

Decision Processes of Oklahoma Cattle Feeders

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CONTENTS

Introduction	3
The Information Base	4
Overall Goal of the Operation	4
Attitude Towards Level vs. Variability of Returns	7
Coordination of Market Activity	8
Market Procedure	13
Product Valuation	15
Market Performance	16
Summary and Conclusion	18
Reference	20

Decision Processes of Oklahoma Cattle Feeders

Wayne D. Purcell and Terry L. Dunn*

Cattle feeding activities increased at a rapid pace in Oklahoma during the 1960's. During 1969, marketings of fed cattle totaled 496,000 head. This is in sharp contrast to the 1960 marketings of 143,000 head (3). Most analysts expect still further increases in the level of feeding in the state (2,4).

As the cattle feeding industry grows, its importance to the Oklahoma economy increases. Consequently, the importance of effective decision processes by the feedlot manager also increases. One of the important sets of decisions confronting the feedlot manager involves the selling of the finished product — the slaughter steer or heifer. Information on how these decisions are made and the economic variables which exert an influence on the decisions is needed by a number of involved and interested persons. The market economist must have such information to conduct the analyses and provide the information which can lead to better informed decisions by the feedlot manager.

Feedlot managers themselves need to be aware of how their approach differs from others and how they might improve their decision processes or adapt generally used procedures to their individual operations. Managers of economic operations related to cattle feeding, such as the meat packing operation, need to understand the selling decisions of the feedlot manager since fat cattle are the purchased raw material for the packer's processing plant.

The focus of attention in this report is on this important set of "selling" decisions. It is the decisions relating to the selling or marketing of his product that determines largely how well the feedlot manager coordinates his activities with other technically related activities in the beef marketing system — such as the packing or processing activity. A later report will delve into the degree of coordination actually achieved

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in the feeder-packer subsector in more detail.¹ The purpose here is to provide a look at the variables which affect feedlot managers' selling decisions, how these decisions are made, and how they vary between managers. Upon this base, selected inferences will be drawn concerning the relationship between the decision processes and overall effectiveness of the marketing effort at the feedlot level.

The Informational Base

During the summer and fall of 1969, a survey was conducted among 42 cattle feeders in Oklahoma. Information of relevance to the selling decisions of the cattle feeders was collected as part of a broader study (1). The sample was structured to insure representative firms from the larger capacity categories would be included. The breakdown of the sample is shown in Table 1.

Several areas were emphasized in the questionnaires. Each will be presented and discussed briefly. Where attributes of the operation such as (1) capacity, (2) years managerial experience, (3) percent equity in the business, or (4) percent of the operation involving custom feeding significantly influenced the responses of the feeders, this effect will also be discussed.

Overall Goal of the Operation

The feeders 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. The goals were structured to range from profit maximization per lot of cattle to a satisficing position for the feeding operation on an annual basis.² The goals were considered to be significantly different in terms of how the manager would try to coordinate with related operations.

¹Reference is to a report currently in process. In the later report, emphasis will be on the economic implications of operational inconsistencies and goal conflicts between the feeder and packer, especially as such conflicts and inconsistencies block coordination of activity in the feeder-packer subsector of the beef marketing system.

²"Satisficing" is an economic term denoting satisfaction with a chosen level of returns as opposed to seeking the maximum possible return.

Table 1. 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

Twenty-four of the 42 feeders selected 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 2 lists the choices presented the feeders and records the response pattern.

Some tendency to choose the strict maximization goal (goal I) was exhibited by the operators with low equity. A more obvious relationship between the response pattern and capacity of operation appeared. All the 19 firms in the size categories greater than 1,000 head capacity chose goals I or II; 13 of the 19 chose goal I. Conversely, eight of the 22 smaller firms selected goals III or IV, exhibiting a tendency to favor a more stable or consistent rate of return.

As a check to see if the feeders would stay with the goal they selected, a related question was written 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 2.

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 6 percent. Then adjustments in operating procedures are made in trying to keep the return at or around 6 percent.

Table 2. 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

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

As noted, 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 3 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 3 are reasonably 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 3. 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 level and variability in returns. The question devised contained five choices with average net returns for the year ranging from \$2.00 to \$6.00 per head.

The pattern of returns, by months, within the year was also shown for each different level of annual net return. 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 level, there were both gains and losses. The higher levels of returns were associated with the higher levels of variability. The costs of getting the cattle to market were stated as being equal under all patterns.

Feeders were asked to examine the patterns of returns and select the one they would prefer to face if they knew they would be faced with that pattern year after year. The alternatives and the response pattern are shown in Table 4. A tendency to go for the more variable patterns with their higher average returns is apparent.

