CATTLE FINISHING RETURN

SERIES

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 December 2011. It is important to note that net returns were computed using closeout months rather than placement months. Net return per head for 2011 was approximately $0 compared to a net return per head for 2010 of $52, and losses of $105 and $117 per head in 2008 and 2009, respectively. Net returns for January, February, March, and April of this year were approximately $42, $52, $150, and $171 per head, respectively. Losses in May, June, July, August, and September were approximately $30, $107, $65, $80, and $70, respectively. At $7 and $13 per head, respectively, net returns in October and November were close to breakeven. Losses in December were $76 per head.

Figure 2 illustrates fed price and breakeven prices from January 2000 on. The breakeven prices starting in January 2012 are forecasted.

Breakeven prices for January through March closeouts are expected to range from $126 to $129 per cwt. At these breakeven prices, losses per head are expected to be rather large (i.e., $45 to $85 per head). Breakeven prices for April through June closeouts are expected to range from $129 to $132. It is important to note that the breakeven prices are highly dependent on the corn market, which has been highly volatile in the last few months.

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 = -0.221). Figure 3 illustrates monthly feeding cost of gain from January 2000 to December 2011. Feeding cost of gain has increased from $69 in October of 2010 to $105 in December of 2011. Feeding cost of gain has been above $100 per cwt since August. Feeding cost of gain for the first and second quarters of 2012 is expected to range from $109 to $111 and $102 to $106, respectively. 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 $1.03 per cwt, each 0.10 per bushel increase in corn prices increases feeding cost of gain by $1.11 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 = -0.826). 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 since 2000 is 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 below 1.00 exhibited cattle net returns averaging $178 per head while the closeout months with ratios above 1.40 exhibited cattle finishing losses averaging $163 per head. The feeder to fed cattle price ratio in December was 1.14. The feeder to fed cattle ratio for January and February closeouts is expected to range from 1.09 to 1.11. The projected ratio for the rest of 2012 is closer to the long-run average of 1.17.

