)												
Direct, Country Dealers, Etc.	14,994	49.2		2,095	33.7		43,255	62.7		8,274	64.6	
Terminal Markets	9,434	31.0		976	15.7		15,246	22.1		2,803	21.9	
Auction Markets	6,028	19.8		3,153	50.6		10,458	15.2		1,722	13.5	
TOTAL	30,456	100.0		6,224	100.0		68,959	100.0		12,799	100.0	
1967--All Packers (1,274)												
Direct, Country Dealers, Etc.	16,176	53.1		1,844	33.4		50,948	65.7		8,377	64.8	
Terminal Markets	8,746	28.7		796	14.4		14,540	18.8		2,457	19.0	
Auction Markets	5,559	18.2		2,880	52.2		12,019	15.5		2,099	16.2	
TOTAL	30,481	100.0		5,520	100.0		77,507	100.0		12,933	100.0	
1968--All Packers (1,300)												
Direct, Country Dealers, Etc.	17,906	57.0		1,707	33.8		53,178	66.6		7,451	66.4	
Terminal Markets	7,738	24.7		706	14.0		15,421	19.3		2,084	18.6	
Auction Markets	5,755	18.3		2,631	52.2		11,284	14.1		1,682	15.0	
TOTAL	31,399	100.0		5,044	100.0		79,883	100.0		11,217	100.0	
1969--All Packers (1,205)												
Direct, Country Dealers, Etc.	19,976	61.8		1,647	35.2		54,906	67.4		7,369	70.8	
Terminal Markets	6,852	21.2		606	12.9		15,380	18.9		1,669	16.1	
Auction Markets	5,492	17.0		2,427	51.9		11,155	13.7		1,363	13.1	
TOTAL	32,320	100.0		4,680	100.0		81,441	100.0		10,401	100.0	

Source: Same as Table 1.

^{1/} Summarized from annual reports of packers filed with the Packers and Stockyards Administration, U. S. Department of Agriculture.

Changes Within the Information Network

The failure to provide market information and distribute it uniformly can lead to an institutionalization of price discovery forces which may then partially account for the decline of the open exchange system. If an open exchange market is competitive and all participants are not equally well-informed, the result of their interaction may be the discovery of a price which the well-informed market participants regard as unsound and uneconomic. Hence, the avoidance of the open exchange market, which theoretically would reduce competition at that market, could improve the well-informed firm's chances of realizing the predictions based on its market information. The well-informed firm's information need not be correct for this realization to be brought about in the short-run; especially if the firm is a large buyer on an imperfectly competitive market.

Producers have difficulty in separating a market price into the elements of grade and quality premiums and penalties desired by processors and presumably by consumers. Despite government assistance the open exchange price discovery system could not economically separate a given price into its various premium and penalties for various specifications--even if the accuracy of measurement permitted such distinctions.

Theoretically the price discovery process at open markets could report accurate market information if the

appropriate collection tools and distribution means were made available to that system. The lack of exactness which existed on open exchange markets did not permit the provision of accurate market information had the tools been made available to the system. The transition to differentiated products did not aid in market price reporting, as it interfered with reporting data on standard products. The demand for accurate market information for most price discovery systems will exceed the supply of accurate information forthcoming from those systems--especially when elements of that system are characterized by imperfect competition.

Changes Within Agriculture

The tremendous changes which have occurred and are still occurring within agricultural price discovery systems are also associated with the changes which has emerged in agricultural production. A change in the cost structure of agricultural production has encouraged changes in the pricing mechanisms for agricultural commodities. This has an origin in the technological change of the production function and the structural change of agricultural production and marketing. Commercial agricultural enterprises have become larger users of purchased capital inputs which in turn require larger amounts of risk capital. Commercial agricultural production had not previously required large amounts of risk capital. Thus, commercial agricultural

production was not subject to the degree of tension concerning the intensity of economic uncertainty that is presently the producer's dilemma.

The differential impact of technological innovations among agricultural producers with varying resource bases creates a situation which the return from agricultural endeavors are not uniformly distributed. If a technological innovation is cost reducing the price per unit of output, will yield the adapting producers a higher profit--assuming that the price per unit of output remains constant and that it previously yielded a profit to producers. But, the producers, which did not adapt the innovation, may not receive a profit or not a great as profit from the production of a unit of the product. This would also hold true if the technological innovation permitted a better product to be produced which could be sold for a higher price on an exclusive basis.

This created a situation within agriculture which encouraged the re-emergence of agricultural discontent. Associated with this re-emergence was the adaption of the bargaining mechanism as a means changing the distribution of agricultural returns. Chapter 3 on bargaining and Chapter 5 on agricultural discontent explore this subject area in greater detail.

Technology has played an important role in the evolution of the price discovery forces within agricultural production

and marketing. However, the impact of agricultural technology should not be confused with the conduct and performance aspects of a price discovery or enhancement system for agricultural commodities.

The increase in the use of purchased capital inputs in agricultural production and marketing has amplified a tendency toward a non-reversible production pattern. The increase in the amount of fixed or overhead costs in a production or marketing unit's cost structure has restricted that unit's mobility in switching among alternatives in production and marketing. This has focused producers' attention on the marketing system and accordingly has created a demand for systems of economic coordination which could correct or mitigate the effects and faults of the open exchange system of price discovery. Many producers and farm leaders believe that agricultural researchers and economists have over-emphasized production aspects without focusing enough attention on marketing methods to match the modern production theory and technology employed in modern agriculture.

Overloading the Exchange System

Breimyer notes that the open exchange system of price discovery may not have diminished in its ability to coordinate the agricultural sector. Modern agriculture requires the open exchange price discovery system to perform more functions than can be efficiently coordinated. Agricultural producers

require a price discovery system which coordinates their actions which have been partially industrialized through the application of capital using technology but over which the primitive traditions of agriculture still prevail under the influence of mother nature.⁴

Schultz notes that the prices arrived at under various agricultural price discovery systems are not the appropriate means through which farm incomes should be stabilized. This burden diminishes the efficiency of a price discovery system. An agricultural price discovery system cannot stabilize farm incomes and at the same time clear the market of agricultural commodities, ration consumers, and allocate agricultural resources among producers and enterprises without creating serious distortions in the operation of the free enterprise system. Separate policies need to be developed for each, otherwise the efficiency of the price discovery system for agricultural commodities will decrease.⁵

⁴Harold F. Breimyer, "The Three Economies of Agriculture," op. cit., p. 692.

⁵Theodore W. Schultz, "Payments to Counter Depression," Agricultural Thought in the 20th Century, (Indianapolis: Bobbs-Merrill and Co., 1967), George McGovern, ed., p. 331.

Where to Now?⁶

Agricultural price discovery systems have become more oriented towards the pricing of a primary product. The value of services added to the raw commodity has widened the margin between retail and farm level prices to such an extent as to cushion the impact of changes which occur in the primary agricultural price discovery process of price enhancement process as reflected in retail prices. The closer a product moves toward the retail level the greater is the effect of merchandising and other aspects of non-price competition on retail price. The competitive strategy adopted by many food retailers and processors has weakened the influence of farm prices on retail prices. Thus, larger rewards are attached to the long-run effective-use of supply maintenance as a tool to facilitate the enhancement techniques of agricultural marketing. Insofar as farm producers desire and are able to influence the kind of a price discovery system to prevail in the future--or a shift to an alternate system--their choices will depend on the goals they hope to achieve. If farmers are willing to accept prices as determined through an improved open market system, then new methods of auctions, computer matching or a form of

⁶Chapter 7 of this study contains interviews with selected Missouri and Midwestern farm leaders. Special emphasis has been placed on the systems of coordination, their coordinators and mechanisms for determining those coordinators in the future for agricultural commodities.

bargaining for price discovery can be used. However, if producers are impatient with the shortcomings of market exchange, and particularly if they desire the enhancement of price in order to improve income, then bargaining to enhance prices, control supply or other group actions may be their selection. The distribution of opinion in atomistic agriculture has not clearly indicated which goals the farmers desire of the price system. The picture is not clear as various farm groups propose alternative mechanisms of price discovery and/or enhancement and others advocate open exchange market preservation systems.

In the past, discontent among farmers has led to new programs being adopted in an attempt to solve the problems. But with a proliferation of alternatives, farmers may well be forced to decide which program suits their operations and criteria best on the basis of incomplete information. Farmers can--if free to choose--pick a price discovery system based on their returns from the market place. However, given binding membership agreements, closed associations, and a proliferation of sice services, producers may be attracted to a particular system for non-market reasons. An extensive reliance on advertising and organizational propaganda to differentiate the services of some groups and the failure of other alternative marketing systems to differentiate their services may indicate that the producer cannot decide on the

grounds of economic criteria which programs are best suited for his commodities and economic situation.

Another distressing factor in the selection process among alternatives is the increasing degree to which information is not freely available concerning the realized prices and resultant returns discovered under various price discovery systems. The process of trial and error in choosing price discovery systems may be akin to playing Russian Roulette in which the loss may not be so gentle as a minor explosion.

CRITERIA ON WHICH TO JUDGE THE PERFORMANCE OF A PRICE DISCOVERY SYSTEM

Basic Considerations

Rhodes refers to several basic criteria of performance which could be expected to flow from the operation of a "good" price discovery system: (1) the efficiency of marketing for a product or service should be facilitated; (2) an acceptable rate of return should be received by market participants; (3) prices and supplies should be reasonably stable; (4) long-run demand should be maintained by not pricing the product out of the market; (5) equitable treatment should be provided for market participants; and (6) the market should be cleared of product. Rhodes notes that while slight trade-offs occur the problems of any price discovery or enhancement system are apt to remain centered around the

first three points.⁷ The problem with criteria is that the definitions of what "should be" efficient, acceptable, reasonable, equitable, and etc., may vary from participant to participant and from time to time.

Consideration needs to be given to the development of standardized criteria by which the performance of alternative price discovery systems can be evaluated. A price discovery system can be judged on the basis of how well prices perform the three basic functions of the economic system. The fulfillment of the three functions can occur within a wide range of performance standards. The achievement of the three functions does not indicate that the alternative price discovery system will meet the standards of performance associated with a free enterprise system in which atomistic agricultural producers produce the bulk of all food consumed by an urbanized, industrialized society.

The performance aspects of alternative price discovery systems separates into two levels of efficiency--operational and pricing. The generalized criteria of operational efficiency hinges on a maximum of consumer satisfaction for a minimum of outlay of resources given a level of goods and services demanded by society.

The performance aspects of alternative price discovery systems separates into two levels of efficiency--operational

⁷V. James Rhodes, "Pricing Systems--Old, New and Options for the Future," op. cit., pp. 12-13.

and pricing. The generalized criteria of operational efficiency hinges on a maximum of consumer satisfaction for a minimum of outlay of resources given a level of goods and services demanded by society. Some of the generalized criteria for pricing efficiency hinge on a "fair" price and "just" value for the participants. Other generalized concepts of freedom, equity, justice, and high productivity enter into the assessment of efficiency and performance standards.

Given a method of price discovery, operational efficiency can be achieved through the proper management of that system. This is due in part to the engineering nature of the input-output relationships which enter into much of the operational efficiency standards. Given a price discovery, pricing efficiency may or may not be achieved within the framework of that system. In the long run prices should optimize resource allocation and consumer satisfaction or minimize resource misallocation and consumer displeasure. In the short-run prices should facilitate orderly trading and the timely movement of goods and services from producers to consumers.

Implicit in assessing the performance of alternative price discovery systems is the judgment of the persons or groups for whom the systems are efficient and equitable. A price discovery system regarded by producers as being efficient and equitable might not be regarded by consumers,

processors or retailers. It is well to recall a warning about sub-optimization when assessing the performance of alternative price discovery systems.

Likewise, problems of intra-industry differences exist with respect to the efficiency and equity of various price discovery systems. Equity among participants has long been a sought-for feature of open markets and many rules and regulations have been designed to conform the conduct and performance of markets for agricultural commodities to that of an open market. New attention to rural poverty has focussed attention on the income-distribution effects of our agricultural system including its markets. Some of the alternates to open markets are highly restrictive to access and entry, clearly inviting judgment in terms of selectivity or even partisanship in their operation and benefits. To accomodate these differences within the framework of a free enterprise system with government serving only as a referee would seem incompatible with the demands placed on alternative systems of price discovery.

General Criteria

A general criterion for efficiency is that the market should be cleared of product at the prices established by market forces. Another general criterion is that the volume of trading should be great enough at the point of price determination so as to constitute a representative sample of trading within the market area. The merits of various

alternative price discovery systems cannot be objectively evaluated on the basis of general criteria alone.

Another criterion by which a price discovery system can be evaluated is that a substantial proportion of the processors and producers should be agreed as to the provisions of that system and have confidence in its operation so as not to jeopardize its operation by their actions and reactions. In addition, the price discovery mechanisms should be almost impossible for any single producer, processor, groups of a few producers or processors to advantageously manipulate--such a system could be one in which a large product volume is moved to many processors from many sellers. Alternatively this system could be one in which price discovery occurred through a committee which establishes price for all producers and processors in its jurisdiction with government acting as a referee and then the assurance of democratic procedure is vital.

A price discovery system must be responsive to changes in both supply and demand conditions and accordingly adjust prices. A utopian situation would be one in which a price discovery system analyzed each indication of a possible change in supply or demand, determined its importance, duration, and effect on prices and then expeditiously made any required price adjustments. This ideal system would anticipate the necessity for changing prices--insofar as possible--instead of maintaining a given level too long and

then having a large price change.⁸ The need for accurate information to adjust the price discovery process under such a Utopian system would be large and would likely require collection procedures enforced by the powers of government or some other regulatory agency.

A price discovery system for agricultural commodities which transformed the operation of the exchange function into a long-term standing agreement or pattern of conduct would materially reduce the cost of the exchange process for each unit traded. This criterion holds little relevance for agricultural products, since the value of a standard trading unit of the commodity is normally greater than the cost of discovering price. The use of this criterion alone might lead to a price discovery system which would minimize transaction cost of exchange, but which might also yield unsatisfactory results to producers and consumers.

The above mentioned generalized criteria relate to the adequacy or the acceptability of a price discovery system. Price discovery systems can also be evaluated on the basis of their operating precision. Some authors prefer to refer to criteria for the assessment of performance for a price discovery system in terms of pricing accuracy.

⁸Alden C. Manchester, "Price Making and Price Reporting in the Boston Egg Market," Harvard Studies in the Marketing of Farm Products, (Cambridge, Harvard University, June, 1954), Number 7-H.

Pricing Accuracy Criteria

Total pricing accuracy usually exists in only the perfectly competitive world. Schupp states that pricing accuracy is obtained when the exchange price agrees with the production cost (assuming normal profits for producers, processors and other handlers) as determined for various quality standards. If the price is not equal to all costs under these conditions, then true pricing accuracy has not been achieved.⁹

Pricing accuracy is a goal which is often attempted but which is never quite attained. The striving is often more than compensated for by improvements which result in a better price discovery process even though short of "true" pricing accuracy. The basis for many price discovery and price enhancement inaccuracies center around the nonavailability of accurate market knowledge for all trading units and the absence of satisfactory marketing alternatives for all trading units.

Summary

The problem of evaluation of the performance of a price discovery and enhancement system objectively often hinges on the lack of reliable and applicable empirical data.

⁹Alvin Schupp, "An Economic Evaluation of the Sire and Length of Feeding on Acceptance of Beef Loin Steaks and on Pricing Accuracy in the Beef Marketing System," (unpublished Doctor's dissertation, University of Missouri, 1969), p. 88.

The initiation of an alternative price discovery or enhancement system in order to obtain empirical data on which to judge the performance would be unfeasible and uneconomic in many instances. The various farm interest groups which are using alternative methods of price discovery and price enhancement do not wish to divulge information which might prove to hinder their efforts in differentiating their services to farmers. Thus, the performance of an alternative price discovery or enhancement system is often inferred from the conduct of participants within that system.

Unfortunately the judgment of the performance of a price discovery or price enhancement system cannot be conducted in hard, fast objective terms. The price system and the price discovery and enhancement processes are man-made economic phenomenon subject to the regulations of man. Thus, subjective judgments of advantages and disadvantages of a price discovery or enhancement system are difficult to avoid.

Chapter 3

BARGAINED AGRICULTURE

BARGAINING AS AN ALTERNATIVE

Introduction

Several alternative means of correcting the defects inherent in the open exchange coordination and control process, or in the actual price discovery process, have been attempted. One has been government action to regulate the conduct of participants in the exchange process. A different kind of measure was authorization to develop countervailing power. Legislation was enacted to permit cooperatives and other farm interest groups to obtain enough power to restore competitiveness to the agricultural marketing system.

The act of exchange implicitly involves a mutual agreement between buyer and seller regarding their mutual rights and obligations. Contrariwise, either party may seek to gain some control over the exchange process if he feels that his rights and obligations are being impaired or violated. Agricultural producers have traditionally felt at a disadvantage in the process of marketing their products. Various alternatives have been used to control or influence the process of coordination and price discovery. Among these alternatives is a labor-derived term--bargaining.

The concept of farmers' obtaining more market or bargaining power in the marketing of their commodities is not new to agricultural thought. The push behind agricultural cooperatives derived impetus from this source of discontent. The dissatisfaction and discontent among farmers over their price discovery and income situation led to a revival of interest in group action to directly control or influence the market environment. Thus, partially to replace unsuccessful and unresponsive cooperative efforts, and partly to enhance cooperative efforts, various cooperative and agricultural interest groups have adopted the concept of bargaining.

Breimyer notes that farmers previously used two alternative mechanisms--cooperatives and the reliance on price support programs--through which the grievances of the market place could be rectified.¹ Cooperatives have done much in the way of provision of satisfactory marketing alternatives for many agricultural commodities but they have seldom attained sufficient industry or sector-wide coverage to act as a general price elevating force, except through the use of market orders and agreements for some commodities. To a degree agricultural marketing cooperatives were lulled into

¹Harold F. Breimyer, "The Problem and Its Setting," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action, North Central Regional Extension Publication 30, (University of Missouri, Extension Division, C911, June 1971), p. 4.

the belief that price support programs would solve the farmer's problems. The shift to lower levels of price supports around the mid-60's for some agricultural producers. Thus, many cooperatives were caught unaware by the extent of agricultural discontent over the price and income situation which is present in modern agriculture.

Renewed emphasis has been placed on the search for new mechanisms through net farm incomes can be supported by improving the price discovery process, either to correct weaknesses and forestall deterioration, or deliberately to enhance prices. This renewed search has to a degree centered on bargaining. To a degree it is a reaction to, and protective mechanism to countervail, the vertical coordination arrangements which could threaten the independence and entrepreneurial roles of producers. But more importantly, producers have become disenchanted with a price discovery mechanism based on the equilibrium of supply and demand in an economy where negotiated pricing, administered pricing and various other control arrangements materially reduces the farmer's well-being. Thus, bargaining is among the arsenal of alternatives by which producers can seek to obtain price discovery with or without price enhancement for their commodities.

Economic Basis for Bargaining

The basis for expansion of farmer participation in influencing the factors which affect the income obtained

from the sales of agricultural commodities and services has been derived from two basic economic concepts for rationalizing higher prices and increased net farm income as a result of the acquisition of increased market or bargaining power by farmers. The first of these two concepts has to do with the relative price inelasticity of aggregate demand for most farm products. Total and net farm income can be increased by reducing the aggregate quantity sent to market or by controlling the quantity marketed within specific quality ranges. The degree of price inelasticity of demand varies between agricultural commodities depending on the availability of acceptable substitutes at comparable prices. Food has a relatively inelastic demand while the demand for "X" brand orange juice is apt to be elastic within certain price ranges.

The second economic concept is that price can be increased for a given quantity marketed due to the imperfectly competitive nature of the marketing channel structures for agricultural products. There are many facets of this imperfection which range from product differentiation, lack of market knowledge, fewness of buyers and sellers, lack of market alternatives, etc. The section on Potential Results of Bargaining, in this chapter, contains further amplification of these facets. The focus of this imperfection is the imbalance between farmers selling a standardized product for a price compared with the many-faceted techniques of non-price competition used by retailers.

The result of this imperfectness decreases the number of junctures at which bargaining or negotiation must occur in order to discover a price. The decrease of the number of price discovery junctures in the absence of bargaining or negotiation can lead to situations where producers in atomistic agriculture are at a relative disadvantage. Thus a bargaining association can take advantage of this imperfectness by establishing a countervailing imperfectness. The gains from improved price discovery processes in an imperfect market are important, but the beneficial effects of stability and orderly marketing procedures should not be overlooked--especially in terms of resource allocation.

Assorted Definitions of Bargaining

The semantics of agricultural economics has not yet fully developed--much less been agreed on by agricultural economists. Agricultural economists tend to define terms with respect to their location and function within the channels of agricultural marketing. In order to comprehend the literature, the layman must tolerate a bewildering array of definitions on bargaining, agricultural bargaining, collective bargaining, cooperative bargaining and bargaining power. A few definitions will be presented in this section including the author's definition in the following section.

