## Feeder Cattle Price Spreads

James L. Mitchell (<u>jlmich19@ksu.edu</u>) and Glynn T. Tonsor (<u>gtonsor@ksu.edu</u>) Kansas State University Department of Agricultural Economics - November 2017

The months of October and November mark an important time of the year for cattle producers. It is a time when critical marketing and production decisions are made regarding spring-born, fall-weaned calves. These decisions including the possibility of retained ownership. Traditionally, spring-born calves are sold in the fall by most cow-calf operations. Alternatively, calves may be retained through the winter and placed in a backgrounding or stocking program. Following a winter feeding program, calves are either sold in the spring or are placed on summer grass where additional pounds can be added before entering a feedlot.

Market signals about the value of added weight are just one of the many factors that contribute to the decision to retain calves through the winter. Price comparisons between futures market contracts can be a useful tool and first step in determining how much the market currently projects to value the added weight from a winter feeding program. Specifically, the price difference between two futures contracts is a standard tool used to determine the current, relative discount of added pounds. For purposes of retained ownership, the November and March feeder cattle futures contracts are the two most widely used contracts as they coincide with this current fall vs. next spring marketing decision.

This fact sheet summarizes weekly feeder cattle futures price data for 2003-2017 to provide a perspective on how the market has historically valued calves sold in the fall against calves retained and sold at a later date (early spring). Importantly, comparisons are made between historic feeder cattle futures price spreads and the current situation for 2017-2018. All futures price data summarized in this fact sheet is collected and maintained by the Livestock Marketing Information Center.

WRITTEN BY: JAMES L. MITCHELL AND GLYNN T. TONSOR

## **Historic and Current Feeder Cattle Price Spreads**

To make comparisons between futures contract prices, we calculate the price spread as:

(1) Spread 
$$(\$/cwt) = FCNov_t - FCMar_{t+1}$$

where *Spread* is the difference between the November (current calendar year) and March (next calendar year) feeder cattle futures contract prices,  $FCNov_t$  is the November feeder cattle futures price for the current year *t* and  $FCMar_{t+1}$  is the March feeder cattle futures price for the deferred year *t*+1. As an example, the weekly price spread for the workweek ending on Friday, November 3, 2017 is calculated as:

(2) 
$$Spread = FCNov_{2017} - FCMar_{2018} = $159.25 - $156.25 = $3.00/cwt.$$

Using equation 1 we calculate spreads between November and March contracts at three different points in time. Spreads as of June, August, and October are reported in Tables 1, 2, and 3, respectively. These months reflect periods when other important production decisions are made and give a sense of how the March-November spread changes as fall-weaning approaches. For example, August and October reflect, for many, a time when weaning decisions are made while June may reflect a time when many consider value-added programs and use of video auction markets.

The example calculation in equation 2 shows the futures market valuing November feeder cattle \$3.00/cwt. higher than March cattle. The current spread is favorable for those considering retained ownership of calves as it is suggestive of a relatively flat price-weight slide. Alternatively, a high, positive number, all else equal, would favor fall marketing of calves.

Price Spread for the Month of June, (\$/cwt)							
Year	2003-07	2008-12	2013-16	2017			
Average	4.93	1.05	5.31	7.84			
Max	9.46	3.37	10.64	10.07			
Min	2.11	-1.61	-1.20	6.39			
Standard Deviation	2.29	1.21	4.10	1.60			

 Table 1. November and March Feeder Cattle Futures Contract

 Price Spread for the Month of June, (\$/cwt)

Table 2. November and March Feeder Cattle Futures Contract
Price Spread for the Month of August, (\$/cwt)

Statistic	2003-07	2008-12	2013-16	2017
Average	6.42	-1.02	5.31	4.65
Max	9.45	2.23	8.96	5.42
Min	3.59	-6.33	0.48	4.24
Standard Deviation	1.84	2.76	2.86	0.53

 Table 3. November and March Feeder Cattle Futures Contract

 Price Spread for the Month of October, (\$/cwt)

Statistic	2003-07	2008-12	2013-16	2017
Average	5.77	-2.30	6.29	4.26
Max	9.79	0.17	11.30	4.70
Min	-0.20	-5.55	0.74	3.96
Standard Deviation	3.22	1.77	3.20	0.33

Except for 2008-2012, all years have experienced positive price spreads between contracts. For October, the 2013-16 period had an average spread of \$6.29/cwt which may be reflective of high calf prices as the industry began rebuilding the herd in the latter half of the period. In addition to a higher spread, the 2013-16 period is characterized by a higher standard deviation consistent with a more volatile market. The three tables show spreads and standard deviations increasing for October relative to June and August for the 2003-07 and 2013-16 periods. More recently, the average 2017 price spread of \$4.26 for

October more strongly encouraged a winter feeding program. These stronger margins may also suggest support for current calf values.

In addition to monthly spread comparisons, we further examine how spreads change throughout the year by plotting the November and March price spread for the 2013-2017 period (Figure 1). In general, Figure 1 shows spreads diverging during October and November. Recent years have favored those selling fall calves. However, 2017 suggests that retained ownership may be a viable alternative and the spread appears to be narrowing as the November contract moves to expiration. Figure 1 paired with results presented in table 3 suggests that the market is currently incentivizing those considering taking calves out to March before grass or feedlot placement.



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## Summary

This analysis shows how price comparisons can be used in deciding whether to market calves in the fall or retain through the winter. Futures prices offer a unique way of summarizing how the market incentivizes or discounts this decision. Currently, the spread of \$3.00/cwt encourages a winter feeding program. This spread has narrowed more recently as the November contract moves towards expiration These results should be paired with information on the cost of carry and historical basis to aid individuals in deciding whether they are positioned well to retain calves through March. Furthermore, producers who elect to pursue winter feeding programs are encouraged to examine availability of price risk management alternatives that are available.

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