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).
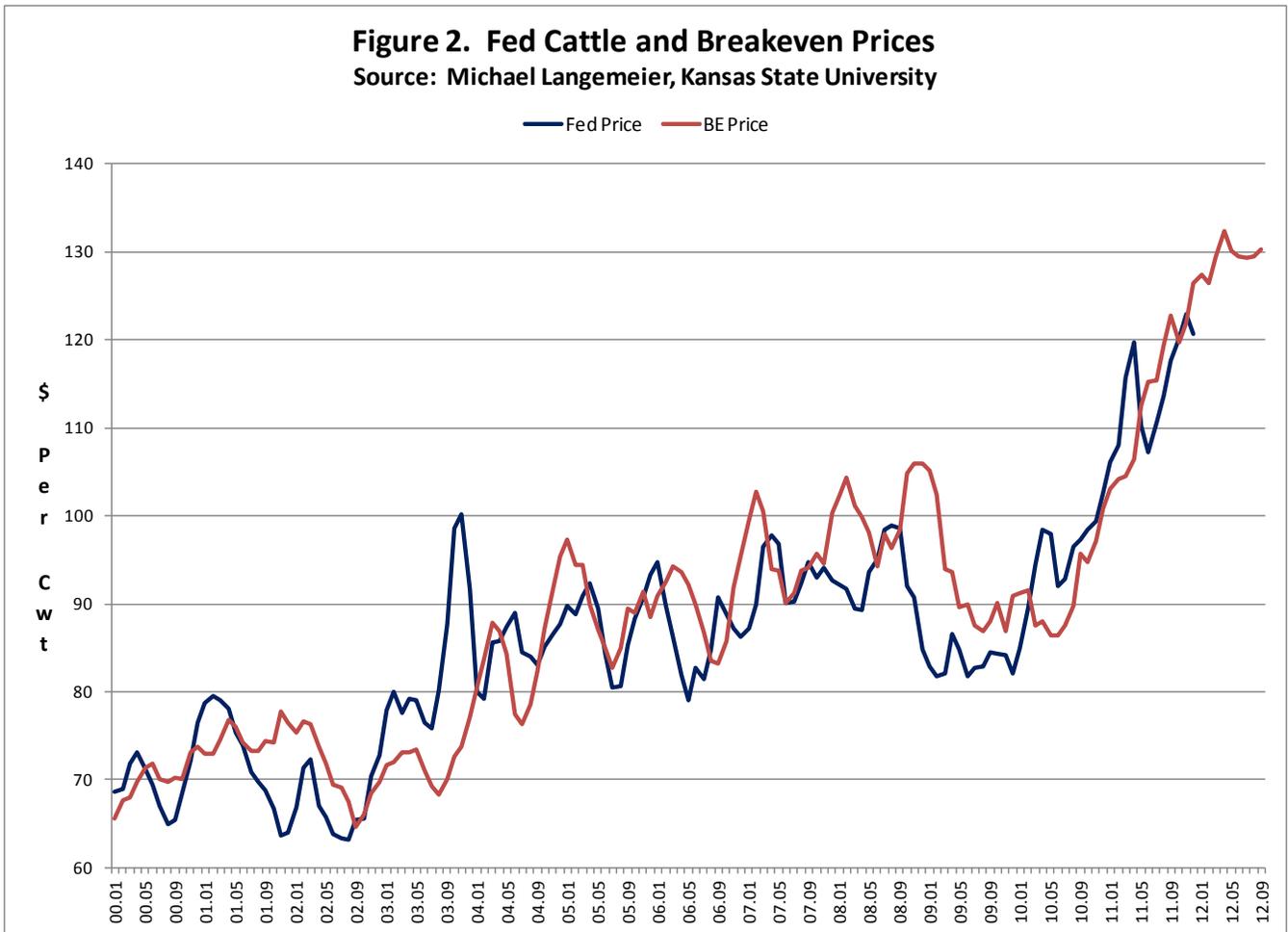
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Figure 1. Historical Net Returns for Finishing Steers
