ECONOMIC IMPLICATIONS OF INTERLEVEL GOAL CONFLICT AND OPERATIONAL INCONSISTENCY IN THE BEEF MARKETING SYSTEM: THE PACKER-FEEDER SUBSECTOR

By

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PREFACE

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CHAPTER I

INTRODUCTION

The Current Situation

The production and marketing of slaughter cattle are of rapidly increasing importance to the Oklahoma economy. During 1969, marketings of fed cattle in Oklahoma totaled 496,000 head. This compares to 1960 marketings totaling 143,000 head.[1] Commercial cattle slaughter in Oklahoma totaled 713,500 head in 1969 compared to 334,400 during the year 1960.[2] Relative to other crops, "cattle and calves" ranked first in importance in 1968 with a value of production estimated at $375.7 million.[3] Increasingly, the beef cattle sector is rising to a position of dominant importance to the economy of the state.

Most analysts agree cattle feeding and related slaughtering operations will continue to grow in Oklahoma.[4] The western counties of Oklahoma, especially the three Panhandle counties, are part of the rapidly growing Southern Plains feeding area. The Southern Plains area fed eight percent of the nation's cattle in 1960 but this share had grown to 25 percent in 1969. Continued increases in growth are forecast for the near future.[5]

The Problem

Growth typically requires change and reorganization. The beef cattle sector of the Oklahoma economy is no exception. As cattle feeding and slaughtering activities expand, there is concurrent expansion in the marketing tasks to be performed. If marketing procedures emerge which are characterized by inefficiency, development of the beef cattle industry is slowed and the contribution this particular industry or sector can make to economic growth of the state as a whole is decreased. An efficient and effective beef marketing system is therefore important.

Available research relating to problems of marketing in the beef industry is directed primarily toward activity at some one level. Pleas for research dealing with the interaction between the identifiable levels of the beef marketing system were voiced by Kohls in the 1950's[6] and echoed by Shaffer as recently as 1968.[7] However, little has been done; there is a void in the received literature concerning the implications of various types of interaction, or alternative forms of coordination, between the levels of the system.

Activity at the various levels of the beef marketing system are technically related. Output at one level becomes input at some related (higher) level. The economic function of the beef marketing system is to effect coordination between what is desired by consumers and what is produced -- to create the time, form, place and possession utilities the modern consumer demands. How effectively these important tasks are performed is affected by the extent to which the various levels work together, the extent to which interlevel coordination of action is achieved.

In an open market exchange system, control of the various activities rests with different management centers. Conflict in goals or inconsistency in operational procedures between levels not only affects the degree of coordination but also has implication to pressures for change in the organizational structure of the entire marketing system. More information on the prevalence and implications of such conflicts or inconsistencies is sorely needed. This study attempts to provide such information for the feeder-packer subsector of the Oklahoma beef marketing system.

Review of Literature

A search of the available literature reveals several efforts which have indirect relevance to the problem. The more recent will be briefly described.

A study by Purcell identifies limited perspectives of firms in the system, with related tendencies toward isolationist goals and operating policies, as an obstacle to effective communication in beef marketing systems.[8] Tapp documents the existency of excessive pencil shrinks in carcass grade and weight sales of slaughter beef in Oklahoma. Such practices indicate a lack of coordination between the two levels where this technique of selling is concerned.[9] Logan estimates slaughtering costs per head for fat cattle increase by as much as 12 percent when the flow of cattle into the plant is variable rather than uniform.[10] Clifton notes such variability encourages vertical integration by the packer back into cattle feeding, thus effecting a change in the organizational structure of the system.[11]

Efforts designed specifically to explore the economic implications of any interlevel goal conflicts and/or operational inconsistencies are missing. The costs of such conflicts, both to the system as a whole and to the individual operators within the system, are unknown. Such information is sorely needed to guide adjustments in procedure in the short-run and to direct changes in the organizational structure of the system over time.

Objectives

The overall objective of this study was to identify, and establish the economic implications of, important interlevel goal conflicts and/or operational inconsistencies in the packer-feeder subsector of the beef marketing system in Oklahoma. More specifically, the objectives were as follows:

1. To identify decision criteria employed by management at the packing and feeding levels which affect the nature of interlevel buying and selling activities;
2. To identify interlevel goal conflicts and operational inconsistencies within the packer-feeder subsector of the beef marketing system; and
3. To infer the implications of selected conflicts and/or inconsistencies to the level of coordination achieved by the packer-feeder subsector of the Oklahoma beef marketing system.

Procedure

There is no secondary source of the type of information needed to fulfill the stated objectives. Consequently, development of an appropriate procedure became an important part of the total study.

A conceptual framework was established using the available literature, interaction with trade personnel, and the insight of various university researchers interested in the problem area. Emphasis was placed on developing, conceptually, an understanding of why interlevel coordination within a marketing system is important and what implications can emerge when an acceptable level of coordination is not realized.

Within the established framework, a total of six dimensions or facets of the total connection between the packer and feeder were selected. Identification or selection of each dimension was equivalent to hypothesizing that significant conflicts or inconsistencies in procedure exists along that particular dimension. In general terms, the six dimensions chosen were: (1) overall goal of the operations, (2) attitudes toward level versus variability in returns (or costs), (3) product valuation, (4) market procedure, (5) attitudes toward various ways of achieving vertical coordination, and (6) opinions on performance of the market within which the managers are operating.

Questionnaires were developed, based on the six dimensions, to isolate any conflicts or inconsistencies and establish a base for inferring implications to the performance of the system and the level of coordination achieved. Separate questionnaires were developed for the packing and feeding sectors; they are included in the thesis as Appendices A and B. Using a stratified random sampling procedure, a

total of 23 packers and 42 feeders were surveyed. More detailed information on the characteristics of the sample is to be included in Chapters III and IV.

A particular orientation was built into the questionnaires. Questions were planned on a "mirror image" basis to facilitate their purpose of isolating conflicts or interlevel inconsistencies. For example, a set of questions was designed to establish feedlot managers' attitudes toward level versus variability of returns. The related questions in the packer survey attempted to establish the packers' attitudes toward level versus variability of in-plant costs of the cattle they buy. Such an approach was considered necessary to isolate basic conflicts and interlevel operating problems.

Additional questions were used to provide a more complete picture of the decision models used by the feeder and packer. Thus, not every question has a direct counterpart in the other questionnaire. No formal structure was maintained; questions relating to the same area were often scattered throughout the form to conceal the underlying purpose of the questions.

The questionnaires were completed by the author during July and August of 1969. Personal interviews were used due to the length of the questionnaires and the need for explanation in some areas to assure similar interpretation by the respondents.

FOOTNOTES

[1]Oklahoma Crop and Livestock Reporting Service, Cattle on Feed, Statistical Reporting Service (Oklahoma City), selected issues.

[2]Oklahoma Crop and Livestock Reporting Service, Livestock Slaughter, Statistical Reporting Service (Oklahoma City), selected issues.

[3]U. S. Department of Agriculture, Meat Animals, Statistical Reporting Service (Washington, April, 1969), p. 71

[4]The "Southern Plains Feeding Area" is generally considered to be comprised of the panhandle areas of Texas and Oklahoma, eastern New Mexico, the southeastern corner of Colorado, and the southwestern part of Kansas.

[5]Wayne D. Purcell, "Are We Overdoing It?," Paper presented at the 1969 Oklahoma Cattle Feeders Seminar (Stillwater, 1969).

[6]R. L. Kohls, "A Critical Evaluation of Agricultural Marketing Research," Journal of Farm Economics, XXXIX (1957), pp. 1600-1609.

[7]James D. Shaffer, "Changing Orientations of Marketing Research," American Journal of Agricultural Economics, L (1968), pp. 1437-1449.

[8]Wayne D. Purcell, An Appraisal of the Information System in Beef Marketing, Michigan State University Agricultural Economics Report No. 151 (East Lansing, 1969).

[9]Ralph L. Tapp and Wayne D. Purcell, Variable Procedure in Carcass Grade and Weight Sales of Slaughter Beef: Implications to Oklahoma Cattle Feeders, Oklahoma Agricultural Experiment Station Bulletin B-669 (Stillwater, 1969).

[10]Samuel H. Logan, "The Effects of Short-Run Variations in Supplies of Cattle and Costs of Slaughtering in California," Journal of Farm Economics, XLV (1963), pp. 625-630.

[11]Elliot S. Clifton, "Effect on the Meat-Packing Firm of Short-Run Price Variations in Livestock," Journal of Farm Economics, XXXIX (1957), pp. 1645-1654.

CHAPTER II

THE COORDINATION OF INTERLEVEL ACTIVITY

Introduction

There is no well organized and conceptually complete "theory" of marketing. The conceptual base for most analyses of marketing activity is a combination of marketing principles and basic tenets of economic theory. The base is often loosely formulated and situation oriented, designed specifically for a particular analysis. Historically, the orientation of researchers has leaned toward analysis of some one of the many related activities which comprise the total marketing effort. Consequently, the received literature offers little in terms of a conceptual base for analysis of an entire marketing system or some subset within the entire system. A more productive base is needed, one directed toward analysis of interlevel activity.

Vertical Coordination and Firm Theory[1]

A logical place to start in establishing a conceptual base is with the available theory of the firm. In examining certain concepts in the theory of the firm, the extent to which the theory can be adapted and brought to bear in systems analysis becomes more apparent.

Basic to all economic activity is the concept of "production". Production may be considered in general terms as any activity that creates or adds form, space, or time utilities to a basic product. In

the firm, an arrangement of the production activities constitutes a "production line", the complete production process. Conceptually, these various activities are often viewed as a vertical continuum. The basic product as raw material is converted to a finished product as it moves up the continuum.

The firm is the organizational unit which conducts these activities. If the various activities are all performed by a single firm, the firm is also responsible for the coordination of these activities. The activities performed have been referred to as stages, with "stage" defined as "any operating process capable of producing a salable product or service under appropriate circumstances."[2] Thus, a stage has the potential to suffice as an economic base for an independently operating firm. A firm then may be made up of only one vertical stage or it may consist of many vertical stages.

The notion of "stage theory" then emerges and can be represented graphically in the form of a grid as shown in Figure 1. The horizontal axis represents units of production and the vertical axis shows units of utility added at each production stage in the vertical stage-to-stage movements of the raw product. The horizontal axis is relatively easy to understand since production is measured in units of output ordinarily used in marginal economic analysis. The vertical axis is less obvious. Utility is added by each successive activity as the product moves up the vertical continuum. Theoretically, an additional activity, which would lengthen the continuum, is justified only if the contribution to total utility inherent to the product is positive and sufficiently large to offset the change in cost associated with the added activity.

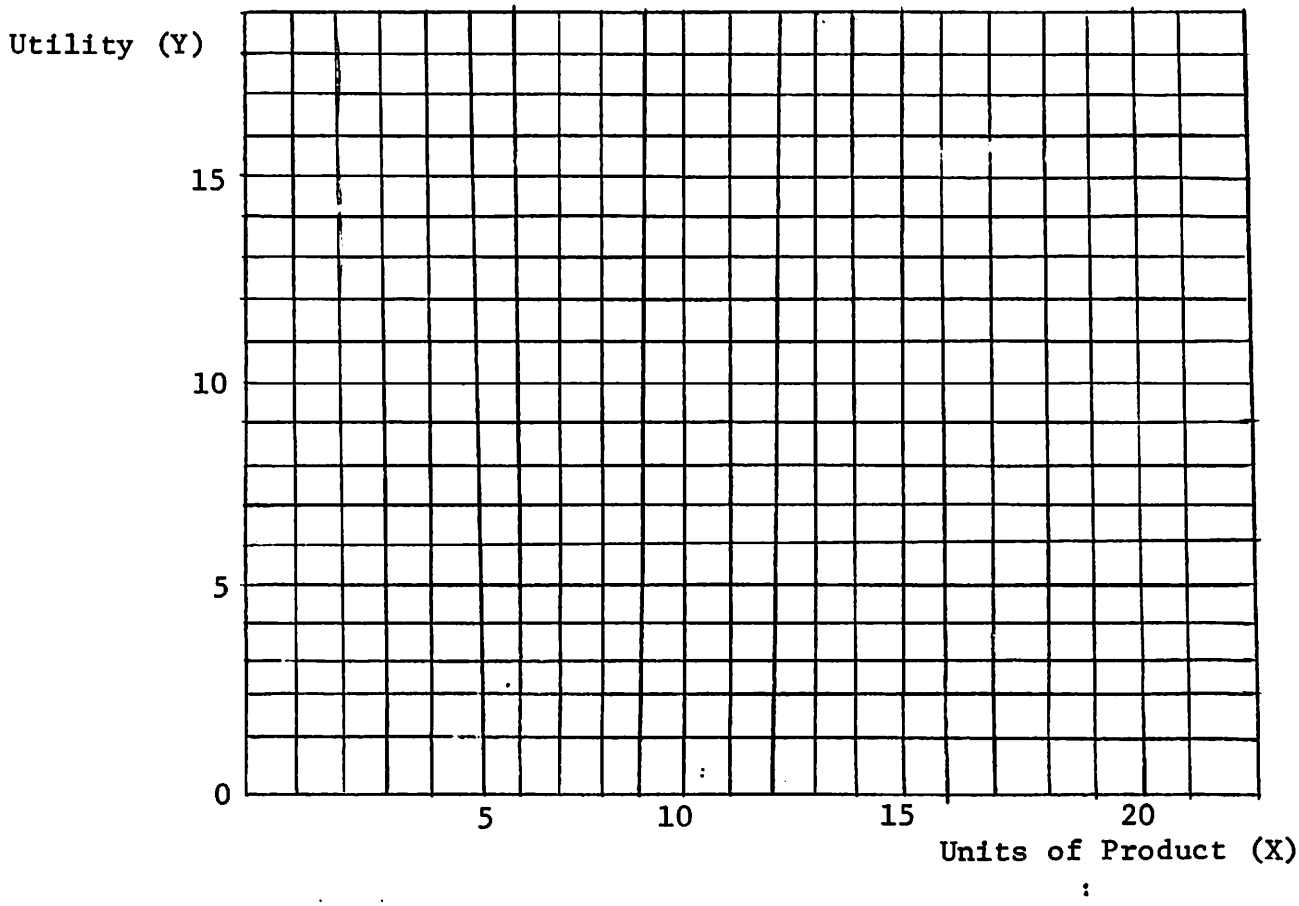

Figure 1. A Production Grid

The total task to be performed in the production process can be likened to the area of the grid shown in Figure 1. If X units of raw material are pushed through the production line which generates Y units of utility per unit of finished product, then the total effort is -- conceptually at least -- the product XY.

Generation of the Y units of utility inherent to each unit of product can, as noted, be divided into a number of stages. Similarly, the X units of product could be produced by a number of firms, each being comprised of one or more stages.

Figure 2 illustrates such a breakdown, showing three separate stages A, B, and C. Five separately controlled firms (a_1, a_2, a_3, a_4, and a_5) are involved in the activities defined to be stage A, four firms (b_1, b_2, b_3, and b_4) in stage B, etc. As shown, no firm is active at more than one stage. Conceptually, of course, several stages could be combined into one firm.

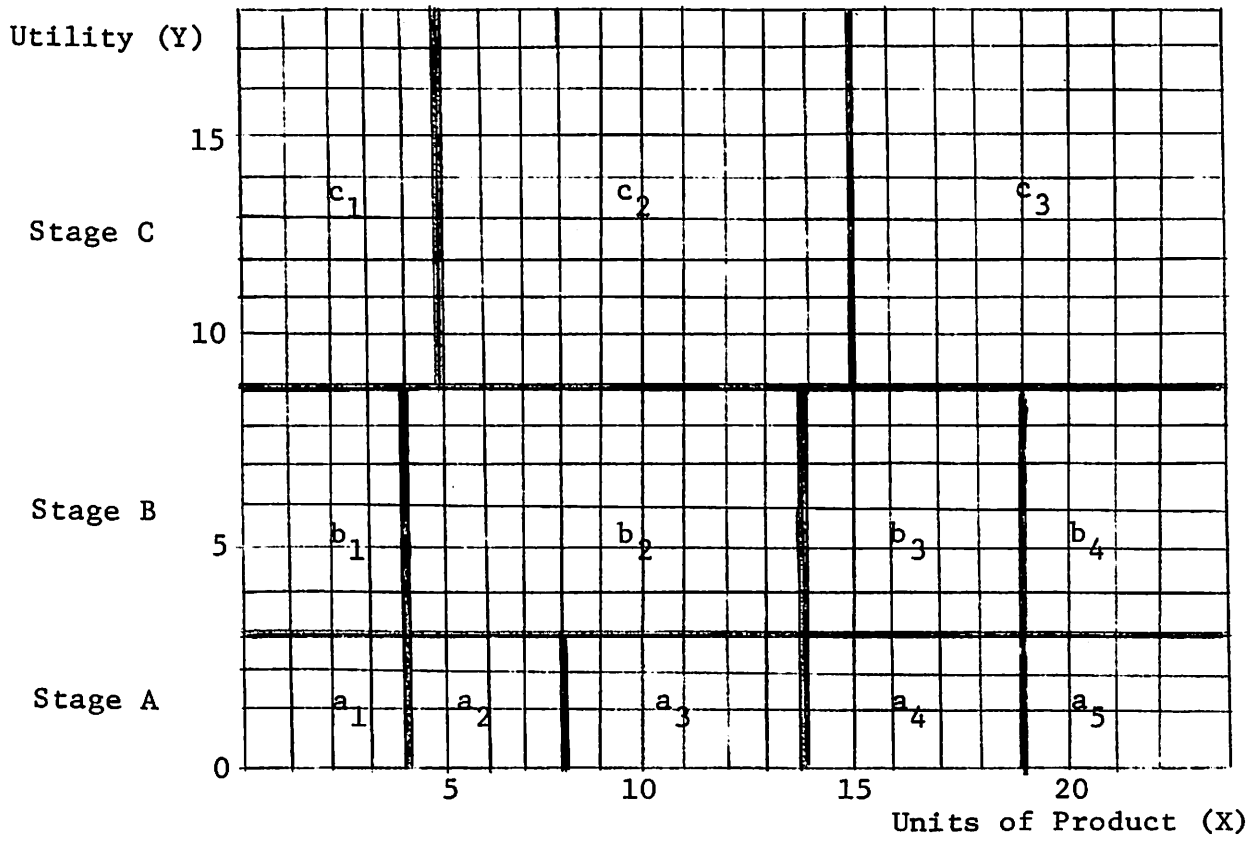

Figure 2. A Possible Breakdown of the Production Grid Into Stages and Firms

The number of stages and the number of horizontal units at each stage to include in a particular firm will depend upon the technical efficiency and capacity of the particular firms involved. The firm can extend itself either horizontally or vertically, but may eventually encounter increasing costs in either direction as its fixed resources are more fully utilized. Once having attained an equilibrium, any new change in technology or demand might call for further regrouping and restructuring.