Ewell P. Roy defines agricultural bargaining in a broad context to include groups of producers who are organized either through formal or informal arrangements and whose purpose is to increase the prices of the products, lower the cost of inputs, provide certain services at cost or generally improve their terms of exchange with buyers.² Roy's definition would seemingly encompass everything from politics through grass-root cooperation. Roy's definition may be too broad to have much meaning in terms of application to the principles of bargaining techniques and strategies.

Breimyer refers to bargaining as including the negotiations for price and other terms of trade in a specified institutional setting under conditions of imperfect competition. Breimyer refers to bargaining in terms of seeking to resolve the indeterminacy which exists when producers must face imperfect competition in the market place.³ This concept differs from Roy's in that bargaining does not include group action to influence the elements that determine price in an otherwise perfectly competitive

²Ewell P. Roy, "Potentials of Cooperative Bargaining," Proceedings of the 11th National Bargaining Conference, Farmer Cooperative Service, U.S. Department of Agriculture, (Washington: Government Printing Office, 1967), p. 1.

³Harold F. Breimyer, "Crucial Differences Between Labor and Agricultural Bargaining and How They Affect the Potential for Agricultural Bargaining," Resource Report--Agricultural Bargaining, (Madison: University of Wisconsin, July, 1969), pp. 10-14.

setting. Breimyer notes that bargaining is also not group action in the management of supply or the control of production or group action in attaining the operational efficiencies of marketing. Breimyer refers to bargaining as negotiation, and bargaining is not concerted action to affect the equilibrium price level.⁴

Clark designates bargaining in a broad sense as the process by which the terms of exchange are arrived at and this is defined to include all the things that a trader--actual or potential--does to protect his interests in prospective exchanges. Clark defines negotiation as the process of "higgling" which occurs only under certain exchange situations, and in which each party attempts to induce the other to improve the terms of his offer.⁵

What is Bargaining?

Bargaining is a relatively new concept in the literature of agricultural economics. Bargaining for price discovery with or without price enhancement is not solely an economic concept. Bargaining involves the use of strategy by the participants which involves the disciplines of psychology, political science, sociology and the econometric-game theory approaches of modern economics. Bargaining in

⁴Ibid.

⁵Clark, op. cit., p. 18.

agricultural marketing refers to the process of negotiation over the terms of exchange. Bargaining in the strict, pure sense of the word denotes only the actual negotiation process.

Bargaining has a much deeper and more specific application to the price discovery and enhancement process and to the process of negotiation over the terms of trade than implied by many agricultural economists. Bargaining refers to the actual implementation of negotiation with parties on the opposing side of the market. Any other such group action needs to be referred to as cooperation in order to bargain more effectively.

Bargaining is not so much an alternative method of coordination and price discovery, with or without price enhancement, as it is a complement to existing methods. Bargaining can operate within the framework of an open market exchange system as a mechanism for price discovery. Bargaining can also complement the processes of contracting and other integrative arrangements in the absence of an open market exchange system as a method for price discovery.

Role of Bargaining

Bargaining in the agricultural production-marketing system can perform a number of different roles. Rhodes notes that two basic approaches to the role of bargaining exist. The first case is that of bargaining as a vehicle within the confines of a system where commodity price is

determined as the basic reward mechanism for producers. The second case is a role for bargaining as a means of arriving at negotiated contract terms in a contractual coordination system for agricultural commodities. The second case is an alternate to the first where the pricing of services in the contract occurs rather than the pricing of the commodities. The roles performed by bargaining as alternative instruments differs widely in each of these two cases.

The role of bargaining within the framework of a commodity price determination system involves two options which are not mutually exclusive. In the situation where an open exchange market system has failed to provide satisfactory price discovery mechanisms bargaining can provide the means by which a price can be discovered. The second option for bargaining is for the enhancement of prices in the negotiation process to discover a price. The latter option is more nearly a sub-set of the former option, although it is useful for expository purposes to separate the two. Prices can be discovered by bargaining with or without price enhancement.⁶

The role of bargaining within a contractually coordinated framework seeks to set the terms and basis for

⁶V. James Rhodes, "Pricing Systems--Old, New and Options for the Future," op. cit., pp. 10-11.

rewards between agricultural producers and agri-business firms. The exclusive nature of the contractual process and relatively weak bargaining position of atomistic agriculture in negotiating individually with imperfect buyers led to a more rapid establishment of countervailing farm forces in the form of bargaining groups. Bargaining over contract terms was hastened due to the imperfectness of the market system facing many specialty crop producers. This bargaining role involves more than price discovery with or without price enhancement, since the terms of relationship with contractors implicitly involve intra-organizational personalities and strategies.

Bargaining Power

Bargaining power can be defined in numerous ways by various authors. But bargaining power typically boils down to a statement about the "market muscle" which is brought into the process of negotiation.⁷ Bargaining power necessarily involves the concepts of negotiation over price and the other terms of exchange. Bargaining power in terms of "market muscle" is not meant to include only the ability to enforce the desired outcomes through the control of the

⁷Professor Barbash refers to this "market muscle" in terms of sanctions in an excellent background article. Jack Barbash, "The Labor Union as a Bargaining Organization," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action, North Central Regional Extension Publication 30, (University of Missouri, Extension Division, C911, June, 1971), p. 15.

various factors which add bargaining strength to an organization, but implicitly--and more importantly--bargaining power reflects the ability of a bargaining group to control its members and channel their expressions of discontent into purposes created to achieve the desired results for the organization.

Bargaining power cannot be legislated or granted by government or any other public body and handed to agricultural producers--bargaining power must be won through the market place. Bargaining power implicitly involves much more than the ability to discover or enhance prices on a short-run basis. It involves the ability to control the market environment and the destiny of relevant variables in agricultural production and marketing. These aspects of environmental control can be obtained through the market place or to a degree by the use of bargaining power in the political arena. However, government action may set the conditions for negotiation.

Roy refers to four basic methods by which bargaining power can be obtained: (1) through political action and the enactment of legislation which enables producers to seek advantage through the exchange process; (2) through profit type businesses owned by producers; (3) through cooperatives which supply, handle, market products or provide services; and (4) through bargaining associations which do not take

title to agricultural products but who bargain for price discovery with or without price enhancement.⁸

Bargaining power is a dynamic concept. The pool of bargaining power for a given group of producers or for the agricultural industry is subject to outflows and deterioration through time as the competitive strategies of participants in the bargaining process change. Thus, the need for replenishment to the pool of bargaining power is relatively great within an agricultural industry where entry into production is not restricted. The "true" test of bargaining power may come through the ability of that power to replenish or increase its pool over time.

Breimyer has described bargaining power as follows:
"Bargaining power is like the wind. Who has seen it? No one; but many have felt it."⁹ Bargaining power is also like the wind in that it can vanish suddenly and then reappear just as quickly in other places within the food production-marketing system. In this respect bargaining power, like the wind, can be so gentle as to only rustle the leaves on trees or so violent as to overturn homes or institutional arrangements with sirocco-like effects.

⁸Ewell Paul Roy, Collective Bargaining in Agriculture, (Danville: The Interstate Printers and Publishers, Inc., 1970), pp. 4-5.

⁹Harold F. Breimyer, "The Problem and Its Setting," op. cit., p. 6.

Who Can Bargain?

Agricultural bargaining is not an exclusive tool of an organizational form or farm interest group. It can be used equally well by groups explicitly organized for negotiation over sales or contract terms, and by cooperatives operating within or without the institutional umbrella of market orders and agreements. Agricultural bargaining can be effectively conducted through various organizational arrangements. Many of these arrangements differ in name only and seek to achieve the same basic results--improve net farm income.

Bargaining cooperatives, bargaining associations, collective farm bargaining groups, marketing and bargaining cooperatives and other groups can use the bargaining mechanism to find improved price discovery systems. This includes farm interest groups ranging from the general farm organizations to marketing cooperatives and encompasses an entire spectrum of other diverse interests in addition to bargaining activities. In contrast, some groups exist for the sole purpose of bargaining. The old adage of the ends justifying the means may well apply to farm bargaining groups, but important distinctions in the structural arrangements and operations of some of the larger organizations carry meaning for the group's conduct and performance in the bargaining process. This aspect will be explored in Chapter 6 on Agricultural Discontent.

BARGAINING IN THE MARKET SYSTEM

Potential Results of Bargaining

The degree of success which a bargaining group can expect to achieve is dependent on several variables: (1) the enactment of enabling legislation and the relative legislative strength of the bargaining group; (2) a suitable organizational form for the bargaining association which permits the organization to take actions necessary in bargaining and yet at the same time permits members to participate in the organization; (3) the regulation of supply to match demand--which can include both product control or quality improvement schemes, demand and promotion or market discrimination schemes; and (4) the pricing of the product in relation to the cross elasticity of demand, so that substitutes will not capture the market as prices rise. If bargaining groups are to be successful, especially in terms of enhancing the incomes of producers, these four variables must be satisfactorily met and adequate solutions found for them.

Leonard notes that farmers can expect to achieve five basic goals by bargaining: (1) acquire a sense of market power in determining the terms of exchange for agricultural products; (2) enhance the prices of agricultural products; (3) achieve additional market coordination through the alignment of product volume for consumption; (4) obtain a

consensus of agreement on a wide range of non-price terms-- delivery schedules, payments, grades, methodology and time limits of contracts and other considerations; and (5) stabilize the variable income flows as farm operations become larger in scale.¹⁰

Barr notes that bargaining may improve the efficiency in marketing by forcing market firms to streamline their operations. He suggests that if agri-business firms have been purchasing commodities on a "soft" market that they will have usually slipped into wasteful and inefficient operations. Bargaining by farmers can add stability and order to a "soft" market and this will force agri-business firms to "look more to their own efficiencies for their profits . . .and eliminate wasteful practices, consolidate operations, and otherwise increase efficiency--all of which may sustain their incomes without increasing retail prices."¹¹

A bargaining association can bargain with processors or possibly with retailers but cannot bargain with consumers.

¹⁰Rodney E. Leonard, "Farm Bargaining Power--A Necessary Ingredient in Modern Agriculture," Proceedings of the 12th National Conference of Bargaining Cooperatives, Farmer Cooperative Service, U. S. Department of Agriculture, (Washington: Government Printing Office, 1968), p. 3.

¹¹Wallace Barr, "Bargaining in Perspective--A Summary," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action, North Central Regional Extension Publication 30, (University of Missouri, Extension Division, C911, June, 1971), p. 48.

Several bargaining associations for specialized commodities have sought to bargain directly with the retailer by building their own processing facilities and bypassing traditional processing channels. This approach would not be effective for all agricultural commodities not in all markets, since the operational problems and competitive conditions of the industry could offset any benefits gained by a shortening of the market channel.

A method by which producers can obtain enhanced net farm incomes through bargaining would be for them to receive a share of increased processor's profits arising from a reduction in the procurement and quality control costs. A large well-organized bargaining group can furnish processors with a supply of a specified-quality product on contract terms delivered to the processor's facilities, and hence reduce procurement costs. In addition, the processor can obtain a uniform quality product more efficiently by this manner than his buyers could procure by assembling mixed lots of the product.

The success of the bargaining effort also depends on the degree of diversification in the processor's product line. A processor with a multi-product line can concentrate and shift into other product lines to partially avoid and offset any successful action of a bargaining group. A processor with a single commodity line or an array of products based around a single commodity line has a narrow

range for maneuverability in avoiding the influence of a large, well-organized bargaining group. A processor with a highly advertised product or a product which is a major part of his business strategy cannot afford to forego or risk foregoing a commodity by not bargaining or being receptive to bargaining. Likewise, a processor cannot afford to ignore the efforts of a bargaining group with which future possible arrangements might have to be negotiated in order to continue a product line which substantially contributes to the profit position of his firm.

The success of bargaining efforts also partially depends on the location of the processor's plants. A processor with many small plants located in widely scattered areas would be expected not to be overly receptive to bargaining done only on a local basis. The processor could switch output to other plants to avoid the tactics of a local bargaining group. A single plant processor is the most favorable situation in which a bargaining group could negotiate in terms of processor's plant characteristics. If bargaining were attempted only on a local basis and a multi-plant processor operated an old facility in that area, the bargaining group would be expected to be faced with the closing of the plant if the demands were too great. This emphasizes the point that bargaining should be done on a basis which would affect all processors' supply procurement areas.

Regardless of the operational efficiencies which may be achieved by processors obtaining a steady, uniform supply of commodity from a bargaining association, the over-riding caution of not tying a supply to an exclusive supplier is exhibited in the reaction of processors to bargaining groups. Retailers also exhibit the caution in procuring supply from processors. This type behavior is important for agricultural producers in that the basic power of a producer or group of producers lies in their ability to choose another market alternative should negotiations prove unsatisfactory with a traditional marketing alternative.

Price Elasticity and Potential for Bargaining

The potential for agricultural bargaining in its price enhancement role depends partially on the price elasticity of supply and demand which exists for the commodity and its products. The ideal situation for a bargaining group would be where both demand and supply have inelastic price responses. This indicates that a higher price will not result in large decreases in quantities demanded as consumers shift to substitute products. Also, production responses of producers will not wreck the bargaining gains.

Another possible case occurs when supply is price inelastic and demand is price elastic. In this case an increase in price results in small production increases but consumption decreases more than proportionately as consumers shift to substitute products. In this case, a bargaining

group could logically engage in advertising in order to differentiate a product in the minds of the consumers and thus put a degree of price inelasticity into the demand curve. A bargaining group thus might seek to practice price discrimination in markets where demand could be effectively separated into an elastic and more inelastic market. To this end, the group could logically promote the adoption of market orders and agreements to assist in bargaining efforts.

Another possibility is one in which the supply response can be price elastic and the demand response can be price inelastic. This case may closely approximate the market demand for some agricultural products. Under these conditions a successful effort to increase prices via bargaining would result in a supply response which would quickly inundate any gains obtained by bargaining. In this situation, a bargaining group needs to find a means of supply control. However, some income gains can be made with small price increases. The group might lobby for more production controls through government action in order to reinforce its bargaining position. Market orders and agreements might provide a feasible solution through the use of quotas and base production plans.

The worst of all possible worlds for a bargaining group would be a situation in which elastic supply and demand responses existed. In order for bargaining to result in substantial income gains in this situation supply control

and product differentiation or price discrimination may need to co-exist. But even in this case, bargaining may lead to small income increases through small price increases or by an improvement in the marketing situation. Some agricultural commodities tend to have this combination of elastic supply and demand responses, which places doubt on the success of bargaining without supply control and/or cross-commodity compliance. If by merchandising the effectiveness of substitute products can be diminished and the demand curve for a particular product can be to some degree negatively sloped, then an opportunity exists for a degree of success by a bargaining group, and particularly for one which could effectively control supply.

Both supply and demand responses require economic time over which to adjust fully. The nature of the agricultural supply response has changed within the last several decades to that of one reflecting the increased capital investment required before the initiation of production and the fixity of that investment in agricultural resources once production is commenced. This has created a relatively more elastic non-reversible supply response pattern for agricultural products. This could create supply problems for agriculture in the long-run, after an initial reversible price increase, assuming the price was above the variable harvesting costs.

Bargaining can--if done for several commodities that compete for markets or resources--reduce the elasticities,

and thus there is more chance of retaining income gains for the several commodities. The National Farmers Organization --as discussed in Chapter 5--emphasize this point by stressing bargaining on a cross-commodity basis.

The demand response has been becoming relatively more inelastic both for various food groups and for specific food items. This trend is not universal and various food groupings and items have been relatively more elastic due to increases in effective substitutes--some of which may be increasingly synthetic--and as a result of ineffective quality improvement and standardization programs in certain foods which has led retailers to remove it from their merchandising plans. In addition, demand particularly grows more inelastic at the farm, as the marketing margin widens.

A point which is often overlooked in the analysis of the potential for bargaining results in terms of price enhancement is that a small price increase or likewise any price advantage for a particular group has a proportionately larger effect on net farm income relative to the magnitude of the initial enhancement. This is because of the three part model of agricultural income: (1) prices time volume; (2) minus the costs of production and marketing; yields (3) net income. This concept is easily overlooked in assessing the success of a bargaining group in terms of improved price discovery systems with or without price enhancement.

If a bargaining group is successful in terms of price and income enhancement a select group of producers would benefit and much of the remaining rural community would remain isolated from the effects of improved farm incomes. Given the nature of modern agricultural input purchases and expenditures, the degree of filtration which would be expected would be less than under a more traditional form of agricultural production and marketing. But if agriculture as a whole bargains for price discovery with or without price enhancement and is successful then the distribution of benefits would be expected to be more uniformly distributed among sectors of agricultural production.

Limitations on Bargaining and Bargaining Groups

Aside from economic checkmates to vigorous bargaining, a basic political problem exists for bargaining groups in their efforts to enhance prices through bargaining--the United States body-politic lies mainly with the non-agricultural sector of the economy. Farmers and farm leaders interested in bargaining repeatedly encounter the basic fact that although possibilities for additional legislation to aid in bargaining for farmers exists the powers granted are apt to be short of exclusive powers--such as labor was able to obtain. The organization of agricultural producers into effective units for bargaining which are successful in enhancing prices poses a question of regulatory or anti-trust action.

There are several alternative methods of constraining bargaining groups to insure that the public weal is served. One method would be to place limits on the techniques of bargaining. The regulation of the conduct of the participants in the bargaining process would hopefully lead to acceptable levels of performance. Another method would be to directly regulate the performance of the bargaining process by limiting the amount of price enhancement. The third and most severe regulating technique is the structural regulation of agriculture.

Private land ownership and the "freedom to farm" are both long standing traditions in the United States. But abuse of these obligations and privileges could lead to the revocation of these basic rights and result in the regulation of both agricultural output and private land ownership. Utility companies have been long operated under regulations to conform the conduct and performance to that of public beneficiaries. This idea may not be so remote as farm leaders and agricultural economists believe. The current hassle over agricultural pollution control standards could generate some light on the above subject for interested agricultural leaders.

Legislation to make the performance of the agricultural sector conform to that of a public utility could be accomplished without a basic change in land tenure arrangements by setting up regulatory commissions and regulations

through which the performance of the agricultural sector could be adjusted so as to supply the consuming public with an adequate and wholesome supply of food at moderate prices as established by the regulatory commission.

The Secretary of Agriculture has the power to bring action against bargaining associations--under Section 2 of the Capper Volstead Act--if the prices are being unduly enhanced. In addition, the Attorney General's office may initiate proceedings to enforce the Secretary's orders to cease and desist in unduly enhancing prices. To date no orders have been issued but the legal mechanisms exist should a bargaining group be too successful in pursuing its private goals.¹²

Samuels lists the following legal limits to activities of bargaining groups. They cannot: (1) engage in predatory practices; (2) participate in a boycott; (3) agree with others not to sell to a particular person; (4) collude with non-cooperative firms to establish prices; (5) ignore Justice Department guidelines in merging with non-cooperative firms; (6) violate Federal Trade Commission regulations; (7) bargain with two or more non-cooperative handlers at the same time; (8) have contracts with handlers that control

¹²J. K. Samuels, "Legal and Legislative Aspects of Collective Bargaining in Agriculture," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action, North Central Regional Extension Publication 30, (University of Missouri, Extension Division, C911, June, 1971), pp. 25-26.

resale prices; nor (9) combine with business groups to engage in activities which are in violation of anti-trust laws.¹³

Bargaining--Fish or Fowl?

The ultimate test of the success for any cooperative or agricultural interest group lies in the ability to produce higher net returns for its members than could have been realized without its operation. Hoos estimates that rarely would a lasting price enhancement of 10 percent be achieved. Hoos notes that a successful bargaining cooperative could expect to achieve a lasting price enhancement in the 2 to 10 percent range.¹⁴ A price enhancement of this magnitude can indicate a significant improvement in net farm income. But in situations where a marketing system is deteriorating, there may be reason for bargaining even though net gains over time may be modest. The structural changes of deteriorating market system may militate in favor of some type of group action, even perhaps only defensive.

¹³Ibid.

¹⁴Sidney Hoos, "Economic Possibilities and Limitations of Cooperative Bargaining Associations," Cooperative Bargaining, Service Report 113, Farmer Cooperative Service, U. S. Department of Agriculture, (Washington: Government Printing Office, August, 1970), p. 18.

The basic problem for a voluntary bargaining group often revolves around the non-exclusive nature of the benefits. Members of the group may feel that the benefits are not being received in the form of improved farm prices, since non-members typically receive the same prices. Thus, bargaining groups usually engage in extensive propaganda campaigns in order to keep their members content.

