

# CATTLE FINISHING RETURN

## S E R I E S

April 2011

### CATTLE FINISHING NET RETURNS

This article discusses recent trends in feeding cost of gain and cattle finishing profitability. Several sources of data were used to compute the cattle finishing net return series discussed below. Feeder and fed cattle prices were obtained from the seasonal cattle price spreadsheet updated monthly by Kevin Dhuyvetter. Average daily gain, feed conversion, days on feed, in weight, out weight, and feeding cost of gain were obtained from monthly issues of the *Focus on Feedlots* newsletter. Interest rates were obtained from the Kansas Federal Reserve Bank of Kansas City.

Figure 1 presents monthly steer finishing net returns from January 2000 to March 2011. It is important to note that net returns were computed using closeout months rather than placement months. Net returns for January, February, and March of this year were approximately \$42, \$52, and \$150 per head, respectively. Net return per head for all of 2010 was approximately \$52 compared to losses of \$105 and \$117 per head in 2008 and 2009.

Figure 2 illustrates fed price and breakeven prices from January 2000 on. The breakeven prices starting in April 2011 are forecasted. The breakeven price for April is expected to range from \$107 to \$109 per cwt. At these breakeven prices, net return per head is expected to range from \$150 to \$170. Due to relatively higher corn and feeder prices, breakeven prices are expected to increase from \$113 in May to \$121 in September. Breakeven prices for the fourth quarter of 2011 are expected to range from \$118

to \$120.

Correlation coefficients can be used to examine the relationship between net returns, feeding cost of gain, and the feeder to fed cattle price ratio. Correlation is a statistical measure of how variables move together and is bounded by -1.0 and 1.0. A value of -1.0 indicates two variables move together perfectly, but in opposite directions, while a value of 1.0 indicates two variables move up and down together proportionally. Values close to zero indicate two variables have little relationship to each other.

Net returns are significant and negatively correlated with feeding cost of gain ( $r = -0.258$ ). Figure 3 illustrates monthly feeding cost of gain from January 2000 to March 2011. Feeding cost of gain has increased from \$69 in October of last year to \$89 in February and March of this year. Feeding cost of gain for the second quarter of this year is expected to range from \$95 to \$97. Feeding cost of gain is sensitive to changes in feed conversions, corn prices, and alfalfa prices. Regression analysis was used to examine the relationship between feeding cost of gain and feed conversion, corn prices, and alfalfa prices. Results are as follows: each 0.10 increase in feed conversion increases feeding cost of gain by \$0.98 per cwt, each 0.10 per bushel increase in corn prices increases feeding cost of gain by \$1.14 per cwt, and each \$5 per ton increase in alfalfa prices increases feeding cost of gain by \$0.32 per cwt.

Net returns are also significant and negatively correlated with the feeder to fed cattle price

ratio ( $r = -0.838$ ). The strong correlation between these variables reveals the importance of this price ratio to net returns. The feeder to fed cattle price ratio is illustrated in figure 4. The average price ratio over the 10-year period was 1.17. Of course, it is not possible to fully anticipate what fed cattle prices will be when purchasing feeder cattle. Large deviations from the mean price ratio indicate periods for which expected and actual fed cattle prices were quite different. The closeout months with ratios above 1.40 exhibited cattle finishing losses ranging from \$149 to \$179 per head. The feeder to fed cattle ratios for October through December closeouts ranged from 1.10 to 1.11. The feeder to fed cattle price ratios for January, February, and March were 1.07, 1.03, and 0.97, respectively. The feeder to fed cattle ratio is