An entire industry can be represented by Figure 2. Each firm in the industry cluster, a_j through c_j, adds utility to the product as it moves vertically through the production process. Each stage produces a potentially salable product. By reducing the scope of activities to be considered, a meaningful subset can be generated for purposes of analysis. An example is shown in Figure 3 where attention is focused on activity at stages B and C.

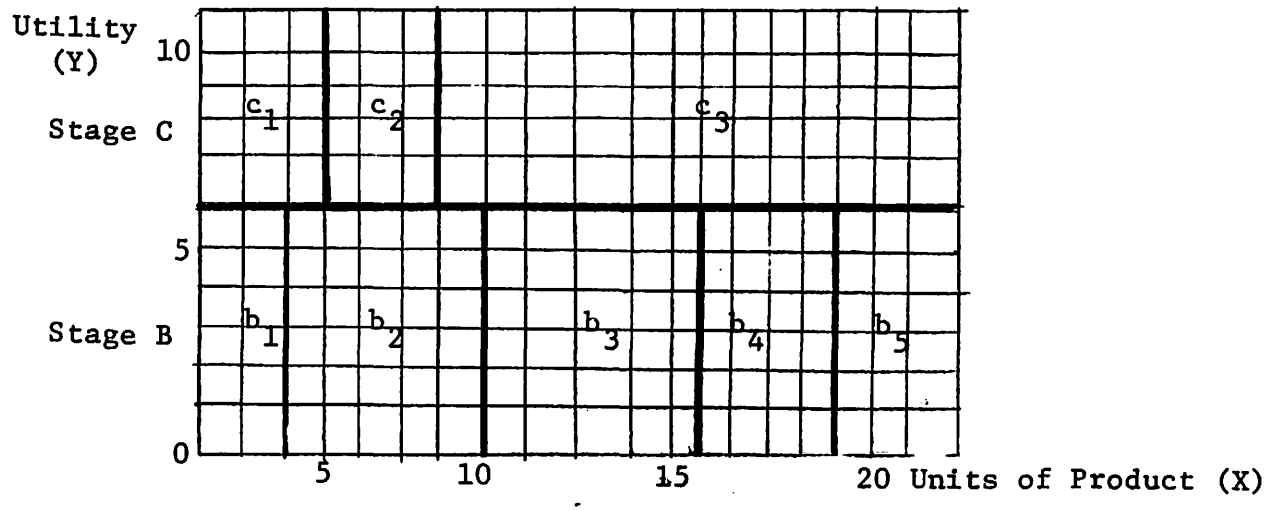

Figure 3. A Product Grid Subset, Featuring Two Stages with Several Firms at Each Stage

It must be recognized that not all utilities are produced in a strict chronological order as suggested by the simple vertical process just outlined. The vertical concept best fits the concept of form utility. The product is continually modified as to form as it moves up through various stages. One can therefore picture the production process as a multiplicity of converging lines of stages or as a fanshaped flow leading to a final product. Of course, envisioning the whole process as an assembly line is another way to grasp the concept of vertical stages. In any case, the stage concept and the vertical succession of stages in production provides assistance in conceptualization and facilitates understanding of the concept of vertical coordination.

Vertical Coordination and Economic Efficiency

In combining several stages to produce a final product, there are at least two dimensions of the operation which affect the level of economic efficiency realized. The two are: (1) the level of output at the various stages, and (2) the timing of the product flow between the stages.

Level of Output

The relationship between cost per unit and level of output is a familiar component of the theory of the firm. Typically, consideration is limited to the cost function for a single operation, which may be the composite of several stages as herein discussed. The typical shape is shown in Figure 4, where ATC refers to "average total cost per unit".

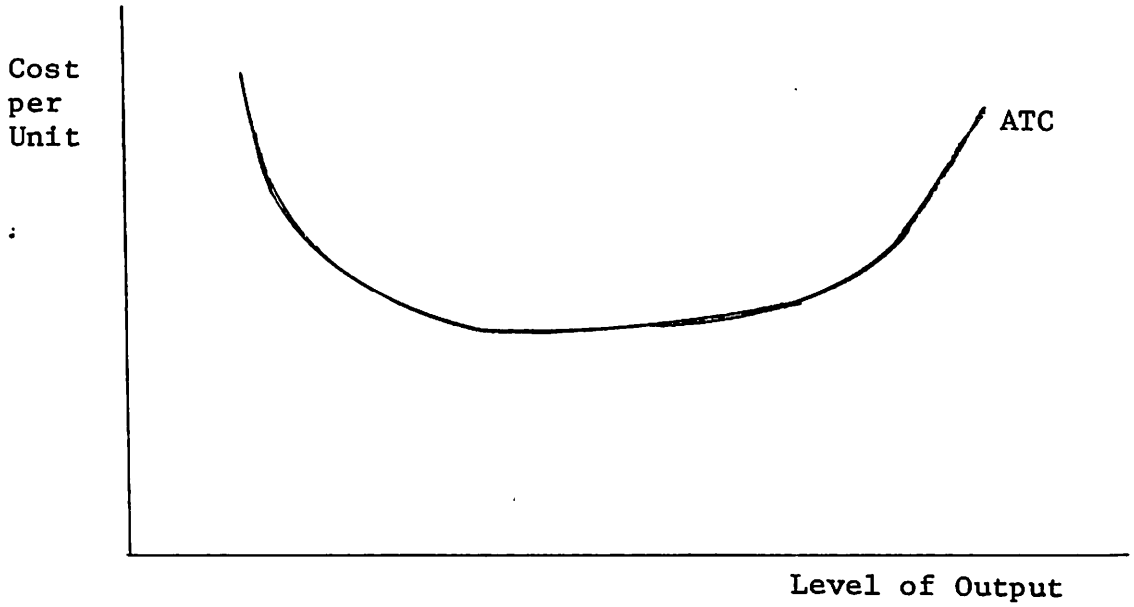

Figure 4. A Typical Average Total Cost (ATC) Curve

A number of analysts have attempted to break this "composite function" into its component parts and thereby isolate the costs of activity at the various stages. The work by French, Sammet, and Bressler[3] in 1956 and later efforts by Mighell and Jones[4] in 1963 constitute primary examples. Such an approach deserves consideration when the degree of coordination between different stages or levels of activity is of primary concern.

In Figure 5, ATC curves for three hypothetical stages, labeled I, II, and III are shown. Vertical distance in the graph is important; the distance below each curve and above the immediately preceding curve denotes the cost of activities in that stage at various levels of output. Thus, the vertical distance between curves I and II is indicative of the cost of performing activities in stage II.

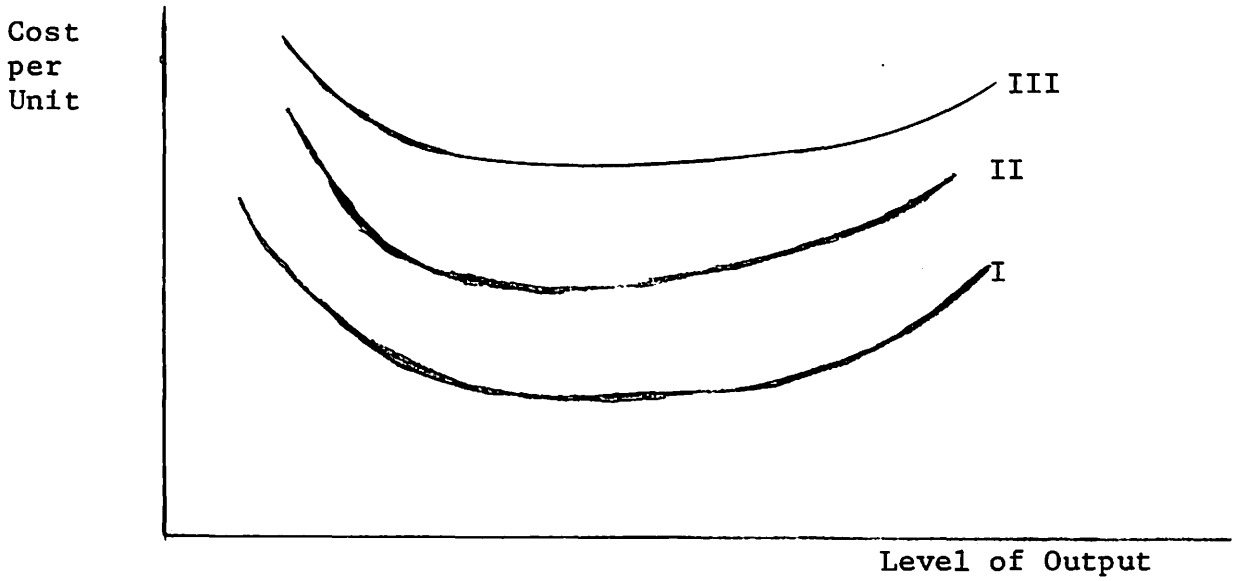

Figure 5. ATC Curves for Three Economic Stages

Through selective adjustment of the placement of the three functions, the problems of coordinating the vertical stages to keep the total cost down can be illustrated. Since activity at the various stage levels involves different economic functions, there is no guarantee the minimum point on the cost curves will occur at the same level of output. In fact, the atypical case would be the one in which minimum costs per unit for the various stages occur at the same level of output. Close coordination of the various stages in terms of level of output is therefore very important. In Figure 6, any level of output outside the segment AB will result in a substantial increase in the cost of the three combined stages. This means careful decision processes are required in (1) deciding on the level of output in stage I, and (2) deciding on what part, if any, of the output of stage I or other intermediate stages is to be sold.

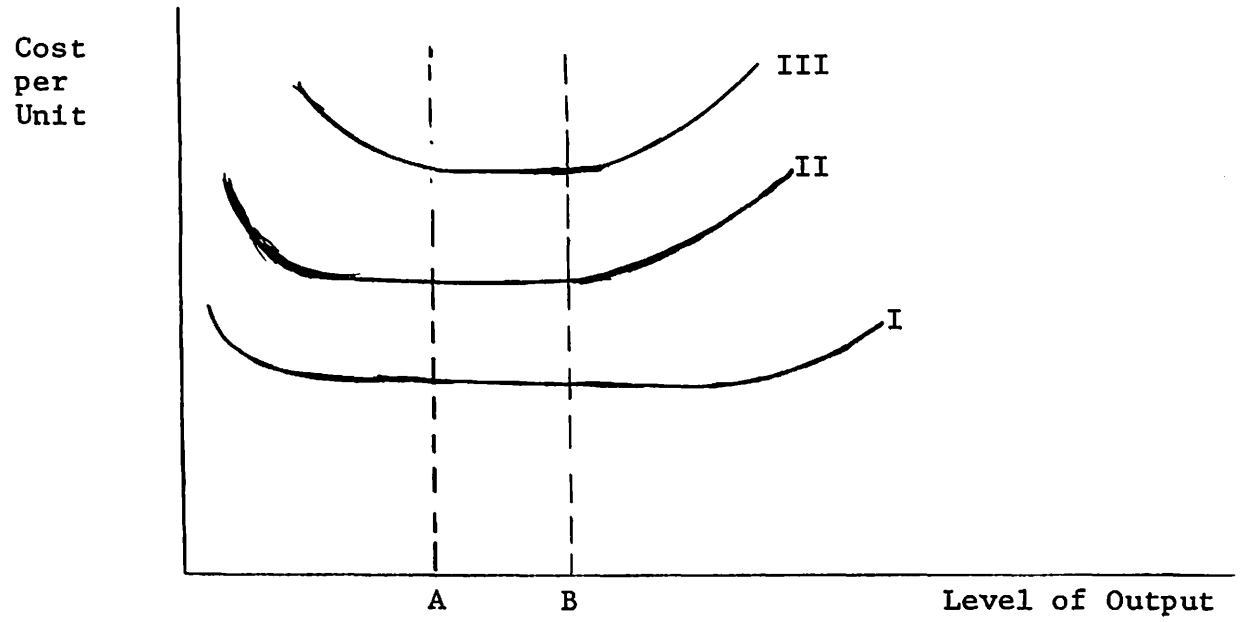

Figure 6. ATC Curves Illustrating the Importance of Coordinating Output Through All Vertical Stages

When stages I, II, and III are controlled by a single management center, the need for coordinating output at the three related stages will usually be apparent. Additionally, control of all stages provides the medium through which the needed coordination can be realized.

If the three stages are under the control of separate management centers, the situation is much different. The needed coordination must be realized externally to the firm -- the element of control over all the stages is missing. The price mechanism and related negotiated exchange procedures are called upon to effect the needed coordination. If the minimum points on the ATC curves occur at different levels of output, the task might become one of coordinating the output of many firms at one stage with the input needs of a single large firm at a

related level or stage. Many possibilities, many combinations of sizes and stages, are of course possible.

Under conditions of separate management control, the requisites to coordination between the stages are essentially the same as in the case where all stages are under control of a single management center. First, there must be an understanding of the cost structure or, more generally, how the various activities are conducted in other stages. Clearly, this understanding is a necessary condition to effective inter-stage coordination.

But understanding alone does not constitute a sufficient condition. There must also be an economic incentive, some reason for management at each level to want to coordinate with those operating at related levels or stages of activity. If coordination means reduced cost of operation, then the entrepreneur who seeks to effect such coordination must believe he will be rewarded -- must believe he will receive some of the benefits of the decreased cost. There would appear to be at least two barriers to voluntary efforts toward coordination. First, the matter of ignorance emerges. If a change is required to realize the benefits of increased coordination between stages, then there is a tendency to maintain the status quo. Change means uncertainty, and logical arguments on paper to support the change are not always convincing.

A second factor is that of economic structure. If an imbalance in bargaining power exists, the same lack of balance in payoff to more coordinated action may prevail. In a structure approaching atomistic conditions, change is not realized easily. The benefits of change may not materialize until all (or nearly all) participants have made the

adjustment. But the transition is seldom quick or smooth. A coordinated program between participants in stages I and II may be predicated upon the cooperation of participants in state III -- which may or may not be forthcoming when there are many such relatively small firms.

Timing of Product Flow

The timing of the flow of the product may be equally as important as the level of output. And like "level of output", the timing of the flow may have implications to per unit cost.

Abstracting from the problem of level of output, Figure 7 shows the problems which can arise due to timing. Unless the stages are independent, each stage depends upon the stage immediately below it (on the vertical continuum) for inputs. If the flow is not relatively smooth or continuous and the "input" available when needed, the results are: (1) higher costs due to departures from the range of output where per unit costs are lowest, and/or (2) higher costs because the product must carry a higher per unit fixed cost, since fixed costs are typically a function of time.

The presentation in Figure 7 surely overstates the flexibility in timing of the various stages. The purpose is to illustrate that if transfer of the product from stage I to stage II is delayed until time B instead of at time A, the proper time, the cost which must be attributed to activities of stage II increase. As illustrated, the increase in cost per unit would be of magnitude C.C'.

As before, the matter of timing will not become a problem of crucial importance when all stages are under the control of a single management unit. The needed timing can be "forced" -- a move as simple

as staggering the starting work hours of the labor force in the various stages may solve the problem. A primary function of stage I is to move the product of stage I, the input for stage II, in a smooth and timely flow. Other functions of stage I, even the "profit" function, may be of secondary importance. Performance of the total, the combined stages, becomes the point of real concern.

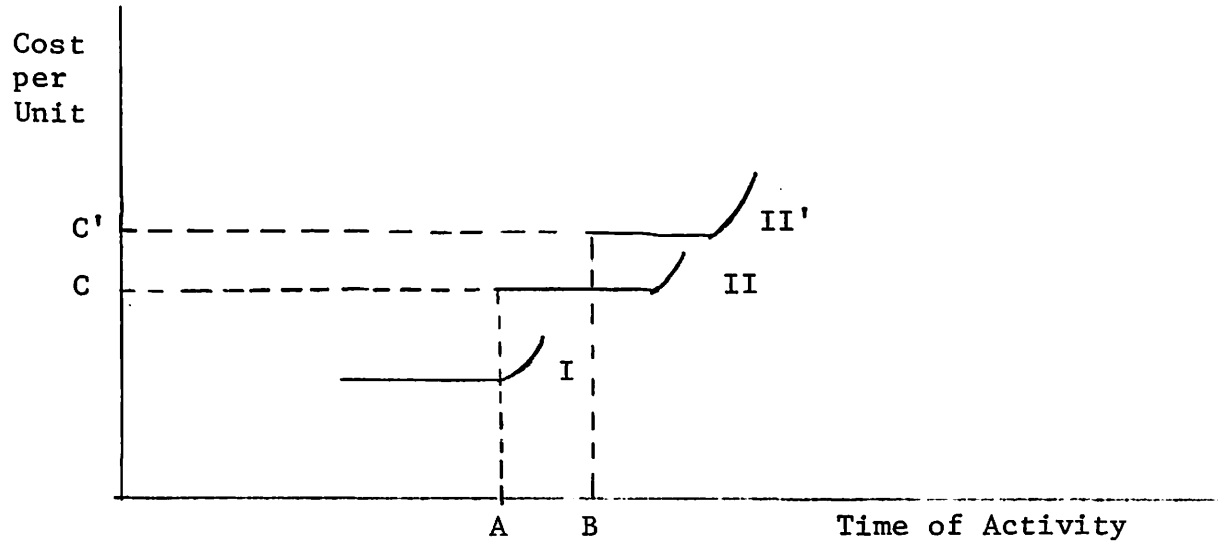

Figure 7. ATC Curves Illustrating the Importance of Coordination in the Timing of Activity at the Various Stage Levels

And as before, when the various stages are controlled by separate management centers, interstage coordination will not be guaranteed. The potential problems associated with timing of the technically related activities must be recognized. There must be some economic incentive for management at one level to coordinate with management at other

levels. If the open market exchange system fails to overcome these barriers, then cost of performing the activities of the combined stages may be higher than under the alternative of an integrated system where all stages are controlled by a single management.

Pricing Efficiency

The possible impact of the lack of coordination on per unit costs has been illustrated. This is a form of economic efficiency, often called technical efficiency, where output per unit of input is the primary consideration. There is another type of economic efficiency which may be equally as important.

Pricing efficiency refers to the ability or capacity of a marketing system to effect a high degree of coordination between what is needed or desired by consumers and what is produced. This concept is more difficult to illustrate graphically. In a very real sense, however, the issue of pricing efficiency has been discussed. If coordination between the vertical stages is realized, then "pricing efficiency" will be realized as well. Vertical coordination means recognition of needs at the various stages, including quality attributes, and converting this recognition into a continuum of stages which effectively bridges the gap between consumer and producer.

When dealing with an integrated system, the term "pricing efficiency" is a misnomer. In an integrated system, prices are not negotiated between the stages. But when separate management of the various stages prevails, price negotiation becomes very important. If pricing efficiency is to be realized, then a system of price signals -- premiums and discounts -- must be properly tied to product attributes

of quality and passed through all the stages. Understanding of why this is important becomes a necessary prerequisite to the realization of such a system. Economic incentive to promote such a system provides the sufficient conditions for its realization.