Some bargaining groups find it necessary to engage in advertising and promotion in order to retain and obtain membership in a voluntary association. The nature of the membership contract in some bargaining groups would seriously strain the use of the word voluntary, but nevertheless membership recruitment is a large--perhaps too large--part of the organization's activities. These "voluntary" associations often fail, since members often expect the association to halt the downward movement of agricultural prices which are beyond the control of the organization. Thus, farmers become dissatisfied and withdraw their financial support from the association. The withdrawal of support is not as serious as the withdrawal of commodities from the association, especially as farm units increase in size. A small number of producers bolting an organization in specialized production groups can lead to the collapse of that organization. Livestock and grain producers are not large enough yet in terms of volume per member for this problem to be critical.

Bargaining groups in order to add impetus to membership recruitment efforts tend to claim credit for all price increases regardless of the source. Then as production increases and prices fall, the group becomes unusually quiet on price enhancement issues and tends to take the offensive against agri-business, the number wranglers in government or the academician. Modern agricultural producers are much different from their ancestors who bought "Kickapoo Indian Oil and Cough Cure" from the traveling medicine man. The realization by some bargaining groups that credibility not membership becomes the problem after large size is attained would serve to promote the cause of agricultural bargaining.

Performance of a Bargained Agriculture

This chapter has sought to review agricultural bargaining as an alternative means of coordination, control and price discovery or enhancement mechanism for agricultural producers. It is not meant to be a primer on bargaining--that alone would take several volumes--or a guidebook for bargainers. Bargaining is one alternative mechanism among several that will be considered in this study from the standpoint of coordination, control and price discovery and enhancement. Bargaining as a tool can operate within the framework of several alternatives.

The performance aspects of a bargained agriculture depend on the role or roles which bargaining plays in the

marketing of agricultural commodities. The roles of bargaining are discussed on pages 50 and 52. If bargaining serves as a vehicle for price discovery in an agriculture characterized by the exchange function determination of the basic producer reward, then the evaluation of performance is similar to that which occurs under traditional exchange systems. But if--as Rhodes and Breimyer note--price enhancement is the objective of most price discovery bargaining then the measurement of the aspects of pricing efficiency assumes critical importance. Efficiency is self-defining when bargaining only facilitates market price discovery, but it is not self-defining when bargaining is for price enhancement.

Bargaining in its role as a means of establishing the terms of relationship between a contractual agriculture and other sectors of the economy involves evaluation of performance aspects which include many complex judgments and trade-offs. Presumably a strong bargaining group would facilitate efficient marketing, obtain acceptable member returns, maintain long-run product demand and maintain reasonably stable market clearing prices. But the aspects of equity between members, between members and non-members, and between sectors within the agricultural industry cannot be assumed to be satisfactory to society.

Bargaining has greater potential for stabilizing price fluctuations than it does to greatly enhance prices over the

long-run. Moreover, the distribution of the benefits from bargaining will not create equal net returns per unit of product for all producers due to the differences in the cost structure of production, the nature of the production function and the management capabilities of different farmers. The open market exchange system did not produce equal returns per unit of product, but the open market exchange mechanism was not accorded this function.

Thus, a level of price enhancement which is great enough to protect the small marginal producer may enable the commercial producer to expand output potentials which could lead to further output instability. Even if output stability remains unchanged, the gap between the two types of producers is not closed by bargaining.

A bargained agriculture is more likely to be an orderly-marketing agriculture. This is not universally true and hinges on the ability of the bargaining group to obtain and retain support among producers and in the political arena. Thus, various institutional supports--such as marketing orders and agreements and market boards--as discussed in Chapter 6--may be necessary in order to obtain and retain the orderly-marketing aspects of bargaining.

Chapter 4

CONTRACTUAL AGRICULTURE

INTRODUCTION

The agricultural production and marketing system has evolved over time within a relatively competitive framework. But as both agricultural production and marketing have tended more recently toward more non-competitive forms, more reliance has been placed on systems of coordination other than the open exchange process at central markets, as a way to direct the food production-market system.

Horizontal and Vertical Integration

These other systems of coordination cover a wide range of activity, but frequently employ terminology such as horizontal and vertical coordination and integration. Horizontal coordination is the lateral combination of individual economic units into a single managerial unit. Likewise, vertical coordination is the relationship in which individual economic units are linked directly to an input supply source or an output sales channel. Horizontal and vertical coordination arrangements in agriculture are not independent random occurrences. Both are often found within the same economic unit--much as if one is cause and the other is effect.

Breimyer notes that vertical coordination can occur through either of two principal methods: market exchange or vertical integration. Breimyer's concept of market exchange is not strictly restricted to the traditional open market exchange system. The concepts involved in market exchange remain the same so long as the negotiation takes place between relatively independent individuals. Vertical integration achieves vertical coordination by linking together successive stages of production and marketing under a single managerial authority.¹ This may be accomplished either by outright ownership or control-without-ownership by one firm. Vertical integration substitutes a form of direct control for the functions of coordination performed by price discovery in an open exchange market system.

Vertical integration is encouraged by situations which make it advantageous for the integrator to gain a degree of control over the price and supply of his inputs or the price and/or merchandising channels of his product. The attractiveness of profit margins at the other levels of an industry may also encourage entry into that area by means of vertical integration. Substantial incentives to enter other levels of industry tend to exist more readily under various forms of imperfect competition than under competitive

¹Harold F. Breimyer, Individual Freedom and The Economic Organization of Agriculture, (Urbana: University of Illinois Press, 1965), p. 100.

conditions. However, unsatisfactory results flowing from another sector of a competitive industry such as an erratic supply of inputs may also encourage vertical integration.

Contracting is the method usually used to achieve vertical integration without actual ownership.

THE CONTRACTUAL SYSTEM

What is Contracting?

The mention of agricultural contracting creates all types of demons in the minds of agricultural producers. A contract is a legal agreement between two or more people and usually enforceable by the courts. Armstrong classifies contracts into advance delivery, production, or a combination of both. Advance delivery contracts usually involve only the pricing mechanism and the terms of trade--such as delivery times and location. Production contracts often involve establishing input prices and detailed specifications concerning management, financing and other production arrangements.²

Contracting is a management-transfer process which involves a decrease in the autonomy of the agricultural

²Jack H. Armstrong, "Bargaining Through Associations," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action, North Central Regional Extension Publication 30, (University of Missouri, Extension Division, C911, June, 1971), p. 30.

producer.³ The degree to which producers feel this loss of self-determination partially influences the extent to which bargaining groups or associations of producers will be formed to countervail the increased power of the integrator. To this extent, contracting and bargaining are a symmetrical relationship in both that a cause and effect and effect and cause relationship can exist between them.

Contract Development

There have been several sources of contract development. The source of contract development has not been the same for all commodities nor proceeded at the rate or directions for all commodities. A few of the more important elements are discussed in this section.

1. If monopolistic competition is characteristic of much of the modern business world and product differentiation is a bulwark of competitive strategy in merchandising, then the associated heavy reliance on advertising to differentiate the product in the minds of the consumer has in part led to what some refer to as the discriminating demand. Retail outlets and processors reflect this demand and this in turn reflects to

³V. James Rhodes, "Contractual Agriculture," Economic and Marketing Information for Missouri Agriculture, (University of Missouri, Department of Agricultural Economics, Cooperative Extension Service, Vol. XIII, February, 1970), p. 3.

producers. Contractual arrangements are thus the natural outgrowth of this process. However, to credit the large increase in the volume of contracting solely to changes in the retail food merchandising practices would be over-simplifying the nature and influences within agricultural production and marketing.

2. Advertising of specified types or qualities of agricultural products created a need for which the open exchange market system of procurement was not then prepared to cope. The big open exchange markets at one time could meet the demands of processors. But the breakdown of the central markets put the burden on specification production and marketing.
3. Contracting may have come about less as a replacement for an unsatisfactory open exchange central market result, but more as a replacement for intermediate steps in the market system evolutionary process. The lack of order and control in these intermediate steps--such as direct selling, individual negotiation--led to the reliance on contracting. Much of the competition was at best oligopsonistic in these intermediate steps. Thus, contractual marketing or production under

deteriorating open exchange central market conditions may be an improvement.

This section is not meant to be a primer on contracting incentives. A section in this chapter, pages 79 through 83, deal with that subject.

Contract Types

Rhodes mentions three basic contract types associated with the agricultural production-marketing system. The first is a piece-wage contract where the contractee remains essentially an employee for the contractor with the contractee's return being based on the quantity and the quality of the finished product delivered to the contractor. The second type is a joint risk sharing arrangement whereby the grower assumes production risks (death loss, feed conversion, etc.) and the contractor assumes market risks associated with price fluctuations. The third type is a forward sale contract through which the buyer agrees to purchase specified quantities and qualities of a commodity within a designated time span.⁴

Rhodes classifies contracts on a scale which runs from a forward sale contract through joint risk sharing contracts

⁴V. James Rhodes, "The Role of Farming in Agricultural Production, Marketing and Processing," Paper No. 1970-26, (University of Missouri, Department of Agricultural Economics, 1970), pp. 11-14.

to piece wage type contracting. This classification is not meant to imply a degree of "goodness" or "badness" or an evolutionary path of contractual development, but rather to illustrate the degree to which the producer's sovereignty and entrepreneurial independence can be differentiated.

The forward sales contract can assume either of two roles: that of a marketing agreement or that of a financing agreement. The marketing agreement contract assures the farmer of a market and the contractor of a supply of inputs. The financing agreements stipulate that in exchange for the contracting firm's supplying the inputs for production the producer agrees to sell his product to the contractor. The producer obtains a source of credit through this arrangement.

Rhodes also notes that joint risk sharing contracts usually shift price risks to the contractor and leave production risks with the contractee. This can take the form of a forward sale at an established price. Contractors take a great deal of market price risks, especially in commodities for which price fluctuations cannot be hedged on the Future's market.

Another alternative which Rhodes mentions is a floor price risk sharing contract where a producer was assured a floor price or market price, whichever is higher. The level of the floor price dictates the degree to which price risks would be shifted to the contractor. Another variant of the joint risk contract is a profit sharing arrangement where

both contractor and farmer contribute inputs and the cost of inputs is subtracted from market returns and profit and losses are shared according to a pre-established arrangement. The producer and contractor share the price and production risks proportionately in this situation.

Rhodes' third type of contract and the ultimate loss of producer marketing entrepreneurship is the price-wage type contract. Several variants of price wage contracts exist, but all basically hinge around guaranteeing a producer so much per unit of marketable product delivered to the contractor. This payment is made for services rendered from labor and capital.⁵

EVALUATION OF A CONTRACTUAL AGRICULTURE

Incentives for Contracting

Numerous incentives can be hypothesized as to the growth of contractual arrangements within the food production-marketing system. However, the examination of a contractual industry is complicated by the exclusive, non-public nature of the relationship which exists between the parties. In analyzing incentives and attempting to explain the movement into any one system of coordination it must be remembered that the analysis is conducted from an ex-post standpoint. This process can be likened to examining a butterfly when

⁵Ibid.

having never learned of metamorphosis. Nevertheless an investigation into prior contractual experiences and relationships is useful from the standpoint of evaluating future contractual arrangements and relationships.

Broiler producers in the early 1950's moved into contracting as a means of mitigating the unpleasant experiences of the intermediate steps in the deterioration of an open exchange market system. This illustrates the evolutionary process which develops once an open exchange market system fails to function. To a degree broiler producers were enticed into entering contractual arrangements by feed dealers and mills, who sought to sew up markets for their feeds. Feed dealers and mills were not alone in pushing for contractual arrangements with producers: processors, hatcheries, and various other combinations of input suppliers and output buyers were and are active in promoting additional contractual arrangements. This illustrates that initially much of the push behind contractual arrangements comes from the input side of the market for some agricultural commodities.

Integration by farmers through their cooperatives is another possible source behind contractual arrangements. To date, except for some specialty crops, this push for contractual cooperative integration has not been great. The absence of strong cooperatives in livestock marketing and to a degree in grain marketing may limit the contractual cooperative integration into those commodities.

Broiler production and broiler growers may have been a special case and thus not applicable to other agricultural industries. Much of the broiler production occurred in southern states where labor was plentiful and risk capital was relatively scarce. Broiler technology was expanding at a rapid rate, and to keep abreast of the latest cost reducing, feed conversion technology growers required increasingly larger amounts of risk capital. The increasing importance of the input supply of capital into agricultural production may require producers to assume fewer price risks. Thus creditors may actively promote contractual arrangements for debtors.

Broiler growers also needed a significant degree of management capability in order to utilize the new technology. Growers by contracting could thus obtain a market and at the same time take advantage of the latest cost reducing technology and obtain managerial supervision all at a reduced risk to the grower.

Broiler processors were willing to engage in contracting because in so doing the operation of the plant at near capacity could be assured. The contractual arrangements initiated by feed dealers and mills often involved processors so as to assure a market. A plant's average operating costs would be more likely to reach the low point of the average cost curve by using processing plants more intensively. The quantity buying practices of supermarkets could force

processors to reduce their costs to near the low point of the average cost curve by using processing plants more intensively. The quantity buying practices of supermarkets could force processors to reduce their costs to near the low point of the average cost curve in order to remain competitive with fellow processors.

Contracting is attractive for input suppliers for similar economic reasons as for the output processor. The desire to maintain or increase the market share so that overhead costs can be more nearly fully distributed is strong. Agri-business firms desire to achieve economies of scale associated with a near capacity output. Contracting also avoids the cost of competitive selling, assuming the cost of contract selling is less. Thus contracting becomes a way of doing business or an eventual bankruptcy game for participating and non-participating firms respectively.

The competitive strategy of agricultural business firms is meant to insure the survival of that firm. Within a given market area the number of producers is limited, especially in agricultural enterprises where land ownership is a major prerequisite. If competing firms adopt a strategy such as contracting which could potentially lock other firms out of a market then the universal adoption of that strategy is necessary in order to insure the survival of the firm. Much the same pattern of development occurred as retail stores adopted trading stamps as a competitive tool.

Contractual arrangements like trading stamps often prove easier to adopt than to disavow, because of the nature of competition between firms.

Contractual Thorns

Several solutions exist for a firm which faces a low level of demand for input services due to an insufficient market because of tying contractual arrangements for input services with other input suppliers. One solution is to induce present producers to achieve higher levels of production and thus create a higher level of demand for the firm's input services. Another solution is to recruit new producers by offering contracts which entail a reduction in risks for the producer and at the same time assure the supplier of an increased demand for input services. Another solution is to directly engage in production and thus constitute a vertically integrated demand for the input services within the same firm. Herein lies some of the greatest problems of contracting and some of the thorniest problems facing the future of independent agricultural production.

Input suppliers and buyers of agricultural products have every desire to increase the amount of agricultural products under contracts which move through their plants. This increased production eventually depresses agricultural prices and forces the integrator to toughen contract terms and possibly consider the advantages of not offering

additional contracts. The contractual producer is thus faced with a gloomy prospect--one of having no additional marketing alternatives other than contracting--if production fields cannot be switched--since other marketing alternatives may have evaporated due to the exclusive nature of the contractual arrangements.

Rhodes points out that several aspects of contracting indicate valuable lessons for the future of contractual arrangements as alternative means of coordination. The process of contractual coordination functions smoothly so long as the market price situation remains favorable so that both parties to the contract agreement can achieve gains. But if market prices fall many contractors will realize the degree of price risks which they have transferred to themselves. This in turn will influence the extent to which contractors will offer or change contract terms in the next production period.⁶ If contractual arrangements prevail the farmers may not be protected by having alternative market arrangements to which to turn.

Formula Pricing

Some authors refer to the declining role of price as an instrument of coordination. But actually, the number of junctures at which price is discovered has declined rather

⁶V. James Rhodes, "Contractual Agriculture," loc. cit.

than the role played by price declining. This decrease in the number of price discovery points actually places a large degree of reliance on the remaining discovery points and the price discovery mechanism. Price discovery processes have increasingly evolved towards a non-negotiated method of arriving at price for agricultural products. The increase in non-negotiated pricing has been a natural outgrowth of the increasing reliance placed on vertical coordination and especially contractual arrangements in lieu of open market exchange.

The most prevalent of these non-negotiated commodity pricing techniques is the so-called formula pricing. A formula pricing device typically involves several elements among which are a basic source of current price information, a differential for product qualities and provisions for discovering and fixing a base price. Formula pricing reduces the extent to which negotiation must occur in each selling price under contractual arrangements. The contract usually specifies a formula through which returns to the producer are to be calculated. The formula mechanisms have been widely used in milk marketing orders and under other marketing orders and agreements.

Formula pricing devices necessarily place a significant degree of dependence on the manner and method in which a base price is selected as an integral part of the formula. In meat the National Provisioner's Yellow Sheet establishes a

price on which a base price is often determined. In eggs the Urner-Barry quotations establish a base price used by many dealers in eggs. Although both the Yellow Sheet and the Urner-Barry quotations are supposedly based on commodity trading, both are shallow markets and include personal judgments of the reporters. Even if formula prices are based on an open exchange market, the choice of the base price market is critical. This base price market should be one in which neither the seller or the buyer has a major market influence.

The use of formulas as a means of price discovery has several advantages. Formulas can increase efficiency by reducing the resources devoted to the price discovery process. Formula mechanisms also tend to promote a degree of continuity among the parties involved. This continuity and the sense of a working relationship can serve as a basis for successful bargaining and price enhancement efforts.

The use of a formula price discovery mechanism can permit the producer to bear the risks of market price fluctuations to a greater degree than occurs through some other forms of contractual price determination. A formula mechanism which uses the base price of an open exchange market incorporates the risks of price fluctuation at those open exchange markets into the formula mechanism. This can result in a greater producer awareness with regard to the relationships of the production process and the workings of

the agricultural price system. This may help solve some of the over-production problems associated with the contractual process. Presumably rational producers--and particularly if an effective interest group existed--would desire to add an output stabilizing effect to products produced under formula price contractual arrangements.

A formula price discovery mechanism basically rewards producers on the basis of product qualities by the application of premiums and discounts. This could tend to lead producers to feel that their product has achieved greater total returns over the open exchange price, since the application of premiums and discounts are clearly visible to the producer--assuming that premiums predominate.

The avoidance of the cost of establishing price is often one of the basic considerations in going to formula pricing mechanisms in contractual arrangements. This leads to a serious shortcoming of the formula price discovery mechanism. The decline of the open exchange markets as a sound base for formulas is of crucial importance. One aspect of this is that if the quality of the product declines significantly at central markets the price established at that market for a given product may not adequately represent a base price on which the formula mechanism can satisfactorily reward producers with the "just" price. Thus producers who market their products under contractual arrangements may feel the need for,

and seek to organize, a group to represent their interests in the negotiation process regarding contract terms.

Various marketing authors have emphasized that low quality products are over-rewarded in the market place and the higher quality products do not receive adequate compensation. The process of contracting can better reward producers of quality products if those producers possess marketing power. But the lower quality products which continue to move through the open exchange process may be even more over-rewarded as a result of the contractual process. This could occur through a strong demand at an open exchange market and a low supply of product at that market. Thus some buyers might buy or may pay more for a lower quality product than they would have normally accepted.

Formula price discovery devices have other disadvantages in that they encourage attempts to gain control over the factors which determine the base price. A group which can significantly influence the factors which determine either the base price or the formula can gain control over the price discovery process and thus create substantial rewards for either party. This manipulation is more likely to occur when the number of buyers or sellers is small or where an unequal market or bargaining power exists among the buyers and sellers.

Performance

The conduct and performance aspects of a contractually coordinated agricultural production-marketing system is closely associated with the structural aspects of that system. The latter typically involve an imperfect market on the buying side characterized by a few, large buyers and a more competitive market on the selling side characterized by many small producers. The performance of a system characterized by these conditions is apt to be slanted more towards levels which are acceptable to integrators and perhaps to consumers.

Another structural form which could be encountered in contractual industries is that where a few large buyers face a farm interest group representing many relatively small producers. This form has been noted in specialty crops or crops produced within a relatively small geographical area. The performance aspects of a system characterized by these conditions depends to a large degree on the strength of bargaining power or "market muscle" possessed by the farm interest group (see Chapter 3 for information concerning the relative bargaining power aspects of a system characterized by such organizations). A farm interest group with inadequate market muscle in addition to failing to enhance incomes may encourage buyer entry into production or encourage aspects of buyer discrimination between producers.

A farm interest group with too strong or effective "market muscle" would likely encounter restraints placed on

its conduct and performance much like those used in the early days of agricultural legislation to control big business interests and conform the conduct and performance of the system of a competitive level.

The role and the functions played by various levels of government will greatly influence the conduct and performance aspects of a contractually coordinated system. Devices such as marketing orders, agreements, boards and pricing committees can provide channels by which seller's relative bargaining strength can be enhanced in negotiating contract terms with buyers. The regulations issued and enforced by various agencies--such as the Packers and Stockyards Administration can materially affect the conduct of contract participants and the process of contracting.

The performance of a contractual system can vary within wide ranges depending on the type of contracts offered by contractors. If contractual arrangements evolve from marketing and financing agreements through joint risk sharing contracts to piece-rate contracts as in broilers and turkeys, then the process of contractual development and performance aspects can be evaluated on the basis of experiences within those industries.