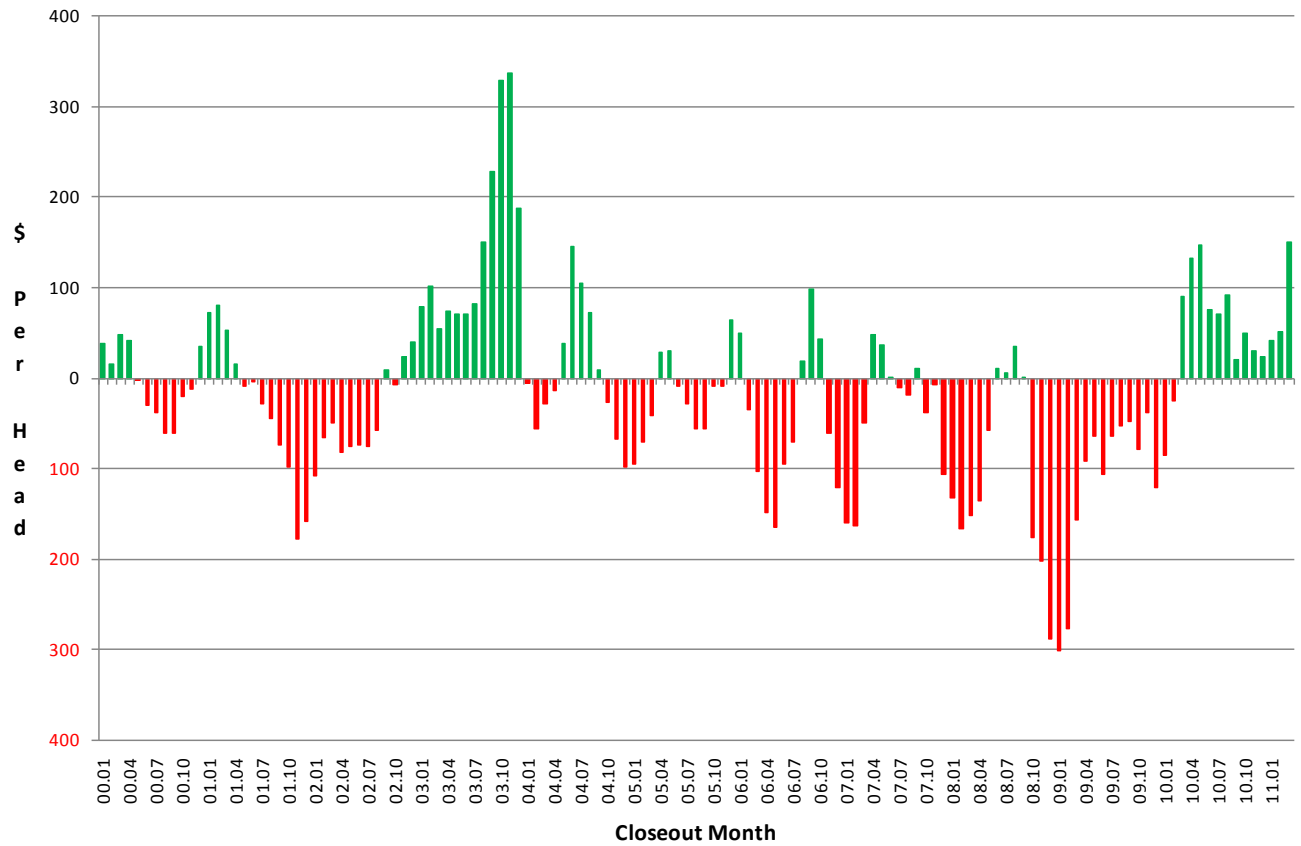
expected to remain below 1.00 for April and then increase to 1.06 to 1.10 for May and June closeouts. The feeder to fed cattle ratio for third quarter closeouts is expected to range from 1.14 to 1.21.

This article discussed recent trends in feeding cost of gain and cattle finishing net returns. Net return information for beef cow and backgrounding operations is available on the Kansas Farm Management Association web site ([www.agmanager.info/kfma](http://www.agmanager.info/kfma)).