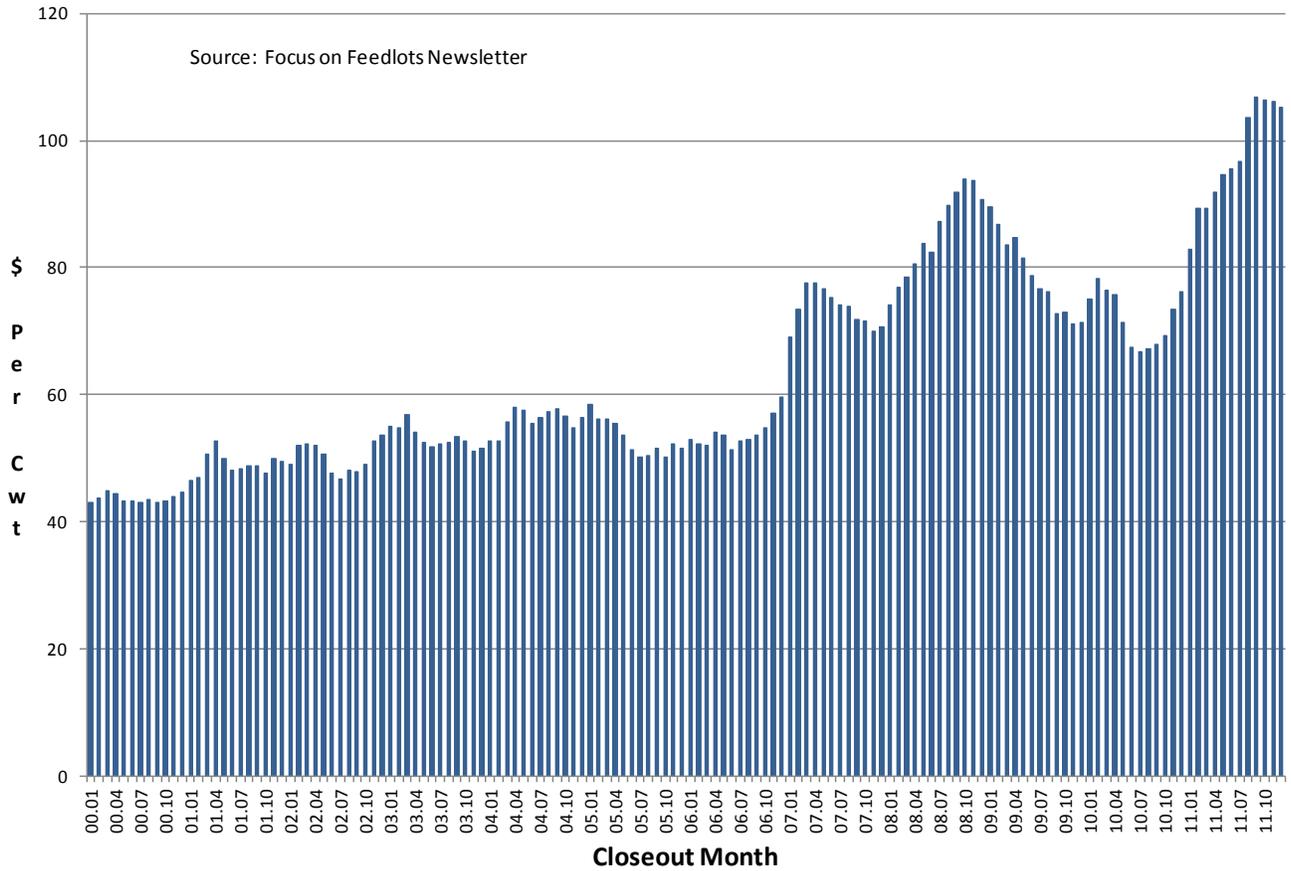Source: Michael Langemeier, Kansas State University
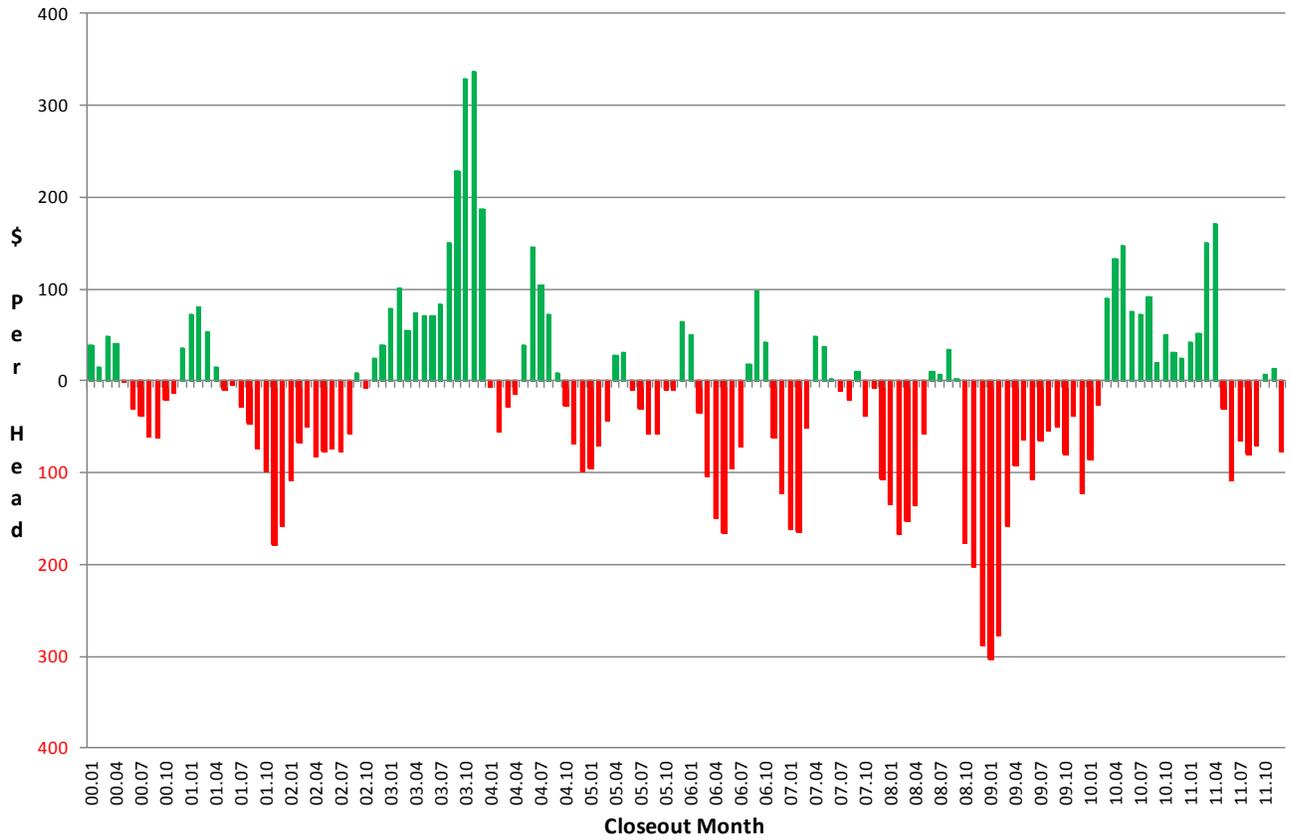
Figure 2. Fed Cattle and Breakeven Prices