In terms of consumers, the performance of the broiler, and to a degree the turkey industries, has been satisfactory at least within the relatively short-run. A better quality product at lower retail prices and in a steady supply has

increased consumer acceptance and encouraged higher per capita consumption. Much of the quality improvement has been due to improved technology--although the integration process may have hastened the development and adaptation of that technology. Performance levels which are satisfactory in the short-run to a particular sector of the economy may not remain so in the long-run.

The performance of a contractual system is closely associated with the availability of production and marketing alternatives to producers. Tomato farmers in Indiana can shift land to corn production should tomato contractual arrangements prove unsatisfactory. Specialization is the nemesis of the unorganized contractee. Fruit production and marketing under contractual arrangements does not in the short-run provide alternate production possibilities for the producer.

In terms of contractors, the performance of a contractual system varies depending on the risks undertaken by the contractors and the objectives of the contractual process. Contractors may be assured of a steady demand for their services and thus the performance of the system may be improved from that standpoint. But as Rhodes pointed out, the performance is acceptable so long as market prices remain favorable and contractors do not suffer under price risk contracts. If market prices become less favorable, then contractors frequently desire better performance under price

risk contracts. Each individual contractor has trade-offs between improved operational efficiencies from the resulting near capacity output compared with added price risks assumed in order to encourage contractual production. But if contractual arrangements have become characteristic of the industry the importance of these trade-offs diminishes, since contractual arrangements may be the only means through which the contractor can remain within the industry.

In terms of contractees, the performance of the contractual system depends to a large extent on the type of contracts to which contractees are committed. Different contractors would be willing to offer various types of contracts--depending on their needs, ability to bare risks and the degree to which contractees must be encouraged to enter contractual arrangements. Contractees would be expected to demand different types of contracts depending on the functions and the degree of risk which the contractees are willing to accept. The heterogeneity of contracts is to be expected unless a strong farm group represents the majority of contractees in negotiating with contractors. In any case, the performance of a contractual agricultural coordination system should be such as to provide means through which marginal producers can advance in proprietorship to full-risk bearing producers.

Overview

The problem in evaluating contractual arrangements hinges on the different types of contracts and in the nature of risk sharing between the contractor and the contractee. The relationship between the contractor and the contractee in terms of sovereignty between the parties is an important element in the evaluation process. Contractual arrangements which lead to a "new feudalism" over agriculture are not satisfactory from the standpoint of the maintenance of contractee sovereignty.

Even the best of contractual arrangements leads to a reduction of marketing information--the basic market knowledge of contractees. This reduction of market knowledge does not permit a contractee or potential contractee to exercise their basic power--that is the choice of marketing alternatives if contractual arrangements should provide unsatisfactory results. The process of declining market knowledge and declining marketing alternatives weakens the performance aspects of a contractual system of coordination.

The offsetting processes of organized group action and alternative institutional arrangements--as discussed in Chapters 5 and 7 respectively--will need to be developed to a much greater extent than now employed or developed in order to add stability and equity to the conduct and performance aspects of developing contractual systems. Bargaining as a

tool relates to several alternative means of coordination, but does so especially well within the framework of contractual arrangements.

Chapter 5

AGRICULTURAL DISCONTENT

Introduction

The passing of the American agricultural frontier checked the movement of settlers to new lands in search of opportunity. The footloose frontiersman had moved into new areas and virgin land whenever civilization encroached. Following the frontiersman came the settlers and sodbusters who desired to accomplish a measure of success both in terms of property and family matters through their agricultural operations.

The passing of this frontier and the ensuing frustration among settlers unable to accomplish their goals marks the beginning of organized discontent among farmers over their lack of ability to control their destiny. This establishes a base point for a brief investigation into the organization of agricultural discontent in the United States.

The era of farm organizations began with producers seeking to rectify their situations and formulate agrarian reform by attempting to achieve success and redress of grievances through the political processes. This eventually led to attempts to control and regulate big business interests. Many important pieces of agricultural legislation

and business regulation legislation owe their existence to these groups. The common feature of these groups was that as soon as the farmer obtained economic relief, the basis of cohesion for the group evaporated and the revolt ended--although many times the accompanying organizational structure refused to die.

Efforts to obtain economic relief through the political arena led to the formation of the so-called Farm Bloc of the 1920's and the eventual establishment of price supports for some agricultural commodities. Campbell points out that the issue of agricultural price supports divided farmers along political party lines with the larger farmers tending towards the Republican party and no price supports and the smaller farmers tending towards the Democratic party and price supports. This division further weakened the farmer's political power which was already being weakened by the migration of farmers to urban areas.¹ This division appeared mainly after the end of World War II and was not clear in the depression and war years.

In addition to efforts to control their destiny directly through political action, farmers slowly and painfully sought to achieve the same and through regulation of the open exchange price discovery system. Much of the legislation in

¹Angus Campbell, et. al., The American Voter, (New York: John Wiley and Sons, Inc., 1964), pp. 225-227.

the early 1900's was aimed at conforming the conduct and performance of the agricultural price discovery system to that of one operating under perfect competition. The provision of services such as market information, uniform grades and standards, regulation of stockyards and other legislation sought to provide the means through which atomistic agricultural units could successfully cope with the forces of the market.

The response to agricultural discontent in more recent years has taken two basic channels. One channel is that of various kinds of government action including price supports and acreage control. The other is farmers' own efforts to influence prices--both input and output--and other terms of their income situation. This latter channel frequently involves the use of the former channel in order to gain enabling legislation and protective support. The results of the flows from the two channels are not mutually exclusive. The concern in this study is with the latter channel and farmer efforts to control and influence their income situations.

As a second channel, farmers sought directly to adjust to the imperfectness of the market through the establishment of countervailing power in the market place via cooperatives. During World War I, Aaron Sapiro organized a number of specialty crop producers into cooperative organizations. By 1920 a new wave of cooperation had engulfed the United States

under the leadership of Sapiro. The inability to combine a substantial proportion of the production into a cooperative organization led to the collapse or disuse of many of these cooperatives.² This further heightened the growing agricultural discontent.

Continued or resurgent agricultural discontent is the occasion for focusing attention upon alternative mechanisms of coordination and control in the agricultural economy.

Agricultural discontent has not been unknown to the midwest. The American Society of Equity and the Farmers Holiday Association were both formed on the farms of the midwest. The Farmers Holiday Association and the National Farmers Organization were both formed in Iowa. The National Farmers Organization, like the American Society of Equity, was the brainchild of a feed and seed salesman. But the National Farmers Organization unlike the other two was first organized for the explicit purpose of seeking the redress of its members' grievances through the political process.

In order to obtain first hand illustration of some of the activities being carried on with regard to alternative systems of coordination, the American Agricultural Marketing Association, the National Farmers Organization and the

²Aaron Sapiro, "Cooperatives to Control Marketing," Agricultural Thought in the 20th Century, (Indianapolis: Bobbs-Merrill and Co., 1967), George McGovern, ed., p. 95.

Interstate Producers Livestock Association operations will be briefly reviewed.

The National Farmers Organization

In 1955, Wayne Jackson--a farmer in southwestern Iowa--convinced Jay Loghry--a Moorman's feed salesman--to attempt the formation of an organization which would endeavor to offset the problems of low farm income. Although the initial effort by Loghry failed to obtain any farmer response, his efforts in 1955--when agricultural prices were depressed--met with more success. Attention was first turned to an attempt to secure the resignation of the then Secretary of Agriculture, Ezra Benson.³ By December 1955 the organization had a membership of about 55,000 "dollar day members," who had initially contributed a dollar to the support of the organization's efforts. The first convention held in December 1955 at Corning, Iowa, elected Oren Lee Staley as the President of the organization.⁴

The objective of the National Farmers Organization has been to obtain enhanced farm prices for its members. The question becomes one of the means necessary in order to achieve this objective. Initial efforts to petition Congress

³Charles Walters, Jr., Holding Action, (Kansas City: Halcyon House, 1968), p. 15.

⁴Ibid., p. 16.

and the United States Department of Agriculture were largely unsuccessful. In order to rally support, it became apparent that new methods should be adopted in order to attain the goal of enhanced farm prices. Charles Walters relates how the idea for these methods were formed:

Staley was riding a cultivator through waist-high corn when he realized that there could be no solution to low farm income as long as farmers relied on either government payments or individual marketing.⁵

In order to arouse support Staley and his organizers canvassed the countryside securing agreements from members who were willing to bargain collectively. Staley then submitted this alternative to the 1958 convention which in turn adopted collective bargaining as a program of action. NFO has progressed through various withholding actions since 1958. This included a large milk withholding action in 1966 and a meat withholding action in 1968.⁶ There have been other commodity withholding actions but the above two generated the most heat and some light for the organization. The dumping of milk and the shooting of hogs made news which illustrated the desperation and the determination of farmers. From an organizational standpoint not a small benefit of the withholding actions were the large increases in membership and in the members' redetermination.

⁵Ibid., p. 18.

⁶Ibid., pp. 10-16.

The concept of withholding production is not new to price and income enhancement efforts. The American Society of Equity, the Farmers Union, various other farm groups and cooperatives had attempted similar withholding efforts prior to the existence of the NFO. The American Society of Equity under the leadership of James Everitt withheld wheat and several other commodities in 1903-1904 and succeeded in raising market prices. But the organization did not have control over its members' production and selling actions, and thus the following year's large crop erased all price increases.⁷ Everitt had the obsession to control the price of farm products and thus lost sight of the necessity to first control production. Everitt was convinced that there was no reason to worry about production control, since producers would not over-produce and wreck the gains achieved. Statements previously made by NFO leaders concerning the need for production controls closely parallel the following statement by Everitt:

It may be claimed that a very large number of farmers and producers cannot be held effectively in line to control prices. We believe that there are enough intelligent and sensible agriculturists in the country who, seeing the enormous benefits resulting from this plan, will not refuse to market conservatively, and thus exert the desired influence to control prices.⁸

⁷Carl C. Taylor, The Farmers' Movements: 1620-1920, (New York: The American Book Co., 1953), p. 313.

⁸James Everitt, The Third Power, (Indianapolis: The Hollenbeck Press, 1903), p. 21.

However, the NFO membership agreement contains a provision for the imposition of production quotas, although given the independent nature of the American farmer the enforcement of quotas might prove difficult.

Withholding as a concept of price enhancement is not an exclusive tool of farm groups. Labor groups have used the strike and required union admittance as a means of withholding their services from employers. Violence has always been a major problem in the use of the withholding technique because of the problems created by non-members. The Farmers Holiday movement was also unsuccessful partially because of the lack of control over production and the accompanying violence. Perhaps among the most violent of all withholding actions was that which occurred among tobacco growers in Kentucky who informally organized a group known as the Kentucky Night Riders who succeeded in raising the prices of tobacco by over 100 percent through engaging in acts of violence and vandalism.⁹

Withholding is not a means of production control. Withholding is basically a bargaining strategy, although it does have other strategic uses. The beneficial results of withholding also lies in the ability to arouse sentiments among farmers and the public in general over the agricultural

⁹Fred A. Shannon, American Farmer Movements, (Princeton, New Jersey: D. Van Nostrand and Co., 1957), pp. 161-166.

situation. This can in the long run lead to a stronger bargaining group which can create a stronger bargaining position.

NFO's basic present bargaining approach functions by signing a large enough volume of production for a specific commodity to supply one processor with a steady stream of the commodity, while denying it to another. NFO makes a determined effort to shift the historical pattern of procurement so that processors will need to pay more for a steady supply of product within an area where supply is short. The NFO claims it can then staircase this supply shortage across the United States and obtain higher prices for the product. However the basic long-run objective of the NFO strategy is to sign up more than half of the total supply of a commodity and then bargain across the board for price enhancement.

The shifting of procurement patterns could lead to more favorable contract terms and thus price enhancement beyond the value of the added services performed by NFO. This technique requires that members' production within an area be a substantial part of the total production and that members honor contract commitments. The percentage of production which must be shifted from the traditional channels is not as great as might be expected, since processors, because of their fixed capital investments, can be persuaded to increase their prices if refusal would mean operating a

plant at below optimum capacity for long periods of time. This device promises benefits to the processor and also denies the NFO products to his competitors.

The NFO membership agreement is a legal contract in the kind of small print that is notorious in so many legal documents. The membership agreement authorizes the NFO to: (1) act as the exclusive representative of the individual farmer in collective bargaining; (2) to enter into contracts with processors covering selling prices; and (3) establish marketing procedures. The membership agreement is for periods of three years unless written notice is received within a ten-day period just prior to the expiration of the three-year contract period at the Corning office.¹⁰ The membership fee is \$75 per year.

The agreements which NFO makes with processors to deliver products to their plants do not normally become effective until 60 percent of a processor's volume is under NFO contract. Until NFO activates a contract the members can market their products by any manner satisfactory to the individual member. But once a contract is activated with a processor the members must sell to the designated processor or be assessed 10 percent of their gross sales as damages.¹¹

¹⁰Joseph C. Honan, Jr., "The National Farmers Organization: A Study of Agricultural Protest," (unpublished Doctor's dissertation, University of Missouri, 1966), pp. 44-45.

¹¹Ibid.

In terms of traditional values which have characterized agriculture and agricultural producers the approach adopted by NFO deviates further from those values than any approach used by an organized farm group. This does not necessarily condemn the approaches used by NFO. Agriculture and agricultural producers are undergoing a series of dynamic changes.

The need for a market by a specialized producer who makes use of purchased capital inputs in the production process differs from those of a diversified producer who once used mainly farm-produced production inputs. To a large extent the modern agricultural producer has been locked into production through the required heavy capital investment. Thus, often what he needs most is a buyer--a dependable purchasing, processing and merchandising organization rather than a militant farm group which would advocate and invite economic disaster. The NFO has come to appreciate these needs. Hence, the semantics of referring to a holding action as a marketing vacation comes into vogue.

It is impossible to assess the accomplishments of NFO. Perhaps the principal accomplishment is that the NFO is still in existence and has grown in strength. NFO has long since passed through the experimental stages. It has moved nationwide and into many commodities and commodity areas. On the other hand, if NFO is deriving its strength from the new members recruited in new areas or for new commodities then that source of strength will soon be exhausted. The ability

of NFO to survive the next ten years in a climate where enhanced member prices and incomes will be expected is the test of the NFO. The test has begun and competition in the form of an active American Agricultural Marketing Association offers an attractive alternative to agricultural producers.

American Agricultural Marketing Association

The American Agricultural Marketing Association (AAMA) is the marketing branch of the American Farm Bureau Federation. It was organized in January, 1960. It depends extensively on the philosophies, policies and strengths of the American Farm Bureau. The objectives of the organization were summarized by Allen Lauterbach as follows: (1) to help farmers and ranchers determine, earn and obtain full market value for their products; (2) facilitate orderly marketing; (3) to expand markets and promote the sale of commodities in foreign and domestic markets; and (4) to initiate and promote special services for growers.¹² Kenneth Hood, the previous general manager of AAMA, states that the basic objective in the formation of AAMA was to help Farm Bureau members solve the new marketing problems which arose from the increase in

¹²Allen Lauterbach, "Some Legal Developments of Interest to Bargaining Cooperatives," Proceedings of the 8th National Conference of Fruit and Vegetable Bargaining Cooperatives, Farmer Cooperative Service, U. S. Department of Agriculture, (Washington: Government Printing Office, 1964), p. 48.

direct marketing, the growth of vertical integration and the rapid development of contract production and marketing.¹³

Harold Hartley, the new general manager of AAMA, refers to the AAMA as "an organization structure which provides producers of any commodity with an opportunity to develop a marketing program of national scope which can deal with major marketing problems."¹⁴ AAMA is made up of the state Farm Bureau Marketing Associations as its members. In March, 1971, there were 39 state member Farm Bureau Marketing Associations within the framework of AAMA. These state associations were involved in providing marketing services for 31 different commodities with special emphasis being placed on fruits, vegetables, and tomatoes for processing, broilers and livestock. The business volume of AAMA in 1969 was approximately \$260,000,000.¹⁵

Hartley lists the following guidelines for the AAMA's marketing programs: (1) the use and improvement of the market price system; (2) to use the marketing associations as a tool, not a weapon; (3) develop a program to bring long term gains rather than short-run benefits to its members; (4) build a marketing program with strong, efficient,

¹³Ken Hood, "Action Marketing," Nations Agriculture, February, 1971, Southern Edition, p. 4.

¹⁴Harold Hartley, "What's New in the AAMA," Proceedings of the 11th National Bargaining Conference, Farmer Cooperative Service, U. S. Department of Agriculture, (Washington: Government Printing Office, 1967), p. 65.

¹⁵Ken Hood, op. cit., p. 4.

commercial producers; (5) base the programs of the association on voluntary membership; (6) use every possible means to educate producers on the objectives of the program--information to the members is a key ingredient in the success of a marketing program; (7) provide a method for buyers to participate in the changes that must come about in agricultural marketing; and (8) use government only to define and enforce the rules of fair play.¹⁶ These guidelines indicate the general philosophy of the Farm Bureau and AAMA with regard to the type of programs in which they are apt to participate or promote.

AAMA basically operates programs by which members can market their products on contract terms through the organization. The organization attempts to gain better contract terms for its members. AAMA also represents groups of producers--such as in specialty crops--who were previously marketing their commodities under contracts. The AAMA serves in the role of negotiator for those producers it has organized. AAMA also operates other programs--such as in livestock--where central collection points are established and cattle or feeder pigs are assembled and sold under contract. AAMA also conducts marketing information programs.

¹⁶ Harold Hartley, "Headaches and Achievements of the AAMA," Proceedings of the 8th National Conference of Fruit and Vegetable Bargaining Cooperatives, Farmer Cooperative Service, U. S. Department of Agriculture, (Washington: Government Printing Office, 1964), p. 13.

Hood notes that farmers must adjust to the changes which have occurred in the food production-marketing system. To do this they must: (1) recognize that consumer demand has changed and is still changing; (2) realize that production decisions directly affect marketing decisions; (3) be willing to work within a marketing system framework which translates consumers' wants directly into production decisions; (4) be willing to make delivery on specification contracts; (5) develop a system of price discovery for the declining reliance on auctions and terminal market systems in the role of price discoverer (Hood notes that this may take the form of bargaining for price discovery); and (6) be willing to establish a bargaining association in order to discover a price based on supply and demand conditions--and develop contracts which relate prices to volume, premiums, differentials and other relevant terms.¹⁷

In Missouri a large part of the AAMA's marketing programs hinge on the livestock marketing activities. The Missouri Farm Bureau is engaged in marketing its members' production through the Missouri Farm Bureau Marketing Association. Missouri Farm Bureau had approximately 46,500 members at the end of 1970. The basis for Missouri Farm Bureau's livestock marketing program is the livestock

¹⁷Kenneth Hood, "The New Route--Contract Marketing," Nation's Agriculture, January, 1970, Southern Edition, p. 29.

production enterprises of Missouri farmers. The Missouri Farm Bureau has teamed up with the Interstate Producers Livestock Association (IPLA) in organizing these livestock marketing programs for Missouri farmers.

Interstate Producers Livestock Association

The Illinois Agricultural Association's livestock marketing affiliate--Interstate Producers Livestock Association--operates in Illinois and surrounding states of Missouri and Iowa. IPLA is a livestock marketing cooperative and lays claim to being the largest of all livestock marketing cooperatives. IPLA moves livestock through four terminal markets and 47 country marketing points as well as auction markets and feeder pig collection points. In 1969-1970 IPLA handled 3,144,813 head of livestock of which about 20 percent was sold under contractual arrangements.¹⁸

L. L. Clovis, former executive vice-president of IPLA, has written several articles which sum up the operational principles and practices of IPLA. Clovis notes that livestock producers may have to eventually market their products on a contractual basis through a sales agency. Clovis notes that this may be the only alternative open to farmers. The sales agency would perform services for both the producer and processor. This could include keeping the producer attuned to the latest technological developments, determining pricing

¹⁸Missouri Farm Bureau News, January 12, 1971, pp. 2-9.

formulas which accurately reflect the most opportune time for producers to market the livestock, and being a party to the grading of the livestock and guaranteeing of payment.¹⁹

Clovis notes that successful contract marketing involves both the producer and his sales agency sacrificing some freedom and independence of operation in order to conform to contract stipulations necessary to secure processor acceptance.

Clovis believes that the farmer-owned sales agency should be the party which contracts with producers, since it can do so on the basis of an impartial third party and not be motivated to reap a profit through the contractual process. Clovis emphasizes that contracts are not the entire answer, since bargaining frequently must occur in order for the contract terms including price to be satisfactorily negotiated. Unless this is done, the sales agency becomes a price taker.²⁰

IPLA and Missouri Farm Bureau have several aspects of operation which should be mentioned briefly in this study. IPLA has for several years contracted to deliver slaughter hogs to the Krey Packing Company in St. Louis. This contract

¹⁹L. L. Clovis, "The Importance of Value in Livestock Marketing," Nations Agriculture, Southern Edition, July-August, 1969, pp. 6-8.