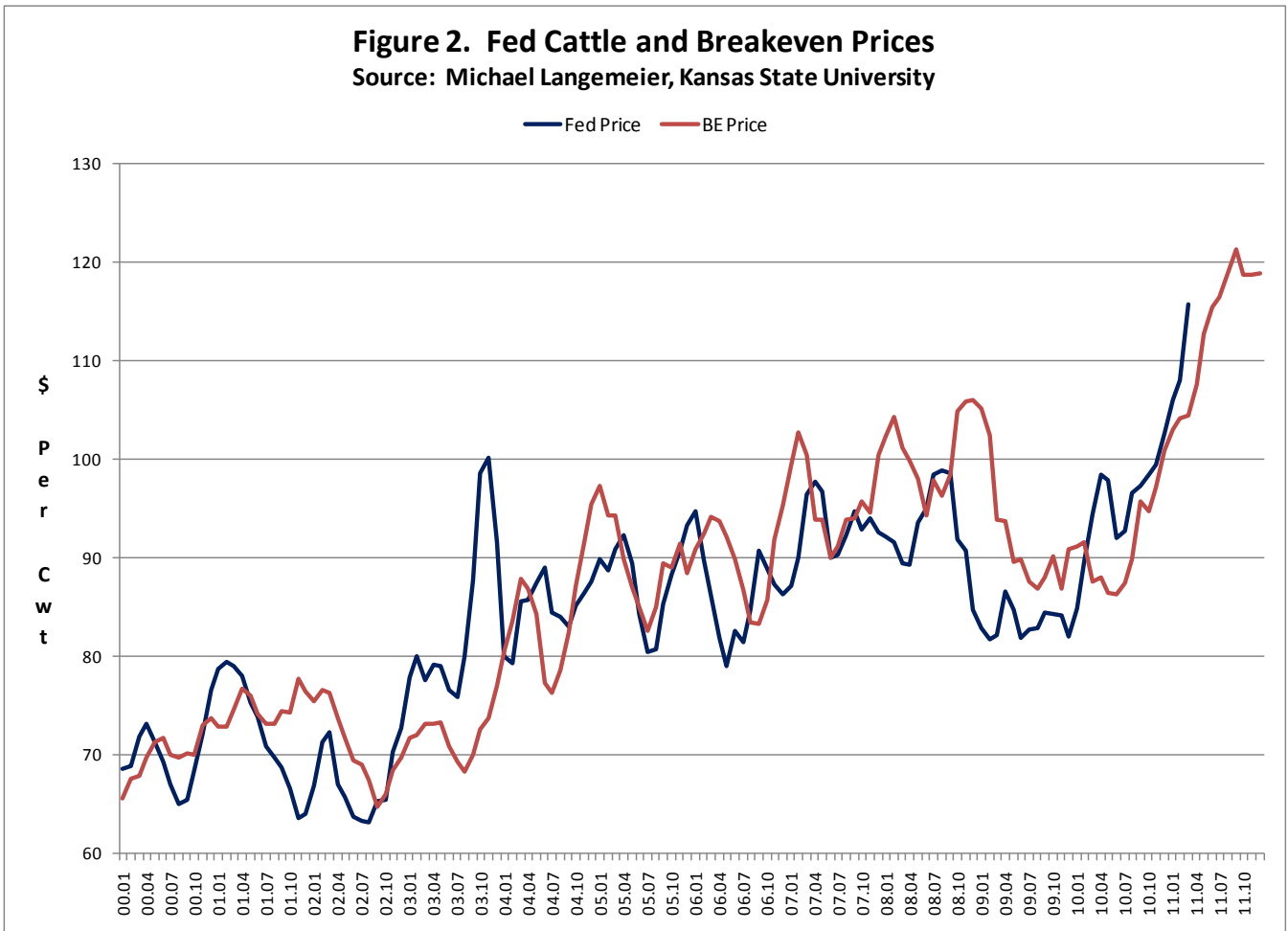
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Department of Agricultural Economics  
Kansas State University*

