

# Cattle Finishing Net Returns

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This article discusses recent trends in feeding cost of gain and profitability of cattle finishing. 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.

Fig. 1 presents monthly steer finishing net returns from January 2000 to November 2010. It is important to note that net returns were computed using closeout months rather than placement months. Losses in January and February 2010 were approximately \$86 and \$25 per head, respectively. Net return in March 2010 was \$90 per head. Net returns in April, May and June 2010 were \$133, \$148 and \$76 per head, respectively. Net returns in July, August and September were approximately \$71, \$91 and \$20 per head, respectively. For October and November, the two most recent months for which data were available, net return per head was \$49 and \$30, respectively. Estimated net return per head for 2010 is \$52 per head, which is certainly an improvement over the loss per head of \$117 in 2009.

Fig. 2 illustrates fed price and breakeven prices from January 2000 on. The breakeven prices starting in December 2010 are forecasted.

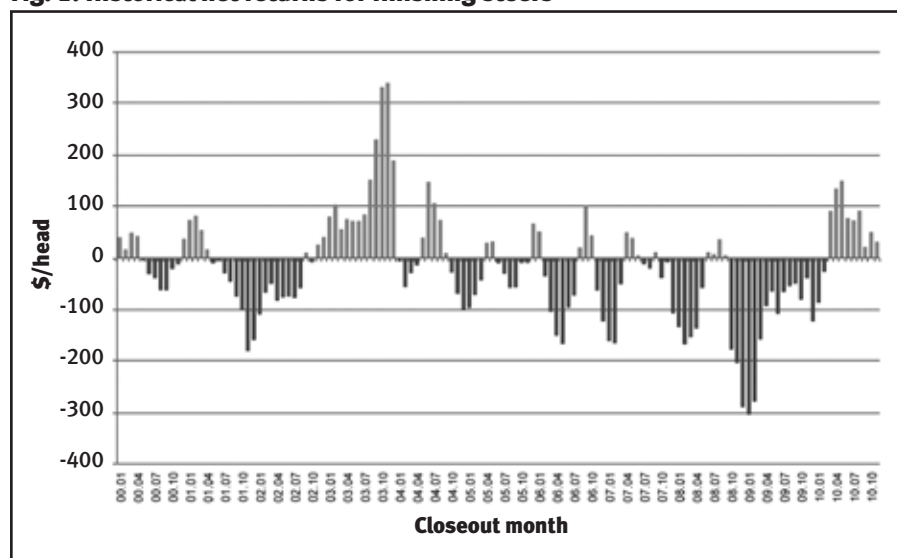
Breakeven price for December closeouts is expected to range from \$100 to \$102. At these breakeven prices, net return per head is expected to range from \$20 to \$40 per head. Due to relatively higher feeder prices, breakeven prices for January through March closeouts (\$102 to \$105) are expected to be considerably higher than those experienced earlier this year. Breakeven prices for the April through June closeouts are projected to range from \$105 to \$108.

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.

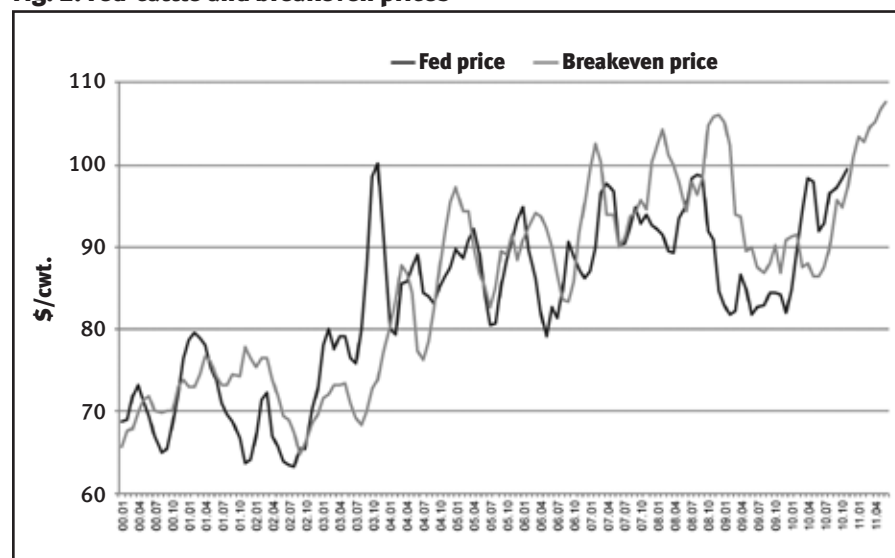
Net returns are significant and negatively correlated with feeding cost of gain ( $r = -0.321$ ). Fig. 3 illustrates monthly feeding cost of gain from January 2000 to November 2010. The relatively high feeding cost of gain in 2008 and 2009 certainly contributed to cattle-finishing losses during these two years. Feeding cost of gain for July and August 2010 closeouts was approximately \$67 per hundredweight (cwt.). Feeding costs of gain for September and October closeouts were approximately \$68 and \$69 per cwt., respectively.