²⁰Ibid.

was signed in May, 1966. The base price is computed on a weekly basis which means that all producers who sell hogs to Krey within a given week receive the same price per pound for a specified type hog. These contracts call for delivery of "x" number of hogs per day to the Krey plant by IPLA members. The base price is established by formula with discounts and premiums according to carcass grade and yield. These discounts and premiums are negotiated with Krey.²¹

The producer chooses the week in which the hogs will be delivered, but IPLA chooses the day of the week. IPLA assumes the responsibility for determining a pricing formula which reflects the value and represents the best interests of producers, and guarantees payment to the producer. IPLA also furnishes a grader who jointly grades the hogs with the Krey grader.²² The Missouri Farm Bureau News reports that over 1,000,000 hogs have been sold to Krey through the quality hog contract.²³ These 1,000,000 hogs to a single packer undoubtedly reduced the supply at area terminal hog markets.

IPLA also conducts a feeder pig program in Missouri and Illinois. IPLA operates feeder pig collection points at

²¹Ibid.

²²Ibid.

²³Missouri Farm Bureau News, loc. cit.

several Missouri locations: Caledonia, Hamilton, Cuba, Albany and Perryville. Producers contract their feeder pigs and the IPLA obtains the best possible price from its established buyers and other interested parties. The feeder pigs are produced under contract with IPLA supervision. IPLA has also started a feeder cattle assembly program and service which lists the sources of feeder cattle for feedlot operators. IPLA operates a feeder calf collection point at Cuba, Missouri.

In addition, IPLA operates market hog collection points at Shawneetown and Callo, Missouri. IPLA in cooperation with the Missouri Farmers Association--operates a market known as Four Square Market near Marshall Junction, Missouri. IPLA has adopted method of vertical and horizontal integration through contractual arrangements which are meant to improve the quality of the farmers' production and also furnish the processor with a specified quality and quantity of commodity.

Comparison of NFO and AAMA

The comparison of NFO and AAMA programs and operations to date presents a picture which is similar in many aspects of operation, but which is quite dissimilar in basic structure. The degree to which both groups have adopted similar modes of operation is more than a coincidence. Both groups are engaged in bargaining. NFO engages in collective bargaining, which unraveled means that farmers bargain in a collective or group basis through the NFO. AAMA bargains or negotiates

over contract terms including price with processors. NFO bargains over contract terms, including price, with processors.

Both NFO and AAMA have contractual livestock marketing operations with packers. The similarities rather than the differences are striking. IPLA and NFO both deliver slaughter hogs to Krey in St. Louis. The distinct difference in their contractual operations for slaughter livestock is that NFO blocks together many small units of livestock and negotiates with packers for terms which involve determination of a formula. AAMA negotiates with packers on the basis of supplying packers with slaughter livestock under formula. The AAMA then groups the larger producers into units to supply those packers. NFO's strategy is to deny product to some packers, while AAMA's strategy would seem to be to obtain packer cooperation in the marketing of slaughter livestock.

The distinct and important difference is that NFO bargains for price and contract terms only after the culmination of the production process. AAMA in some but not all of its bargaining positions undertakes to improve the product and keep producers informed prior to the culmination of the production process. AAMA would seemingly see a larger role for the organization in terms of production and marketing of agricultural commodities than would the NFO. NFO has to date acted more as solely a bargaining agent rather than as a coordinator of agricultural activity.

AAMA has a broad base on which to operate its programs through a large, well-financed, established organizational arrangement. NFO partially because of the youth of the organization--and partially because of a failure to see a broad role for the organization--has not developed the depth or breath of organizational structure as has AAMA. In order to provide tangible services to members and to be able to better coordinate production and marketing, AAMA, and NFO to an even greater degree, will need to develop services and perform functions once handled by the process of open exchange at terminal markets. This transfer of functions and services may not be more efficient, but may occur because of discontent among producers and the failure of open exchange systems and farm groups to improve the price discovery systems. The National Farmers Organization has acted as a catalyst to cause change. Catalysts are frequently not useful unless they are guided by the actions of other agents within the system.

Chapter 6

MARKETING ORDERS, MARKETING AGREEMENTS AND MARKETING BOARDS

MARKETING ORDERS AND AGREEMENTS

Introduction

Marketing orders and agreements represent a method which was made available to agricultural producers by the regulatory powers of government through which production, marketing, demand and price problems can be dealt with for producers of some agricultural commodities. Marketing orders and agreements were authorized under the Agricultural Marketing Agreement Act of 1937. The program is sponsored by government and enforced by the police powers of government.

Marketing orders and agreements were first used as a means of boosting farm prices and incomes on a temporary basis, but were later used to provide an effective institutional arrangement for combating other marketing problems which materially affected farm incomes. This approach permits farm groups to facilitate the marketing of an existing product rather than controlling the production of that product.

Breimyer notes that marketing orders and agreements may perhaps be the most original institution developed in the

United States agricultural industry within the last generation.¹ The unique feature of this approach is that orders and agreements are initiated, developed, adopted, directed and financed by the industry within the given market area.²

Marketing orders and agreements were developed in response to a crisis situation. This crisis was the reduced agricultural income situation in the early 1930's and especially 1933-34. As a result of farmer discontent over their income situation Congress enacted self-help legislation for producers in the form of marketing order and agreement enabling legislation.

Jacobson points out that the Act of 1937 actually provides for two types of marketing orders--one for fluid milk which provides for a minimum price payment by all handlers for a given quality product within the market area; and the other type which includes a wide range of activity for other eligible commodities and which has come to be used primarily by producers of fresh fruits and vegetables and nuts.³

¹Harold F. Breimyer, Individual Freedom and the Economic Organization of Agriculture, op. cit., p. 163.

²Jerry Foytik, Agricultural Marketing Orders--Characteristics and Use in California, 1932-1963, Report 259 University of California, Giannini Foundation, 1962), p. 1.

³Robert Jacobson, "Marketing Orders: Bargaining Aid or Vehicle," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action, North Central Regional Extension Publication 30, (Washington: Government Printing Office, June, 1971), p. 35.

This study will consider mainly marketing orders, although marketing agreements can also play an important role in the marketing system for specialized agricultural products. A marketing agreement is voluntary. It is binding only on the handlers who sign the agreement contract with the Secretary of Agriculture. A marketing order is mandatory. It is binding on all handlers within the defined marketing area or production field for which it has been approved.⁴

The primary objectives of order programs as set forth in the Agricultural Marketing Agreement Act of 1937 were to bring about a degree of stability within a given market order area in the marketing of an agricultural commodity specified by the order. This concept of orderly marketing has been the primary role of federal orders. Breimyer characterizes orders and agreements as:

Those institutions which help to preserve the managerial role--the enterprise or entrepreneurial status--of the individual farmer. In that way, they also are keeping with the traditional concept of the marketing system for agriculture, wherein the incomes that farmers earn for their efforts are principally determined by the prices they received in markets to which all farmers (as well as buyers) have access to on equal terms.⁵

Federal orders and agreements do not authorize production control as such, but volume-of-marketing control may be

⁴Harold F. Breimyer, Individual Freedom and the Economic Organization of Agriculture, op. cit., p. 164.

⁵Ibid., p. 173.

accomplished through quality improvement and maintenance schemes and by diverting surplus products into low-valued uses. Orders and agreements have two impacts: Orderly marketing--as such--which includes strict quality control, tight trade practice regulations, and similar actions that yield a benefit in today's kind of market system; and diversion and/or storage and/or shipment control that does affect quantity moving to markets to some degree. Other orders such as the ones for milk also accomplish market stratification and classified pricing.

Some agricultural economists have considered the possibility that fluid milk marketing orders could be representative of other marketing order prototypes for agricultural commodities. Inasmuch as the dairy industry is one of Missouri's leading agricultural enterprises the investigation of fluid milk marketing orders becomes a relevant sub-section of this study.

Fluid Milk Orders

Dehaven recounts the history of milk marketing with relevant economic concepts in an unpublished Master's thesis at Missouri. Producer bargaining groups were formed to obtain bargaining power for individual producers vis-a-vis distributors. The bargaining situation approximated that of a bilateral monopoly, except that the producer associations did not usually control member's production.

The agricultural depressions of the late 1920's and the early 1930's wrecked the pricing system for milk as demand declined and supply increased. Distributors began to negotiate individually with producers and succeeded in driving prices down. After moving through a period of trial and error of milk pricing, the Agricultural Marketing Agreement Act of 1937 was passed and became the legal basis for the federal regulation of milk marketing by providing enabling legislation for marketing orders and agreements for selected agricultural commodities. Illustration 1, on page 121, indicates the milk marketing orders as of January 1, 1971.

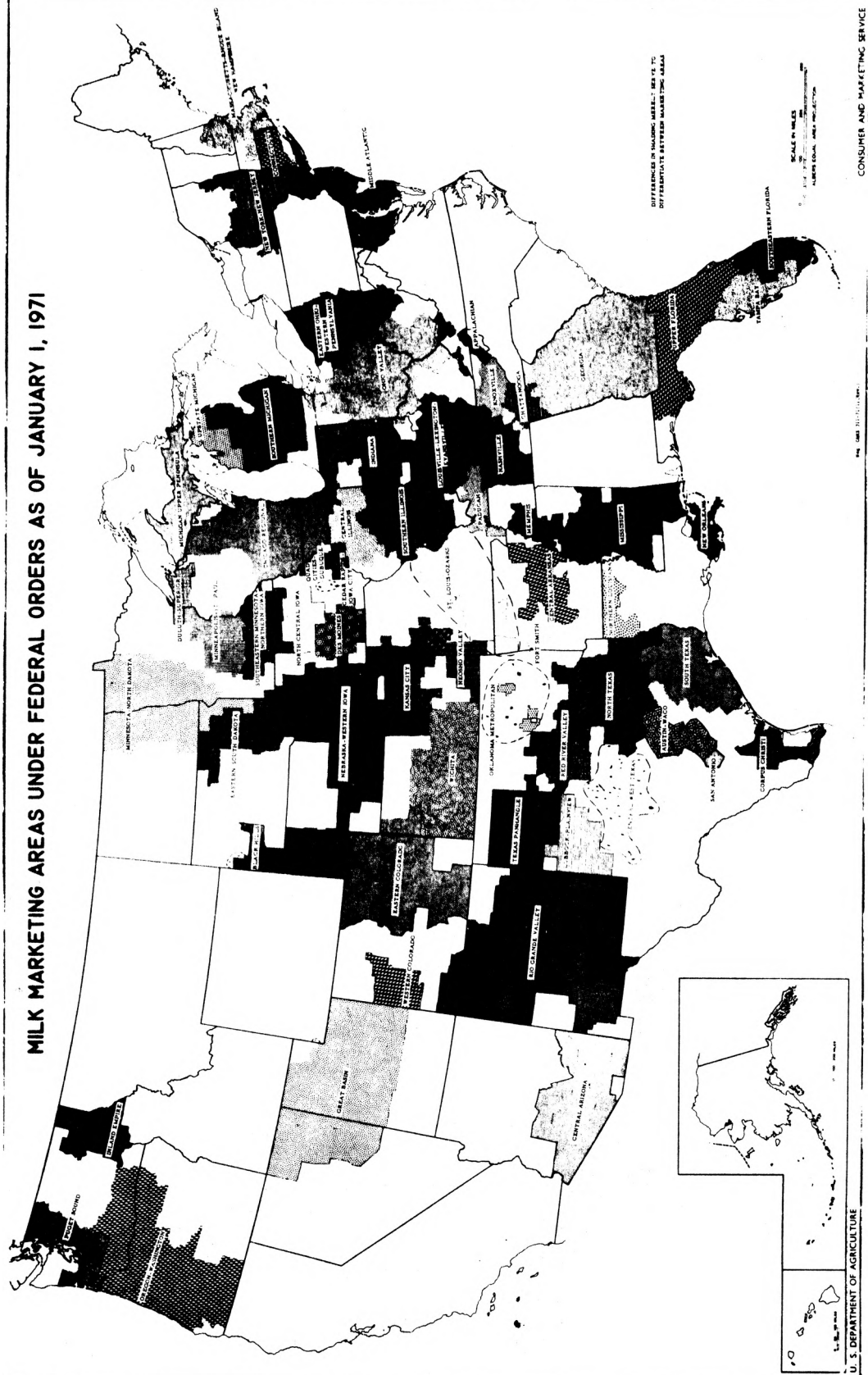
The federal order program for milk contained two basic provisions. One was the establishment of producer prices. The other was the regulation of handlers which required that the same minimum price for each class of milk be paid producers. This added a degree of stability to fluid milk marketing.⁶

Marketing orders for fluid milk involve several basic elements: a classified pricing plan; a system of minimum prices; and provisions for administering the operation of the order. The classified pricing plan involves market

⁶Kenneth Dehaven, "Economic Evaluation of Alternative Milk Pricing Plans," (unpublished Master's Thesis, University of Missouri, 1966), pp. 26-35.

ILLUSTRATION I

MILK MARKETING AREAS UNDER FEDERAL ORDERS AS OF JANUARY 1, 1971



discrimination aspects through the establishment of different prices for different classes according to use. Fluid milk orders also provide for uniform producer prices for a stated quality of product by either of two methods.

The first method is an individual handler pool whereby all producers who sell to a given handler receive the same market base price. The second is by a market-wide pool whereby all producers within a market area are paid a uniform price for a given class of milk.⁷ Fluid milk orders establish a base price for milk based on local and general economic conditions and the demand and the supply of milk.⁸

Under the marketing order classified pricing plan for milk the market clearing function operates for manufacturing milk and the price established for fluid milk is on a price discrimination basis. There is no intention that the price established for fluid milk will clear the market for all fluid milk in the short run.⁹ The intent is to make fluid milk production more profitable than manufacturing milk production by an amount sufficient to maintain a steady and

⁷The Federal Milk Marketing Order Programs, Consumer and Marketing Service, U. S. Department of Agriculture, Marketing Bulletin 27, (Washington: Government Printing Office), p. 6.

⁸Ibid., p. 7.

⁹The price support programs for fluid milk products has facilitated this market clearing by purchasing surplus products from the market.

adequate supply of fluid milk to meet consumer demand at the established prices. The functions of milk marketing orders are to insure orderly marketing and stable prices to producers and assure an ample supply of wholesome milk to the consumers at all times. A purpose of milk marketing orders--tacit or expressed--was to increase producers total revenue by taking advantage of the more inelastic demand for fluid milk.

The primary method of determining a standard on which to base minimum prices is an equilibrium of supply and demand for milk within a given market area. A current view is that the base price of fluid milk is primarily established on the basis of insuring an adequate supply of milk for consumers. Formula pricing plans have been used to relate these variables into a workable system which can establish a minimum base price for fluid milk.¹⁰

Two basic type formulas are used in pricing fluid milk under federal order programs. The first type relates manufacturing milk formulas to the value of fluid used for lower valued manufacturing uses. The second type relates the price of fluid milk directly to various economic variables, such as the cost of producing fluid milk, changes in disposable income and changes in the prices of other agricultural products. In addition, these formulas can be adjusted upward

¹⁰The Federal Milk Marketing Order Program, Ibid., p. 28.

or downward depending on the supply and demand for milk through the use of so-called demand-supply adjustor mechanisms.¹¹ Supply-demand adjustors can be described as follows: "those devices employed in many federal order markets to adjust Class I--or in a few markets Class II--prices in response to changes in the relationship between receipts of milk from producers and quantities used in fluid milk, fluid cream, and other Class I and II products."¹²

Fruit and Vegetable Marketing Orders and Agreements

Milk marketing orders are not the only prototype which should be considered when evaluating the potential of marketing orders and agreements as an alternative vehicle for coordination for other agricultural commodities. Fruit and vegetable marketing orders and agreements are popular for many of these specialty crops. As such, a brief investigation into these orders and agreements is necessary. This subsection is not intended to be complete but merely a descriptive part of an alternative system available to agricultural producers.

¹¹Ibid., p. 30.

¹²Sheldon W. Williams, et. al., The Mechanics of Supply-Demand Adjusters for Midwestern Milk Markets, North Central Regional Publication 134, (Urbana, University of Illinois, April, 1962), p. 5.

Fruit and vegetable orders and agreements use the Federal enabling legislation as well as being dependent on various state enabling legislation. The major use of marketing orders and agreements for fruits and vegetables is concentrated in the Pacific Coast states. Deciduous tree fruit is the predominate commodity regulated under those orders.¹³ Table 3, on page 126, indicates the number and size of the fruit, vegetable and tree nut orders and agreements in effect during 1970.

The main types of activities and regulation authorized by Federal and State enabling legislation for fruit and vegetable marketing orders and agreements is:

1. The establishment and enforcement of minimum standards of grade, size, maturity, or other attributes of quality in the marketing of an agricultural product.
2. Limitation of the quantity of the commodity marketed in total or by grade, size, maturity, or other attributes of quality during a specified time period. Such limitations may differ among markets for the commodity in time, space, or form.
3. Regulation of the characteristics of pack and containers applicable in the marketing of the commodity.
4. Specification and prohibition of trading practices deemed to be unfair.
5. Posting of prices.
6. Research

¹³National Commission on Food Marketing, Organization and Competition in the Fruit and Vegetable Industry, Technical Study No. 4, (Washington: Government Printing Office, June, 1966), pp. 296-297.

Table 3

Fruit, Vegetable, and Tree Nut Marketing Agreement and Order Programs, in Effect During Fiscal Year 1970

Orders	Estimated Number of Commercial Producers	Farm Value
	Number	\$ 1,000
Citrus Fruits:		
California and Arizona Navel and Miscellaneous Oranges	4,600	57,018
California and Arizona Valencia Oranges	4,700	43,792
California and Arizona Desert grapefruit	600	11,640
California and Arizona Lemons	2,350	89,208
Florida Oranges, Grapefruit, Tangerines, and Tangelos	15,500	376,034
Florida Indian River Grapefruit	1,600	(1)
Florida Interior Grapefruit	7,000	(1)
Florida Limes	500	3,045
Texas Oranges and Grapefruit	4,000	20,934
Deciduous Fruits:		
California Bartlett Pears, Plums, and Elberta-type Peaches	8,220	63,759
California Nectarines	1,250	9,240
California Olives	1,500	21,560
California Tokay Grapes	1,200	12,129
Colorado Peaches	800	2,394
Florida Avocados	600	3,629
Georgia Peaches	350	12,299
Idaho and Oregon Prunes	250	1,942
Utah Peaches	1,000	834
Washington Apricots	1,000	610

Table 3 (Continued)

Orders	Estimated Number of Commercial Producers	Farm Value
	Number	\$1,000
Deciduous Fruits (Continued):		
Washington Sweet Cherries	1,000	8,092
Washington Peaches	1,500	494
Washington, Oregon, and California Winter Pears	1,800	14,066
Washington and Oregon Bartlett Pears	2,000	15,420
Washington and Oregon Prunes	1,000	3,835
Cranberries	1,300	29,717
Dried Fruits:		
California Dates	160	2,528
California Dried Prunes	4,200	39,130
California Raisins	4,600	63,756
Vegetables:		
Florida Celery	49	23,946
Florida Tomatoes	435	64,359
Idaho and Eastern Oregon Onions	295	15,556
Texas Lettuce	146	4,788
South Texas Onions	342	17,989
Texas Tomatoes	300	2,085
Potatoes:		
Colorado	812	23,286
Idaho and Eastern Oregon	3,817	143,263
Maine	2,148	77,220

Table 3 (Continued)

Orders	Estimated Number of Commercial Producers	Farm Value
	Number	\$1,000
Potatoes (Continued):		
New England, except Maine	748	11,000
Oregon and Northern California	850	25,026
Southeastern States (Virginia-North Carolina)	1,400	12,578
Washington	704	49,786
Nuts:		
California Almonds	6,954	72,834
Oregon, Washington, and California Walnuts	9,000	52,296
Oregon and Washington Filberts	1,639	4,088
Peanuts (2)	86,860	311,451
Washington, Oregon, Idaho, and California Hops (3)	237	21,305
TOTAL (46 Orders)		1,839,961

Source: Agricultural Statistics, 1970, U. S. Department of Agriculture, (Washington: Government Printing Office), p. 544.

(1) Included under Florida grapefruit above.

(2) Marketing agreement only; covers States of Alabama, Florida, Georgia, Mississippi, South Carolina, Arizona, Arkansas, California, Louisiana, New Mexico, Oklahoma, Texas, Missouri, North Carolina, Tennessee, and Virginia.

(3) Marketing order only.

In addition, some enabling legislation authorizes marketing orders to engage in non-brand promotion for agricultural products.¹⁴

The common feature of many of these orders and agreements is the quality control and research provisions. The quality control provisions enables the improvement of product at the retail store which is demand increasing in its effect. But also the quality control provision enables a higher revenue to be achieved from a given crop by separating the inferior products and taking advantage of the more inelastic demand for the superior product in marketing the crop.