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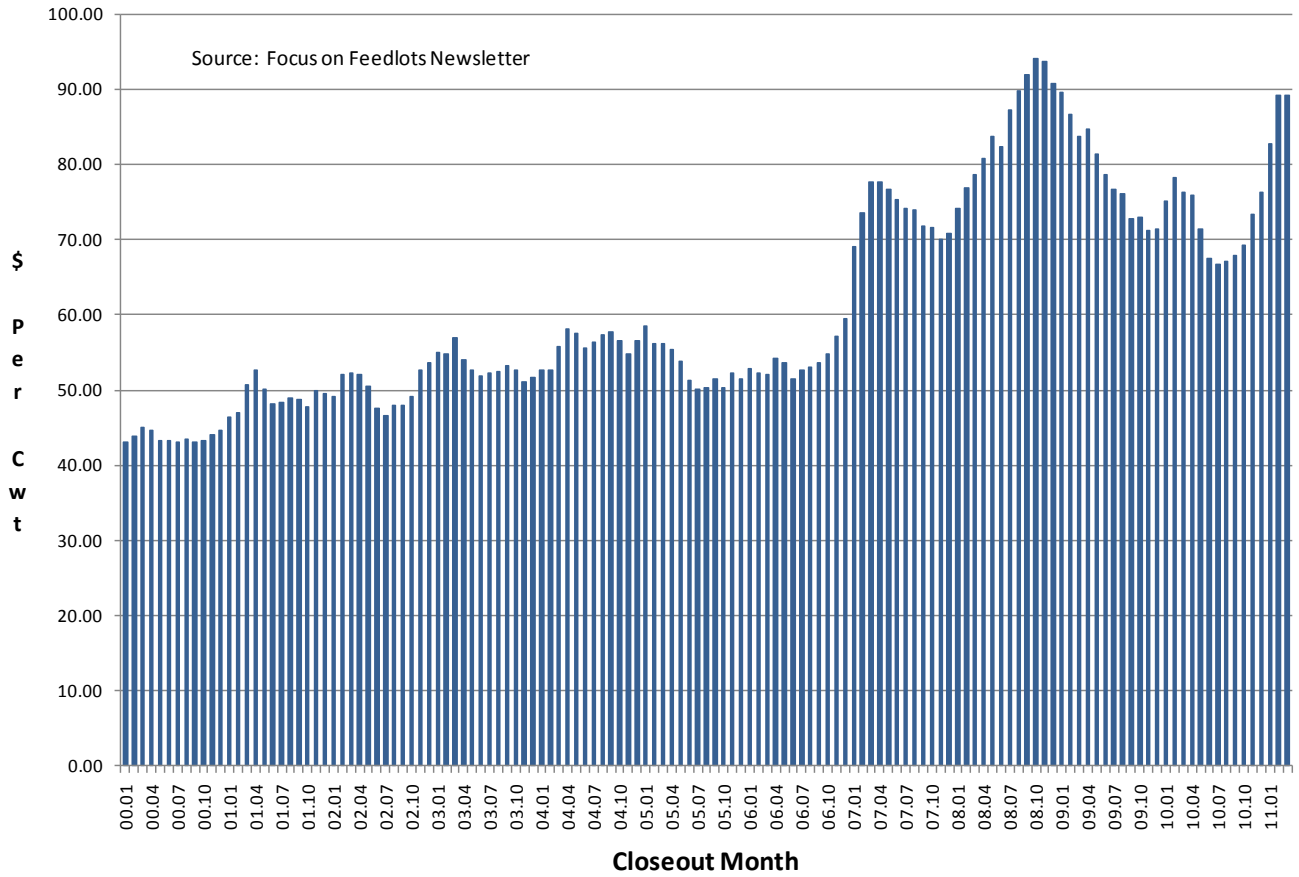
**Figure 1. Historical Net Returns for Finishing Steers**  
Source: Michael Langemeier, Kansas State University