Within a single firm or under a single management center, the coordinating of quality needs at the various stage levels is sure to receive attention. When the output of stage I is not suitable as input for stage II, adjustments will be made. In an open market system, such adjustments are not automatic. Coordination of effort between different management centers is required and, as noted, either lack of understanding and/or a perceived lack of economic incentive may prevent such coordination from developing.

Summary

The performance of any sequence of economic activities can be meaningfully divided into stages. The output of any one stage is a salable product or, under appropriate circumstances, input to a related stage. By proper grouping of these economic stages a theoretical vertical continuum, stretching from producer to consumer, can be developed.

Several stages can be performed by a single firm. Indeed, the typical average total cost curve (ATC) in the theory of the firm is often a composite function, showing the per unit cost of the output of some combination of stages. Alternatively, each stage can be under the control of a separate management. In this case, the element of control over all stages is missing. Coordination of the vertical stages must

be achieved through open market exchange processes rather than through administrative decree as when all stages are controlled by a single management center.

Lack of coordination in the level of output and/or the timing of operations at the various stages can significantly increase the cost of the final output of the combined stages. Within the firm, coordination can be "forced" given the prevailing degree of control. With separate management of the various stages, coordination is less likely to be realized. Failure to understand the need for coordination and/or failure to see any economic incentive for coordinated action can block the realization of higher levels of coordination.

Failure to achieve coordination vertically through the marketing system both increases per unit costs of producing goods or services and blocks the realization of a high level of pricing efficiency. If the failures are sufficiently costly to management at any one level, then an incentive to integrate so as to gain an element of control over activity at related levels would be expected to develop. This would mean integration arising from the inadequacies of an open market exchange system.

FOOTNOTES

[1]Mighell and Jones use the term "vertical coordination" to include all the ways in which the vertical stages are controlled and directed. Ronald Mighell and Lawrence Jones, Vertical Coordination in Agriculture, Agricultural Economics Report No. 19, Economic Research Service USDA (Washington, 1963).

[2]Ibid., p. 7.

[3]B. C. French, L. L. Sammet, and R. G. Bressler, "Economic Efficiency in Plant Operations With Special Reference to the Marketing of California Pears," Hilgardia, XXIV (Berkley, 1956), pp. 544-579.

[4]Mighell and Jones, pp. 19-34.

CHAPTER III

PRESENTATION AND INTERPRETATION OF FEEDLOT SURVEY RESULTS

In this chapter the feedlot data are analyzed. Factors such as attitudes, goals, and marketing procedure will be presented and implications drawn as to their impact on marketing procedures in the feedlot sector. Certain attributes of the feedlot itself, and management personnel, are analyzed on a selective basis for any effect on goals, attitudes, marketing procedure and other operational procedures. These various facets are presented in an attempt to determine the decision model used by the feedlot operator in marketing his product.

Presentation and Interpretation of Feedlot Data

The data from the feedlot questionnaires can be broken into three parts: (1) structural and operational characteristics; (2) managerial characteristics; and (3) potential areas of conflict.

General Structural and Operational Characteristics

General structural and operational characteristics are presented in the following tables dealing with selected facets of the 42 feedlots surveyed. Two of these characteristics, feedlot size and level of equity in the business, will be examined later to determine if there is any correlation between these factors and selected marketing practices.

The feedlots are divided into five capacity levels (Table I). This is one-time capacity, not yearly. The categories are broad and facilitate isolation of differences in operations due to size. The number of lots in each capacity level reflects the organizational structure of feeding operations in the state.

TABLE I

DISTRIBUTION OF THE SAMPLE FEEDLOTS BY CAPACITY OF OPERATION

Capacity of Lot (Head)	Number Lots Surveyed
0-500	12
501-1,000	11
1,001-5,000	11
5,001-20,000	6
over 20,000	2

Concerning the amount of custom feeding, the tendency is towards all or none (Table II). Only 11 of the 42 lots reported custom feeding activity. Much of the custom feeding is done by the larger feedlots; many of the smaller lots do no custom feeding at all.

Feedlot owners were questioned as to the percent equity in their business operation. Twenty-six of the 42 lots (almost 62 percent) are included in the 100 percent equity class. Eleven of the 42 lots

(slightly over 25 percent) have less than 50 percent equity in the business. Equity tends to decrease as the size of the feedlots increases, showing the larger capital investment in the lot and lower initial investment on a percentage basis (Table III). Equity tends to increase with the age of the owner-manager and with the number of years the feedlot has been in operation. This suggests the business is paying off over time and the owners' equity in the operation is growing.

TABLE II

CUSTOM FEEDING BY SIZE OF OPERATION

Capacity of Lot (Head)	Total Number Lots	Number Custom Feeding
0-500	12	1
501-1,000	11	0
1,001-5,000	11	5
5,001-20,000	6	3
over 20,000	2	2

Almost 60 percent of the lots have been in operation 10 years or less. When comparing years in operation to size, there is a tendency for the larger lots to have been in operation a shorter time than the smaller ones (Table IV).

TABLE III

PERCENT EQUITY IN BUSINESS RELATED TO NUMBER AND SIZE OF THE FEEDLOTS

Percent Equity	No. Lots	No. by Size of Lot (Head)				
		0-500	501-1,000	1,001-5,000	5,001-20,000	>20,000
0-24	5	0	2	0	1	2
25-49	6	3	1	0	2	0
50-74	4	2	0	2	0	0
75-99	1	0	1	0	0	0
100	26	7	7	9	3	0

TABLE IV

NUMBER YEARS IN OPERATION RELATED TO NUMBER AND SIZE OF THE FEEDLOTS

No. Years in Operation	Lots	No. by Size of Lot (Head)				
		0-500	501-1,000	1,001-5,000	5,001-20,000	>20,000
5 or less	10	5	2	0	1	2
6-10	14	4	6	3	1	0
11-15	6	1	1	2	2	0
16-20	4	1	1	1	1	0
over 20	7	1	1	4	1	0

General Characteristics of the Feedlot Managers

Some of the more important variables that may affect the decisions of managers in both the production and marketing activities of the feedlot sector are age, experience in feeding, length of management tenure, and the structure of management (manager or owner-manager). These factors are considered in the following text and tables. Two of the factors, age and experience in feeding, were selected and will be studied in further detail to see how they relate to the feeder's decision model.

Thirty-five of the 42 lots are operated by owner-managers. Six lots are operated by managers hired for that purpose. Decisions concerning feedlot operations could vary depending on whether the operator is an owner-manager or strictly a manager. When comparing age, experience, and length of management tenure with structure of management, the following relationships are found: the majority of owner-managers are in the 30-39 and 40-49 age groups; managers tend to fall in all age groups with slightly more in the 60-and-over category; most managers have 10 years or less experience in the cattle feeding business, while owner-managers were spread about evenly through all experience categories; and a slightly larger percentage of managers have over 20 years experience (Table V).

For managers, the length of management tenure corresponds closely to experience in feeding. All in the manager group have been managers 10 years or less. Looking at the same classification for owner-managers, there seems to be a tapering off point at the 10-year level. Over half of the owner-managers are included in the 0-5 and 6-10 year length of management tenure categories.

TABLE V

MANAGEMENT STRUCTURE RELATED TO YEARS EXPERIENCE IN CATTLE FEEDING AND YEARS EXPERIENCE IN FEEDLOT MANAGEMENT

Classification	Years Experience in Feedlot Management					Years Experience in Cattle Feeding				
	0-5	6-10	11-15	16-20	>20	0-5	6-10	11-15	16-20	>20
	(No. in Category)					(No. in Category)				
Hired Manager	3	4	0	0	0	1	5	0	0	1
Owner-Manager	8	15	5	3	4	6	6	7	6	10

Potential Areas of Conflict

Six areas of potential conflict in operational and marketing activity were selected. Each area is discussed and interpreted as to its effects on the decisions involved. Each area is also examined for any apparent relationship between the selected factors of age, size, experience, or percent equity and the decision processes of management in the feedlot sector.

Overall Economic Goal or Objective

Operators were presented four goals and asked to select the one best fitting their operations. A fifth choice, providing for a write-in answer, was also provided (Appendix A, question II). The goals were structured to range from profit maximization per lot of cattle to a satisficing position for the operation on an annual basis. Each combination of goals was considered to be significantly different in terms of how the manager would try to coordinate with related operations

(to be analyzed in Chapter V). Twenty-four of the 42 feeders chose the operational goal calling for maximization of profits on each lot of cattle. This amounts to 57 percent of the sample, but 83 percent of the feedlot capacity represented by the 41 feeders who responded to the question (Table VI).

TABLE VI

FEEDLOT MANAGERS' CHOICE OF GOALS FOR THEIR RESPECTIVE OPERATION

	Goal	No. Feeders Choosing	Percent of the Sample	Feeding Capacity Represented (No. Head)
I.	Try to maximize the return per head for each lot of cattle you handle.	24	57.1	113,835
II.	Try to maximize the returns to your total operation over some specific period of time (such as each year of operation).	8	19.0	16,650
III.	Try to realize some chosen rate of return on your investment (which may be expressed in terms of percent return or margin per head).	2	4.8	1,200
IV.	Seek some stable or constant return which you have decided is acceptable for your particular operation.	4	9.5	1,550
V.	If none of the above fit your case, please describe your goals or objectives.	3	7.1	2,300

Table VII relates the choice of operating goals to capacity, percent equity and years experience in feeding. There is no strong relationship between goals chosen and either percent equity or years experience. Some tendency to move to the strict maximization goal (Goal I) is shown for the operations with low equity. Years experience does not appear to be an important determinant of which goal was selected. A more obvious relationship between goal choice and capacity appears. The larger operators, from a capacity of 1,000 head through the much larger operations, chose the goals involving maximization (Goals I and II). None of the operations in this size range selected goals III or IV. The smaller feeders appear more likely to go for a stable or consistent rate of return.

As a check to see if the feeders would stay with the goal they chose, a related question was developed concerning the pattern of performance they would like to see their operation follow. Four patterns were presented and the choices were designed to be inversely correlated to the goals presented in Table VI.

The performance patterns were as follows:

I. The business consistently yields an average yearly net return of 6 percent on the initial investment. Operating policies (including buying and selling procedures) will not be changed until there is indication the return will drop below six percent. Then adjustments in operating procedures are made in trying to keep the return at or around six percent.

II. The business returns five to nine percent on the initial investment (has averaged seven percent) but adjustments are being made in operating policies (including buying and

TABLE VII

CHOICE OF GOALS RELATED TO CAPACITY, PERCENT EQUITY AND YEARS EXPERIENCE IN FEEDING

	Capacity (No. Head)					Percent Equity					Years Experience in Feeding				
Goal Chosen	0-500	501-1,000	1,001-5,000	5,001-20,000	>20,000	0-24	25-49	50-74	75-99	100	0-5	6-10	11-15	16-20	>20
Goal I	6	6	5	5	2	5	4	2	0	13	4	7	4	2	7
Goal II	1	1	5	1	0	0	0	2	0	6	0	3	0	1	4
Goal III	0	2	0	0	0	0	0	0	1	1	1	1	0	0	0
Goal IV	3	1	0	0	0	0	1	0	0	3	1	0	2	0	1
Goal V	2	0	1	0	0	0	1	0	0	2	1	0	1	1	0

selling procedures) in an attempt to increase the yearly average net return to eight to nine percent.

III. The business earns a reasonable return on the initial investment, but adjustments are made in operating policies (including buying and selling procedures) when there appears to be a way to increase yearly net returns.

IV. The business operates under the rule that adjustments in operating policies (including buying and selling procedures) are made so as to make the net returns on each lot of cattle as large as possible.

The patterns were structured to yield a high inverse correlation between the patterns of performance and the alternative goals (pattern IV was structured to be consistent with goal I, pattern III with goal II, etc.). Table VIII shows the relationship based on actual response to the two question areas. Expected frequencies (assuming a correlation of -1.0) are shown in parentheses, actual frequencies are the entries which are not enclosed in parentheses. Both are based on the number of responses to this particular question.

Recognizing the difficulties in structuring the performance patterns so that a correlation of -1.0 with the choice of goals could reasonably be expected, the results shown in Table VIII are surprisingly consistent. Since both "patterns" III and IV involve efforts to maximize, it is not surprising to see both related to goals I and II. Less consistency is observed in the other alternatives; the expected relationships between goal III and pattern II, goal IV and pattern I did not materialize. Whether this is due to the few observations,

inadequacies in the questions, inconsistencies on the part of the managers or some combination of the three is not known.

TABLE VIII

THE RELATIONSHIP OF GOAL CHOICES TO SELECTED PATTERNS OF PERFORMANCE

Goals	Performance Patterns			
	I	II	III	IV
I	1(0)	2(0)	8(0)	11(22)
II	0(0)	2(0)	5(12)	5(0)
III	0(0)	0(3)	3(0)	0(0)
IV	0(2)	0(0)	1(0)	1(0)

Attitude Towards Level vs. Variability of Returns

Feedlot operators were questioned to determine how much "trade-off" they will accept between the level and variability in returns. The question devised contained five choices with level of average net returns for the year ranging from $2.00 to $6.00 per head (Appendix A, question IX). The pattern of returns, by months, within the year was also shown for each different level of annual returns. The variability in returns for the five choices was arranged such that variability in pattern II was twice that in pattern I, variability in pattern III was three times that in pattern I, etc. One sales figure per month was

used for reasons of simplicity. In each 12-month group of returns, except the $2.00 and $3.00 level, there were both gains and losses. The higher levels of returns were associated with the higher levels of variability and vice-versa for the lower levels of returns. The costs of getting the cattle to market were assumed to be equal under all patterns.

Feeders were asked to examine the patterns of returns and choose the one they would prefer to face if they knew they would be faced with that pattern year after year. Over 50 percent of the feeders chose pattern III, the highest net returns and also the most variable (Table IX). In this pattern of returns, there were three chances for losses and one chance to break even, so four months out of twelve the operation will not make any money. Second choice was the $5.00 level of returns and the next most variable pattern. In this choice, there were two chances out of twelve to lose money on the operation, one chance to break even.

As a check to see if operators would stay with this pattern of responses, a related question was asked later during the interview period. Average yearly net returns were held constant at $4.00 per head for all patterns of returns (Appendix A, question XIII). This time, slightly over half chose pattern number II. This is the most stable pattern of returns with no losses. The second choice when net returns were constant was pattern number I with two chances for losses. Five of the operators chose this pattern (Table X).

The choices on patterns of returns were compared with age, equity, experience, and capacity. With variable net returns, operators tend to choose patterns III or V independently of equity, age, experience, or

TABLE IX

FEEDLOT OPERATORS' CHOICES BETWEEN LEVEL OF RETURNS AND VARIABILITY OF RETURNS: NET RETURNS VARIABLE

Pattern	No. Feeders Choosing	Average Net Returns for the Year ($ per Head)	Net Returns Per Head from 12 Monthly Sales--"Boxed" Figures Represent Losses ($ per Head)											
			1	2	3	4	5	6	7	8	9	10	11	12
I	1	4	5	[2]	4	1	9	3	7	[1]	10	3	5	4
II	1	2	0	3	1	2	1	1	3	4	3	1	2	3
III	22	6	[3]	5	6	13	0	12	9	[1]	15	6	11	[1]
IV	1	3	2	5	0	4	2	[1]	7	4	2	1	6	4
V	11	5	5	11	0	8	[2]	2	5	[1]	2	12	8	10

TABLE X

FEEDLOT OPERATORS' CHOICES BETWEEN LEVEL OF RETURNS AND VARIABILITY OF RETURNS: NET RETURNS CONSTANT

Patterns	No. Feeders Choosing	Average Net Returns for the Year ($ per Head)	Net Returns Per Head from 12 Monthly Sales--"Boxed" Figures Represent Losses ($ per Head)											
			1	2	3	4	5	6	7	8	9	10	11	12
I	5	4	5	1	[2]	3	4	10	[1]	9	3	7	4	5
II	22	4	3	5	4	3	3	6	5	5	2	5	3	4
III	1	4	9	5	[1]	11	9	[4]	10	[2]	12	[3]	3	1
IV	2	4	3	5	7	0	1	5	3	8	2	6	5	3
V	2	4	8	3	[3]	5	0	9	[1]	10	5	11	[2]	3

capacity. There was no apparent relationship between patterns of returns and these factors. With constant net returns, the operators tend to choose patterns I and II independently of age, experience, equity, or capacity.

With the choices of patterns III and V under variable yearly average net returns, it appears that feedlot operators are willing to make the "trade-off" between the level of, and variability in, returns. Most operators are enough of a gambler to shoot for higher average net returns and take the associated losses in stride. This is expected more in large feedlot operations where volume of business can help to average out the losses. However, this "trade-off" was not expected to be so prevalent in the smaller lots where variability in returns presents a more serious problem. When the magnitude of loss has a greater effect on operations, operators might be expected to take a lower average return if increased stability in returns is realized by doing so. Due to the smallness of operations, volume cannot be expected to average out the losses. This, however, is not the choice that was made.

Even more of an inconsistency exists under the situation where average yearly net returns are constant for all patterns of returns. The selection of pattern I by a number of the feeders is surprising. Pattern number IV ranks second in terms of stability and average net returns for the year are constant. But, only two operators chose pattern IV. Pattern number I shows an increase of 50 percent in variability compared to pattern IV. This appears to be an irrational choice on the part of the five feedlot operators. The only explanation to offer is that operators noticed the higher net returns during the monthly sales ($10, $9, and $7 in pattern I compared to $8, $7, and $6

in pattern IV) and chose to try and hit these higher monthly returns. The months in which these higher returns occur may have affected the decision of some operators even though they were instructed not to view the patterns as running through a calendar year.

Coordination of Market Activity

Another important area of interest was the attitude of feeders toward alternative ways of achieving increased vertical coordination. Three "types" of coordination were considered in the survey. First, feedlot owners were questioned on their attitudes towards vertical integration. This was done through a series of questions on the structure or pattern of ownership in feedlot operations.

Feedlot owners were split on their answers to questions concerning whether packers should be allowed to own feedlots. Nineteen feeders replied "no" and 19 replied "yes". However, feeders are willing to allow packers to custom feed cattle in lots owned by others as almost 67 percent replied "yes". Feeders were also asked if they were now or had ever considered "buying into" a packing plant. Sixty-nine percent replied "no" and gave various reasons why. Some of the more frequent reasons are "not enough capital, not interested, packing is another phase of the business, run a family operation, not enough time, etc." The feeders that answered "yes" supported their answer with such reasoning as "use the packing plant to process our own beef, the packing plant provides a sure market outlet, and we are trying to increase total profits." Feedlot operators are very much against allowing a packer to "buy into" their feeding operations as 35 of the 42 operators replied "no". The most often given reasons for this choice were

"running a family operation and do not want to change, do not desire additional partners, do not want to be obligated to a packer, and do not care to expand operations." The few operators that replied "yes" felt it would establish a ready market for their cattle and/or permit them to run more cattle.