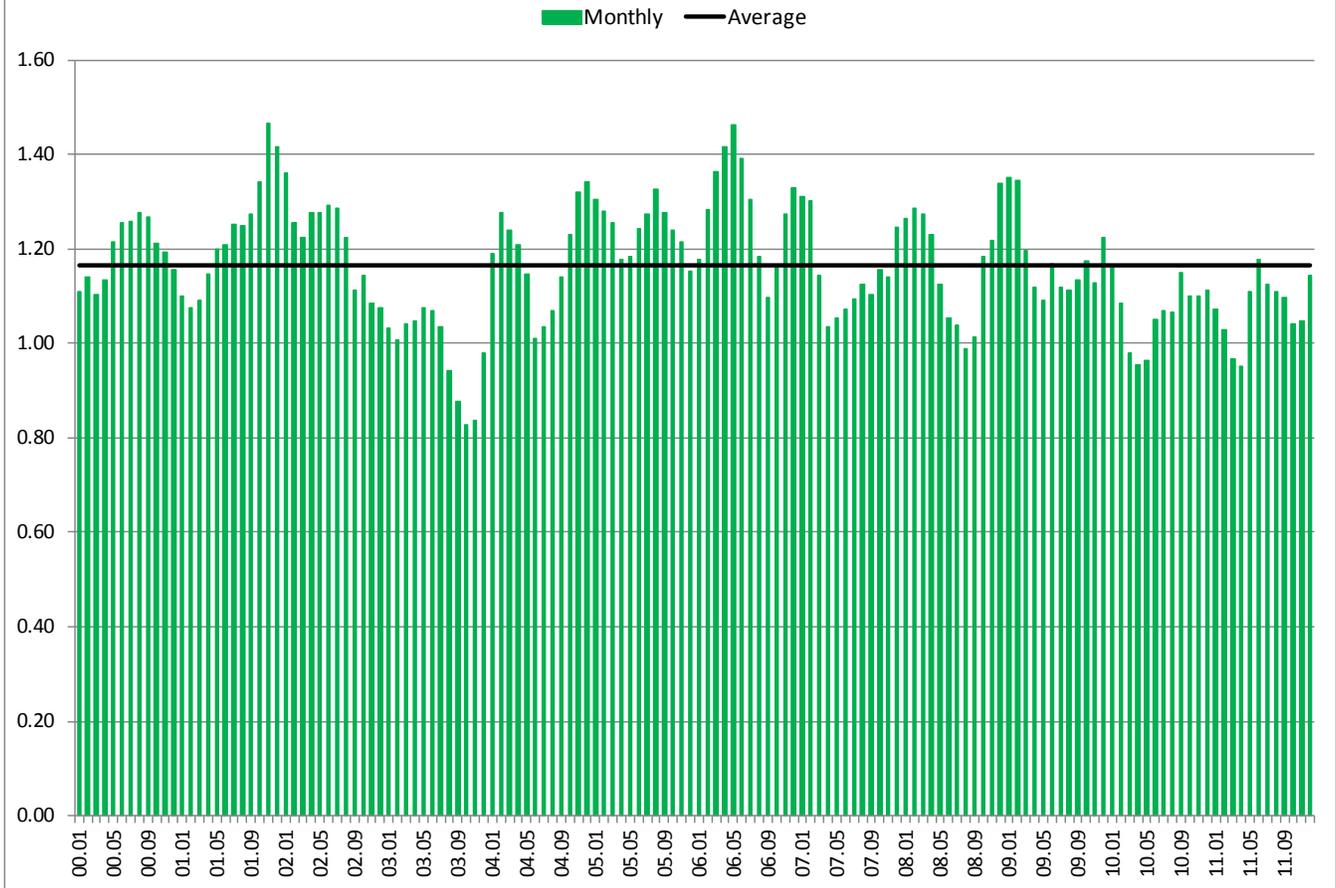**Source: Michael Langemeier, Kansas State University**

Figure 3. Feeding Cost of Gain for Steers

Source: Focus on Feedlots Newsletter

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.