Most of the fruit and vegetable orders and agreements have an administrative committee which typically consists of producers and handlers. This committee formulates marketing policies, recommends regulations and assessments and performs other activities for the operation of the order. The committee makes its recommendations to the Secretary of Agriculture and/or the appropriate State agency. The United States Department of Agriculture and/or the State agency provides essential guidance and information for the operation of many fruit and vegetable marketing orders and agreements.¹⁵ The formulation of an administrative committee approaches an

¹⁴Ibid., p. 294.

¹⁵Ibid., p. 301.

arrangement whereby prices could be discovered by such committees.

Most orders and agreements seek enhanced prices. Fruit and vegetable orders and agreements usually attempt to accomplish this in marketing control. Several of these control mechanisms will be briefly discussed. The control mechanisms vary from commodity to commodity depending to a large degree on the production and marketing characteristics of the commodity and the type of markets and outlets for the commodity.

The difficulty which arises under these orders and agreements from quantity control either by quality provisions or quantity marketed provisions is the degree of substitutability. A marketing order or agreement must cover most of the production in order to be effective for a commodity. In addition, many fruits and vegetables have close substitutes. The short-run effect may not be so large, but the long-run effect may discourage many committees from attempting large price enhancements via quantity control schemes.¹⁶

Another means to increase producer net returns which some of these commodities have used is to allocate the available supply among alternate markets. This is sometimes done among foreign and domestic markets. The Pacific Coast Walnut order allocates walnuts between in-shell, shelled and

¹⁶Ibid., pp. 302-307.

by-product markets. Again this control requires that most of the supply of the commodity be under the administration of the order committee.¹⁷

Other orders use what is known as rate-of-flow regulations. These regulations simply control the movement into markets of a commodity. For instance, beef cattle might have a rate of flow regulation which would permit only "x" number of choice cattle to be marketed per week at a given market. This regulation obviously--as does many of the fruit and vegetable marketing order and agreement regulations--requires extensive control enhancing agricultural prices.¹⁸ California orange growers have successfully used the rate-of-flow regulations to carefully allocate the supply of oranges among alternate markets.

Price Enhancement Under Marketing Orders and Agreements

Williams and Vose, et. al. state that Federal orders have materially affected the structure, conduct and performance of the fluid milk marketing industry in Federal order markets. The small milk handlers lost their initial competitive advantages, since these small handlers were typically short on surplus milk and they sold most of their milk for higher priced fluid uses but paid producers only a flat rate for all classes of milk. Thus, Federal marketing

¹⁷Ibid., p. 308.

¹⁸Ibid., p. 310.

orders forced the small milk handlers out of business and established a greater degree of equity between producers and handlers which added stability to the milk marketing system.¹⁹

Marketing orders and agreements tend to work best when producers are organized into large, well-managed marketing cooperatives. Such cooperatives tend to inhibit the emergence of large, integrated, independent firms. Contrariwise, a large independent handler who is well integrated can oftentimes block the establishment of any order or agreement.²⁰ This tends to reflect the thinking that the early bird gets the worm and in the process gets a grip on producers so that market penetration by other interests proves difficult.

Federal orders complement bargaining efforts even though orders are not primarily a bargaining instrument and bargaining in the short-run can be effective without orders. Marketing orders add a more stable characteristic to the market which aids the bargaining group in achieving its objectives. In approximately one-third of the Class I fluid milk markets where prices are above the minimum order price the orders perform an additional function of establishing the floor price from which buyers and sellers of fluid milk can

¹⁹Sheldon W. Williams, David A. Vose, et. al., Organization and Competition in the Midwest Dairy Industries, (Ames: The Iowa State University Press, 1970), p. 17.

²⁰Harold F. Breimyer, Individual Freedom and the Economic Organization of Agriculture, op. cit., p. 234.

bargain. This approaches the model for a bilateral monopoly. The level of prices is thus a matter of the bargaining power with the balance dependent on those factors which determine bargaining power of each party. The Federal order program tends to enhance the relative power of the producer's organizations as compared to processors.

Marketing orders provide a means through which bargaining power can be directly channeled to handlers through the forces of the market. Groups which expect marketing order programs to give them instant bargaining power are laboring under false notions, since as recounted in Chapter 3-- bargaining power can be achieved primarily through the market place with the effective use of "market muscle." The same requirements for effective organizational arrangements and production control are necessary under orders and agreements as they are for any other alternative system of coordination and institutional support arrangements.

Jacobson lists five criteria by which to evaluate the effectiveness of marketing orders in facilitating the bargaining process: (1) there should be no close substitutes for the product; (2) existence of two or more markets with different price elasticity in each market aids in accomplishing the objectives of the marketing order; (3) the supply response should be relatively inelastic at least for short periods of time; (4) products that have characteristics such as perishability need general industry arrangements in order

to achieve orderly marketing and hence orderly marketing works best for commodities with those features; and (5) strong producer organizations with good leadership which have unified goals are useful in getting order programs adopted.²¹

Price Discovery Systems and Marketing Orders and Agreements

Marketing orders as discussed lend themselves to bargaining for price discovery. If strong producer organizations exist within a marketing order framework, bargaining for price discovery is relatively easy. But unlike those for which marketing orders have proved successful, many agricultural commodities are not represented by strong farmer cooperatives or groups engaged in processing.

Bargaining for enhanced prices has recently been successful under marketing orders, especially in the case of fluid milk. However, supply response unless regulated by quota plans or class base plans will remain a potential threat to bargained gains.

The performance of price discovery mechanisms under the institutional forms of marketing orders and agreements can be inferred by the degree to which the conduct of the participants is prescribed by the regulations of the marketing order legislation. Marketing orders--unlike bargaining directly for price discovery--provide directly for price discovery

²¹Robert Jacobson, op. cit., pp. 36-37.

only in the case of milk; otherwise, they establish an institutional mechanism which affects price discovery but does not in itself yield a price. But other institutional mechanisms exist whereby a price can be discovered for agricultural producers.

MARKETING BOARDS

A Brief Look into Marketing Boards

Walker defines a producer-marketing board as a producer controlled, horizontal, compulsory marketing organization established by legal authority to perform specific marketing operations for a commodity. A marketing board provides monopoly power to some producers with regulations imposed by government concerning conduct and performance of the group. A marketing board approach to the production and marketing problems of specific commodities is similar to the marketing order approach. They are similar in many respects but different in the important respect that supply and/or price powers are usually an integral part of the board's powers.²² Marketing board authority does not exist in the United States but marketing boards are used extensively in other countries.

Roy denotes three basic types of marketing boards:

(1) promotional types, which advertise and promote the sale

²²H. V. Walker, "Bargaining Through Marketing Boards--The Canadian Experience," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action, North Central Regional Extension Publication 30, (University of Missouri, Extension Division, C911, June, 1971), p. 40.

of farm products; (2) negotiating boards which arrange terms of contract between farmers and processors; and (3) compulsory type boards which control production, marketing, and pricing of agricultural products.²³

Marketing boards, much like marketing orders and agreements, provide a means through which producer groups can be effective in price enhancement and price discovery efforts. Much like orders and agreements, marketing boards must exercise a substantial degree of control over supply if they are to be effective in enhancing producers' prices. But unlike orders and agreements where control over supply is modest, marketing boards frequently can exercise a substantial degree of control over supply, which is necessary if they are to enhance producers' prices to sizeable extent.

Walker lists several methods by which a marketing board can obtain a measure of control over supply; (1) price discrimination; (2) collective bargaining; (3) input quotas; (4) sales quotas; and (5) restrictions on entry into production.²⁴ In addition the control of imports is often a necessary phase of the supply management program of marketing boards. Marketing boards can accomplish the market discrimination programs and various of the above supply

²³Ewell P. Roy, Collective Bargaining in Agriculture, op. cit., p. 165.

²⁴H. V. Walker, op. cit., p. 7.

management tools. The prices which are established by boards do not usually clear the markets of products without the aid of some of the above supplementary tools.

Marketing boards can provide a means by which bargaining groups can effectively obtain results satisfactory to members. However, a substantial degree of legislation is needed to create a marketing board program. Thus, a degree of unification of farm interest groups may be necessary in order to increase their bargaining power in the political arena if marketing boards are desired. The adoption of marketing board programs in the United States is not likely to occur unless a serious agricultural crisis should develop.

Bargaining for price discovery would seem to fit well into marketing board programs. Marketing boards like orders and agreements provide the mechanisms through which producers and handlers can meet and arrive at mutually acceptable results. Bargaining for price discovery with or without price enhancement would seem to require a necessary institutional umbrella of some form under which producers could operate. Although bargaining for price discovery can be, and is, conducted without marketing boards, a marketing board would represent the ultimate aid to effective bargaining. It would give bargaining a strong base.

Marketing boards are generally used as a quasi-private extension of government policy and action, much of which has been handled by the United States Department of Agriculture in

this country. If public policy dictates that the Federal government divest much agricultural policy from the functions of government--including perhaps even a dismantling of the Department of Agriculture--then perhaps relevant roles will open for which marketing boards may be well suited. Marketing boards may be needed considering the heterogeneous nature of alternate means of marketing coordination for any given agricultural commodity.

The evaluation of the performance of marketing boards should include criteria which note the dynamics and innovational aspects of the agricultural industry. Marketing board programs may tend to insulate producers from forces that previously had led to the adoption of new technology. This performance criterion has greater implications of long-run significance for consumers and international trade than for agricultural producers. Marketing board programs should be carefully designed so as to insure competition between atomistic units of agricultural production by not restricting entry through the use of permanent quotas or input restrictions.

OVERVIEW

Marketing orders, agreements and boards bring a degree of unified control over marketing by the group action of producers. This control is authorized and also restrained by government. Marketing orders have had a relatively limited

coverage and power to date. Marketing boards go much further in controlling the marketing and price discovery forces for agricultural products.

Marketing orders may not be applicable to all agricultural commodity situations. Agricultural commodities which are produced on a widely dispersed geographical basis would require a national order. Any agricultural commodity which is storable could result in outsiders gaining control through purchase and storage. The use of marketing boards may be necessary for situations where a large number of heterogeneous producers exist on a widely dispersed geographical basis for a semi-perishable agricultural commodity.

The marketing order approach would seem to be more realistic in the United States--at least so long as the Commodity Credit Corporation is used for price support purposes and the storage of basic commodities. The marketing order approach has permitted producers to collectively design and devise their marketing system. The order approach is very flexible and allows producers to devise several alternative mechanisms--this being particularly applicable if and where the conventional marketing channels break down. However, orders require a large degree of producer support and solidarity not only for adoption but also for their effective operation.

Chapter 7

INTERVIEWS WITH MISSOURI AND MIDWESTERN AGRICULTURAL LEADERS

Introduction

In order to better determine the directions and change in emphasis of alternative agricultural marketing price discovery and enhancement mechanisms a series of interviews were conducted with various farm leaders. They were conducted informally with the aid of a prepared schedule of questions. But no attempt was made to stick to an outline of questions or to press a point in areas in which the interviewee had few opinions.

Each interviewee tended to respond to questions on the basis of his organizational ties, the organization's goals and objectives, methods used to achieve those goals and objectives, experience and other factors. Thus, the responses from each interviewee are biased in a direction favorable to him or his organization. It was expected that such would be the case. It is hoped that enough of a common basis and direction-giving can be ascertained from the interview section of this study to add relevance to this thesis.

The Open Exchange System

The interviewees were asked if they thought the open market exchange system would fade entirely out of the agricultural marketing picture. The interviewees replied mainly in the context of livestock, since it is the principal agricultural product of Missouri. The responses varied from total decline to only slight decreases and to responses which viewed the auction system of selling livestock as being the savior of terminal markets.

The stockyards people, Charles Jennings of the Kansas City Stockyards Company and Frank Patton of the Farmers Commission Company at the National Stockyards, Illinois, differed somewhat in their viewpoints. One forecast pointed to private treaty trading at the terminal markets declining to the point where only old cows, bulls, cripples, etc. would be exchanged in private treaty.¹ The other prediction did not have terminal market private treaty exchange declining in terms of importance for agricultural marketing.

Patton could foresee a growth in the auction method of selling feeder cattle, but did not think the auction method would become a major means of selling slaughter hogs or cattle at least in the St. Louis market. Jennings foresaw

¹Private treaty selling occurs when commission firms, representing producers, negotiate on an individual basis with buyers representing packers. This is contrasted with auctions where buyers representing packers can openly compete for livestock by bidding in the auction ring.

the auction method of selling, especially for feeder cattle, as continuing to grow in the Kansas City market area.

This illustrates a point which needs emphasis at the beginning of this study. Some of the respondents typically replied in terms of a single commodity or commodity line with which they were most familiar or most interested. Jennings spoke in terms of feeder cattle, and Patton spoke in terms of slaughter hogs. This only serves to illustrate the near impossibility of grasping the movements within the whole complex of agricultural production and marketing systems.

These two agricultural marketing men--Jennings and Patton--have an understandable faith in the durability of his agency. However, each seeks to insure the survival and growth of the terminal marketing system but by different methods and for different commodities. Jennings promotes the cow-calf agricultural potential within the Kansas City market area. The Kansas City Chamber of Commerce was also being encouraged to emphasize the suitability of much of the marginal cropland in the greater Kansas City market area as being excellent for cow-calf type enterprises. The outcome of this promotion would hopefully be more feeder calves for the terminal feeder auction in Kansas City.

Patton seeks to insure the continuation of the St. Louis hog market by pre-grading slaughter hogs and sorting them into uniform lots. Patton has contacted numerous pork

packers in the east who desire specific type slaughter hogs. By pre-grading and sorting, Patton can have certain groups of slaughter hogs which meet their standards. The order buyers for those packers will then more readily purchase the hogs. Thus Patton has obtained--to a large degree--a working and mutual understanding with the needs of these packers and the result is--according to Patton--a premium for slaughter hogs sold on the St. Louis Market.²

One interviewee posed a rather different type problem for the terminal market system than this author had expected to encounter. He noted that farmers do not seem to respond to the terminal market premium as would be expected, but rather they continue to bypass the market in favor of factors such as ease of shipment, convenient location, a line of salesmanship or whatever and use interior marketing points. The lack of economic reasoning by many such farmers concerned both these terminal marketing men.

Thus, as was the problem with bargaining groups, so the problem is similar for terminal markets; promotion, advertising and provision of information to producers. Perhaps the marketing system which succeeds or those which fail will not do so on their merits but on the degree to which they have effectively merchandised the services and

²This strives for the quality control aspects that is a principal feature of both many bargained contracts and market orders.

returns which they provide to producers. This idea is not so far out as might appear on first blush. It has to a degree occurred in retailing and in other aspects of marketing, so why not on the primary level of exchange? The provision of market information to supplement producers' market knowledge may serve to offset the promotion of these alternatives.

A related interviewee was Forest T. Noel of the Mid-Missouri Livestock Center at Mexico, Missouri, a private enterprise. Noel had a different viewpoint on the potential decline of the open market livestock exchange system. Noel believes that a "true" auction is the best manner in which to market livestock because of the element of competition that occurs in such a market. Noel defines a "true" auction in terms of the commission firm's refraining from buying and selling for their accounts through the auction. This in effect removes the incentives to play the market and make a profit for the commission firm instead of returning to the farmer a fair price for his product.

Noel views the auction method as the only means by which the terminal markets can prevent decline. But not all terminals--in Noel's opinion--can survive even with the auction type methods. Noel noted that in order for any marketing system to survive it must give farmers and processors alike the fair value they need and expect to receive. The volume of product moving through an auction will attract

buyers and the services including "fair value" prices will attract sellers to a particular auction market. Noel has a very modern, efficient auction-type market and would appear to provide numerous services in addition to convenient location to producers. In addition, he believes in publicizing the market information. Thus, at 12:00 Noon each day, seven radio stations within the market area carry a 15-minute report of the activity at the Mid-Missouri Livestock Center.

The leaders and representatives of various farm organizations represent a rather heterogeneous group with regard to the state of the open exchange system. Don Hill, Missouri President of the National Farmers Organization, believes the open exchange system will decline entirely out of the agricultural marketing picture. Its replacement, in his view, would be a collective bargaining agency. This will involve blocking members' production into effective bargaining units for which price premiums can be bargained.

Two leaders of the Missouri Farm Bureau, C. R. Johnston, President and Vincent Crane, Director of Policy Research, gave similar separate opinions that were more cautious than Don Hill's statements. Both gave the terminal markets a chance in isolated market areas where they had functioned well in the past or where no other satisfactory means of marketing existed for a commodity. Johnston believes that with some markets and for some people, the terminal market

method of exchange will always be preferred. Crane noted that auctions could possibly save the terminal marketing system. But other terminals which are located on high value land and have gone to auctions only recently--if at all--may have to move out of the central cities, either ceasing operations or re-establishing at interior points.

R. A. McPheeters, a Missouri Farm Bureau member, farmer, county and state Farm Bureau leader, thought the terminal market private treaty system would entirely fade out of the picture except for odd lots of livestock. McPheeters believes the auction method of establishing price at a terminal market for livestock will continue to grow and assume the leading role in establishing terminal market livestock prices.

Another interviewee noted that the terminal market system was probably completely out of the marketing picture for livestock. Even auctions will not be able to save the terminal market system, although for some specialized commodities they may enable the system to linger on. He also noted that the auction method was essentially sound but that assembly in central cities was not necessary or feasible for an auction system.

Dale Butz, Director of Marketing for the Illinois Agricultural Association, viewed the private treaty aspect of terminal marketing for livestock as declining but not entirely out of the agricultural marketing picture. Butz

foresaw a possibility which might prevent the decline of the terminal livestock markets. Butz thinks that packers and processors may be forced back into the central city areas--assuming they can get back--because of the pollution problem.

The decentralization of meat packing has spread packing plants into areas which before knew no serious pollution and often were without effective means of handling pollution problems. Butz noted that the great hue and cry over pollution may lead to legislation which over the long-run could force processing plants back into the central cities where large sewage treatment systems were available and water supply is not the problem it is in areas of the southwest, for example, where water tables are fast falling. Thus the processing plants may be forced back into cities where they can take advantage of external economies of scale which result from the central collection of their wastes and water supply.

L. C. Carpenter of Mid-Continent Farmers Association stated that terminal markets would not decline entirely out of the livestock marketing picture due to the auction market effect. This interviewer encountered more cautious statements concerning the decline of the open exchange method of marketing livestock than would be expected based on exposure to the germane ideas in agricultural marketing circles.

The only person interviewed other than Don Hill who quickly wrote off the terminal market system was Hal Hellebust of the Kansas Cooperative Council. Hellebust did not foresee a future role of coordination in livestock marketing or for any other type marketing coordination for the open exchange system. Hellebust only tends to think in terms of his proposed project which will be mentioned later in this chapter.

Alternatives

The interviewees were questioned as to the alternatives for coordination and price discovery and enhancement which they foresaw as complementing or replacing the open market exchange system. This series of questions differed for practically every interview according to the depth of thought within certain areas and the interviewee's willingness to discuss alternative systems. The various systems of coordination and related ideas will be presented first and then a section will immediately follow in which price discovery and price enhancement systems to complement or substitute for the open market exchange price discovery and enhancement system will be discussed. Perhaps a look into the distinctive ideas of Hal Hellebust would serve to begin this section and then gradually work back to more familiar ideas.

Hellebust proposes an alternative marketing system which would be based on the licensing of producers and production.

This would seemingly require federal legislation. But Hellebust believes that through a federation of cooperatives and farm organizations the same plan could be implemented voluntarily if a large enough volume of production were represented by the membership. Thus, production--and hopefully--entry into production could be controlled. Producers would then market their commodities through designated marketing agencies--selected by the producer before production commenced. These agencies would then bargain or contract to sell the commodities directly to the processors. Hellebust has formulated this idea initially for wheat, but sees it spreading to other agricultural commodities.

This method of marketing by-passes the present open exchange system. This program would require legislation, if not in order to initiate it, then to protect it from entry into production by processors and others and the possibility of increased imports. Hellebust's viewpoint is that the increasing age of the typical farmer will place the agricultural economy in a serious situation within a few years. Farmers will be too old to farm and they may not be able to sell their farms due to the amount of capital needed to finance such a large investment. Young farmers who inherit "going" concerns will be able to farm, but who else can afford to start? Thus, many farmers may face the prospect of not being able to farm or sell their farms. Hellebust

foresees business and public utility-type farming unless something is done now to put younger people back into farming. Hellebust would do this and achieve rural development by granting farmers the means to obtain comparable incomes in accordance with their investments. This would insure a "family farm" commercial agriculture. Hellebust sees the cooperative approach as being the salvation for agriculture.

