ANALYSIS AND COMMENTS

Livestock Marketing Information Center

State Extension Services in Cooperation with USDA

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BEEF INDUSTRY: Profitable or Not - A Review of 2004 and 2005?

Introduction

The beef/cattle industry has gradually become more complex over time. The industry is comprised of many segments that range from the cow-calf producer to the end consumer at home or in a restaurant. Compared to five-years ago, the U.S. beef/cattle industry has faced a number of challenges and has advanced in many dimensions, including: animal identification, control of e-coli and other pathogens, domestic and foreign market development, in addition to improvements in efficiency across the beef production system.

The segmented nature of the industry combined with inherent biological time lags, economic forces and government policies often cause cost and returns to be quite different depending on which segment is being viewed. When looking ahead, the profitability of the other segments in the production system leads to an understanding of what will change. For example, the profitability status of feeding cattle over a period of months is a key to how aggressively bidding will be for feeder cattle and how placements of animals into feedlots will change.

Background

Profitability in the cattle/beef industry is measured in terms of estimated returns and costs relative to historical data for the major industry segments (i.e. cow-calf, feedlot, processing). This analysis focuses on three estimated data series compiled by the Livestock Marketing Information Center (LMIC), that are indicators of profitability in the cattle/beef complex. The estimated series employed in this analysis are: 1) estimated annual average cow-calf returns; 2) estimated returns to cattle feeders; and 3) estimated packer gross margins (i.e. live to cutout price spread). This discussion will not include a rather important animal production stage in the beef industry, the stocker and backgrounding businesses. Typically, stocker operations take lightweight calves and use graze forage pastures to add weight, while backgrounders perform similar functions using feed grains in confined feeding areas. In the U.S. those operations, especially stocker operations are region specific, for example winter wheat and small grain grazing in the winter months in Oklahoma. Estimates of retailer gross margins can also be made (cutout to retail price spread), but historical sale price data for those firms (e.g. retail prices) are problematic and those relationships will not be discussed here.

As calculated by the LMIC, profitability and margin data sets are input parameters for market analysis. The estimated data sets are not survey based and many parameters are based on standard industry values. For example, weather conditions such as drought are not fully reflected in the annual estimates. Still, on a comparative basis and over time these data sets give insight into relative levels of profitability.

Since the discovery of BSE in North America in 2003, the U.S. cattle/beef industry has been forced to operate under abnormal conditions, which has caused a greater degree of uncertainty in the markets than previous periods. The discovery of BSE impacted all sectors of the U.S. beef/cattle industry, however, the extent of the impact differed among each sector of the industry. In late 2003 and into 2004, the U.S. cow-calf sector was at the onset of the rebuilding phase of the cattle cycle which impacted the domestic cattle supply while at the same time consumer demand strengthened tremendously compared to prior years. By 2005, expansion of the U.S. cowherd was underway which was supportive to feeder and fed cattle prices, however stable to weaker consumer demand at times combined with a variety of additional economic and trade factors had a significant impact on beef packer margins, especially in late 2004 and 2005.

Cow-Calf Returns

Cow-calf returns are difficult to measure as individual operations vary greatly in terms of cowherd size, forage environment, management strategies, herd genetics, and marketing practices. At the LMIC, annual estimated cow-calf returns are calculated as returns over all cash costs (including pasture rent), the estimated measure does not account for indirect production costs. Cow-calf returns are estimated on a per cow basis and represent a typical spring calving production system in the Southern Plains.

Annual cow-calf returns reflect the cyclical nature of the U.S. cowherd inventory. Cow-calf returns typically improve during the early phase of cowherd rebuilding as tight feeder calf supplies support higher feeder calf prices. However, cow-calf returns decline as prices weaken in response to larger cattle supplies, setting the stage for the liquidation phase of the cattle cycle. For example, in 1991, the estimated return to cow-calf producers was $78.29 per head. Following that year, returns began to decline as the industry entered an expansion phase. In 1996, the U.S. cattle inventory peaked and cow-calf producers realized a cyclical low return of a negative $89.55 per cow. That was the biggest estimated loss for cow-calf producers since the LMIC series began in 1976.