**Fig. 1: Historical net returns for finishing steers**



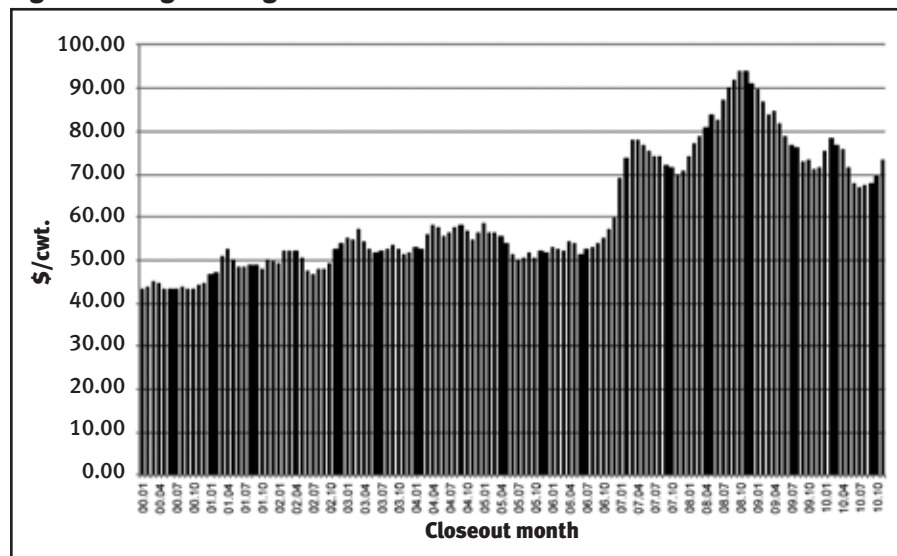
Source: Michael Langemeier, Kansas State University.

**Fig. 2: Fed-cattle and breakeven prices**



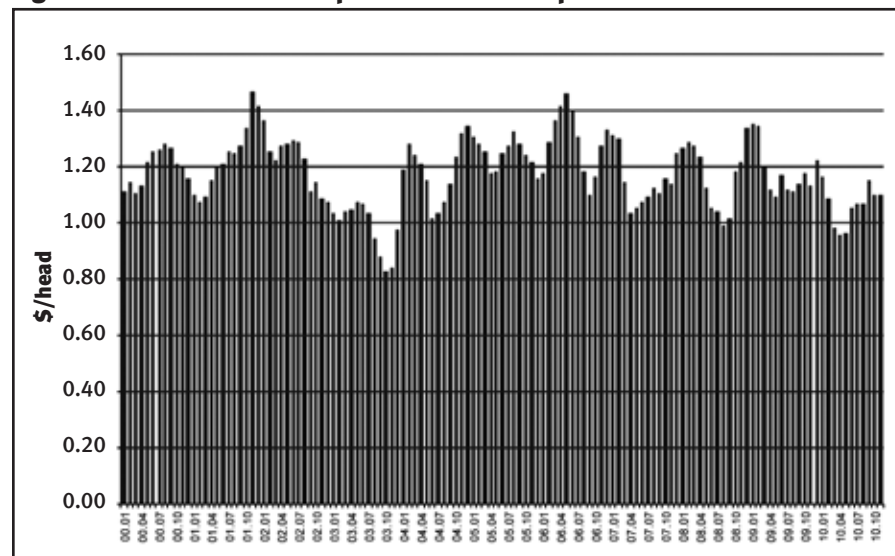
Source: Michael Langemeier, Kansas State University.

**Fig. 3: Feeding cost of gain for steers**



Source: Focus on Feedlots newsletter.

**Fig. 4: Ratio of feeder-cattle prices to fed-cattle prices**



November closeouts were approximately \$73 per cwt. Due to recent spikes in corn prices, feeding cost of gain for current placements is expected to range from \$90 to \$93 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 \$0.33 per cwt.

Net returns are also significant and negatively correlated with the ratio of feeder-cattle price to fed-cattle price ( $r = -0.834$ ). The strong correlation between these variables reveals the importance of this price ratio to net returns. The feeder-cattle to fed-cattle price ratio is illustrated in Fig. 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 extremely large losses from December 2008 to February 2009 were the result of relatively high feeding cost of gain (\$87 to \$91 per cwt.) and relatively high feeder-cattle to fed-cattle price ratios (1.34 to 1.35).

The feeder-cattle to fed-cattle price ratios for March, April and May 2010 were below 1.00. The feeder-cattle to fed-cattle price ratios for June through August closeouts ranged from 1.05 to 1.07. The feeder-cattle to fed-cattle price ratios for September, October and November closeouts ranged from 1.10 to 1.15. The feeder-cattle to fed-cattle price ratio is expected to range from 1.06 to 1.12 for December 2010 through June 2011 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 website ([www.agmanager.info/kfma](http://www.agmanager.info/kfma)).

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