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. The response pattern is shown in Table 5. Perhaps the most surprising development is the number of feeders choosing pattern I. This is a much more variable pattern than pattern IV which would be the expected response if pattern II were not selected.

It appears that feedlot operators are willing to make the "trade-off" between the level of, and variability in, net returns. Most operators are enough of a gambler to shoot for higher average net returns and take

Table 4. Feedlot Operators' Choices Between Level of Returns and Variability of Returns: Net Returns Variable.

Pattern	No. Feeders Choosing per Head)	Average Net Returns for the Year (\$	Net Returns Per Head from 12 Monthly Sales—Figures in Parentheses 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 5. Feedlot Operators' Choices Between Level of Returns and Variability of Returns: Net Returns Constant.

Pattern	No. Feeders Choosing per Head	Average Net Returns for the Year (\$)	Net Returns Per Head from 12 Monthly Sales—Figures in Parentheses 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

the associated losses in stride. Such behavior is expected more in large feedlot operations where volume of business can help to average out any 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. To reduce the risk of capital losses, the smaller operators might be expected to take a lower average return if increased stability in returns is realized by doing so. This, however, is not the choice that was made.

As noted earlier, an apparent inconsistency exists under the situation where average yearly net returns were held constant for all patterns of returns. The selection of pattern I by a number of the feeders was surprising. Pattern number IV ranks second in terms of stability, but only two operators chose pattern IV. 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 for 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 have considered “buying into” a packing plant. Sixty-nine percent replied “no” and gave various reasons why. Some of the more frequent reasons were “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.” In responding to yet another question, the feeders indicated they would not let packers “buy into” their feeding operations as 35 of the 42 operators replied “no”.

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. 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 deal would consider important in the contract. The feeders were then 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 will be weighed.
- (2) Specify the exact time of day for weighing.
- (3) Specify an exact time 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 6 shows how the feeders responded to the questions posed.

In interpreting Table 6, it is important to recognize not all feeders ranked all variables. The feeders were asked to rank all variables they consider 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 ranking 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 that the contracts referred to were contracts signed after the cattle were placed on feed.

Table 7 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. In general, attitudes toward contracting were positive, a result somewhat surprising in view of the nominal percentage of fed cattle which are sold via contract.

A third potentially important contributor to economic activity and to the degree of stability in the cattle feeding business is the futures

Table 6. 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

Table 7. 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

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 (5).

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 or June 1 quotes for the October live cattle futures contract. Other questions, written in case such a response occurred, were then presented.

The feeders were asked to indicate how much they would pay for a certain type of feeder cattle with the October futures contract trading at \$30 per cwt. on June 1. Then, in an attempt to isolate the extent to which futures quotes affect the price they would pay, the operators were presented two alternative situations and the changes in their decisions recorded. In situation I, the June 1 quotation for the October futures contract is \$28 instead of \$30 (Table 8). Over 70 percent, 22 of 30 who responded, would not pay as much for the feeder cattle.

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

Table 8. 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

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 the 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 consider hedging if prices were still higher.

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.

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 received 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 agreed 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 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 was 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 considered situation I 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 too much of an advantage as negotiations are begun.

In order to shed more light on the feeders' 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 as the market outlook changes. 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 \$.51 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 by less than \$.10 per hundredweight.

Product Valuation

The fifth primary area of interest involved 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 quotation;
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.

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 9. 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

Table 9. Feeders’ Ranking of Important Determinants of the Value of a Slaughter Animal.

Factor of 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

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 quality grade and dressing percentage.

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 10.

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 the 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 selected 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

Table 10. 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

market in which they buy and sell functions. This opinion reflects directly upon their operation 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 11. 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 12. Among the reasons included in the "other" category were: (1) adequate premiums are not paid because of the volume needs of

Table 11. 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 12. 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 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

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.

Summary and Conclusions

A survey was conducted among 42 cattle feeders in Oklahoma during the summer and fall of 1969. The questionnaires employed were designed to explore the feeders’ decision processes, with special emphasis on the selling decision. Such decisions are important determinants of the relative efficiency of the feeding operations and how well the feeding operations are being coordinated with technically related operations — such as meat packing. The survey results provide a basis for qualitative evaluation of the relative effectiveness of the Oklahoma cattle feeder as a decision maker.

As an overall operating goal, most of the feeders attempt to maximize net returns. In addition, most attempt to maximize net returns to *each* lot of cattle they handle. Such behavior was especially typical of the larger feeders; it was the smaller feeders who indicated preference for a more stable situation which involves maximization of net returns over the period of an operating year.