There seemed to be no apparent relationships between the answers to such questions and age, experience, equity, or size. The answers were independent of these factors.

The second form of coordination covered was through contractual arrangements, especially contract selling of slaughter cattle. Currently, contractual selling of slaughter cattle by Oklahoma feedlot operators plays only a minor role in the beef marketing system. However, the use of forward contracting is expected to increase in the future.

As a starting point, several variables considered important in a contract were listed and the feeders were asked to rank these variables in order of importance. The feeders were first asked to rank the variables in accordance with what they, the feedlot owners, feel should be given primary attention in the contract. Next the operators were asked to rank the variables in accordance with what they thought the packer-buyer with whom they dealt would consider important in the contract. Then the feeders were asked to compare the lists and if they differed, to indicate why. The operators made their choices from a list of eight variables as follows:

(1) Specify the scales on which the cattle are to be weighed.

(2) Specify the exact time of day for weighing.

(3) Specify when transfer of title to the cattle is to take place.

(4) Specify an exact pencil shrink.

(5) Guarantee a minimum dressing percentage with a specific schedule of price discounts for falling short of the guaranteed level, a schedule of premiums if the cattle dress higher.

(6) Guarantee a certain percentage to grade Choice with a specified price discount for falling short, a premium for exceeding the guaranteed level.

(7) Specify the basic price per cwt. you are to be paid at the time the contract is established.

(8) Make provisions for price to be based on the price at some chosen market on the day of delivery or for a certain day during the week of delivery.

Using these numbers to identify the variable or consideration, Table XI shows how the feeders respond to the questions posed.

In interpreting Table XI, it is important to recognize not all feeders ranked all variables. The feeders were asked to rank all those variables they considered important. Variable (7), dealing with a specification of price, was clearly first in both rankings. The only variable for which the rankings appeared to be significantly different was Variable (1), dealing with a specification of scales on which the cattle are to be weighed. The feeders apparently feel the packer attaches relative less importance to this particular variable; only 16 feeders ranked it at all and the weighted rankings was sixth. Differences in the ranking given other variables, such as Variable (5), must be discounted in view of the small number of feeders who considered it important enough to rank. The rankings are based on weighted averages, assigning a value of "8" for first, "7" for second, etc.

Feedlot owners and managers were also asked for their opinions concerning contracting of slaughter cattle with packers. Five choices were presented to the operators. It was explained to the operators

TABLE XI

FEEDERS' RANKING OF IMPORTANT CONTRACT VARIABLES

Variable Number	Feeders Ranking of the Variable (What Feeders View as Important)	No. Feeders Ranking This Variable	Feeders Ranking of the Variable (What Feeders Feel the Packer Views as Important)	No. Feeders Ranking This Variable
(1)	Fourth	23	Sixth	16
(2)	Second	30	Third	23
(3)	Seventh	17	Eighth	12
(4)	Fifth	31	Fourth	21
(5)	Eighth	6	Fifth	7
(6)	Third	11	Second	10
(7)	First	29	First	23
(8)	Sixth	7	Seventh	6

that the contracts referred to were made after the cattle were put on feed.

Table XII records the choices presented the feeders and the distribution of replies from those who responded. The most prevalent "write-in" suggested the feeder would contract if a profit is likely or could be guaranteed. There are no apparent relationships between the attitudes expressed and years experience in feeding, percentage equity, or capacity of the operation.

TABLE XII

FEEDERS' ATTITUDE TOWARD CONTRACT SELLING TO PACKERS

Choice	No. Feeders Selecting
I am in favor of such contracts since they guarantee a market.	7
I will contract if the packer will pay a premium above the "going market price" at time of delivery.	3
I will not contract under any conditions since this prevents the packer from having to compete for cattle in the open market.	4
I will contract at the "going market price" at the time of delivery since this assures the packer a steady supply of cattle and this leads to better working relations with the packer.	8
If none of the above are suitable, please indicate your feelings here _____.	14

A third potentially important contributor to economic activity and to the degree of stability in the cattle feeding business is the futures market. Other surveys have revealed little hedging is done by Oklahoma feeders, so questions were designed to determine whether the futures market becomes an integral part of the feeder's decision processes in other selected ways.

One set of questions related to the impact, if any, of futures quotes on the price the feeder would pay for feeder cattle. The feeders were told to assume it was June 1. Any cattle purchased would "finish" and be ready for market in early October. Then, an effort was made to determine what factors are most important in the feeder's decision on how much to pay for feeder cattle.

A number of factors were mentioned, including cost of gain, feed cost, current slaughter cattle market, season of the year, market outlook for fat cattle, etc. But the factor which ranked first based on frequency of occurrence was, or related closely to, current quotes for futures contracts.

Feeders were then asked to decide how much they would pay for feeder cattle with the October futures contract trading at $30 per hundredweight on June 1. In an attempt to isolate the extent to which futures quotes affect the price they would pay, the operators were then presented two alternative situations and the changes in their decisions recorded. In situation I, the June 1 market for the October futures contract is $28 instead of $30 (Table XIII). Over 70 percent, 22 of 30 who responded, would not pay as much for the feeder cattle. Only eight percent were willing to pay the same amount as with the $30 futures quote. None of the feeders were willing to pay more for the

feeder cattle. Comparing these choices to the factors of age, experience, and size brought out no apparent relationships.

TABLE XIII

FEEDLOT MANAGERS' ADJUSTMENTS IN PRICE OFFERS FOR FEEDER CATTLE IN RESPONSE TO CHANGING PRICES OF LIVE CATTLE FUTURES

Choice	No. Feeders Choosing	
	I. Futures Price Drops from $30 to $28 per cwt.	II. Futures Price Rises to $32 from $30 per cwt.
Would be willing to pay less for the cattle.	22	1
Would be willing to pay the same for the cattle.	8	11
Would be willing to pay more for the cattle.	0	18

In situation II the June 1 quotation for the October futures contract is $32 instead of the $30 and the same possible changes were allowed. Eighteen of the 30 feeders were willing to pay more for the feeder cattle, 11 would pay the same. Only one feeder chose to pay less. It appears the futures market is used by feeders as a predictive mechanism since what they would pay for feeder cattle varies with the "predictions" of the futures market.

In another question feedlot managers were quizzed on the hedging of cattle, a more legitimate use of the futures market. In this

situation they were asked to assume the following:

> It is around June 1 and you are putting feeder cattle in your lot. You estimate the costs of getting your steers to market weight in early October to be $27 per cwt. This $27 includes the purchase price of the feeders, vet expenses, feed, a lot or "yardage" cost, etc.

Considering this information the feeders were asked if they would consider hedging cattle. If so, they were asked to indicate what the June 1 quote for October futures would have to be in order for them to hedge the cattle. If they would not hedge, they were asked to briefly explain why.

Twenty-six of 39 feeders who answered noted they would not hedge the cattle. Several reasons were given for the "no" answer. Many operators had never used the futures market and felt they didn't know enough about its operation. Others felt that hedging eliminated the chance of large profits and they would rather assume all the risk in exchange for the chance at the larger profits. Several other feeders felt that since they bought and sold cattle on the same market, they had a built-in hedge. Other reasons given were that there was no real advantage to hedging cattle, the hedge had never worked to the operator's satisfaction, and some had lost before on hedging and were "soured" on the futures market.

Thirteen of the 39 feeders indicated they would consider hedging. Of these 13 feeders, eight indicated the June 1 quote for the October futures contract would have to be in the $28-29 range for them to hedge. The remaining five indicated a price in the $30-31 range. Presumably, the feeders were giving the minimum quotes and all would hedge if prices

were still higher. Note that all levels indicated they would permit the locking in of a positive margin when the hedge is established.

Market Procedure

A fourth area of primary interest which affects the market operations of feeders is the marketing procedure followed. This facet of the feedlot operation covers all phases of marketing activities from selling procedures to price forecasting. In a sense, it concerns all the technical activities of the marketing function.

Feeders were asked to select their typical selling procedure from the following three alternatives:

1. Sell at least 50 percent on a liveweight basis;
2. Sell at least 50 percent on a carcass grade and weight or other carcass evaluation basis; and
3. Sell 50-50 on liveweight and carcass basis.

Twenty-five of the 42 feeders sell predominantly on a liveweight basis, 13 on a carcass evaluation basis, and four sell on a combined liveweight-carcass evaluation basis. The only obvious relationship to the selected operational characteristics is a tendency for the smaller lots, less than 5,000 head capacity, to sell on a carcass evaluation basis. The larger lots typically sell liveweight.

Most feeders sell through a number of outlets and have access to even more. Twenty-six of 39 feeders who responded to questions relating to this area receive from two to five bids on their cattle. Examining the other side of this issue, 34 of the 39 reported they do not supply the majority of cattle bought by any particular packer.

Those feeders who sell cattle on the basis that a certain percentage will grade Choice were asked if premiums or discounts are agreed

upon if the percentage grading Choice turn out to be high or low respectively. Fifteen of the 21 feeders involved in this question area report no such use of premiums or discounts. The remaining six agree the premiums and discounts, when employed, are approximately equal in absolute value.

If feeders sell cattle on a liveweight basis, they were asked which of the following situations they would prefer the buyer to be in as negotiations are begun for the sale of cattle:

I. The packer has access to your records providing information on dressing percentage, carcass cut-out percentage (yield grade), quality grade, etc. for previous cattle you have fed.

II. You have given the packer a summary (written or oral) of the percent of your cattle which grade Choice (and Good, Prime, etc.), of average dressing percentages, and average carcass cut-out percentages (yield grade) for previous cattle you have fed.

III. You make the cattle available to the packer-buyer for his inspection, but offer no additional information other than number of days on feed and type of feed fed.

Of 39 feeders who responded, 11 chose situation I, 10 chose situation II, and 18 chose situation III. Thus, 21 of the 39 feeders expressed a willingness to make available much of the information the packer would be likely to want or need (situations I and II). This willingness to provide information is supported by such reasoning as "want the buyer to come back", "more information should increase the price offered", and "I have nothing to hide". Those choosing situation II over situation I generally felt situation I is too detailed and

somewhat impractical. Feeders choosing situation III indicated they do not have the information (called for in I and II), the buyer knows the quality from previous experience, or they feel such information would give the packer to much of an advantage as negotiations are begun.

In order to shed more light on the operators' opinions about the market in which they operate, feeders were questioned on how they make the decision on number of cattle to feed. The basic purpose of this question area was to determine the importance and use of market outlook information in this decision and the sources of price information employed.

Twenty-six of 41 feeders responding noted they do not vary the number of cattle fed with the market outlook. Rather, they keep the lot as full as possible subject to turnover of their cattle inventory. Reasons for such an approach include the following:

1. Buy and sell regularly to "average out" prices;
2. Do not want to try to "out guess" the market;
3. Need volume in a custom operation; and
4. Try to keep per unit fixed costs down.

The 15 feeders who do vary feeding level on the basis of market outlook were asked to rank various sources of information as to importance. Most importance was attached to, in order of importance, (1) private sources, trade associations, (2) outlook reports from university and/or USDA market analysts, (3) recent price patterns with the expectation the current pattern will continue, and (4) watching seasonal patterns in price and feeding so as to hit the "peak" price.

The feeders who employ outlook information or price forecasts were varied in their response to questions concerning the accuracy of the

forecasts. Weighted averages (weighted by frequency of response for the various levels) suggest the feeders feel the price forecasts are too high 44 percent of the time and too low 40 percent of the time. In the majority of the cases, the price forecast employed by the feeders "missed" the price which was ultimately realized by from $.51 to $1.00 per hundredweight.

Twenty-two of 32 feeders responding indicated they will allow a difference of more than $.50 per hundredweight before they consider price forecasts "useless", regardless of whether the market is rising or falling. The remaining 10 replies were scattered throughout the lower "differences"; three feeders would require the forecasts to miss the mark by less than $.10 per hundredweight.

Product Valuation

The fifth primary area of interest involves product valuation. This area includes such factors as sources of price information, price determinants, and operator's ability to estimate various value dimensions of the animals.

Feeders were asked to name the most important source(s) of price information used as they begin to negotiate the sale of a particular lot of cattle. Many sources are employed, but according to importance as judged by frequency of use, the sources rank as follows:

1. Yellow sheet quotations;
2. Prices at terminal markets and other liveweight quotations;
3. Daily market news from the USDA, Oklahoma Department of Agriculture as disseminated by newspapers, radio and television;
4. Sales by others in the local market; and

5. Other, including telephone, teletype, buyers' quotes, etc.

Recognizing other factors enter into price negotiations, the feeders were asked to rank selected factors which they might be prone to consider. Of the six factors considered, "current reports of price levels in the wholesale beef market" and "current quotes of price levels in the live cattle market" rank far ahead of the others in importance. Employing weighted averages of the rankings, bids from other potential buyers ranks a weak third, price paid for the feeder cattle fourth, and costs of gain fifth. The sixth factor, the first bid of the buyer if made before the feeder mentioned a price, is given little importance. The open-end alternative on this particular question was not used.

The feeders were asked to rank in order of importance selected factors which become determinants of the value of a slaughter animal. The factors and the ranking of each are shown in Table XIV. As before, the rankings are based on weighted averages of the feeders' estimates as to relative importance.

Quality grade and dressing percentage rank ahead of the other factors and are awarded about equal importance in terms of weighted averages. Seventeen of 41 respondents ranked quality grade first in importance with 16 ranking it second. Seventeen of 37 respondents ranked dressing percentage first with 11 ranking it second. Apparently, there is a tendency to view these two determinants as being most important with some ranking grade first and dressing percentage second, others reversing this order. Cutability ranks a rather weak third, with the weighted average of rankings considerably below grade and dressing percentage. However, five of 24 respondents ranked cutability first, five others ranked it second. Six of 25 respondents ranked sex

of the animal as the most important determinant. Neither of the remaining factors received a ranking by any feeder above third. There was no response to the open-end or "write-in" alternative.

TABLE XIV

FEEDERS' RANKING OF IMPORTANT DETERMINANTS OF THE VALUE OF A SLAUGHTER ANIMAL

Factor or Determinant	Ranking
Grade of the animal (quality grade).	1
Age of the animal.	6
Dressing percentage.	1
Sex of the animal.	4
Live weight.	5
Carcass cutability (weight of all lean cuts as percent of total carcass weight).	3

In another part of the questionnaire the feeders were asked to compare their ability to estimate three of the value determining factors to the ability of the packer-buyer with whom they deal. The operators were given the choices of "better, about same, poorer, and don't know". The factors covered were dressing percentage, grade (quality grade), and carcass cutability. The results are summarized in Table XV.

TABLE XV

FEEDERS' COMPARISON OF THEIR OWN AND PACKER BUYERS' ABILITY TO ACCURATELY ESTIMATE IMPORTANT DETERMINANTS OF THE VALUE OF SLAUGHTER CATTLE

Rating Relative to Ability of the Packer Buyer	No. Feeders Choosing		
	Grade	Dressing Percentage	Cutability
Better	7	6	5
About Same	25	26	16
Poorer	6	7	13
Don't Know	2	1	3

Feeders feel they have about the same ability as the packer-buyer in estimating quality grade and dressing percentage, but rate themselves lower as estimators of cutability. Whether the distributions are biased relative to actual performance or ability cannot be determined from the data available from this survey.

Checking the feeders' comparisons relative to selected operational characteristics, it appears the managers of the larger lots rate their ability to estimate grade and dressing percentage relatively higher. Only one of the 16 responding feeders with a capacity above 1,000 head rated himself "poorer" as an estimator of grade. Only two of 18 responding feeders of this larger "group" rated themselves poorer in estimating dressing percentage. Conversely, seven of 22 of the smaller packers chose "poorer" or "don't know" concerning estimation of grade and six of these 22 chose these responses concerning estimation of

dressing percentage. There was no apparent relationship between capacity and expressed ability to estimate cutability.

Market Performance

Another area of concern is the feeders' evaluation of how effectively the market performs. All operators have an opinion on how well the market in which they deal functions. This opinion reflects directly upon their operating procedures as they prepare to cope with the type of market each feeder thinks he faces.

The feeders were asked to select from several statements the one which best reflected their opinion on performance of the market in which they sold. The statements and the frequency of response to each are shown in Table XVI. Among the "other" replies was one which indicated the only time poorer cattle are not discounted adequately is during periods of rapidly rising prices.

Overall, only 12 of the feeders expressed a degree of satisfaction with the way their market is performing. These 12 feel the premiums and discounts are adequate and, apparently, properly allocated. The remaining 30 feeders, those who expressed dissatisfaction with performance of their market, were asked to indicate "why". The alternatives presented these feeders and the frequency with which each was chosen are shown in Table XVII. Among the reasons included in the "other" category were: (1) adequate premiums are not paid because of the volume needs of the packer and his problem with too many price "breakdowns"; (2) packers try to buy all cattle at an average price and hope they yield and grade well; and (3) there are no premiums because the packer can't sell a premium carcass for any more than an average carcass.

TABLE XVI

FEEDERS' OPINIONS ON THE PERFORMANCE OF THE MARKET IN WHICH THEY OPERATE

Statements of Performance	No. Feeders Choosing
Cattle are sold at or near an "average" price with no real premiums for the better cattle and discounts for the poorer cattle.	18
The poorer cattle are discounted, but no comparable premium is paid for the better cattle.	10
Adequate premiums are paid for the better than average cattle and the poorer cattle are discounted by an appropriate amount.	12
Other; please explain _____.	2

TABLE XVII

FEEDERS' CHOICE OF REASONS AS TO WHY THE MARKET DOES NOT PAY ADEQUATE PREMIUMS, LEVY APPROPRIATE DISCOUNTS

Reason for Performance	No. Feeders Choosing
There is not enough competition between packers to force them to pay a premium for the better cattle but they can and do discount poorer cattle.	9
The packer will pay a premium for cattle which appear to be better than average only when he knows the feeder to be a "reputation feeder".	13
Most feeders prefer to keep the packer guessing on how well the cattle will do in terms of yield, carcass cutability, etc.	0
Many feeders do not really know the value of their cattle and this prevents the well-informed feeder from getting a premium for his better cattle.	5
Other; please explain _____.	3

Summary

As an operating goal, cattle feeders attempt to maximize profits. Most attempt to maximize returns per head to each lot of cattle they handle as opposed to some selected time period such as a year. Any tendency to seek a more stable situation, one which qualify as a satisficing rather than a maximizing goal, is exhibited by the smaller feeders with less than 1,000 head capacity.

Most feeders, regardless of size or other operating characteristics, are willing to trade stability of net returns for a chance at a higher net return. This holds true even when up to one-third of the sales within a year will be at a loss or a zero net return per head. Such behavior was not unexpected. However, the pattern of choices (from among patterns of returns with varying levels of stability) when average yearly net returns were held constant did produce unexpected results. A significant number of the feeders selected the more variable patterns of returns even with the net returns per head constant. The reasons for such behavior are not clear, but could well indicate an affinity for the "high" market or sale -- even if losses are incurred at other times within the production and marketing year.