In 2004, cow-calf producers experienced the most profitable year in three decades due to a combination of market supply and demand factors. Since 1996, the number of cattle in the U.S. has declined until 2005. Thus, prior to the discovery of BSE in North America in 2003, the domestic supply of feeder cattle available was tighter than in earlier periods and calf prices were already fairly strong. The closure of the U.S. and Canadian border further tightened the supply of feeder cattle pushing feeder, fed, and cull cow prices to record levels in 2004. In addition, during 2004, it appeared the U.S. cattle industry was on the onset of a potential expansion phase as evidenced by a decline in the number of heifers available for slaughter.

Tighter supply conditions combined with robust domestic demand for beef pushed cattle prices to record levels in 2004. The annual average return for cow-calf producers in 2004 was estimated at $148.05 per head, surging above all earlier estimates. On average, cow-calf producers gained a near $63 per head more than the estimated return of $85.51 per head in 2003 and an additional $141 per head above 2002's.

In 2005, cow-calf returns were just slightly below the record returns of 2004. The modest yearly decline was mostly due to high fuel and utilities costs as feeder cattle prices were once again above a year earlier. For 2005, the annual estimated cow-calf return was $139.11 per head, a decline of only $7.83 per h, in response to larger cattle and beef supplies, lower feeder and fed cattle prices, and continued year-to-year increases in fuel and energy costs. Still, by historical standards 2006 will be good for most U.S. cow-calf producers.

Feedlot Returns

Annual returns to feedlots, unlike cow-calf returns do no exhibit much of a cyclical pattern and vary substantially from year to year. Given the nature of the cattle/beef industry, feedlot operators are impacted by supply and demand conditions in the cow-calf/backgrounder (feeder

cattle prices) and the beef packing (wholesale beef prices) stages of the production chain. At the same time, cattle feeding returns are influenced by the supply of slaughter cattle and currentness of this supply relative to wholesale beef demand. In addition, market factors in the feedstuffs (i.e. corn, hay) markets impact costs and thus profitability at this production stage.

Cattle feeding returns were significantly lower in 2004 compared to 2003's when feeding returns reached an all time annual record return of $102.39 per steer. Although, slaughter cattle prices in 2004 were well above a year ago, another year-to-year record in calf prices forced annual returns to cattle feeders into the red. Annual feedlot returns based on feeding a 725-pound steer in the Southern Plains region of the U.S. was a negative $45.37 per head in 2004, down $57 per head from the prior year. Looking back to prior years, there have only been four other times when cattle feeders have lost more money than in 2004: 2002, 1994, 1991, and 1998. The largest loss incurred by cattle feeders was in 1998 at a negative $70.09 per head.

At the beginning of 2005, cattle feeding returns were in the red but moved back into the black for a short time during the spring months before returning to the red until late in the year. For 2005, the average loss to cattle feeders was $28.31 per head. Many of the same factors that impacted feeding returns in 2004 continued to hamper returns in 2005, particularly another year of record high feeder cattle prices. On a monthly basis, positive cattle feeding returns were posted in March, April, and May, but then tumbled to a loss of over $100 per head in August. The last time cattle feeding losses were larger was in November of 2004, at just under $126 per head. Strong fed cattle prices in late 2005 pushed cattle feeding returns back into the black in November of 2005 but still, for the calendar year, cattle feeding returns were in the red.

Gross Packer Margins

Beef packer/processor profits are difficult to measure due to a lack of information available on operating and other costs incurred by beef processing plants. Despite the lack of cost data, the packer gross margin can be estimated utilizing the available price data for slaughter cattle and wholesale beef values. The estimated gross packer margin provides general insight into beef packer profitability.

The difference between the purchase price of a slaughter steer and the wholesale beef value (Choice boxed beef cutout) plus the total value of the non-meat items from the steer (byproduct value) is defined as the live to cutout price spread or commonly referred to in the beef industry as the estimated packer gross margin. The estimated packer margin does not represent beef packer profitability since processing plant operating and other costs are not included in the spread calculation.

The live to cutout price spread is highly seasonal. In an average year, the live to cutout spread is smallest in the first quarter and widens in the second quarter as wholesale beef values typically improve in the spring and summer months as demand for higher valued beef products strengthens for the grilling season and market ready slaughter steer and heifer supplies are largest. The live to cutout spread modestly tapers during the remainder of the year.