The choice of overall goals has implications to the degree of coordination achieved with related activities. Attempts to maximize net returns to each lot of cattle permits, and probably accentuates, the short-run price variations in the slaughter cattle market. The resulting fluctuations in the raw material supply proves costly to the packer and may motivate moves to integrate into cattle feeding. It appears the feeders surveyed are in general not concerned with coordinating their feeding activities with those of the processor nor do they appear to be aware of any implications of the lack of such coordination to possible structural changes in the beef industry. Such factors are not very important in the feeders’ decision processes.

The feeders’ choice between level versus variability in returns is a second important facet of their decision processes. When net returns increase with increased variability in the pattern of net returns, the bulk of the feeders are willing to tolerate the variability to get the higher average returns. This holds true even when one of every four sales results in a loss. Such behavior was not unexpected. However, a “check” question — with average net returns held constant — did produce surprising results. A significant number of the feeders selected the more variable patterns of returns even though average net returns were the same under all alternatives presented for their consideration.

The feeders apparently view anything other than a variable pattern of returns as atypical or unrealistic. Their response pattern suggests an affinity for the "high" market — even if losses are thereby incurred at other times during the marketing year. Such an operating philosophy has implications to any attempt to evolve a more stable live cattle market. It is highly unlikely corrective action will be initiated on any widespread basis by the feeders since they do not view the variability to which they have long been exposed as a problem or as being indicative of inefficiency and a lack of coordination within this part of the beef marketing system.

Questions designed to explore the feeders' attitudes toward alternative ways of affecting, perhaps increasing, the degree of vertical coordination in the slaughter cattle market provided interesting information. In general, the response pattern indicated the same lack of strong concern. Among the areas covered were (1) attitudes toward packer feeding of cattle, (2) attitudes toward the use of forward contracts in selling slaughter cattle, and (3) attitudes toward, and uses of, the live cattle futures market.

Most packers oppose packer ownership of feedlots. Conversely, the majority considered custom feeding activity by the packer, in lots owned by independent cattle feeders, to be acceptable.

Few feeders forward contract their slaughter cattle. The lack of use of such arrangements is apparently not due to disagreement over the relative importance of various contract variables — the feeders surveyed see few problems in this area. A few feeders oppose contractual arrangements because they feel contracts preclude competition between packers in buying. But the more important barriers to contracting seem to be a lack of familiarity with such sales procedures and the absence of any felt need or motivating factors.

Few of the feeders surveyed consider using the futures market to hedge their feeding operations. Most confessed to a lack of understanding of hedging procedures. No such reservation was held concerning the use of the futures market as a predictive device, however. Most feeders would change (significantly) the price they would pay for feeder cattle if the quotes for the futures contracts change to any significant extent.

Considering the response pattern to this question area, one might well conclude a paradox exists. Feeders are opposed to vertical integration but, at the same time, show little inclination to take steps to increase the realized degree of vertical coordination in their part of the beef marketing system. *If* the lack of concern leads to increased pressures on the packer (or others) to integrate vertically, *then* the overall decision format of the Oklahoma cattle feeder exhibits a serious shortcoming.

Questions relating to actual selling or marketing procedure evoked responses which tend to substantiate this last conclusion.

The majority of the feeders, especially the large feeders, sell on a liveweight basis. Liveweight sales require estimation of several value-related variables, but almost one-half the feeders would not make information on dressing percentage, grade, and carcass cutability (or yield grades) for previously fed cattle available to the buyer. They would not go beyond making the cattle available for visual inspection.

Perhaps related, the feeders ranked quality grade and dressing percentage as the important determinants of value. The theoretically important factor, carcass cutability, ranked a weak third. The feeders in general feel they can compete with the packer buyer in estimating quality grade and dressing percentage. Some of the larger feeders felt they were better in making such estimates than the packer buyer. However, most feeders felt their ability to estimate carcass cutability to be inferior to that of the buyer.

Most feeders ranked the performance of the market in which they operate as "poor". Only a small percentage feel adequate premiums are paid for the more valuable animals, appropriate discounts levied against the less valuable animals. Many of the feeders feel premiums are paid only on "reputation" cattle.

It appears, therefore, that most feeders are not satisfied with the performance of their market. Yet, they resist the changes which would remove some of the need for estimation and place the trade which must occur on a more objective basis. Without attempting to predict the total outcome of such a change, it would appear the typical Oklahoma feeder needs to broaden his perspective and come to understand his operation is but one part of a much larger system. If this change is not realized, the structural and other changes which may come as a result of the current lack of coordination will be forced upon the feeder. A considerable amount of revision in their decision processes, especially in the number of variables considered, appears advisable for most of the feeders included in the survey.

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