Reaction to alternative ways of increasing the degree of vertical coordination within the beef marketing system varies across the feeders surveyed. In general, the feeders are opposed to packers owning feedlots, which amounts to vertical integration within the system. Similarly, most feeders are not interested in "buying into" or establishing packing facilities. The few who favored such moves are motivated by the need to assure a ready market for their cattle or similar reasons.

Opinions on the acceptability of packers having cattle custom fed in lots owned by feeders is different; most of the 42 feeders surveyed considered this acceptable.

Few feeders forward contract their slaughter cattle. This second form of coordinating activity vertically within the beef marketing system is not important in Oklahoma. The lack of use cannot be attributed to disagreement on the relative importance attached to various contract variables; the feeders surveyed see few problems in this area. Some feeders oppose contractual arrangements because they are viewed as precluding competition between packers in the buying of slaughter cattle. But the more important barrier seems to be the lack of familiarity with contractual sales.

The third facet of the general pattern of "vertical coordination" examined is the use of the futures market. Most feeders do not consider hedging their feeding operations; the few who would pause to consider this possibility require a positive lock-in margin as a necessary prerequisite.

Another use of the futures market, perhaps a serious "misuse" of the market, arises in the feeder's cattle buying activities. The majority of the feeders would adjust the price they would be willing to pay for feeder cattle up or down when the level at which the relevant distant futures contract moves up or down. Thus, the feeders use the futures market as a predictor of cash price.

Turning to market procedure, the survey revealed that the majority of the feeders interviewed sell on a liveweight basis. Such a method of selling entails problems of product valuation, but almost 50 percent of the feeders would not make information on dressing percentage, grade,

and carcass cutability for previously fed cattle available to the buying packer. They will make the cattle available for visual inspection, but offer no records or more detailed information.

With the exception of a few of the smaller feeders, no attempt is made to adjust production and selling activities in response to market outlook. The larger feeders in particular try to operate at capacity and do not attempt to "out guess" the market. When negotiations for sales are then begun, an indication of price levels in the wholesale beef market -- primarily the "Yellow Sheet" -- is the most important informational source to the feeders.

In the area of product valuation, feeders ranked quality grade and dressing percentage as the important determinants of value. The theoretically important factor, carcass cutability, ranked a weak third. Perhaps related to this ranking, the feeders in general feel they can compete with the packer buyer in estimating quality grade and dressing percentage, but feel they fall short in ability to estimate carcass cutability. There is a tendency for the large feeders to rank themselves higher in all areas of estimation as compared to the smaller feeders.

The feeders generally rate the performance of the market within which they must operate as "poor". Only a small percentage feel adequate premiums are paid for the more valuable animals or that adequate discounts are levied against the less valuable animals. Many of the feeders feel a premium will be paid only on "reputation" cattle, if at all, which places the valuation on a subjective basis with only indirect relation to the actual physical product.

CHAPTER IV

PRESENTATION AND INTERPRETATION OF THE PACKER SURVEY RESULTS

The data from the meat packer survey will be presented in two parts: (1) general characteristics of the packing operations; and (2) conflicts in goals or operational characteristics within the packing sector. Three operational characteristics, namely plant capacity, years of plant operation, and prevalence of custom feeding of cattle, will be examined on a selective basis for any relationship to isolated conflicts internal to the packing sector.

Organizational Characteristics of the Packing Sector

Several levels of capacity were covered in the sample (Table XVIII). The plants interviewed varied from giant publicly-owned stock corporations to small private operations. The five plants in the broad 51-500 head category have daily kills of 70, 70, 75, 104 and 120 head. Thus, there were no plants in the size range between 125 head per day and the two large firms which kill 700 and 720 head per day.

Most of the plants contacted have been in operation for ten years or more (Table XIX). Almost 50 percent of the plants were included in the 21-30 years category. Only three of the 23 plants surveyed have been in operation for less than ten years.

TABLE XVIII

DISTRIBUTION OF THE SAMPLE PACKING PLANTS BY CAPACITY OF OPERATION

Capacity of Packing Plant (Head Slaughtered per Day)	Number of Plants Surveyed
0-20	8
21-50	8
51-500	5
>500	2

TABLE XIX

DISTRIBUTION OF THE SAMPLE PACKING PLANTS BY YEARS OF PLANT OPERATION

Length of Plant Operation (Years)	Number of Plants
1-10	3
11-20	6
21-30	11
>30	3

The third and final organizational characteristic covered is the prevalence of custom feeding by packers. Six of the 23 packers surveyed are having cattle fed for them for use in their own plants

(Table XX). Three of the six are very small plants (capacity less than 25 head per day) and three are larger plants (capacity greater then 100 head per day). The packers which have cattle fed are feeding a relatively small proportion of their total cattle slaughter. No one plant has more than 40 percent of slaughter needs custom fed.

TABLE XX

PREVALENCE OF CUSTOM FEEDING OF CATTLE BY PACKERS

Involved in Custom Feeding of Cattle	Number of Plants
Yes	6
No	17

Operational Characteristics of the Packing Sector

The questionnaire employed in the packer survey was constructed to investigate the "other side" of the areas of conflict investigated in the feeder survey. The feeder is the seller and the packer is the buyer but interaction between the two is on ground common to both. Again, six selected "dimensions" will be considered.

Overall Economic Goal of the Operation

The managers were presented four goals and asked to select the one alternative that best describes the goal of their slaughter cattle operation. Emphasis was on their cattle buying activities. The goals and the packers' selections are summarized in Table XXI.

TABLE XXI

NUMBER OF PACKERS SELECTING ALTERNATIVE GOALS FOR THEIR SLAUGHTER CATTLE OPERATIONS

Economic Goal of Operation	Number of Packers Choosing the Goal
Goal I - Try to minimize the cost per head for each animal slaughtered.	3
Goal II - Try to operate on a "set" margin per head which has been selected as adequate and buy so as to achieve this set margin over each year of operation.	4
Goal III - Try to buy cattle so as to realize some target average margin per head above the level you are now achieving.	6
Goal IV - Try to buy cattle so as to maximize the return or margin per hear over each year of operation.	7
Goal V - If none of the above fit your case, please describe your objective in buying.	3

The responses to the open-end alternative were not revealing, reflecting particular sets of circumstances or attitudes on the part of the managers. Examples include one packer who says he has little control over his operation because he is "in the middle between the feeder and the central buying concerns", and a second packer who feeds most of his cattle to supply a buyer with light-weight dressed carcasses.

When operating goals are compared with plant capacity, the only apparent relationship is a tendency for the larger packers to avoid the first two goals (Table XXII).

TABLE XXII

PACKERS' CHOICE OF OPERATING GOALS COMPARED TO PLANT CAPACITY

Goal Number	No. Packers Choosing by Level of Capacity Plant Capacity (Head per Day)			
	0-20	21-50	51-500	>500
I	1	2	0	0
II	2	2	0	0
III	1	2	3	0
IV	3	1	2	1
V	1	2	0	1

There is no apparent relationship between goals selected and the number of years the plant has been in operation. When the prevalence of custom feeding is compared to goal choices, no apparent relationships are found.

Attitudes Towards Cost of Cattle and Variability in Supply

A question was designed as the "mirror image" of the question employed in the feeder survey which dealt with feeders' attitudes toward level of returns and variability in returns (Appendix B, question IV). Packers were asked to assume they are trying to operate at ninety percent of their rated full capacity. They were then asked to select one from five different cost level-supply variability alternatives. Each alternative contained two important factors: (1) percentage variations in the available monthly quantity of cattle above and/or below the quantity needed for them to operate at the ninety percent level; and (2) the average yearly costs of slaughter cattle, per hundredweight, into their plant. Each of the situations covered a twelve month operating period. Packers were asked to choose the situation they would prefer to face if they knew they would face this situation year after year (Table XXIII).

Packers who chose Situation I and II had the same basic reasons for their choices: (1) it is most or more stable with respect to supply; (2) it is better to have a uniform kill and a small profit than none at all; and (3) costs would be more uniform and possibly lower in either Situation I or II. Those packers that selected Situation III gave the following reasons: (1) to keep both the buyer and seller happy you must hit an average price; and (2) obtaining cattle is not a

TABLE XXIII

PACKERS' CHOICES FROM AMONG ALTERNATIVE COMBINATIONS OF COST PER CWT. AND VARIATION IN THE AVAILABLE NUMBERS OF CATTLE

Situation	Number Packers Choosing	Yearly Average Cost of Cattle ($ per cwt.)	Monthly Variation Around the Number of Cattle to Maintain Operations at 90% of Rated Capacity											
			1	2	3	4	5	6	7	8	9	10	11	12
I	11	30.20	-2	1	-1	0	-1	-1	1	2	1	-1	0	1
II	4	30.10	-1	2	-3	1	-1	-4	3	1	-1	-2	3	1
III	3	30.00	1	-6	0	-3	5	-1	3	-5	6	-1	1	0
IV	0	29.90	0	6	-5	3	-7	3	0	-6	-3	7	3	5
V	3	29.80	-1	-9	0	7	-6	6	3	-7	9	0	5	-5

problem. Only one packer that chose Situation V gave a reason for choosing it. He thought the fluctuation was better for his method of operation.

To see whether the packers were indeed saying they would pay a higher price for a more stable supply of cattle, a "check" question was asked at another point in the interview. Average yearly costs were held constant at $30.00 per hundredweight but the supply was allowed to vary precisely as was the case in Table XXIII (Appendix B, question XII). Eighteen of 20 responding packers chose Situation I, the most stable in terms of supply variability, and defended their choice as follows: (1) Situation I is more stable with respect to supply; (2) costs will be less in a situation with low variability in supply; and (3) planning and execution of operations is much easier under stable conditions. Situations III and IV were each chosen by one packer, but no reasons for their choice were given.

There is no obvious relationship between capacity, years in operation, or involvement in custom feeding of cattle and the packers' response to the two questions. In general, the desire for supply stability was common to all packers.

Coordination of Activity

In order to determine packers attitudes towards alternative ways of coordinating marketing activity, they were asked a series of questions on contracting, futures market operations, and custom feeding of cattle.

Packers were asked if they contract purchase a significant proportion of their slaughter cattle purchases. Five of the 23 packers noted

they are doing some contract buying of cattle. The percentage of their slaughter contracted generally ranged from 21 to 50 percent. There are no apparent relationships between plant capacity, years of plant operation, or the prevalence of custom feeding and the occurrance and magnitude of contract buying.

Packers were asked to rank in importance selected contract variables, a "mirror image" question to the one asked feeders and reported in Chapter III. Only eight of the 23 packers responded to the question, so the base for any conclusions is limited. In attempting to rank the replies of the eight, contractual provisions calling for (1) specifying the exact time of day for the cattle to be weighed, (2) specifying an exact pencil shrink, and (3) specifying the exact price to be paid upon delivery were ranked first, second, and third respectively. This limited base suggests packers often view other factors to be of equal or greater importance than price. None of the responding packers felt the feeders with whom they deal would have ranked the variables any differently.

Related, the packers were questioned concerning their opinion as to the impact contractual sales of slaughter cattle have on the slaughter cattle market. Only 11 of the 23 packers responded to the question. The alternatives from which the packers made their selections and the number of responses for each are shown in Table XXIV. Among the "other" comments was one which noted contracting "hurts the market at times."

Concerning custom feeding of cattle, most packers feed to "take up slack" and combat variability in the supply of cattle. Custom feeding is appealing to many packers because they are not required to

make the large capital outlay which would be required if they constructed feedlots of their own.

TABLE XXIV

PACKERS' OPINIONS CONCERNING THE EFFECT OF CONTRACTING ON THE SLAUGHTER CATTLE MARKET

Alternatives	Number Packers Choosing
Stabilizes the price at which cattle move by decreasing short-run fluctuations in the quantity of available cattle.	1
Stabilizes as in first alternative and lowers the overall price level.	0
Stabilizes as in first alternative and raises the overall price level.	0
Works to the benefit of both packer and feeder by establishing better working relationships.	5
Has hurt the market in which I buy because too many cattle are "tied up" through contracts and I have trouble finding cattle.	3
Other; please explain _____.	2

Market Procedure

A fourth area of importance to the packing sector is that of market procedure. In order to study the problems in more detail, packers were questioned about several facets of their buying operations where problems of inconsistency or conflict are likely to arise.

Packers were asked to describe their typical buying procedure in terms of the basis on which they buy cattle (Table XXV). When choice of buying procedure is compared to plant capacity, length of operation, and prevalence of custom feeding, no relationships are apparent.

TABLE XXV

TYPICAL BUYING PROCEDURE FOLLOWED BY PACKERS IN THE PURCHASE OF SLAUGHTER CATTLE

Typical Buying Procedure	Number of Plants
Buy at least 50 percent on a live-weight basis.	18
Buy at least 50 percent on a carcass grade and weight or other carcass evaluation basis.	3
Buy 50-50 on a live-weight and carcass evaluation basis.	1
Other; please explain _____.	1

Packers were next asked whether or not they are dependent primarily upon one feeder or feedlot as a source of supply for their slaughter cattle. Slightly over thirty percent of the packers interviewed replied "yes" to this question. Their reasons can be summarized by the following two statements: (1) "The feedlot I use is a close and convenient source of cattle" or (2) "I can obtain the quality of cattle I desire

from the feedlot". Several packers said they preferred to feed cattle in their own feedlots.

In another question packers were asked about marketing tactics. It was hypothesized that packers changed their buying tactics and that feeders change their selling tactics as the supply of cattle varies. The packers were asked if they make any changes in their buying tactics when cattle supplies become larger. Sixteen of the 23 packers surveyed noted they make some change in tactics. The changes can be summarized as follows: (1) the packer is not as aggressive a buyer when supply is heavy; (2) he, the packer, takes more time in buying, looks at more cattle, and takes advantage of the fact that he has additional sources from which to choose; (3) he may require the feeder to deliver the cattle to the plant; and (4) he usually buys only what cattle are needed for current slaughter levels. In general, packers feel they have market advantages over the feeder when cattle supplies are excessive.

Packers also believe the feeders change their selling tactics when cattle supplies are scarce. Twenty-two of the packers felt that the feeders make some changes in this type of situation. The changes that packers think feeders make can be summarized as follows: (1) the feeder can hold his cattle off the market longer; (2) the feeder asks a higher price for his cattle when supplies are scarce; (3) the feeder has more market sources for his supply; (4) the feeder tries to feed a cheaper grade of cattle; or (5) the feeders make the packer come to the lot and pick up the cattle. Most of the packers surveyed feel the market advantage rests with the feeder when cattle supplies are scarce.

Since supply problems tend to plague packers they were asked about the nature of the problems and some possible solutions. One question

related to the necessity of "bidding up" the price of cattle during periods of short supply. In general, the packers agreed this does occur, noting the four to eight week period in late spring and summer is the interval within the year when supplies are typically short. Responding to a related question, over 50 percent of the packers would pay a premium (compared to the "average" yearly price) to feeders who would guarantee a stable supply of cattle during a period of "short supply". The packers favor this idea because they feel that it would be easier to market animals of consistent quality in addition to the stability it would give to their operations. The packers who were not willing to pay a premium feel they are too small and their operations are too variable for satisfactory arrangements with feeders to be worked out.

The packers who were willing to pay a premium were then questioned about the amount they would be willing to pay in order to have feeders guarantee to supply a certain percentage of their normal kill. Packers were asked to indicate the premium they would be willing to pay feeders to supply them 20, 40, 60, 80, or 100 percent of their kill on a scheduled basis. The results are summarized in Table XXVI. The packers noted that such buying arrangements would eliminate travel expenses and time spent in looking for cattle. However, packers do not think feeders would be willing to start such a program at the present time because they do not think the feeders are willing to "tie-up" their cattle. There is also concern among the packers about the feeders' ability to meet a guarantee to supply the quality of cattle desired.

In another "mirror-image" question, the packers' attitudes toward a preferred negotiation position were investigated. The problem here assumes purchase of cattle on a live-weight basis and concerns the

amount of information the packer prefers to have before he begins to negotiate the purchase of a pen of cattle. The negotiation positions and the packers selections are summarized in Table XXVII.

TABLE XXVI

PREMIUMS PACKERS WOULD PAY FOR GUARANTEED SUPPLIES OF CATTLE: SELECTED PERCENTAGES OF THE NORMAL KILL

Premium Packers Would Pay ($ per cwt.)	Number Packers Responding by Percent of Kill to be Guaranteed				
	20%	40%	60%	80%	100%
<$.25			1	1	1
.26-.50			2	4	4
.51-1.00				1	
1.01-2.00	1		1		1
>2.00					

Packers who chose the third negotiation position, involving essentially no transfer of information, defended their choice as follows: (1) I want to know only the number of days the cattle were on feed and what feed they were fed; (2) I cannot trust the information the feeder gives me; or (3) I would rather let the buyer evaluate the cattle since this is the job the buyer is being paid to do and I trust his ability to judge cattle. The division between positions I and II was based primarily upon feelings on how detailed the information could be

or needed to be in order to help. Those packers choosing I and II all agreed such information was helpful and is the type of information needed to eliminate "guessing". The several packers who chose the open-end alternative offered such reasoning as the following: (1) all I want to know is the length of time on feed and what feed was fed; (2) my buyer is a good judge of cattle and I trust his ability to evaluate the cattle accurately; (3) I can not get this type of information from the feeders from whom I purchase cattle; and (4) I do not trust information of this type the feeder would give me.

TABLE XXVII

PACKERS' PREFERENCE OF A NEGOTIATION POSITION WHEN BUYING ON A LIVEWEIGHT BASIS

	Negotiation Position	Number of Packers Selecting
I.	The feeder has given you access to his records providing detailed per head information on dressing percentage, carcass cut-out percentage, quality, grade, etc. for previous cattle he has fed.	5
II.	The feeder has given you a summary of the percent of his cattle which grade choice, of average carcass cut-out, and dressing percentages of pervious cattle he has fed.	5
III.	The feeder makes the cattle available for your inspection, but offers no additional information.	8
IV.	None of the above; please explain _____.	5

Packers were then asked if their buying strategy would differ according to the amount of information they could obtain on the cattle, i.e. which negotiation position they must face. Eleven of 21 packers responding replied "yes". The packers seem to be more cautious as they approach situations like position III. The strategic adjustments made typically involve moves to provide protection against the uncertainty relating to factors such as dressing percentage, etc., when this information is not provided. Generally, the change is in the form of a price adjustment; many of the packers would pay more for the cattle if they could obtain the types of information herein discussed.

