

# FACTORS THAT INFLUENCE NUMBER OF BIDS ON FINISHED CATTLE

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## Summary

Previous research indicates that the number of bids received on pens of fed cattle has a positive influence on price. This study was undertaken to determine what factors influence the number of bids received on pens of cattle. The number of bids for fed cattle was investigated in 13 southwestern Kansas feedyards during May through November, 1990. Results indicated that cattle of desired weight, with higher estimated carcass yield and quality grade, in larger pen sizes, and sold in the middle of the week received the most bids. In addition, feedyard asking price relative to packer price offers also influenced the number of bids received.

(Key Words: Marketing, Feed Cattle, Bid Determinants, Number of Bids.)

## Introduction

Generally, the more bids a pen of feedlot cattle attracts, the higher the demand for that pen and the higher the resulting price. To the extent that a feedyard manager can either adjust production or marketing strategies to influence the number of bids, this knowledge of bid determinants will be valuable.

## Experimental Procedures

Detailed bidding data were collected on 1405 pens of fed cattle sold during May through November 1990 in 13 feedyards in southwestern Kansas. The total number of bids received was collected on each pen sold. In

addition, several measures of animal quality, including live estimates of dressing percentage and USDA quality grade, and other characteristics of each pen, were collected, as well as market conditions in the region. These data were then statistically analyzed to estimate determinants of the number of bids received.

## Results and Discussion

The majority (67.7%) of pens were sold on the first bid, and 83.6% of the pens had only one packer bid. In addition, packers often purchased several pens from a feedyard in a single negotiated transaction, which resulted in fewer total bids. The average numbers of cattle purchased by a packer from each yard daily were 679 head, when at least one pen of steers was purchased, and 580 head, when at least one pen of heifers was purchased. On average, five or more pens per yard were purchased daily by a packer. This suggests that the high bidding packer at a particular yard on any given day tended to be the high bidder on several pens of cattle.

The number of bids received per pen of cattle ranged from one to nine, with an average of 1.75 bids. Bid numbers were significantly influenced by live weight, with cattle weighing approximately 1144 lb receiving the most bids. This is consistent with packers stated preference for cattle in desired weight ranges. Table 1 reports the impacts of cattle quality variation, number of head, and feedyard asking price relative to packer's first offer on the number of bids received. For each 10% estimated increase in cattle grading Choice, the

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probability of receiving an additional bid was 4%, and the average number of additional bids was .5. The probability of attracting an additional bid was 15.4% for each 1% increase in estimated dressing percentage. The probability of the feedyard manager waiting for an additional bid increased 5% for each additional 100 head in a pen. Finally, for every \$/cwt that the asking price exceeded the packer's initial price bid, the probability that the feedyard manager would hold the cattle for an additional bid was 33.6%.

The average number of bids received varied by day of the week on which the cattle were sold. Figure 1 illustrates the average number of bids received per pen as the week progressed. Cattle sold on Monday and Tuesday received fewer bids, partly because they were on the show list for less time. Cattle sold on Wednesday attracted the most bids. Pens sold in mid-week included cattle that feedyard managers were reluctant to sell early in the week. Finally, cattle sold on Friday received fewer bids on average, perhaps reflecting reduced buyer interest in lower quality or underfinished cattle that remained on the show list.

**Table 1. Impacts of Cattle Quality, Number of Head, and Feedyard Asking Price Relative to Packer First Price Offer on the Number of Bids Received**

Bid factor	% Change in probability <sup>a</sup>	Number of additional bids <sup>b</sup>
Percent Choice <sup>c</sup>	4.00	.50
Dressing percent <sup>d</sup>	15.40	.21
Number of head <sup>e</sup>	5.00	.00
Asking price - bid spread <sup>f</sup>	33.60	.48

<sup>a</sup>The probability of receiving at least one more bid for each unit increase in the bid factor.

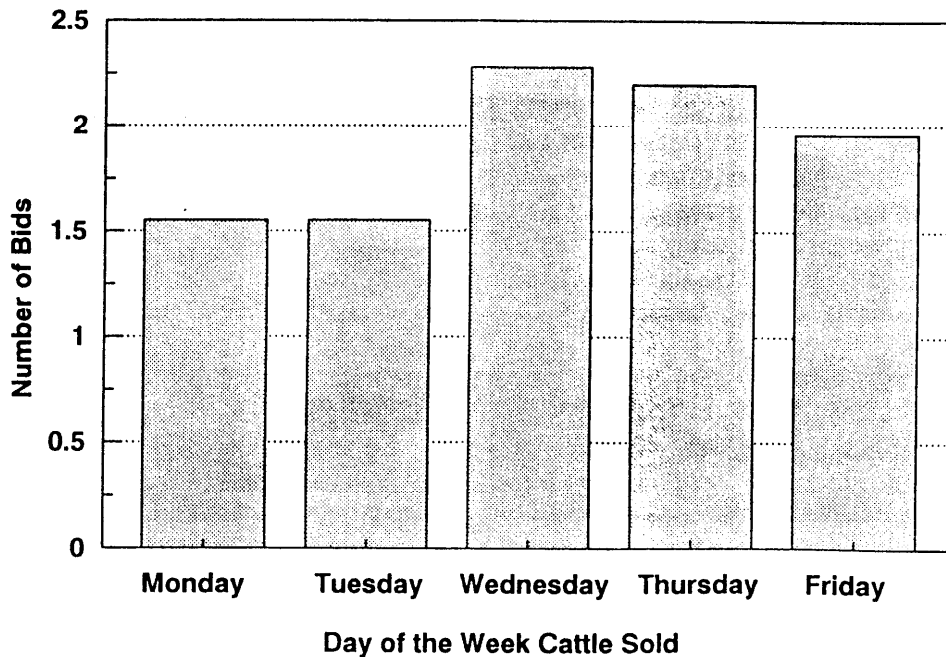
<sup>b</sup>Number of additional bids for each unit increase in the bid factor.

<sup>c</sup>10% increments in estimated Choice cattle.

<sup>d</sup>1% increments in estimated dressing percentage of cattle.

<sup>e</sup>100 head per pen increments.

<sup>f</sup>\$/cwt price spread increments.



**Figure 1. Average Number of Bids Received per Pen by Day of the Week Cattle Sold**