Forest T. Noel notes that the marketing system for livestock or any other commodity develops a pattern based on the principles of serving producers and yielding equitable returns. Thus there will be no one system for marketing livestock. Noel believes that independent producers must be the backbone of any marketing system which satisfactorily serves the producer. He cannot foresee pork and beef going through the process as broiler production and marketing has due to the differences in the nature of production and to the learning process which producers have acquired from watching broilers and some rudimentary attempts in pork contractual production and marketing.

However, Noel does believe that there will be a continued interest in integration by processors and retailers, although their efforts will be relatively an insignificant portion of the total. The trend is towards large size in any business enterprise. However, Noel believes that farmers can compete with big business, due to the fact that big business must show profits or get out of that line. Noel

believes that farmers can withstand the ravages of the price cycles better than business integrated operations. Noel, thus, does not see any cause for alarm as long as farmers remain independent and alternative market outlets exist for their products such as auction markets.

Noel characterizes producers as having as sound resource base on which to withstand the ravages of the price cycles. Established producers who need the assurance of a market and guaranteed returns in order to stay in the farming business? But time marches on even for farmers with established resource bases, and their sons cannot be counted as the agricultural producers of tomorrow under a free enterprise system. The market structure can be weakened through over-supply by a relatively small percentage of the production for any given commodity.

Don Hill of the National Farmers Organization views the backward integration by processors and retailers into agricultural production as being one of the major problems. Hill has supported a bill in the Missouri Legislature--similar to NFO bills in other states--which would prevent retailers and processors from entering into production operations. Hill sees group action as the only means through which producers can protect the sovereignty of agricultural production and marketing as it is now known. Hill means by group action, the blocking together of production for the purposes of collective bargaining. The Extension Service, according to

Hill, should undertake to promote the idea of group action among Missouri farmers. United we stand or divided we fall, would seem to be Hill's basis for the future of agricultural production and marketing.

L. C. Carpenter thinks that contracting will increase in terms of magnitude, but the farmer-owned sales agency will provide the means through which the farmer can have a voice in the marketing of his products. Carpenter firmly believes that marketing orders and agreements for all agricultural commodities either on a national or regional scope will be necessary in order for the family farm system of agriculture to be preserved. Carpenter believes that marketing orders have the ability to enhance prices--especially if minimum price legislation is included in the orders. Marketing orders can also aid in the improvement of product characteristics and help in the control of production. Carpenter was the only person interviewed who specifically expressed a great need for marketing orders and agreements as the mechanism through which alternative means of market coordination could be achieved. Carpenter emphasized the increasing role of cooperatives in the output disposal functions and their future role as a sales agency for producers, preferably under the umbrella of protection established by marketing orders and agreements.

R. A. McPheeters operates in partnership with his son, a farm which produces about 850-900 head of slaughter hogs

per year. He also feeds cattle. He has sold cattle direct to the packer from his feedlot, but markets his hogs through the South St. Joseph terminal market. McPheeters could visualize the day when contracting could become an increasingly important means of marketing agricultural products, since he had received better returns through contracting directly with the meat packer. McPheeters attributed this to a better manner by which he could ascertain the packer's exact wants in terms of weights and grades and thus provide the packer with his wants. Thus, McPheeters could avoid over-feeding cattle for a terminal market where the wants of the buyer were unknown.

McPheeters emphasized--as did Noel--the aspect of the agricultural production and marketing system developing in a pattern which was fragmented as a whole but specialized in its methods and manners in individual market areas. In some areas where terminal markets were progressive and could provide suitable producer returns, the terminal marketing system would survive. In other areas and for other commodities other alternative systems of coordination would prove best and those systems would be used. If this method of development is approximately what is likely to occur, then the problems of the agricultural price discovery and price reporting under the present system will look like a bed of roses compared to the problems of the future. The

important function will then be the provision of market information to facilitate the market knowledge of producers.

C. R. Johnston also voices the belief that farmers must group together and market their products through a sales agency type program, preferably the American Agricultural Marketing Association. This type program would involve contractual production and marketing. The sales agency would perform the functions of assembling the products in uniform lots for processors and then bargain directly with processors over terms including price. The concept of a sales agency can lend strength to an atomistic type agriculture, especially when facing an imperfectly competitive buyer.

Johnston proposes a concept of alternative marketing systems that is unique among the ideas obtained through this survey of farm leaders. He believes that the retail store has too much market power. Johnston has had first-hand experience with retail stores, inasmuch as he was faced with merchandising a brand of milk--Golden Guernsey -- from his dairy and other producers in markets at Springfield, Missouri. Unfortunately there is no simple solution to this problem of retail power or, as in Johnston's terms, "it is real easy to become cynical about the outlook for agricultural marketing at least as it has been known in the past."³

³Interview with C. R. Johnston.

Johnston believes that retailers tend to extract too much margin on many agricultural products. Thus, they may reduce the demand and, further, encourage the introduction of substitutes and synthetics into the market. Johnston notes that the use of private brands by retailers and the retail store's power over shelf space gives the retailer by far the greatest market power in the food-production marketing system. Johnston does not foresee much opportunity to legislate away or curb this power. Johnston thinks that if producers would organize and integrate forward into retailing and processing units that they could also achieve a degree of market power. However, farmers need to be well organized and realize that to do battle with food retailers would be a long and costly struggle.

Vincent Crane, also of the Missouri Farm Bureau, believes that the sales agency approach to farmer cooperation will benefit agricultural producers. But this will involve the necessity of moving into contractual production and marketing as an alternate system of coordination. Therein lies the largest of modern agriculture's problems--the people problem. Crane defines the people problem as that of getting farmers convinced to market their products through a joint farmer-owned, farmer-controlled sales agency. American producers have been independent and have sold their commodities through numerous alternative outlets. But if the open market exchange system fades away farmers will have

to be willing to let trained personnel handle the marketing of their agricultural products--rather than playing the part of a gambler. To this extent the hope for agriculture lies in the younger farmer's ability to delegate marketing authority to reputable sales agencies.

The comparison of the approach used by the Missouri Farm Bureau and the National Farmers Organization is revealing. The National Farmers Organization is a more centrally organized group and thus the statements by Hill reflect similar statements by Oren Lee Staley, the national NFO President. NFO would bargain for prices by horizontally combining farmers. Missouri Farm Bureau would contract on a horizontal level but would also envision vertical combinations.

Dale Butz of the Illinois Agricultural Association sees the eventual adoption of contractual production and marketing arrangements as the major means of coordinating production and marketing for agricultural products. This will come much faster for some commodities of which it is not now a major alternative and much slower for other commodities. Livestock will move into the contractual phase rather rapidly, but grains will not move into contractual production and marketing for some length of time according to Butz. Butz supports the basic Farm Bureau concept of a marketing-sales agency--like AAMA--which will be necessary

in order to move agricultural products from the farm to the retailer and on to the consumer.

Butz departs in his thinking on the marketing agency approach more so than other Farm Bureau people interviewed in this study. Butz thinks in terms of a systems approach to the production, processing and retailing of agricultural products. The sales agency would become more or less directly associated with one or more retailers in the marketing and merchandising of farm products. This linkage might go so far as to establish joint ventures into processing between the retailers and the sales agency. The merit of these joint ventures would lie in the area of having retailers committed to the merchandising of an agricultural product. Presumably retailers would merchandise more intensively to protect their investments.

The stockyard men, Jennings, Patton and to a degree Noel, did not see much other alternative to their present marketing system for livestock. These men tended to emphasize the elements of competition as available only through an open exchange method of marketing. These three men placed much reliance on the independent farmer's ability to perceive the dangers of direct selling and by-passing established markets. One man was more concerned about farmers not perceiving the advantages of competition on the open exchange markets. But the three basically believed

that no alternate system to the terminal market method could provide satisfactory returns or services to producers.

Alternate Price Discovery Mechanisms

The interviewees were questioned in detail--so far as possible--as to alternate methods of price discovery if the open exchange system declines and alternate systems of coordination come into general use. Several of the interviewees could reply only in general terms about alternate price discovery systems for agricultural producers.

Dale Butz views future price discovery processes as being conducted by a committee type organization should the terminal market price discovery mechanism break down. This may not be a formal committee but could be one made up of a producer sales agency and processor representatives with government acting as a referee. Butz notes the sales agency would know the "fair" price for the commodity. Butz states that farmers may need to realize that they cannot extract large profits from processors on the up side of the price cycle and then expect the market agency to cushion their incomes on the down side by brass-tacks bargaining. Through mutual understanding the producer and processor can largely take the cyclical effects out of price movements.

The stockyards men, Patton and Jennings and to a degree Noel, did not see any other alternate to the open exchange system and therefore did not see but one method of price

discovery--that occurs by open exchange at central markets. The stockyards men did not address themselves to as far-ranging questions as Butz.

Vincent Crane notes that a formula pricing mechanism as being necessary as agriculture goes contractual. This formula mechanism could be made up of prices established at terminals--so long as terminals exist--prices at rural collection points, prices at local and regional auction markets plus negotiated premiums for delivery specifications. A price once established for a specified product will need to be charged all processors, since no processor would desire to pay more than other processors. Crane notes that the marketing agency would be foolhardy to attempt to take advantage of a single processor's weak bargaining position in this manner. The processor might be forced out of business and thus the number of buyers--a most important consideration in a non-open exchange coordinated agriculture --would be lessened.

R. A. McPheeters, a farmer, noted that the process of price discovery may occur through a committee made up of processors and producers and with government acting as a referee. As long as the retailer has the majority of the market power the producer and the processor need to work together and assure each of a fair return. McPheeters sees these committees as operational on a local market basis and the price established for choice cattle at the Kansas City

area committee would be kept in line by the competition between other nearby market committees.

This committee could work effectively so long as alternative outlets and markets existed to which the traders could turn if negotiations collapsed. However, if alternative markets cease to operate, then a relative contest of bargaining and market power would develop among the negotiators. McPheeters notes that the retailer may need to be a part of this price discovery committee in order to assure its effective operation. This would also have benefit in that perhaps retailers could gain an appreciation of the problems of price discovery, if they were actually a first-hand participant in the process.

Bargaining

The interviewees were questioned concerning the role they thought agricultural bargaining would play in the coordination, price discovery, and price enhancement process for modern agriculture. The responses covered a range from bargaining as the sole answer, to bargaining as an unsatisfactory and unlikely solution to the problems of price discovery and income enhancement.

The stockyards marketing men, Jennings, Patton and to a degree Noel did not note a role for bargaining, especially the price enhancement type. Bargaining for price discovery would be the most likely type of bargaining to anticipate if terminal markets for livestock were to decline. One of the

interviewees feared that bargaining might be promoted by big agricultural processors who would have an advantage over smaller agricultural processors in terms of relative bargaining power, and thus bargaining would prove to be a means whereby the level of competition between large and small agricultural processors could be decreased. This man--who asked not to be quoted--viewed agricultural producers as being unable to engage successfully in a labor type of bargaining. This man viewed bargaining as a transitory phase of moving from an open market exchange system with individual farm ownership to a corporate controlled agriculture with corporate land ownership.

Dale Butz perceived a role for bargaining as a means of price discovery and to a degree coordination for agricultural producers. Butz views bargaining over contract terms, including price, as being the really only feasible role for bargaining in agricultural production and marketing. Butz emphasizes the choice problem of the bargaining partner. Bargaining will not succeed if it is attempted with a party at an intermediate level of exchange who does not discover prices. For instance in grain, bargaining with country elevators would not result in success; perhaps bargaining with government might be the only feasible solution in grain.

Perhaps the most unusual response on agricultural bargaining was provided by Vincent Crane of the Missouri Farm Bureau. Crane notes that bargaining in agriculture is likely

to take either of two routes: (1) a National Labor Relations type board for agriculture, or (2) a "hard-nose" type bargaining approach which would accompany the unionization of farm laborers and in effect the unionization of agriculture. This idea of a National Labor Relations type board for agriculture has been around for some time and would typically model bargaining for agricultural producers along the lines of labor bargaining.

Crane's second alternative is the most interesting in terms of uniqueness in this study. Crane believes that if farm labor becomes organized and an effort succeeds in unionizing laborers in agriculture across the nation, then through the use of the boycott and sympathy strikes the retailer can be forced into exclusively using and merchandising union label products. Legislation by Congress could block the exclusion of non-union products or in other ways decrease the union's power to influence the performance of the production-marketing system. But let us assume the unionization movement was successful and that independent farmers were forced to purchase union labels in order to market their products. This would, of necessity, bring about bargaining for enhanced prices between a greatly changed agriculture represented by a union and the processors and retailers. The result would be increased food prices at the retail level.

Crane's idea of the unionization of agriculture is certainly different. The likelihood of this occurrence seems remote--yet it may be possible. The greatest stumbling block would seem to be the passage of legislation by Congress which would regulate the conduct and performance of agriculture under such an organizational arrangement. Crane notes that the rest of bargaining power and the ability to bargain would lie in the political arena in which farm groups and businessmen are pitted against organized labor. The result would be uncertain. But the coalition of agricultural and business interests over such issues could have long-run beneficial effects for agricultural producers greater than those involved in bargaining for price enhancement and discovery through the unionization of agriculture.

A consensus emerged out of almost every interview except for Don Hill's, about the ability of the NFO to influence the level of agricultural prices through its bargaining efforts. Some interviewees stated that agricultural processing firms could not be expected to cooperate with NFO to a great degree because of unrealistic bargaining demands. The control of production and entry into production seemed to be the point at which most non-NFO people questioned the ability of the NFO to preserve the bargaining gains even if they were successful.

The consensus was that the NFO had good ideas and some good methods in implementing their bargaining program, but

that the lack of careful application to the situation often turned good ideas and methods into efforts that went awry. The NFO has a bad image with the public, other farm groups and with agricultural marketing people in general. It would seem that the NFO needs professional guidance in order to avoid the pitfalls of organizations which preceded it such as the American Society of Equity, The Grange, and co-operative movements. The NFO could learn much from the history of other farmer movements which would apply to the agriculture of tomorrow. Such was the opinion of several interviewees.

Miscellaneous Ideas

The prospects of various farm interest groups--general farm organizations, cooperatives, bargaining groups, and various other farm interest groups--attaining a unified federation would indeed be bleak if the results of this sampling of agricultural leaders is any indication of movement in that direction. The only person interviewed who thought that a working organizational arrangement might be arrived at was L. C. Carpenter. This may be partially due to the joint operation with the Missouri Farm Bureau, Interstate Producers Livestock Association and the Missouri Farmers Association of a livestock market known as Four Square Market, near Marshall Junction, Missouri. Several interviewees could see a role for farm groups in achieving

a working relationship with agricultural cooperatives in order to achieve forward integration which might be useful in price enhancement efforts.

The potential for the use of marketing orders and agreements for agricultural commodities was generally noted by most interviewees. L. C. Carpenter was the most ardent supporter for the adoption of a system of national or regional orders and agreements. Others such as Dale Butz noted that marketing orders would be a necessary institutional form if the degree of price enhancement sought was substantially above that of a free market. The advantage of marketing orders would lie in having all handlers under regulation within an area or country and the payment of minimum prices, if the enabling legislation specified a minimum price provision.

Willaim Powell, President of Mid-America Dairymen, could see a role for the marketing orders but only if a precondition were satisfied. First a crisis would need to occur within agriculture in order to achieve the adoption of orders for other commodities. For milk in particular, Powell could see a pricing mechanism for Class II milk based on the solids not fat content and a price mechanism for Class I milk which would be based on a bargained price discovery process. Powell also noted that production quotas or price base plans would probably have to be used in order

to make the gains achieved under a bargained price discovery process lasting.

An interview was also conducted with Fred Shipley and Donald Nicholson, market administrator and assistant market administrator respectively of the St. Louis Milk Market Order. The point made by Shipley--a veteran where marketing orders are concerned--was that while marketing orders can be applicable to other commodities, the existence of a strong cooperative for the commodity involved would be most helpful in establishing the order. Shipley noted that the problem of getting the order organized would be the major stumbling block. U. S. Department of Agriculture or any other government agency would not likely actively promote an order or agreement for a specific commodity to the point of adoption. The only effective means of getting an order organized has been through grassroots support. This has been through promotion by cooperatives or bargaining associations who were involved in handling that commodity. Commodities like livestock are not represented by a single group but rather by diverse groups, thus Shipley noted they would seem to exhibit little inclination for joint action.

Summary

Several general conclusions were professed by nearly all interviewees:

1. The independent, commercial, family farm has been and will likely remain the backbone of agricultural production;
2. All--except for NFO representatives--could not see much chance for legislation forbidding or denying entry into production by non-farm interests;
3. The market power of the retailer was a much discussed problem, and it was generally agreed that the power of the retailer was not apt to decrease appreciably in the near future; and
4. Cooperatives will continue to have a significant role in the agricultural organization of the future, but a greater degree of emphasis will be placed on output disposal of members' commodities rather than strictly input supply.

Several other concepts brought out in this section of the study are germane to this subject, although they were typically expressed as only one man's views:

1. The degree to which merchandising alternative means of coordination will materially influence the course taken by the marketing system. The promotion by various alternative means of marketing may be more influential in the selection of alternatives by producers than are the actual benefits of that alternative.

2. The likelihood that instead of a more orderly selection of means of market coordination, a greater degree of variety and form can be expected within marketing arrangements both within and between commodities.
3. The role which the recent focus on problems of pollution will have on the location and methods of processing to such a degree as to materially affect the conduct and performance of the marketing system.
4. The possibility of a systems approach to food production and marketing in which joint ventures with retailers and farm groups might by-pass the traditional processing sector.
5. The role to be played by the attempts to unionize farm workers in relation to the alternative means of coordination--especially bargaining; and
6. The dangers inherent in a bargaining approach through which the elimination of competition among processing units on the buying side of the market could materially affect the relationships with the processing industry.

In terms of preserving the open exchange system for agricultural products and particularly livestock, four of the interviewers could foresee the system preserved with only minor changes. Four interviewees viewed the open exchange

system as passing from the agricultural marketing scene and three were non-committal about the future of the system. The replacement price discovery and enhancement mechanisms covered a wide range from committee pricing through bargaining.

Chapter 8

SUMMARY

Introduction

Every group of people--society if you please--require a means by which to obtain subsistence. This can range from the primitive self-subsistence means to complex systems through which subsistence occurs as a result of specialization and division of labor and talents. The complex systems require some mechanism through which control can be exercised, and in a rational manner. In particular, they must be able to specify the wants and desires of the society by a mechanism which will result in the appropriate flows of goods and services to the members of that society. A system which results in the production of wars in Southeast Asia rather than public goods for the poor of a wealthy nation may not be the most efficient for that society.

These various mechanisms are often referred to as systems of coordination. There are many alternative systems of coordination--threat, custom, integrative, exchange and others. The exchange system is the most prevalent and well-known. The role of coordinator within an exchange system has been typically assigned to price, although barter might also serve. Barter as a coordinator may gradually evolve to

price as a coordinator in an exchange system where growth results in the need for the determination of a "just" value.

There are alternative mechanisms by which prices can be discovered for an exchange economy using price as coordinator. These price discovery mechanisms range from competitively determined prices, bargained prices, decreed prices, to prices established by formula--those based on other price discovery mechanisms.

An exchange economy--such as in the United States--progresses historically through an evolutionary pattern of development. As a nation develops or a society becomes increasingly urbanized many of the exchange transactions begin to centralize in organized markets. Fewer transactions occur outside those markets. The exchange process guides as well as controls the economic system. This places a large degree of reliance on the mechanisms which are used to discover prices.

At the same time, a price-based exchange system promises substantial rewards to those who are able to achieve a degree of control or influence over the process of price discovery. Thus, the exchange system of coordination democratically conceived requires an intricate legal-institutional framework; and if it is designed or works imperfectly, it can leave some sectors of society at a

disadvantage while giving inordinate rewards to those which achieve a degree of control or influence.

The process of economic coordination would be less difficult to comprehend if a society were characterized by only one system of coordination, one coordinator and only a few means of discovering the numerical magnitude of the coordinator. But alas, the coordination systems, their coordinators and the determination of the coordinator which characterizes most economic systems resembles a multi-colored abstract painting with a multitude of shadings and tints complete with revolving and evolving psychedelic lights.

The operation of the open exchange method of coordination for agricultural products and the resulting uses of price as the coordinator reached its peak and then gradually became less effective due to changes occurring both within and outside of the agricultural production-marketing system. Changes occurring outside the system are by and large a result of the evolution of the economic system to that of a highly urbanized and industrialized society. The impact of technology within this framework is over-riding in its implications, but it alone does not account for the mass of changes within our economic system.

The increase in productivity per employee permitted more people to be freed from the land. But at the same time it placed a greater degree of dependence on the efficient

working of the system which moved raw commodities from the farm through processing plants to appear on the consumer's table in the form of TV dinners.

The movement into a system characterized by organized groups for the purpose of directly affecting the economic destiny of that group--both politically and through the exchange process--is the major change occurring outside the agricultural system. This movement has accelerated and by all indications will continue to increase in intensity. Thus, atomistic agriculture must organize if any semblance of entrepreneurial decision-making is to remain with the individual farmer.