In an effort to determine how much monetary importance was attached to this information, the packers were asked how much they would discount price offered if such information had not been available. As a standard, the packers were told to assume they had bid $30.00 per cwt. (liveweight basis) when complete information on dressing percentage, carcass cutability, etc. on previously fed cattle was available (negotitation position I in Table XXVII). The replies of those packers who responded to this question are shown in Table XXVIII.

Responding to a related question, seven of the 23 packers noted they would expect the feeder to prefer the situation involving complete transfer of information. Two packers felt the feeder would want a summary of the pertinent information made available, three felt the feeder would prefer to just make the cattle available for inspection, and six noted which position the feeder would be likely to choose would depend upon the circumstances, whether he had dealt with the packer before, etc. Six of the 23 packers declined response to the question.

TABLE XXVIII

PACKERS' DISCOUNTS FOR UNCERTAINTY WHEN BUYING CATTLE: SELECTED NEGOTIATION POSITIONS

Negotiation Position	No. Packers Responding by Level of Discount				
	<.25	.26-.50	.51-1.00	1.01-2.00	>2.01
Summary versus detailed information on quality grade, dressing percentage, carcass cutability.	5	3	2	2	0
Cattle available for inspection but no transfer of prior information.	3	2	3	3	2

The packers, in general, feel inclusion of such information in the negotiation proceedings works to the benefit of both packer and feeder. The cattle under consideration can be evaluated more accurately and the packer is less prone to provide himself insurance by discounting price or exerting influence on other terms of trade.

Product Valuation

In order to determine the effectiveness of current indicators of value of an animal, packers were asked to indicate their opinions on the accuracy with which live animal prices reflect the carcass value of an animal. The opinions of 20 packers who responded to the question are summarized in Table XXIX.

The packers were asked to select from several alternative statements why the animals go at an "average" price and, more specifically,

why premiums are not paid for the better cattle. Table XXX summarizes the alternatives and the selections of the packers.

TABLE XXIX

PACKERS' OPINIONS ON THE ACCURACY OF LIVE PRICES IN REFLECTING CARCASS VALUE

Opinions Presented	Number of Packers Selecting
Cattle move at an "average" price with no significant premiums for the more valuable cattle and no significant discounts for the less valuable cattle.	11
Poorer cattle are effectively discounted, but the truly valuable does not receive the premium it deserves.	9
Other; please explain _____.	2

Of the two packers that selected the "other" choice, one tends to feel that he pays too much for the poorer cattle. The other packer buys cattle on a hot weight basis and sells on a cold weight basis. He does not think the margin is enough to offset cooler shrink.

As was the case in the cattle feeder survey, and to help provide a base for conclusions, packers were asked to rank in order of importance the important value determinants of a slaughter animal. This ranking is presented in Table XXXI.

TABLE XXX

PACKERS' OPINIONS WITH RESPECT TO WHY LIVE PRICES DO NOT ACCURATELY REFLECT CARCASS VALUE

Alternative Reasons	Number of Packers Selecting
It is difficult to merchandise the more valuable carcass at a higher price so we cannot pay a premium for the live animal.	4
The packer sells in a market where specifications are strict, but this is one-sided -- there are discounts if the beef does not meet specifications, but no premiums if it exceeds specifications.	3
The typical packer has to have the higher margin on the better carcass to offset narrower margins or losses on the less valuable carcasses.	3
The variability in value of the beef animal is accurately and adequately reflected by premiums and discounts imposed by the marketing system.	1
Other; please explain _____.	2

Quality grade and dressing percentage were considered by all packers (the 23 surveyed) and were ranked first and second respectively. Cutability ranked a rather weak third both in terms of position of importance and consideration -- six of the 23 packers did not consider cutability of sufficient importance to give it a ranking. The other factors were awarded lesser importance although seven of 18 packers considering liveweight ranked it second or first in importance.

TABLE XXXI

PACKERS' RANKING OF SELECTED VALUE DETERMINANTS OF A SLAUGHTER ANIMAL, BY ORDER OF IMPORTANCE

Selected Value Determinant	Ranking
Grade of the animal (quality grade)	1
Dressing percentage	2
Carcass cutability	3
Age of the animal	5
Sex of the animal	6
Liveweight	4

Market Performance

The final "problem" area is that of market performance. By analyzing the packers' opinions on market performance, a deeper insight can be gained into the problems facing the sector. The packers were asked to select any number of six statements describing market performance. The "response pattern" and the statements of performance are shown in Table XXXII.

The packers were also asked what they have done or are considering to solve these problems in their own operation. Their answers included the following: (1) we are custom feeding cattle; (2) we are building our own feedlot; (3) we cut back on the kill and reduce plant operations

to a lower level; (4) we try to out-bid the other packers; and (5) we have established a "set" price to encourage the feeders to supply better cattle on a consistent basis. A small number of packers chose to do nothing about the problems or to just try and "live" with them.

TABLE XXXII

PACKERS' OPINIONS ON GENERAL MARKET PERFORMANCE

Statement of Market Performance	Number of Packers Selecting
Variability in quantity of cattle available is a real problem.	7
The quantity is available, but we have problems getting the quality we need.	6
We find we have to pay a price above the "going market price" to insure a consistent number of cattle of the quality we need.	3
Because of fixed costs, labor commitments, etc., we have to "bid-up" prices to excessive levels during periods of short supply.	6
Competition is such that during periods of short supply, we cannot get cattle even by bidding up prices since other packers do the same thing.	7
We experience no important problems in getting a consistent number of cattle at the quality level we need.	9

Summary

As an operating goal, meat packers try to maximize returns for an operating year. Packers view supply and price variability as a "problem" and are willing to pay a higher in-plant cost to insure stability.

In relation to methods of coordinating market activity, packers' attitudes vary. Very little contract buying is done in the state. Custom feeding is, to the packers, an appealing way to combat supply variability. Marketing agreements with existing feeders are preferred to integrating into feeding.

Market procedure used by packers varies with cattle supply levels. With larger supplies, the packer buys less aggressively and with scarce supplies is forced to "bid-up" price. Packers feel that bargaining advantage shifts from packer to feeder as cattle supplies vary from heavy to light.

Most packers prefer a negotiation position in which they obtain as much information as possible about the cattle. Significant discounts in prices offered to feeders are used to offset the lack of information on dressing percentage, etc. on previously fed cattle.

Packers feel quality grade and dressing percentages are most important; cutability ranked a weak third. Packers feel they cannot pay a premium for higher cutting carcasses due to merchandising problems. In general packers feel market performance is poor. The lack of a system of adequate premiums or discounts as a price incentive to producers reflects this feeling.

CHAPTER V

ANALYSIS OF INTERLEVEL CONFLICTS AND OPERATIONAL INCONSISTENCIES IN THE FEEDER-PACKER SUBSECTOR

No effort has been made to analyze the problems of conflict and inconsistency as they relate to the combined feeder-packer sector. The two levels have been treated separately with only indirect reference to interrelations which prevail. The two levels of activity will now be combined and treated as a subsector of the beef marketing system. Identifiable conflicts and inconsistencies between the two levels will be examined in terms of implications to operational efficiency, the degree of interlevel coordination attained in the feeder-packer subsector, and possible impact on future organizational structures.

Selected Conflicts and Inconsistencies

Important dimensions of performance at the feeder and packer levels, the potential sources of conflict and inconsistency, have been identified in Chapters III and IV. Upon this base, and drawing upon the treatment in Chapters III and IV, the extent of conflict and inconsistency between the two levels will now be examined.

Overall Goal of the Operation

The majority of the feeders, especially the larger ones, attempt to maximize returns per head for each lot of cattle sold. Conversely,

most packers try to maximize the return or margin per head over each year of operation. Thus, "maximize returns" is the overall economic goal of both feeder and packer, but the planning horizon is different.

The difference in planning horizons becomes a determinant of the realized level of coordination between the feeding and packing levels. In pursuing a goal of maximum returns per head for each lot of cattle, the feeder perpetuates -- and possibly accentuates -- short run price variability in the live cattle market. Such an approach is not conducive to stable price levels and related stable flows of cattle into the packing facilities. It appears that packers, by their choice of a longer planning horizon, are expressing a desire for increased stability.

Possible implications of this inconsistency (in the length of the planning horizon) are manyfold. To the extent that coordination of activity between the two levels has been precluded, pressures for change in organizational structure have been strengthened. Vertical integration between two levels of activity such as cattle feeding and meat packing provides for, or permits, coordination through ownership and the degree of control which goes with ownership. When coordination is not achieved through the exchange process with separate ownership at the two levels, the pressures for a vertically integrated structure are especially strong.

In similar fashion, the goal conflict serves as an obstacle to means of achieving coordination via means less extreme than vertical integration -- such as contractual arrangements. Most contractual arrangements bring with them forward pricing schemes and a degree of

specificity in price often inconsistent with the feeder's attempt to maximize returns per head on each lot of cattle.

It should be noted that the possible inconsistency in basic goals may contribute significantly to other interlevel conflicts and inconsistencies. Thus, examining the other conflicts and/or inconsistencies will, in a sense, be continuing to probe the implications of the inconsistent goals.

Attitude Toward Level Versus Variability in Returns (Costs)

Some inconsistencies existed within the feedlot sector concerning the "trade off" between level of returns and variability in returns. There is a general consensus that, when net returns are variable, stability in returns will be sacrificed for the chance to earn a higher level of net returns. However, a significant number of the feeders prefer the more variable pattern of returns even when net returns per head are held constant over a specified period of time. Packers, on the other hand, are interested in stability of operations and appear to be willing to pay for increased stability. The majority of the packers would be willing to incur a significantly higher in-plant cost (per head) to increase stability in the flow of cattle into the plant.

Relating to coordination between the feeding and packing levels, there is definitely a conflict between the two levels concerning this area of stability versus level of returns or costs. The feedlot sector does not place the same importance on stability of operations. Variability in the supply of feeder cattle, evolving a fluctuating price and related problems in buying, creates difficulty for the feeder. However, there is either no transfer of this awareness to the problems

confronting the packer when the flow of fat cattle is variable or the feeder prefers to operate under such conditions. Consequently, there has been little effort made by the feeders to explore the possibility that increased stability in the flow of cattle -- in quantity and quality -- could be mutually beneficial to both parties.

The results of the surveys clearly imply packers would pay for increased stability -- if the operating environment were such that the needed stability were realized and feeders recognized its importance. But such is not the case. Rather, the pattern is one of operational procedures which largely ignore the interrelations between the two levels. Clearly, there is little or no recognition of any need to effect and maintain a high degree of coordination between the two levels.

The implications of this particular type of conflict or inconsistency are numerous, spanning several different planning horizons. The survey results indicate packers attach a great deal of significance to the instability in cattle flows to which they are exposed. This substantiates efforts in the received literature which establish the economic implications of short-run fluctuations in cattle numbers. Over the long-run, the pressures from problems associated with fluctuating cattle numbers will effect changes in the organizational structure of the feeding-packing subsector. Pressures for the packer to integrate vertically will develop or be maintained as the packer seeks to impose a degree of stability the exchange system has not provided.

Short-run implications include variable incomes to feeders and variable net operating margins to the packer. Per unit costs at the packer level are increased. Short-run variations in cattle numbers

mean periodic excess supply, a more flexible plant layout (in terms of level of operation), and higher procurement costs than would otherwise be necessary. Price signals are concealed by a fluctuating price level for live cattle and production adjustments are thereby slowed.

Coordination of Market Activity

As in the section on variability, views on coordination at each level are varied. Both feeders and packers agree that vertical coordination is essential to efficient market operation, but they are not in agreement on how such coordination should be accomplished. Generally, feedlot managers are opposed to means of coordination which erodes their complete control of the feeding operations. Differing degrees of "control" are met with varying opinions. Methods of coordination that allow the least control or interference by the packing sector or other "outside groups" are more compatible to the feeders.

The packers are not enthusiastic about taking over the feedlot sector or becoming feeders themselves. Most packers give the impression they would prefer to work out agreements with the feeders on a custom basis rather than invest in feeding facilities. It appears packers are saying they will consider integrating vertically into feeding if the "looser" forms of coordination, such as custom feeding or contract selling of the cattle, do not supply the needed coordination.

As implied, the majority of packers and feeders are in favor of custom feeding. Custom feeding does not require the packer to tie up his capital in feeding facilities, yet it gives stability to his operations. The feeder manages his operation with the freedom and

independence he values so highly. According to the survey slightly over one-fourth of the packers interviewed owned cattle being fed in a custom lot. This does not necessarily include cattle being fed for employees of packers, affiliated agencies, non-reporting subsidiaries, etc. Given the attitudes of feeders and packers, custom feeding by packers is likely to increase.

The other method of coordination that shows potential as a coordinating device is the contract selling of fed cattle. Feeders and packers hold generally favorable attitudes towards contracts, but little or no contracting is being done by the feeders and packers interviewed. The reasons for the lack of use are not clear. Response to the questions concerning the relative importance of contract variables revealed no substantial differences. In general, feeders and packers attach the same relative importance to the variables which require specification in the contract.

Accordingly, there are other reasons for not using contracts. Insofar as the surveys are concerned, there were two possible reasons which could be inferred: (1) the feeder has an aversion to "tying up" his cattle and not being free to negotiate sales at or near the time of shipment, and related (2) the feeder is afraid he will get caught with a contractual price which is lower than the going market price at time of delivery. Few feeders, as will be noted later, are in a position to protect against this latter possibility by effectively using the futures market for live cattle to hedge their position.

Considerable change in the attitudes and understanding of the parties involved, especially the feeder, will be required before contractual sales of fat cattle becomes widespread in Oklahoma. There is

some evidence that the packer is willing to offer sufficient economic incentive to make contracting an attractive alternative to the feeder, especially if stability in cattle flows is realized.

The survey findings on the use of live cattle futures were surprising in at least two respects: (1) little or no hedging is being done, and (2) the futures market -- when used as a part of the feedlot manager's decision processes -- is misused. Each of these findings will be considered briefly.

Most feeders indicated they do not consider hedging their feeding operation, citing various reasons with lack of understanding of the hedging procedure coming up most often. Similarly, most packers indicated a lack of interest in hedging; the one exception was a packer who is actively promoting cash contracts for fat cattle. This packer then hedges his position.

Whether lack of understanding or the related technical difficulties, arising from the adjustments that have to be made to hedge an Oklahoma operation, is the primary reason little hedging is done is not known. It is clear the futures market will contribute little to increased coordination between the feeding and packing sectors until the barriers to its use, real or imaginary, are removed.

Feeders <u>do</u> use the futures quotes as a predictor of cash prices, and this is a misuse of the live cattle futures market. As noted in Chapter III, many of the feeders surveyed change the price they are willing to pay for feeder cattle as the current quotes on distant futures contracts change. If the price of the futures contract goes up, the price the feeder will pay for feeder cattle goes up; if the price of the futures contract goes down, the feeder will not go as high

on his bids for feeder cattle. This constitutes a misuse of the futures market. To provide effective hedging alternatives, the futures market does not have to be an accurate predictor of cash price. If the cash and futures markets converge on or about the maturity date of the futures contract, this is all that is required for effective hedging of feeding operations.

The use of the futures market is in its infancy in Oklahoma. Any contributions the live cattle futures market can make toward increased coordination between the feeding and packing sectors will not be realized until understanding of the market and how it can be used is materially increased.

Market Procedure

Most market transactions between the feedlot and meat packing sectors in Oklahoma are on a liveweight basis. The larger feeders in particular are prone to favor selling on a liveweight basis. Thirteen of the 42 feeders interviewed sell predominantly on a carcass basis, but most of these have lots of less than 5,000 capacity. Ideally, whatever the method employed, the market operates in such a manner that both buyer and seller achieve desired results through a standardized operating procedure. This standardized procedure, with some adjustment to fit individual operations, would then result in economical inter-level activity and promote coordination between the feeding and packing levels. However, no standardized market procedure is found when we examine the present situation.

Buying tactics in the packing sector tend to vary with levels of fed cattle supply. Buyers are more aggressive when supplies are light

and more selective when supplies are heavy. Survey results indicated most packers feel they hold some market advantage over feeders when supplies are large by being able to practice selective buying. However, the packers feel the tables are turned when supplies are light and the packer must bid aggressively to meet his slaughter needs. Most packers agreed that the feeder has the advantage by being able to hold back the cattle and raise the asking price. The packer feels he has no alternative but to "bid up" the price. This highly variable procedure is the rule and, of course, not conducive to stability of operation at any level.

Attitudes towards using premiums and discounts as a tool in promoting increased stability and coordination were mixed. Most feeders do not sell on a premium or discount basis, but the idea was met with favorable reception for the most part. The packers appear to be willing to set up a system of premiums and discounts in an attempt to decrease supply variability. If a feeder (or feeders) would guarantee from 60 to 100 percent of the packer's normal kill on a scheduled basis into the plant, about one-third of the packers surveyed would pay a premium of up to $.50 per hundredweight. A few would go to $1.00 per hundredweight or higher. However, the packers doubt that the feeders will be willing to commit their cattle under such a program.

An important part of overall procedure is the negotiation position each party -- buyer and seller -- attempts to establish. As noted in Chapter III, 21 of 39 feeders responding to the question are willing to provide the packer with information on dressing percentage, carcass yield, and such information on previously fed cattle. The remaining 18 prefer to operate from a position where they make the cattle

available for inspection but offer no additional information. Interestingly, not all packers want such information. Some indicated they would place little faith in information offered by the feeders.

The conflict in this aspect of procedure is very real and important. The negotiating arena is too often viewed as a battleground. Not all of the participants are willing to provide the information needed to help "pin down" the true value of a lot of cattle; even fewer actually provide such information. The end result of the conflict is a price which may or may not reflect actual value being paid for cattle, which may or may not be what the packer thinks he is buying.

Product Valuation

Another potential problem area facing the feeder-packer sector evolves from conflicting orientations and/or methods in establishing the value of the product. Conceptually, the valuation of a product at one level is an accurate measure of the product's value to the buyer and a means of adequately rewarding the seller. As the product is processed and passed through the marketing channels to the final consumer, the value added at each stage in processing is reflected as increments to price. Product value, as expressed in the form of price or price differentials, serves as a guide to production and production-related activities.

The feeding and packing industry has at its disposal a system of grades to aid in the valuation of the product they handle. The two sectors estimate the value of the animals using the same terminology. However, there are differences in interpretation of these terms and the relative importance placed on individual terms.

The surveys revealed no highly significant inconsistencies between feeder and packer in selecting the value determinants of the slaughter animal (sold on a liveweight basis). In Chapter III, it was noted feeders ranked quality grade and dressing percentage of equal importance, with carcass cutability a rather weak third. The packers, as was noted in Chapter IV, largely agreed with the feeders: the ranking on quality grade, dressing percentage, and carcass cutability was first, second, and third respectively. Again, carcass cutability was a rather weak third. The other variables listed, such as sex, age, and liveweight were given secondary or no importance by both groups.