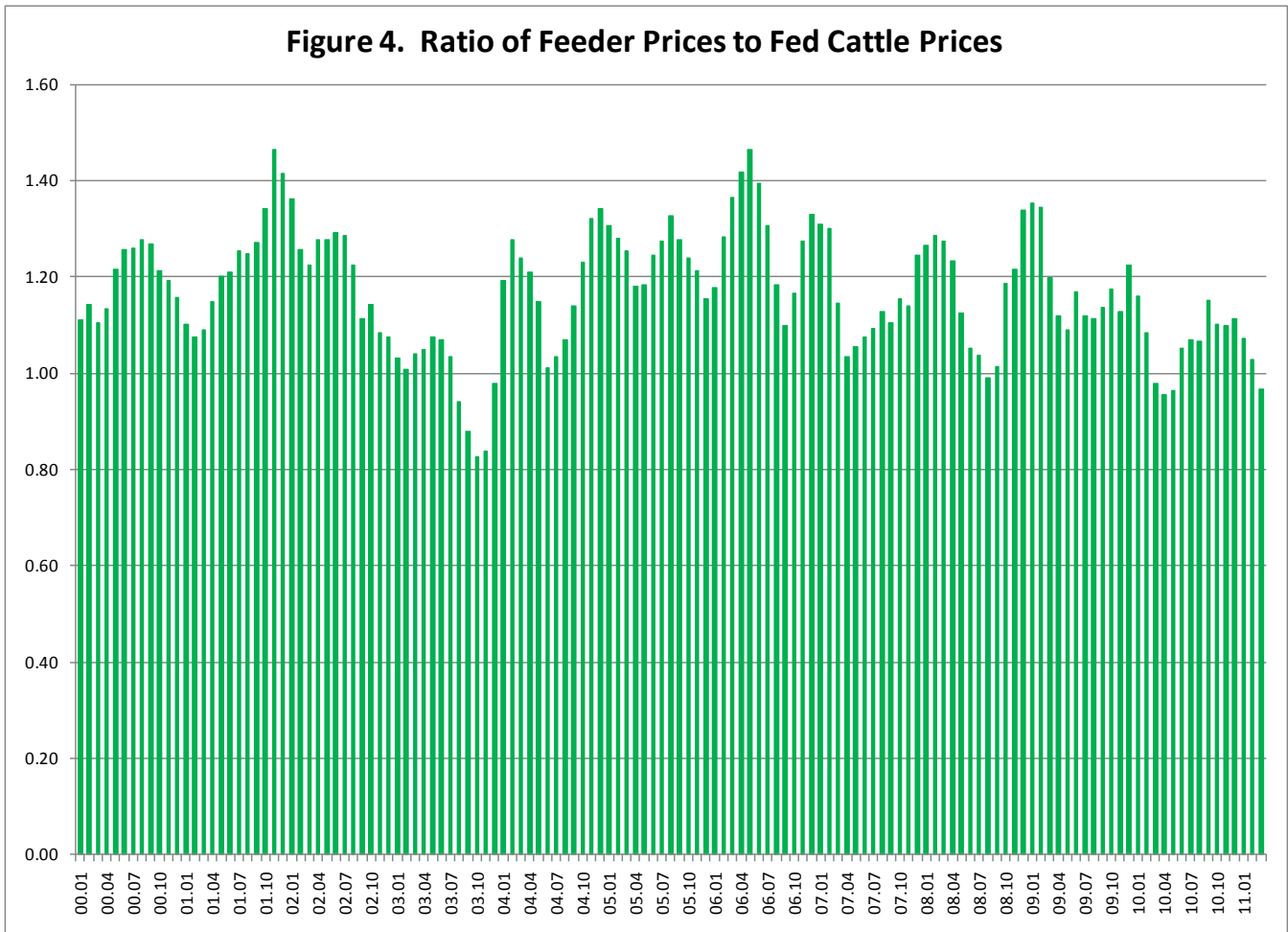
**Figure 2. Fed Cattle and Breakeven Prices**  
 Source: Michael Langemeier, Kansas State University



**Figure 3. Feeding Cost of Gain for Steers**



**Figure 4. Ratio of Feeder Prices to Fed Cattle Prices**



The Cattle Finishing Returns Series is distributed monthly to provide information to farm decision makers. Further information can be found on the Extension Agricultural Economics website: [www.agmanager.info](http://www.agmanager.info).



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