CATTLE FINISHING RETURN
S E R I E S

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 February 2011. It is important to note that net returns were computed using closeout months rather than placement months. Net returns for January and February of this year were approximately $42 and $52 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 March 2011 are forecasted. The breakeven price for March is expected to range from $105 to $107 per cwt. At these breakeven prices, net return per head is expected to range from $110 to $130. Due to relatively higher corn and feeder prices, breakeven prices are expected to increase from $108 in April to $118 in June. Breakeven prices for the second half of 2011 are expected to range from $119 to $122.

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 = -0.289). Figure 3 illustrates monthly feeding cost of gain from January 2000 to February 2011. Feeding cost of gain has increased from $69 in October of last year to $89 in February of this year. Feeding cost of gain for March closeouts is expected to range from $91 to $93 while feeding cost of gain for current placements is expected to range from $104 to $106 per cwt. 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 = -0.835). 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 and February were 1.07 and 1.03, respectively. The feeder to fed cattle ratio is expected to range from 0.97 to 1.00 for March and April closeouts and from 1.06 to 1.10 for May and June closeouts.

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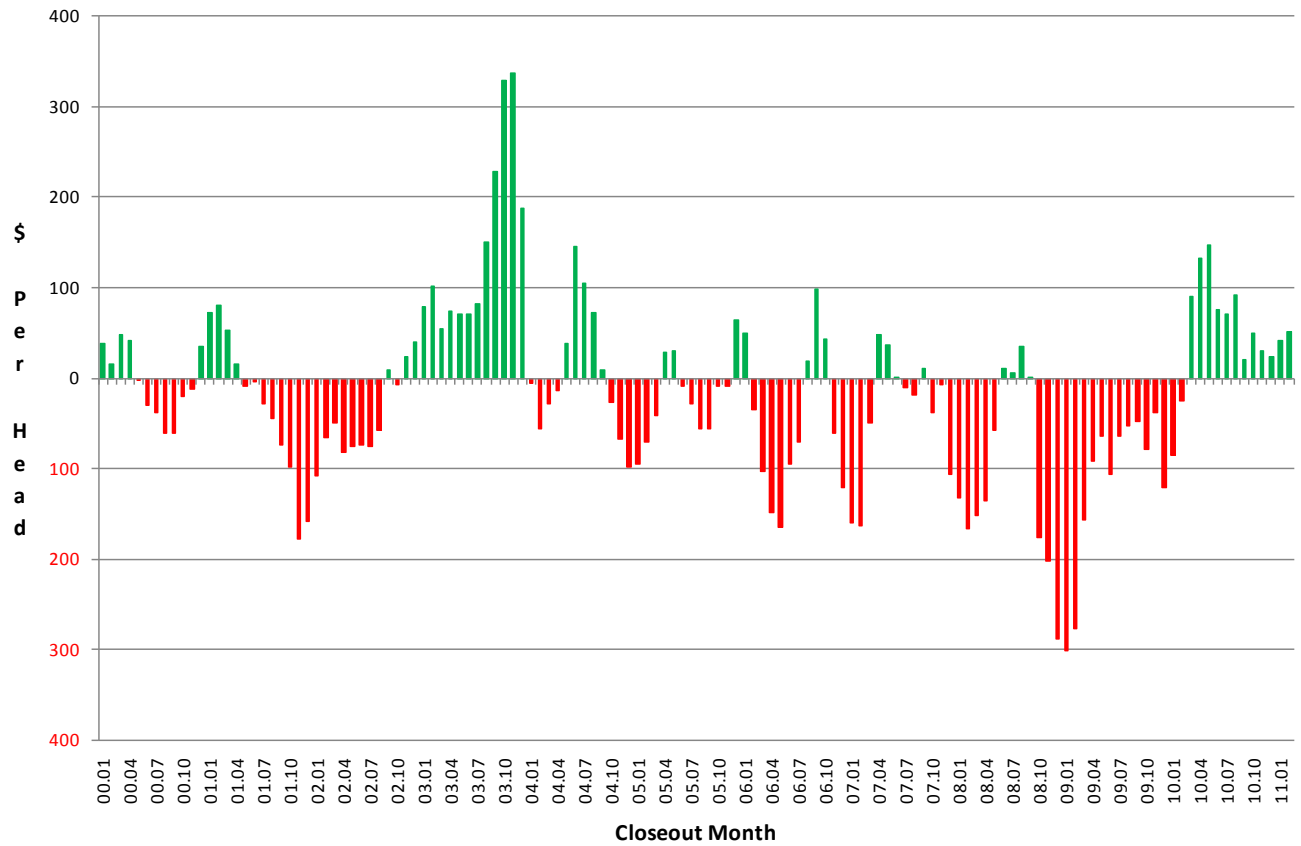
Figure 2. Fed Cattle and Breakeven Prices
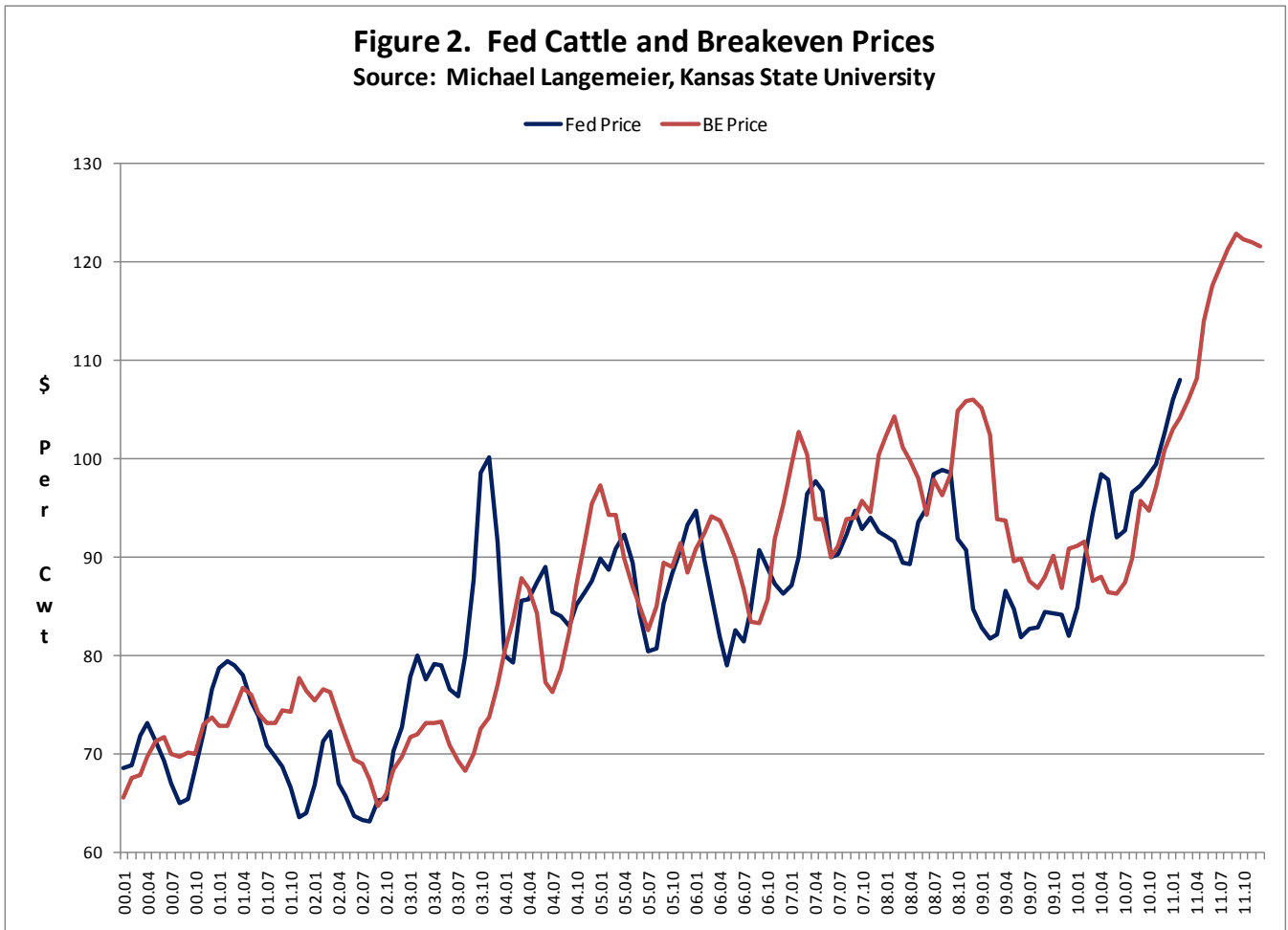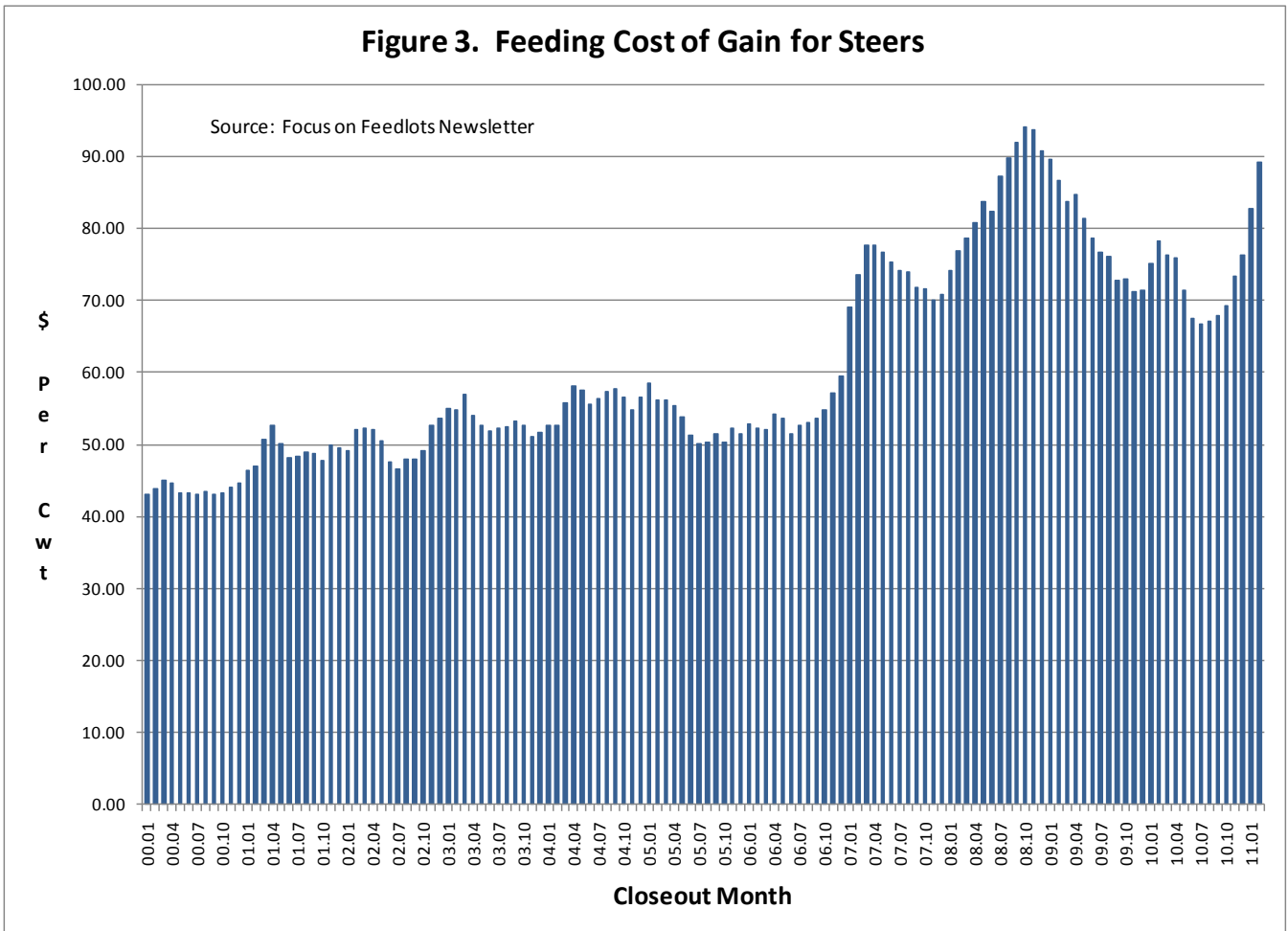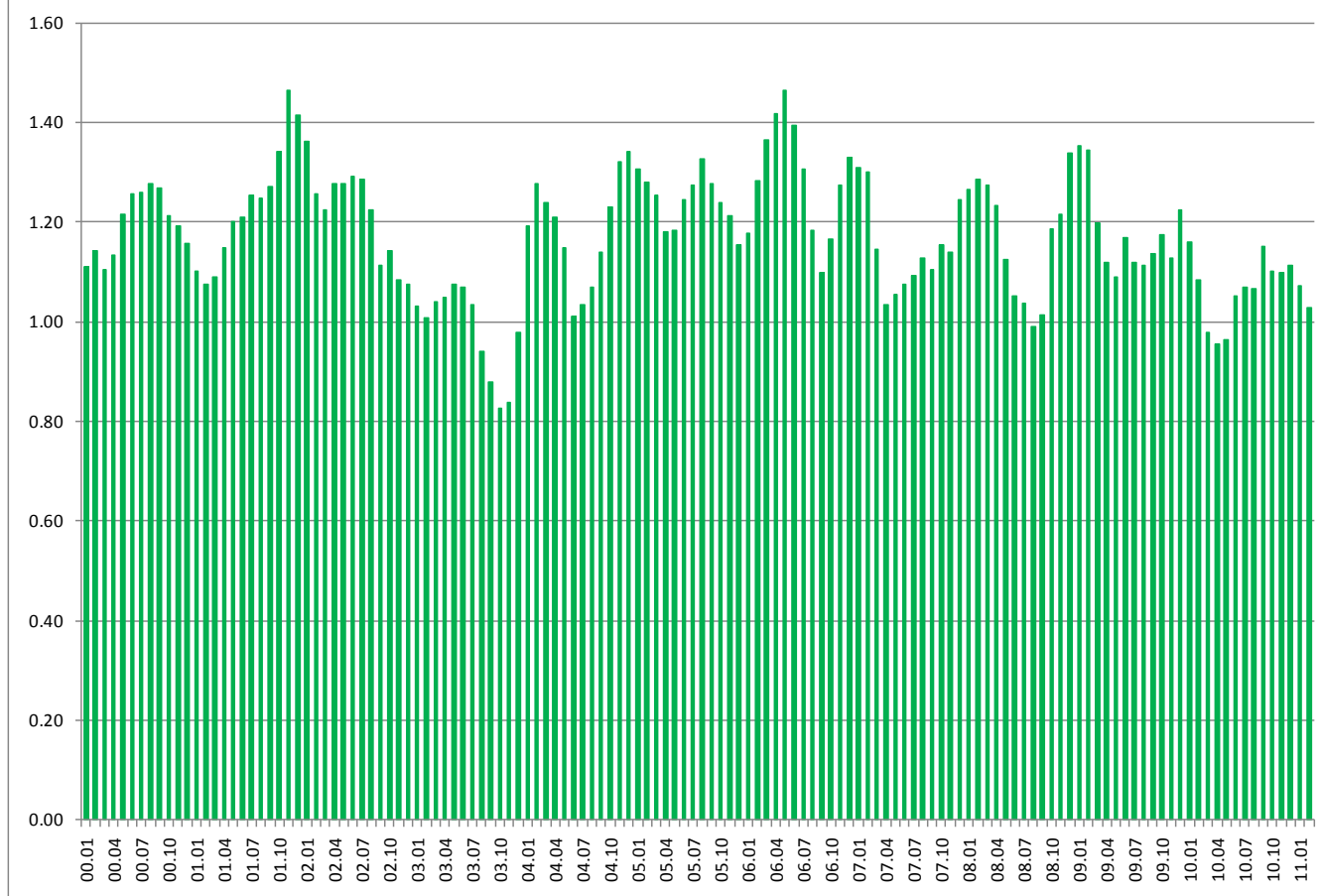Source: Michael Langemeier, Kansas State University

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.