While no marked inconsistencies exist, the reasoning for the relatively low ranking of carcass cutability (low relative to its conceptual importance) by the two groups is revealing. Most of the feeders were not very familiar with the notion of carcass cutability, even when it was explained in terms of yield grades or other terminology with which the feeder might have been more familiar. While the feeders in general feel they are able to "measure up" against the packer buyer in estimating quality grade and dressing percentage, they consider themselves inferior to the packer buyer in estimating carcass cutability. In general, the feeder is not as yet equipped to use carcass cutability as an important value determinant, nor is he inclined to do so.

Packers were generally more familiar with the concept and more confident in the ability of their buyers, but carcass cutability was ranked low for yet another reason. At least part of the packers feel a carcass with greater than average cutability can not be effectively merchandised as such -- it is sold in the same market, often at the

same price, as all other carcasses. The extent to which this is due to poorly conceived or inadequate merchandising efforts was not determined.

Overall, the degree of conflict and/or inconsistency between the feeder and packer in the importance attached to various variables as determinants of value is not highly significant. Carcass cutability is not being used extensively nor is it given the importance one might expect based on theoretical considerations. With the feeder, the problem appears to be one of unfamiliarity and lack of understanding; with the packer, it is more nearly a felt difficulty in effectively merchandising carcasses with varying cutability levels. The problems associated with the inconsistency which does prevail will likely require a change in orientation and operational procedure throughout the beef marketing system, not just in the packer-feeder subsector.

Market Performance

This last area of conflict in the feeder-packer sector is possibly the most important -- and the most difficult to summarize. The greatest influence of the largely unpredictable human or management factor is felt here.

In an ideal situation, the marketing system performs in such a manner that the functions are carried on in a coordinated and orderly manner. There are no bottlenecks or lags and the product flows smoothly through market channels from producer to final consumer. In reality, this may be more of a goal to move toward rather than a level of expected achievement.

Most managers of feedlots and packing plants have settled opinions of how they think the market in which they operate performs or "treats"

them. Operating policies and resulting action of the firm are based on these opinions. If the manager feels that the market is treating him fairly and rewarding him justly, he will probably deal with others in a similar manner. On the other hand, if the manager feels that the market is not treating him fairly, he will operate his business in a manner that reflects these feelings.

General implications can be drawn here. Under the system that is performing fairly, an attitude of cooperation and coordination can be established and will grow. Both sectors recognize that it is to their mutual benefit to operate in this manner. In the second case, this is not true. With a strong spirit of independent action, cooperation and coordination usually do not exist. How the various managers view the performance, the adequacy, of the marketing system within which they operate is therefore extremely important.

Market performance, as the term is used in this study, clearly has different connotations to each sector. For the feeding sector, market performance refers to prices received for slaughter cattle. As noted in Chapter III, only 12 of 42 responding feeders feel "adequate premiums are paid for the better than average cattle and the poorer cattle are discounted by an appropriate amount". Most of the feeders feel all cattle moved at an "average" price; others feel discounts are levied for "poor" cattle but no premiums are paid for the "better" cattle. Overall, then, the feeders label performance of their market as "poor" in terms of its capacity to reflect "true" value of the animal sold on a liveweight basis.

The packers generally agreed, noting cattle either move at an "average" price or a pattern involving discounts for the "poor" cattle

and no premiums for the "better" cattle tends to evolve. When queried as to why such a situation prevails, the packers noted the difficulty in merchandising the "better" carcasses at an appropriately higher price. Consequently, the packer does not feel he could or should pay the producer a premium for the more valuable live animal. Also noted was the market situation confronting the packer, a situation involving strict specifications with discounts for failure to comply -- and often no premium if the specifications are exceeded.

What we have seen is the view of both feeder and packer on the dimension of performance important to the feeder and why the observed pattern of performance prevails. Whether these problems, involving the failure of the system to evolve an adequate set of premiums and discounts -- an adequate set of price signals -- can be solved by adjustment completely within the feeder-packer subsector is not known. It depends on whether the "problem" confronting the packers is exogenous to the subsector or whether it is due to ineffective merchandising.

A second and related dimension of market performance is important to the packer. Variation in the flow of cattle into their plant, in terms of both quantity and quality, is important to the packer. In Chapter IV, the reaction of the packers to questions in this area was discussed. In general, the packer must operate at all times because of his relatively high ratio of fixed to variable costs. When the supply of cattle is periodically "short" the packer is forced to bid up price -- which may or may not get him more cattle since other packers are doing the same thing.

The conflicts and problems which are inherent to the noted attitudes toward performance of the market are characteristic of the

liveweight method of selling. The feeder is concerned that the pricing mechanism does not accurately value the animal; the packer largely agrees, but is more concerned about the variability in supply with which he is confronted. Conceptually, a move to carcass grade and weight techniques of selling would improve the situation for both parties. But other attitudes, other conflicts and inconsistencies which are prevalent in the feeder-packer subsector, largely preclude a pronounced move to selling on a carcass evaluation basis -- at least in the immediate future.

CHAPTER VI

SUMMARY, CONCLUSIONS AND IMPLICATIONS

The working hypothesis underlying this study can be stated as follows: There exist goal conflicts and operational inconsistencies between cattle feeders and meat packers which block the realization of a higher level of interlevel coordination within the feeder-packer subsector of the beef marketing system. The overall objective revolved, therefore, around an attempt to isolate such conflicts and/or inconsistencies and establish their relationship with the realized level of coordination within the feeder-packer subsector.

Surveys were conducted at the feeder and packer levels in Oklahoma. Questionnaires were developed which explored activities of feeders and packers along selected dimensions of the total connection between the two levels. The questions were like a "mirror image" in that the same topics were covered, but for buyer and seller respectively. Selection of each of the "dimensions" was equivalent to hypothesizing that significant problems of conflict and/or consistency prevailed along the dimension identified. Each of these dimensions or areas will be discussed briefly with emphasis on the conclusions emerging from the analysis and the implications of these conclusions.

Overall Economic Goal

Both packer and feeder are motivated primarily by a desire to maximize profits. However, the typical feeder seeks to maximize net returns to each lot of cattle sold; the typical packer seeks to maximize returns to his operation over a longer planning horizon, such as a year.

The difference in planning horizons exerts significant influence on the pattern of interaction between the packer and feeder. The feeder's goal of maximizing net returns to each lot of cattle tends to permit or accentuate short-run fluctuations in price, discourages contractual or related forward pricing schemes, and becomes an obstacle to attempts to effect a higher degree of stability -- price and quantity -- in the live cattle market. The packer is more concerned with stability, emphasizing a longer planning horizon.

More information is needed on how the expressed goals of the feeder and packer respectively are transformed into operational procedures. Such will prove necessary to "pin down" more specifically the economic implications of the apparent inconsistency in goals and provide a basis for corrective action.

Level vs. Variability in Returns or Costs

Feeders prefer the more variable pattern of returns when average net returns over time (an operating year) increase with the variability. This holds true even when losses are incurred periodically. However, some feeders still prefer the more variable patterns with average net returns held constant. This suggests importance is attached to the periodic "high" sales which go with the more variable sales patterns.

Packers prefer more stability. Most are willing to incur a higher in-plant cost to achieve a degree of stability in the numbers of cattle flowing into their plants.

Implications of this type of inconsistency are apparent. The packer's cost structure is higher due to short-run fluctuation in live cattle numbers and prices. Price signals are concealed by price fluctuations. Motivations for packers to integrate vertically into feeding are perpetuated and strengthened since the desired degree of stability is not being realized via an open market exchange system.

Any realization that increased coordination might be mutually beneficial to both feeder and packer is missing. Work is needed to illustrate the changes which would accrue from increased coordination; simulation techniques should be investigated as a possible methodology to evolve such illustrations.

Coordination of Market Activity

Feeders are strongly opposed to vertical integration (from packing back into feeding) as a means of achieving vertically coordinated market activity. Attitudes toward custom feeding by packers in feeder-owned lots are more lenient. In general, the packers agree; it appears they view vertical integration as a last resort if other means of effecting coordination and related stability of operation fail.

Both groups view contractual sales (of fat cattle) as a permissable course of action, but little contracting is being done. There is surprising agreement between the two groups concerning the relative importance of variables to be specified in the contract. Lack of familiarity with contractual arrangements, the feeder's hesitancy to

commit himself, and some feeling by feeders that contractual arrangements preclude strong competition between packers in bidding for cattle appear to be the barriers to contractual selling of slaughter cattle.

The live cattle futures market is not effectively used by either feeders or packers. Lack of understanding precludes the feeder using the futures market to hedge his position in contractual selling of slaughter cattle. Few feeders consider hedging their feeding operation. Only the larger packers consider the futures market as a means of hedging contractual arrangements in buying. When considered by the feeders, the futures market is misused; the price feeders are willing to pay for feeder cattle is based to a significant extent on the prevailing quotes for distant live cattle futures contracts.

Many of the barriers to moving to alternative ways of achieving "market coordination" in the feeder-packer subsector are the result of lack of understanding. There <u>is</u> conflict between the two groups concerning the desirability of vertical integration by the packer and some difference of opinion concerning the implications of contractual selling of slaughter cattle. But the more important barrier is ignorance. In most cases, there is little insight concerning the potential implications of using such techniques as a contract for delivery of cattle on a specific date, at a specific price, with the position of each party to the transaction hedged using the live cattle futures market. Efforts to generate the possible outcomes of alternative courses of action and to convey this information to those actively engaged in buying and selling of slaughter cattle are needed.

Market Procedure

Most cattle are sold on a liveweight basis. Packers discount the price on cattle where little or no information is available to facilitate "accurate" estimates of dressing percentage, quality grade, and carcass cutability. Yet, one-half of the feeders surveyed are not willing to provide such information on previously fed cattle. Not all packers want such information, voicing questions about its accuracy or about the ability of the feeder to provide the information.

The negotiation table is often viewed as a battleground. Many feeders are not willing to transmit information to help "pin down" the value of cattle when sold on a liveweight basis; some packers would not trust the information if given. Such behavior perpetuates the tendency for cattle to be sold at an "average" price without benefit of premiums or discounts based on the actual value of the carcass at retail. The communication effectiveness of the marketing system is thereby decreased and legitimate production adjustments slowed.

Needed are measurements of the implications of such conflicts on the level and pattern of returns to feeders, in both the short-run and over the long-run, and on costs to the packers which evolve directly from the need to "guess" at value. At a more conceptual level, the implications of such market procedure to efficiency of the system need to be explored. Such would encourage consideration of procedures alternative to liveweight selling, such as various carcass evaluation techniques, which are theoretically superior but currently in disfavor with most feeders.

Product Valuation

Both feeders and packers selected quality grade and dressing percentage as the important determinants of value of the live beef animal. The theoretically important carcass cutability factor was ranked a weak third by both groups. Feeders feel they equal the packer buyer in ability to estimate quality grade and dressing percentage, but not carcass cutability. This partially explains the low ranking given "carcass cutability."

The packers' low ranking was due in part to problems in merchandising beef carcasses at prices consistent with the "carcass cutability" variable. This has implications to both groups. If the packer is unable to merchandise the "high cutting" carcass at a premium, then he refuses to pay a premium for the more valuable animal. Thus, feeders feel they are not paid premiums for the more valuable animal and packers insist they cannot pay more when they cannot sell for more.

Implications of this "conflict" are far-reaching. Whether the situation arises from outside the packer-feeder subsector or is due to ineffective merchandising by the packers is not known. Badly needed are efforts to pinpoint the bottlenecks in the beef marketing system, the connections which block the transmission of an effective set of premiums and discounts. More work is needed to determine the extent to which a "bottleneck" exists within the packer-feeder subsector.

Market Performance

Feeders generally rank the performance of the market as "poor"; premiums are not paid when deserved and discounts are not levied when a discount is appropriate. This is the attribute of performance which

is important to the feeder because it is directly connected to the price he receives.

The packers agree with the feeders, but consider another dimension of performance more important to their operation. The market does not provide the stable flow of cattle, at a consistent quality, which the packer deems desirable. They, too, rank performance of the market as "poor".

Market performance is, of course, a catchall for the other dimensions which have been identified. Reaction of the feeders and packers in this area provides testimony to the importance of the conflicts and inconsistencies identified. No specific "needs" can be listed here, but a general observation is in order. Increased awareness of the relationship between the behavioral inconsistencies over which they have a degree of direct control and the performance of the market which they label as "poor" is needed by both feeder and packer. Such awareness may well be a necessary condition for any improvements initiated internally to the subsector.

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APPENDIX A

APPENDIX A

OKLAHOMA FEEDLOT SURVEY

Code:_____

I. General information. Please answer as indicated:

1. Capacity of your lot. (One-time capacity, not what you could feed yearly) _____ head.

2. Characteristics of the manager:

a. Age: _____

b. Years of experience in feeding: _____

c. Manager: _____ Owner-Manager: _____ (mark one)

d. How long has your feedlot been in operation?
Years: _____ Months: _____

e. How long have you been manager?
Years: _____ Months: _____

3. Characteristics of the feedlot operation:

a. Percent of your feeding which is on a custom basis ____%

b. Percent equity in the business. (Please mark the category below which shows the percent of the business which is now "owned" as the initial investment is being paid off.)

_____ 100 percent

_____ 75-99 percent

_____ 50-74 percent

_____ 25-49 percent

_____ 0-24 percent

4. Attitude toward the structure or pattern of ownership in cattle feeding:

a. Do you feel packers should be allowed to <u>own</u> feedlots?
_____ Yes _____ No

b. Do you feel packers should be allowed to feed cattle in lots owned by others? _____ Yes _____ No

c. Are you currently, or have you ever, considered "buying into" a packing or slaughtering operation?
_____ Yes _____ No
Why or why not? _____

d. If you are at least part owner in the lot which you manage, would you consider allowing a packer to "buy into" your operation and become part owner?
_____ Yes _____ No
Why or why not? _____

5. Typical selling procedure:

_____ Sell at least 50 percent on liveweight basis.

_____ Sell at least 50 percent on carcass grade and weight or other carcass evaluation basis.

_____ Sell 50-50 on liveweight and carcass basis.

II. Which one of the following best describes the objectives or goals of your operation?

_____ Try to maximize the return per head for each lot of cattle you handle.

_____ Try to maximize the returns to your total operation over some specific period of time (such as each year of operation).

_____ Try to realize some chosen rate of return on your investment (which may be expressed in terms of percent return or margin per head).

_____ Seek some stable or constant return which you have decided is acceptable for your particular operation.

_____ If none of the above fit your case, please describe your goals or objectives: _____

III. Concerning selling procedure, please answer the following:

1. What source of price information is most important to you as you begin to negotiate the sale of a particular lot of cattle? _____

2. Please rate your ability to estimate the factors below as compared to the ability of the packer buyers with whom you deal:

a. Grade (percent which will make Choice, for example):

_____ Better _____ Poorer

_____ About Same _____ Don't Know

b. Dressing percentage:

_____ Better _____ Poorer

_____ About Same _____ Don't Know

c. Carcass cutability:

_____ Better _____ Poorer

_____ About Same _____ Don't Know

3. If you sell cattle on the basis that a certain percentage must grade Choice, please answer the following:

a. Is there a certain premium or discount agreed upon if the percentage which make Choice goes above (premium) or below (discount) the set percentage? _____ Yes _____ No
If yes, then mark the correct procedure below:

_____ The premiums and discounts are the same on a per cwt. basis.

_____ The discounts are larger than the premiums.

_____ The premiums are larger than the discounts.

IV. If you are selling cattle on a liveweight basis, which of the following situations would you prefer the buyer be in as you begin negotiations?

_____ The packer has access to your records providing information on dressing percentage, carcass cut-out percentage (yield grade), quality grade, etc. for previous cattle you have fed.

_____ You have given the packer a summary of the percent of your cattle which grade Choice (and Good, Prime, etc.), of average dressing percentages, and average carcass cut-out percentage (yield grade) for previous cattle you have fed.

_____ You make the cattle available to the packer-buyer for his inspection but offer no additional information.

Why did you choose the particular situation which you marked?

_____

V. Below are several questions or statements concerning the market in which you operate. Please answer as requested:

1. Indicate the number of buyers from whom you normally receive bids on your cattle. _____

2. Do you supply most of the cattle bought by any particular packer? _____ Yes _____ No

3. Do you make a decision on how many cattle to feed based on the market outlook?

_____ No, keep the lot "full" at all times. Why do you operate in this manner? _____

_____ Yes. If yes, you apparently use some procedure of forecasting price levels. Please rank in order of importance (1st, 2nd, etc.) those of the following which would fit the method you use in deciding on outlook for price for slaughter cattle.

_____ Private sources, trade associations.

_____ Current quotes on live cattle futures contracts for several months in the future.

_____ Outlook reports from university and/or USDA market analysts.

_____ Note what price has been doing (rising, falling, or steady) for past few months and plan on this to continue for the next few months when cattle would be ready for the market.

_____ Expect price of beef to move upward since it has generally been increasing in recent years.

_____ Watch how prices typically vary within the year and make plans to put cattle in the lot so they will be "finished" during the season when prices are typically best.

_____ Watch the cyclical movement in prices and plan to feed more cattle during the upswing of the cycle.

_____ Other, please explain: _____

4. If yes, over what time period or periods would it be most useful for the cattle you sell? _____

5. We realize that there are no price forecasting procedures that allow price prediction with 100 percent accuracy. Over time, estimated prices will usually be above or below the actual prices received. On the basis of your past experience with price forecasting, what percentage of the time is your estimate of the price you expect to receive for your cattle above or below the price you actually receive?

   a. Percentage of the time estimated price is above actual price received: _____

   b. Percentage of the time estimated price is below actual price received: _____

   c. By what amount per cwt. is the estimate most often above or below actual price? Dollars or cents per cwt. above: _____ Dollars or cents per cwt. below: _____

6. In each of the following situations, indicate the maximum difference you would be willing to allow between price you get and expected price before you would consider price forecasts useless:

   a. Actual price falls below your forecast of price and the market is <u>falling</u>.

   _____1. less than 10¢ per cwt.
   _____2. 10-15 cents
   _____3. 16-25 cents
   _____4. 26-30 cents
   _____5. 31-35 cents
   _____6. 36-40 cents
   _____7. 41-45 cents
   _____8. 46-50 cents
   _____9. More than 50¢ per cwt.

   b. Actual price falls below your forecast of price and the market is <u>rising</u>.

   _____1. less than 10¢ per cwt.
   _____2. 10-15 cents
   _____3. 16-20 cents
   _____4. 21-25 cents
   _____5. 26-30 cents
   _____6. 36-40 cents
   _____7. 41-45 cents
   _____8. 46-50 cents
   _____9. More than 50¢ per cwt.

VI. Mark the <u>one</u> statement from the following which best reflects your opinion on how the marketing system actually performs:

_____1. Cattle are sold at or near an "average" price with no real premiums for the better cattle and discounts for the poorer cattle.