The exchange system of coordination has many inherent merits and it might be supposed that all parties have as their deepest wish the improvement and perpetuation of that system. However, a more accurate generalization might be of opposite content, namely, the acquisition and/or retention of market power and control authority becomes a more relevant firm or group goal than does the pursuit of larger profits. Galbraith, for example, refers to this as the desire to maintain the business firm for the sake of the techno-structure. Long corporate life may thus become the goal--and to this end--the use of increasing alternate coordination and control arrangements--other than exchange with price as the coordinator--helps to insure this

longevity. This situation can be characterized by groups and organizations which interact outside the exchange system in order to further their individual self-interest goals.

The movement from this situation can proceed either backwards and towards improved open exchange mechanisms--although the traditional concepts of conduct and performance of an open exchange market system may not be preserved intact--or forward and to alternate coordination and control arrangements. The point is that pressures for change exist within our economic system and that the challenge of charting and guiding these changes so as to better serve the system becomes the economist's responsibility.

The Agricultural Open Exchange Market System

The open exchange market system came about as an effective means of coordination and control for an atomistic agriculture in the United States in a relatively competitive setting as a result of: (1) the geographically dispersed nature of production in areas removed from the eastern concentration of consumers; (2) the development of a rail transport system which encouraged agricultural exchange markets in central cities; (3) the capability of producers to produce a surplus; (4) the traditional values of agriculture which emphasized the independent nature of agricultural production and de-emphasized marketing; and (5) the dispersed

nature of agricultural marketing which both contributed to and reflected the exchange process.

The changes occurring within the agricultural system arose primarily from emerging weaknesses of the open exchange method of coordination and its use of competitively determined prices as the coordinator. One weakness is the wide fluctuations which tended to occur in price as well as volume as independent producers entered and existed or increased and decreased production in response to market price movements. This created large variations in producer's net incomes as the volumes of supplies fluctuated inversely with market prices. This also created surplus disposal problems and problems for processors in keeping their overhead cost fully distributed over as many units of output as possible.

The open exchange method of coordination has not so much suffered increasing fluctuation but rather that agriculture became more discriminating and demanding. This has been in part due to agriculture's increasing commercial composition. Thus, the fluctuations became less tolerable as agriculture became more highly leveraged through the use capital-using technology. A farmer with 50,000 broilers or 300 choice steers ready for market does not like to find that the prices generated on open exchange markets are below his cost of production.

Another important change in the food production-marketing system has occurred at the consumption end. As consumers' real income increased the amount by which retail prices must decrease in order for a surplus of some agricultural products to be consumed is greater than previously in the situation where consumers were more price responsive. Open exchange coordination could not satisfactorily provide incentives for the control of the supply of those products by price at the end of the culmination process of capital input flows. Agricultural producers and to a degree farm leaders have been slow to appreciate the implications of this change. Supply control and market discrimination plans have become more attractive because of this decreased degree of price responsiveness.

The declining price responsiveness of consumers for some agricultural products is also reflected in the declining role of price and the growing role of non-price competition within the marketing channels. The movement into more non-competitively determined prices by firms seeking to avoid active competition. The open exchange method of coordination placed an overly large burden on competitively determined prices. Thus, the undermining of this determination led the resultant determined prices to reflect less and less accurately the "true" demand and supply conditions required for equilibrium in the open exchange coordination system.

There has particularly been a decrease in the effectiveness of price as a regulator of production. That is, it performs less well the control or regulatory role that is an important part of its function in an exchange economy. The development of price support programs to counter the agricultural crisis of the early 1930's further accentuated this trend for some agricultural commodities. The decreasing reliance placed on price supports as a method of income maintenance and the public clamor for decreased government storage costs for agricultural commodities has encouraged farmers to seek self-help programs.

Another weakness within the open exchange coordination process--and perhaps the most telling in terms of long-run deterioration of that system--is the impersonal nature of the forces which arrive at a price on that market system. The producers of agricultural commodities have increasingly become alienated from the open exchange coordination system which at times seemed to operate independently of their individual action. Thus, in order to achieve a degree of insulation from the forces of the open exchange system various alternate methods of coordination and control have been promoted by various farm interest groups.

Agricultural producers have observed that various price management groups--such as government, labor unions, etc.--have interfered with the long-run function of price and price discovery as the coordinator on open exchange markets,

because the unmanaged market was judged to provide unsatisfactory solutions. Thus, the central question for the coordination of the agricultural system reduces to the relative ability and stability of an agricultural industry characterized by atomism to survive in an economic system characterized by much non-open exchange coordination and control.

Alternate Price Discovery and Enhancement Systems

Historically, the first attempts at developing alternatives to the open exchange system of coordination came as efforts to improve that system. The regulation of the conduct of participants--particularly large buying interests--and the provision of the grades and standards necessary for them including market information services all sought to improve the performance of the open exchange system of coordination.

Another attempt at improving the performance of the open exchange system came in authorizing countervailing power in the form of cooperatives. The failure--by and large--of the cooperative approach led to price support programs designed to put an income floor under agricultural producers until the open exchange system of coordination could be improved.

Efforts to improve the performance of the open exchange system of agricultural coordination were not overly

successful. This was partly due to increased performance aspects expected of the open exchange system. Thus, new impetus was added to the drive to create countervailing imperfectness within the system for agricultural producers. The first attempt came through the establishment of the institutional device of marketing orders and agreements. The second and latest efforts have been to create bargaining potential for agricultural producers. It is worth noting that these two efforts are complementary and may be largely inter-dependent in order for agricultural income improvement to be attained by these methods.

The agri-business side of the food production-marketing system has also desired to improve the performance of that system--but for different reasons. As a part of their merchandising strategy input suppliers have offered contractual arrangements in order to stabilize the demand for their inputs. Feed mills and dealers in broiler production areas were especially reluctant to see their large input buying customers accept tying contractual arrangements with competitors.

Agricultural commodity buyers--although frequently tied in with input suppliers in vertical coordination arrangements --have also engaged in contract marketing and production systems. Their motivation has largely been spreading of overhead and product differentiating--although changes in demands for quantity and quality of food retailers played no

small part. This new system circumscribed to some extent the exchange process at open exchange markets. In addition, the supply of coordination and control arrangements by agri-business units has often been output-increasing and consequently market price depressing--as in broilers and turkeys.

This turn of events and the resultant adoption of contractual arrangements of coordination by these agri-business interests has led to resurgent attention to agricultural bargaining as a means of improving the performance of the coordination system by adding imperfectness to that system. Bargaining is not a system of coordination. Agricultural economists frequently get bedazzled by the concept of a bargained agriculture. Bargaining is a tool--a mechanism--a means to an end--that end being a mechanism to arrive at the coordinator and the relative numerical magnitude of the coordinator for that coordination system.

Bargaining is a very flexible concept and can be fitted as a tool into various institutional arrangements including contractual schemes, orders, boards and various other institutional forms--including the open exchange coordination system. Bargaining can preserve the price discovery mechanism role for the price coordinator at open exchange markets. Bargained price coordinators can function on a central assembly market without running to alternate coordination systems. Bargaining and contractual arrangements

are also mutually supporting relationships within the framework of a non-open exchange coordination system.

Agricultural economists have seized upon bargaining with a tenacity that would make any octopus envious. Bargaining is not the sole answer to a many faceted problem. Agricultural economists and farm leaders must come to realize that bargaining is merely a tool for which several alternate coordination systems exist.

The improvement and preservation of the open exchange system of coordination through improvements in the competitively determined mechanisms of price coordinators have been successful in certain instances. Telephone auctions, possible computer matching of bids and offers, improvement of the Futures Market and other mechanism improvements can lead to the improvement of price as a coordinator within the framework of an open exchange coordination system.

Alternate systems of agricultural coordination are promoted mainly by a species of animal known as farm interest groups. The analysis of alternative systems of coordination and their respective coordinators and coordinator determining mechanisms is often distracted by the menagerie of organizational structures. Chapter 5 and to a degree Chapter 7 take up this organizational subject. But organizations are not the major concern of this study. Organizations are important but the consideration of

alternative coordination systems, coordinator and coordinator-determining mechanisms are of the paramount importance for this study.

These alternate systems of coordination and their coordinators and coordinator-determining mechanisms frequently require institutional support in the form of enabling legislation which permits the establishment of marketing orders and agreements, marketing boards and various other umbrella authorities. Chapter 6 considers some of these various authority arrangements. Bargaining can be referred to in a loose way as an institutional support mechanism, but bargaining complements rather than supplants these authorities.

Evaluation of Alternate Systems of Coordination and Control

Evaluation of the various alternate coordination systems, their coordinators and the mechanisms for the determination of those coordinators is difficult at best. The lack of empirical data leads to tentative and conditional hypotheses concerning the conduct and performance outcomes of various alternate methods of coordination and control.

The costs of a market system in terms of resource mis-allocation or lack of consumer satisfaction with regard to the quality, quantity and mix of goods and services is directly linked to the alternate systems. These costs can be both direct and indirect in nature. The direct costs

involve unwanted goods piling up in inventory and the costs involved in using too many resources to produce those unwanted goods. The direct cost can be estimated but admittedly at best only imperfectly and then only after the fact.

The indirect costs are associated with foregone alternatives and satisfactions. The indirect costs are nebulous and obscure in a mixed exchange economic system as large and complex as in the United States where increasing reliance is placed on non-open exchange coordination and control to guide the economic system in performing the three functions mentioned in the opening paragraph of this study.

These alternatives involve at the first level--that of coordination systems--the exchange system, the integrative system, the custom system, and authoritarian systems. Various mixtures of these coordination systems can and do occur within any given economy or sector of an economy. The alternatives for coordinator at the next level involve, for example, price and barter for exchange systems, threats for authoritarian systems, role or tradition for the custom system, and delegated responsibility for the integrative system. The alternatives at the third level--that of coordinator-determining mechanisms--for example, involve open competition or bargaining for price or barter;

inherited, assigned or earned mechanisms for roles and traditions under the custom system.

The point is that trade-offs exist between each of the three levels in this system especially in a large complex agricultural economy where numerous farm groups exist and government supported structural arrangements are commonplace. The problem arises from the manner in which price and value relate to each other at various points within this systematic arrangement. Value determined by a contractual mechanism within an integrative system--even though the mechanism may include value determination made by openly competitive price discovery within an exchange system--may not arrive at a price which can be evaluated in terms of performance criteria based on open exchange systems.

Overview

Regardless of the alternative chosen on any of the three levels, the operation of that alternative can be made reasonably satisfactory by sufficient farm group participation and government regulation and control. But producers may have to accept fair returns based on their input costs and capital base, rather than seek to obtain pure profits due to natural scarcity in order to furnish adequate returns to investments over the long-run.

The dynamics of change has been slow to adjust within the various structural arrangements of the agricultural

production-marketing system. Adjustment will occur by one means or another and the challenge to agricultural economists and farm leaders will be to guide this change among the alternate price discovery enhancement systems so that the change can be accomplished and attain acceptable performance including preserving a degree of producer sovereignty.

Regardless of the choice of alternative price discovery or enhancement systems or the mechanisms chosen there are no miracle working cures which will insure prosperity for all agricultural producers. Agricultural production has and will likely remain a competitive enterprise and producers should not expect to maintain their status quo or income positions through the use of improved price discovery or enhancement mechanisms. Economics was once labeled the dismal science and so it will remain for those who expect to be shielded from the workings of the market and the principles of comparative advantage through the use of alternative methods of price discovery.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Armstrong, Jack H. 1971. "Bargaining Through Associations," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action. North Central Regional Extension Publication 30, University of Missouri, Extension Division, C 911.
- Barbash, Jack. 1971. "The Labor Union as a Bargaining Organization," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action. North Central Regional Extension Publication 30. University of Missouri, Extension Division, C 911.
- Barr, Wallace. 1971. "Bargaining in Perspective--A Summary," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action. North Central Regional Extension Publication 30. University of Missouri, Extension Division, C 911.
- Boulding, Kenneth E. 1963. "Toward a Pure Theory of Threat Systems," American Economic Review. 53:424-434.
- Breimyer, Harold F. 1962. "The Three Economies of Agriculture," Journal of Farm Economics. 44:690-694.
- _____. 1965. Individual Freedom and The Economic Organization of Agriculture. Urbana: University of Illinois Press.
- _____. 1969. "Crucial Differences Between Labor and Agricultural Bargaining and How They Affect the Potential for Agricultural Bargaining," Resource Report--Agricultural Bargaining. Madison: University of Wisconsin.
- _____. 1971. "The Problem and Its Setting," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action. North Central Regional Extension Publication 30. University of Missouri, Extension Division, C 911.
- Campbell, Angus. 1964. The American Voter. New York: John Wiley and Sons, Inc.
- Clark, John Maurice. 1961. Competition as a Dynamic Process. Washington: The Brookings Institution.

- Clovis, L. L. "The Importance of Value in Livestock Marketing," Nations Agriculture. :6-8.
- Dehaven, Kenneth. "Economic Evaluation of Alternative Milk Pricing Plans." Unpublished Master's Thesis, University of Missouri, 1966.
- Dorfman, Robert. 1964. The Price System. Englewood Cliffs: Prentice-Hall.
- Everitt, James. 1903. The Third Power. Indianapolis: The Hollenbeck Press.
- Fitzpatrick, Albert Arthur. 1964. Pricing Methods of Industry. Boulder: Pruett Press, Inc.
- Foytik, Jerry. 1962. Agricultural Marketing Orders-- Characteristics and Use in California, 1932-1963. Report 259, Giannini Foundation, University of California.
- Hartley, Harold. 1964. "Headaches and Achievements of the AAMA," Proceedings of the 8th National Conference of Fruit and Vegetable Bargaining Cooperatives. Farmer Cooperative Service, U. S. Department of Agriculture, Washington: Government Printing Office.
- _____. 1967. "What's New in the AAMA," Proceedings of the 11th National Bargaining Conference. Farmer Cooperative Service, U. S. Department of Agriculture, Washington: Government Printing Office.
- Honan, Joseph C., Jr. "The National Farmers Organization: A Study of Agricultural Protest." Unpublished Doctor's Dissertation, University of Missouri, 1966.
- Hood, Kenneth. "The New Route--Contract Marketing," Nation's Agriculture. January, 1970. 45:29.
- _____. "Action Marketing," Nations Agriculture. February, 1971. 46:4.
- Hoos, Sidney. 1970. "Economic Possibilities and Limitations of Cooperative Bargaining Associations," Cooperative Bargaining. Service Report 113, Farmer Cooperative Service, U. S. Department of Agriculture. Washington: Government Printing Office.

- Jacobson, Robert. 1971. "Marketing Orders: Bargaining Aid or Vehicle," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action, North Central Regional Extension Publication 30. University of Missouri, Extension Division, C 911.
- Kohls, Richard L. 1966. "Can Cooperative Bargaining Associations Succeed,"? Proceedings of the 10th National Conference of Fruit and Vegetable Bargaining Cooperatives, Farmer Cooperative Service, U. S. Department of Agriculture, Washington: Government Printing Office.
- Lauterbach, Allen. 1964. "Some Legal Developments of Interest to Bargaining Cooperatives," Proceedings of the 8th National Conference of Fruit and Vegetable Bargaining Cooperatives. Farmer Cooperative Service, U. S. Department of Agriculture. Washington: Government Printing Office.
- Leonard, Rodney E. 1968. "Farm Bargaining Power--A Necessary Ingredient in Modern Agriculture," Proceedings of the 12th National Conference of Bargaining Cooperatives, Farmer Cooperative Service, U. S. Department of Agriculture. Washington: Government Printing Office.
- Manchester, Alden C. 1954. "Price Making and Price Reporting in the Boston Egg Market," Harvard Studies in the Marketing of Farm Products. Number 7-H. Cambridge: Harvard University.
- Missouri Farm Bureau News. January 12, 1971. Jefferson City: Missouri Farm Bureau Federation, p. 2-9.
- National Commission on Food Marketing. 1966. Organization and Competition in the Fruit and Vegetable Industry. Technical Study No. 4. Washington: Government Printing Office.
- Nourse, E. G. 1944. Price Making in a Democracy. Washington: The Brookings Institution.
- Rhodes, V. James. "Contractual Agriculture," Economic and Marketing Information for Missouri Agriculture. February, 1970. 13:3. University of Missouri, Department of Agricultural Economics.
- _____. 1970. The Role of Farming in Agricultural Production, Marketing and Processing. Paper No. 1970-26. University of Missouri, Department of Agricultural Economics.

- Rhodes, V. James. 1971. "Pricing Systems--Old, New and Options for the Future," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action. North Central Regional Extension Publication 30, University of Missouri, Extension Division C 911.
- Roy, Ewell Paul. 1967. "Potentials of Cooperative Bargaining," Proceedings of the 11th National Bargaining Conference. Farmer Cooperative Service. U. S. Department of Agriculture. Washington: Government Printing Office.
- _____. 1970. Collective Bargaining in Agriculture. Danville: The Interstate Printers and Publishers, Inc.
- Samuels, J. K. 1971. "Legal and Legislative Aspects of Collective Bargaining in Agriculture," Bargaining in Agriculture--Potentials and Pitfalls in Collective Action. North Central Regional Extension Publication 30. University of Missouri, Extension Division, C 911.
- Sapiro, Aaron. 1967. "Cooperatives to Control Marketing," Agricultural Thought in the 20th Century. ed. George McGovern. Indianapolis: Bobbs-Merrill and Co.
- Schultz, Theodore W. 1967. "Payments to Counter Depression," Agricultural Thought in the 20th Century. ed. George McGovern. Indianapolis: Bobbs-Merrill and Co.
- Schupp, Alvin. "An Economic Evaluation of the Sire and Length of Feeding on Acceptance of Beef Loin Steaks and on Pricing Accuracy in the Beef Marketing System." Unpublished Master's Thesis, University of Missouri, 1969.
- Shannon, Fred A. 1957. American Farmer Movements. Princeton: D. Van Nostrand and Co.
- Smith, Adam. 1913. Wealth of Nations--Book I. New York: The Macmillian Co.
- Taylor, Carl C. 1953. The Farmers' Movements: 1620-1920. New York: The American Book Company.
- United States Department of Agriculture. The Federal Milk Marketing Order Program. Marketing Bulletin 27, Consumer and Marketing Service. Washington: Government Printing Office.

- Walker, H. V. 1971. "Bargaining Through Marketing Boards--
The Canadian Experience," Bargaining in Agriculture--
Potentials and Pitfalls in Collective Action. North
Central Regional Extension Publication 30. University
of Missouri, Extension Division, C 911.
- Walters, Charles, Jr. 1968. Holding Action. Kansas City:
Halcoyon House.
- Wilcox, Walter W. and Cochrane, Willard W. 1960.
Economics of American Agriculture. Englewood Cliffs:
Prentice-Hall.
- Williams, Sheldon W., et. al. 1962. The Mechanics of
Supply-Demand Adjusters for Midwestern Milk Markets,
North Central Regional Extension Publication 134.
Urbana: University of Illinois.
- Williams, Sheldon W., David A. Voss, et. al. 1970.
Organization and Competition in the Midwest Dairy
Industries. Ames: The Iowa State University Press.

VITA

Harold James Loyd was born [REDACTED]. He was reared on a farm near Billings, Missouri. He attended public school in Billings, and was graduated from the Billings High School in 1962.

Harold received the Bachelor of Science in Agriculture from Southwest Missouri State College in Springfield, Missouri, in 1966. He accepted a research assistantship to do graduate work at the University of Missouri and received the Master of Science degree in Agricultural Economics in 1968. He then received a research graduate assistantship to continue study for the Doctor of Philosophy degree in Agricultural Economics.

In August, 1971, Harold will receive the Doctor of Philosophy degree in Agricultural Economics from the University of Missouri, Columbia, Missouri. He will then join the faculty of the Department of Business Administration at Abraham Baldwin Agricultural College in Tifton, Georgia.

The undersigned, appointed by the Dean of the Graduate Faculty, have
examined a thesis entitled

ALTERNATE METHODS OF COORDINATION FOR
AGRICULTURAL PRODUCERS

presented by Harold James Loyd

a candidate for the degree of Doctor of Philosophy

and hereby certify that in their opinion it is worthy of acceptance.



Digitization Information Page

Local identifier Loyd1971

Source information

Format	Book
Content type	Text
Source ID	Gift copy from department; not added to MU collection.
Notes	

Capture information

Date captured	December 2023
Scanner manufacturer	Fujitsu
Scanner model	fi-7460
Scanning system software	ScandAll Pro v. 2.1.5 Premium
Optical resolution	600 dpi
Color settings	8 bit grayscale
File types	tiff
Notes	

Derivatives - Access copy

Compression	Tiff: LZW compression
Editing software	Adobe Photoshop
Resolution	600 dpi
Color	grayscale
File types	pdf created from tiffs
Notes	Images cropped, straightened, brightened Text on page 178 is crooked.