_____2. The poorer cattle are discounted but no comparable premium is paid for the better cattle.

_____3. Adequate premiums are paid for the better than average cattle and the poorer cattle are discounted an appropriate amount.

_____4. Other; please explain. _____

VII. If you marked 1, 2, or 4 in the previous question, please select from the following the one statement which best explains why the marketing system does not perform very well:

_____ There is not enough competition between packers to force them to pay a premium for the better cattle but they can and do discount poorer cattle.

_____ The packer will pay a premium for cattle which appear to be better than average only when he knows the feeder to be a "reputation feeder".

_____ Most feeders prefer to keep the packer guessing on how well the cattle will do in terms of yield, carcass cutability, etc.

_____ Many feeders do not really know the value of their cattle and this prevents the well-informed feeder from getting a premium for his better cattle.

_____ Other; please explain. _____

VIII. Select the pattern of performance you would prefer to see your operation follow:

_____ The business consistently yields an average yearly net return of 6 percent on the initial investment. Operating policies (including buying and selling procedures) will not be changed until there is indication the return will drop below 6 percent. Then, adjustments in operating procedure are made in trying to keep the return at or around 6 percent.

_____ The business returns 5-9 percent on the initial investment (has averaged 7 percent) but adjustments are being made in operating policies -- including buying and selling -- in an attempt to increase the yearly average net return to 8-9 percent.

_____ The business earns a reasonable return on the initial investment, but adjustments are made in operating policies -- including buying and selling -- whenever there appears to be a way to increase the yearly net returns.

_____ The business operates under the rule that adjustments in operating policies -- including buying and selling -- are made so as to make net returns on each lot of cattle as large as possible.

IX. If you knew you would be faced each year with one of the following patterns of returns per head, which would you prefer to face? (The costs of getting the cattle to market weights are the same under all patterns.)

Pattern	Average Net Return per Head for the Year	Net Returns per Head from Sales Operations 12 Months; "Boxed" Figures are Losses											
		1	2	3	4	5	6	7	8	9	10	11	12
	(Dollars)												
I	4.00	5	[2]	4	1	9	3	7	[1]	10	3	5	4
II	2.00	0	3	1	2	1	1	3	4	3	1	2	3
III	6.00	[3]	5	6	13	0	12	9	[1]	15	6	11	[1]
IV	3.00	2	5	0	4	2	[1]	7	4	2	1	6	4
V	5.00	5	11	0	8	[2]	2	5	[1]	2	12	8	10

X. Assume you are preparing to negotiate the sale of a load of choice steers. Consider the statements below and rank (1st, 2nd, etc.) in order of importance all the factors which are important in determining the price you will ask for your cattle.

_____ Costs of gain.

_____ The price paid for the cattle as feeder cattle.

_____ Current reports of price levels in the wholesale beef market.

_____ The first bid by the buyer; if made before you mention a price.

_____ Bids already received by other potential buyers.

_____ Current reports of price levels in the live cattle market.

_____ Other; please explain. _____

XI. Please rank in order of importance (1st, 2nd, etc.) the following factors as determinants of the value of a slaughter animal.

_____ Grade of the animal (quality grade).

_____ Dressing percentage.

_____ Sex of the animal.

_____ Age of the animal.

_____ Liveweight.

_____ Carcass cutability (weight of all lean cuts as percent of total carcass weight).

_____ Any other factor; please explain: _____

XII. Assume it is June 1 and you are putting feeder cattle in your lot. You estimate the costs of getting your steers to market weight in early October to be $27.00 per cwt. (includes purchase of feeders, vet expenses, feed, a lot or "yardage" cost, etc.). Please answer the following:

1. Would you consider hedging the cattle? _____ Yes _____ No

If yes, think about what the June 1 quote for the October futures contract would have to be for you to hedge and indicate this price range: _____

If no, indicate briefly why you do not consider hedging: _____.

XIII. If you knew you would be faced each year with one of the following pattern of returns per head, which would you prefer to face? (The costs of getting the animals to market weight are the same under all patterns.)

Pattern	Average Net Return per Head for the Year	Net Returns per Head from Sales Operations 12 Months; "Boxed" Figures are Losses											
		1	2	3	4	5	6	7	8	9	10	11	12
	(Dollars)												
I	4.00	5	1	[2]	3	4	10	[1]	9	3	7	4	5
II	4.00	3	5	4	3	3	6	5	5	2	5	3	4
III	4.00	9	5	[1]	11	9	[4]	10	[2]	12	[3]	3	[1]
IV	4.00	3	5	7	0	1	5	3	8	2	6	5	3
V	4.00	8	3	[3]	5	0	9	[1]	10	5	11	[2]	3

Why did you choose that particular pattern? _____

XIV. Assume it is around June 1 and you are buying feeder cattle. You would expect the cattle at which you are looking to "finish" (grade Choice) and be ready for market in early October. Please answer the following:

1. Briefly, how do you decide how much you can afford to pay for the feeder cattle? _____

2. If you decide how much you can pay with the June 1 quote for the October live beef futures contract at $30.00 per cwt., how would you change if the following had been the situation:

   a. The June 1 quote for the October futures contract was $28.00 instead of the $30.00

      _____ would be willing to pay less for the feeder cattle.

      _____ would be willing to pay the same for the feeder cattle.

      _____ would be willing to pay more for the feeder cattle.

   b. The June 1 quote for the October futures contract was $32.00 instead of the $30.00

      _____ would be willing to pay less for the feeder cattle.

      _____ would be willing to pay the same for the feeder cattle.

      _____ would be willing to pay more for the feeder cattle.

XV. Your cattle will be ready to sell in 6 weeks, if you were thinking of signing a contract today to sell the cattle to a particular packer, please answer the questions below:

A. Choose any of the following that you would consider important and then list the numbers here <u>in order of importance</u> (for example, if #4 is most important to you, list it and then the next important to you, list it and then the next most important factor, etc.). List: _____

1. Specify the scales on which the cattle are to be weighed.

2. Specify the exact time of day for weighing.

3. Specify when transfer of title to the cattle is to take place.

4. Specify an exact pencil shrink.

5. Guarantee a minimum dressing percentage with a specific schedule of price discounts for falling short of the guaranteed level, a schedule of premiums if the cattle dress higher.

6. Guarantee a certain percentage to grade Choice with a specified price discount for falling short, a premium for exceeding the guaranteed level.

7. Specify the basic price per cwt. you are to be paid at the time the contract is established.

8. Make provisions for price to be based on the price at some chosen market on the day of delivery or for a certain day during the week of delivery.

B. Look at the list (1-8) again and rate them the way you think the packers to whom you sell would list them. (For example, if you feel packers would consider #2 most important, list it and then go to the one you feel they would rank second in importance etc.) List: _____

C. Examine your "lists" in A and B above. If they are different, try to indicate the <u>one</u> factor you feel is most important in explaining <u>why</u> they are different: _____

XVI. Mark the one statement from the following which best fits your opinion concerning contracting. (The "contracting" to which we refer involves contracting to a packer after you buy the feeder cattle and have them on feed.)

_____ I am in favor of such contracts since they guarantee a market.

_____ I will contract if the packer will pay a premium above the "going market price" at time of delivery. [If you mark this alternative, please indicate the premium you feel you would have to receive $_____ per cwt. (live basis).]

_____ I will not contract under any conditions since this prevents the packer from having to compete for cattle in the open market.

_____ I will contract at the "going market price" at the time of delivery since this assures the packer of steady supply of cattle and this leads to better working relations with the packer.

_____ If none of the above are suitable, please indicate your feelings here. _____

APPENDIX B

APPENDIX B

OKLAHOMA MEAT PACKER SURVEY

Code:_____

I. General Information.

1. Capacity of your plant:

   Head per day _____

   Head per hour _____

2. Plant has been in operation: _____ Years _____ Months

3. Do you purchase the major percentage of your slaughter cattle from any one particular feeder? _____ Yes _____ No
   If yes, why? _____

II. Choose one of the following which best describes the objectives or goals of your operation with respect to slaughter cattle procurement:

_____ Try to minimize the cost per head for each animal you buy for slaughter.

_____ Try to operate on a "set" margin per head which has been selected as adequate and buy so as to achieve this set margin over each year of operation.

_____ Try to buy cattle so as to realize some target average margin per head above the level you are now achieving.

_____ Try to buy cattle so as to maximize the return or margin per head over each year of operation.

_____ If none of the above fit your case, please describe your objective in buying. _____

III. 1. Typical buying procedure:

_____ Buy at least 50 percent on liveweight basis.

_____ Buy at least 50 percent on carcass grade and weight or other carcass evaluation basis.

_____ Buy 50-50 on liveweight and carcass basis.

_____ Other; please explain: _____

2. If you are buying cattle on a liveweight basis, choose one of the following situations which you would prefer to be in before you begin negotiations:

a. _____ The feeder has given you access to his records providing detailed per head information on dressing percentage, carcass cut-out percentage, quality grade, etc. for previous cattle he has fed.

b. _____ The feeder has given you a summary of the percent of his cattle which grade Choice, of average carcass cut-out and dressing percentage of previous cattle he has fed.

c. _____ The feeder makes the cattle available for your inspection, but offers no additional information.

i. Why did you choose the particular situation which you marked? _____

ii. Does your buying strategy differ depending upon which situation prevails -- a, b, or c above? _____ Yes _____ No If yes, how does it differ and why? _____

iii. Assume you would be willing to pay $30 per cwt. (live basis) for a particular lot of cattle if you had seen complete information on previous cattle (situation a in previous question): What would you be likely to offer if instead of situation a, situation b prevailed? _____ per cwt., situation c prevailed? _____ per cwt.

If your answer is something other than $30.00, why did you change? _____

iv. Which situation a, b, or c in (ii) do you think the feeder would prefer? _____
Why? _____

v. Explain how you think the inclusion of exclusion of such information operates to put either you or the feeders in a position of advantage or disadvantage as you begin negotiating the purchase of a lot of cattle.

_____

IV. Assume you are set up to operate at 90 percent of your rated full capacity. Below are 5 situations which show: (1) percentage variations in available cattle above or below the 90 percent level you try to maintain and (2) a yearly average cost per year. Choose the one situation you would prefer to face if you knew you would face that situation year after year.

Situation	Percentage Variations in the Available Monthly Quantity of Cattle Above or Below What You Need to Operate at 90% of Capacity												Average Yearly Cost per cwt. into your Plant
	1	2	3	4	5	6	7	8	9	10	11	12	(Dollars/Cwt.)
___ I	-2	1	-1	0	-1	-1	1	2	1	-1	0	1	30.20
___ II	-1	2	-3	1	-1	-4	3	1	-1	-2	3	1	30.10
___III	1	-6	0	-3	5	-1	3	-5	6	-1	1	0	30.00
___ IV	0	6	-5	3	-7	3	0	-6	-3	7	3	5	29.90
___ V	-3	-9	0	7	-6	6	3	-7	9	0	5	-5	29.80

Why did you mark this situation? _____

V. Indicate any of the following statements which reflect your opinion on how the marketing system actually works:

_____ a. Variability in quantity of cattle available is a real problem.

_____ b. The quantity is available, but we have problems getting the quality we need.

_____ c. We find we have to pay a price above the "going market price" to insure a consistent number of cattle of the quality we need.

_____ d. Because of fixed costs, labor commitments, etc., we have to "bid up" prices to excessive levels during periods of short supply.

_____ e. Competition is such that during periods of short supply, we cannot get cattle even by bidding up prices since other packers do the same thing.

_____ f. We experience no important problems in getting a consistent number of cattle at the quality level we need.

If one or more of (a) through (e) was selected, which is most important? _____

What do you feel will have to be done to solve the problem or what have you done to solve the problem in your operation?

Mark the one statement from the following which best reflects your opinion on the extent to which prices reflect the actual value of an animal:

_____ Cattle move at an "average" price with no significant premiums for the more valuable cattle and no significant discounts for the less valuable cattle.

_____ Poorer cattle are effectively discounted, but the truly valuable animal does not receive the premium it deserves. If you marked this alternative, choose from the following the one best explanation of why such a situation prevails:

_____ It is difficult to merchandise the more valuable carcass at a higher price so we cannot pay a premium for the live animal.

_____ The packer sells in a market where specifications are strict but this is one-sided -- there are discounts if the beef does not meet specifications but no premium if it exceeds specifications.

_____ The typical packer has to have the higher margin on the better carcass to offset narrow margins or losses on the less valuable carcasses.

_____ The variability in value of the beef animal is accurately and adequately reflected by premiums and discounts imposed by the marketing system.

_____ If the above are not adequate, please explain your opinion here. _____

VI. Please rank in order of importance (1st, 2nd, etc.) the following factors as determinants of the value of a slaughter animal:

_____ Grade of the animal (quality grade).

_____ Dressing percentage.

_____ Sex of the animal.

_____ Age of the animal.

_____ Liveweight.

_____ Carcass cutability (weight of all lean cuts as percent of total carcass weight)

_____ Any other factor; please explain: _____

VII. 1. Do you contract purchase any of your slaughter cattle needs?
_____ Yes _____ No

2. If yes, please answer the following:

a. What percentage do you contract? _____

b. Choose any of the following factors you consider important in the contract and list in order of importance.
List: _____

1. Specify the scales on which the cattle are to be weighed.

2. Specify the exact time of day for weighing.

3. Specify when transfer of title to the cattle is to take place.

4. Specify an exact pencil shrink.

5. Guaranteed minimum dressing percentage with a specific schedule of price discounts for falling short of the guaranteed level.

6. Guaranteed set percentage to grade Choice with a specified price for falling short, a premium for exceeding the guaranteed level.

7. Specify the basic price per cwt. you are to pay at the time the contract is established.

8. Make provisions for price to be based on the price at some chosen market on the day of delivery or for a certain day during the week of delivery.

c. Look at the list (1-8) again and rate them the way you think the feeders from whom you buy would list them. (For example, if you feel feeders would consider #2 most important, list it and then go to the next one you feel they would rank second in importance, etc.)
List: _____

d. Examine your "lists" in b & c above. If they are different, try to indicate the <u>one</u> factor you feel is most important in explaining <u>why</u> they are different.

_____

VIII. Choose the <u>one</u> statement from the following which best fits your opinion concerning contracting with a feeder (after the cattle are on feed):

_____ 1. I use contracts to assure a consistent availability of cattle for slaughter regardless of whether the market is going up or down.

_____ 2. I contract only when it appears the market will continue to rise and thus get a degree of protection against the price rise.

_____ 3. I contract primarily to prevent getting forced into "bidding up" prices when the number of available cattle decreases suddenly.

_____ 4. I do not contract to a significant extent.

_____ 5. I contract whenever I can and then hedge my position in the futures market.

_____ 6. Other; please explain: _____

IX. If you do a significant amount of contracting, please select all the following which you feel indicate the effect which contracting is having on the cattle market.

_____ 1. Stabilizes the price at which cattle move by decreasing short-run fluctuations in the quantity of available cattle.

_____ 2. Stabilizes as in (1) and lowers the overall price level.

_____ 3. Stabilizes as in (1) and raises the overall price level.

_____ 4. Works to the benefit of both packer and feeder by establishing better working relationships.

_____ 5. Has hurt the market in which I buy because too many cattle are "tied up" through contracts and I have trouble finding cattle.

_____ 6. Other; please explain: _____

X. A short supply of cattle can result in your "bidding up" price to insure your needs will be met. Conversely, price may be "down" when supplies are heavy. Over the year, you end up paying some "average price" for the cattle.

1. How many weeks during a typical year do you find cattle supplies short enough to cause you to "bid up" price in trying to keep a reasonable level of slaughter? _____

2. Would you be willing to pay feeders a premium above this "average" yearly price if they would guarantee you a consistent supply of cattle of acceptable quality all through the year? _____ Yes _____ No If no, why not? _____

If yes, about how much would you be willing to pay to guarantee yourself the following percentages of your normal kill?

a. $_____ per cwt. to guarantee 20%

b. $_____ per cwt. to guarantee 40%

c. $_____ per cwt. to guarantee 60%

d. $_____ per cwt. to guarantee 80%

e. $_____ per cwt. to guarantee 100%

Which of the combinations would you prefer if you had a choice? _____ Why? _____

Which do you feel the typical feeder would prefer? _____
Why? _____

Are feeders ready and willing to start such a program?
_____ Yes _____ No Why or why not? _____

XI. 1. In the following situation assume that you are contracting in June for 1100 pounds of slaughter steers to be delivered in October. The contract price for the steers is $26.00 per cwt. You are considering hedging the cattle against unfavorable price fluctuations. Indicate which of the following October futures price quotations would cause you to hedge the contract.

_____ 1. 28.00
_____ 2. 27.75
_____ 3. 27.50
_____ 4. 27.25
_____ 5. 27.00
_____ 6. 26.75
_____ 7. 26.50
_____ 8. 26.25
_____ 9. 26.00
_____ 10. 25.75
_____ 11. 25.50
_____ 12. 25.25
_____ 13. 25.00
_____ 14. 24.75
_____ 15. 24.50
_____ 16. 24.25
_____ 17. 24.00

2. Do you hedge your contract purchases? _____ Yes _____ No
If yes, why? _____
If no, under what condition would you hedge? _____

XII. Assume you are set up to operate at 90 percent of your rated full capacity. Below are 5 situations which show: (1) percentage variation in available cattle above or below the 90 percent level you try to maintain, and (2) a yearly average cost per cwt. for each situation. Mark the one situation you prefer to face:

Situation	Percentage Variations in the Available Monthly Quantity of Cattle Above or Below What You Need to Operate at 90% of Capacity												Average Yearly Cost per cwt. into your Plant
	1	2	3	4	5	6	7	8	9	10	11	12	(Dollars/Cwt.)
____ I	-2	1	-1	0	-1	-1	1	2	1	-1	0	1	30.00
____ II	-1	2	-3	1	-1	-4	3	1	-1	-2	3	1	30.00
____III	1	-6	0	-3	5	-1	3	-5	6	-1	1	0	30.00
____ IV	0	6	-5	3	-7	3	0	-6	-3	7	3	5	30.00
____ V	-3	-9	0	7	-6	6	3	-7	9	0	5	-5	30.00

Why did you mark this situation? _____

XIII. Marketing procedures:

1. Do you change your buying tactics when cattle supply is heavy? _____ Yes _____ No If yes, in what way? _____

2. Do you feel that you have market advantages over the feeder when the supply is heavy? _____ Yes _____ No If yes, how?

3. Do you think the feeder changes his selling tactics when supply is light? _____ Yes _____ No If yes, how? _____

4. Do you think the feeding industry is in such a position as to have market advantages over packers when supply is light?
_____ Yes _____ No If yes, in what way? _____

VITA

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Candidate for the Degree of

Master of Science

Thesis: ECONOMIC IMPLICATIONS OF INTERLEVEL GOAL CONFLICT AND OPERATIONAL INCONSISTENCY IN THE BEEF MARKETING SYSTEM: THE PACKER-FEEDER SUBSECTOR

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