In 2004, the live to cutout spread reached at all time record high in April in response to a combination of market demand and supply factors. Consumer beef demand was very strong in 2004 compared to prior years, while beef supplies were smaller due to less slaughter cattle available and lighter cattle weights. In addition, the beef and cattle complex was operating under volatile conditions following the discovery of BSE in North American in 2003.

As a result of relatively high wholesale beef prices and strong beef demand, estimated gross packer margins were extremely positive during the first half of 2004, 21 percent above the prior five-year average for the respective period. In April of that year, the estimated gross packer margin (live to cutout spread) peaked in mid-April at $258.48 per head, however packer margins weakened for the remainder of 2004. In October and November, the estimated packer margin fell well below a $100 per head, the first time since March 1999, as packer margins were squeezed by relatively high slaughter cattle prices and lackluster wholesale beef prices. In fact,

in late 2004 those gross margins indicated that packer profitability was negative, which prompted many beef processing plants to operate under reduced schedules.

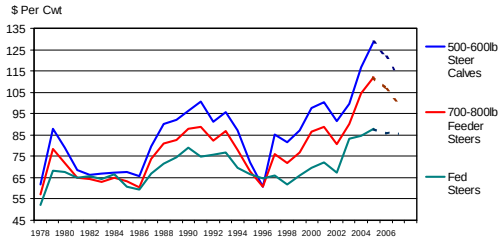
Gross packer margins continued to be squeezed in 2005, as the cattle that were processed lost money for the beef packer. The reestablishment of imports of Canadian cattle did not provide much relief for packer returns as many in the industry had expected. The live to cutout spread widened during the first quarter and early part of the second quarter, peaking in May at $188 per head. However, the live to cutout spread seasonally narrowed thereafter, hitting $113.18 per head in July, down $19 per head or 15 percent from 2004. During the latter half of 2005, packer margins fluctuated in the $110 to $120 per head range before ramping up in December to $143 per head, well above 2004's. For calendar year 2005, packer margins averaged about 2 percent above 2004's. Nonetheless, despite the levels reached by beef packers at the end of 2005, packer costs per head were mostly higher than their margin, thus packers were in the red for much of 2005, especially in the second half of the year. As in late 2004, beef packers began to operate under reduced processing schedules at times in late 2005.

Conclusions

Today's beef/cattle industry is complex and is comprised of many segments that range from the cow-calf producer to the end consumer. Profitability in the cattle/beef industry is measured in terms of estimated returns and margins relative to historical data for the major industry segments (i.e. cow-calf, feedlot, processing). This analysis focused on estimated data series compiled by the LMIC that are representative of the costs and returns in the cow-calf, cattle feeding, and beef packing sectors.

As evidenced in this analysis and comments, the cow-calf, cattle feeding, and beef packing industries each faired differently in 2004 and 2005. A variety of factors such as consumer demand, international trade, and economic conditions combined with normal seasonal patterns greatly influenced the profitability (or lack thereof) in each sector over the last two years and will continue to in the years ahead. Because, each sector of the cattle and beef industry is interconnected, often profitability in one sector comes at the expense of another. In 2004 and 2005, overall the cow calf industry was profitable while the feeding and packing sectors struggled, despite short periods of positive returns during the two-year period. A long-held saying is that seldom does everyone make money in the cattle/beef industry, seems to hold. The anomaly was 2003, which came about due to the cyclical state of the industry and some unusual forces related to international trade caused by the discovery of BSE in Canada in May of that year.

ANNUAL AVERAGE CATTLE PRICES



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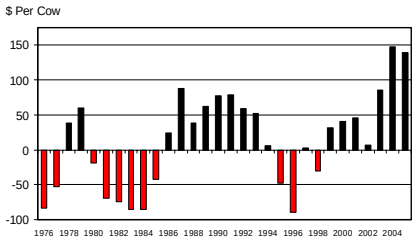
02/27/06

ESTIMATED AVERAGE COW CALF RETURNS

Returns Over Cash Cost (Includes Pasture Rent), Annual



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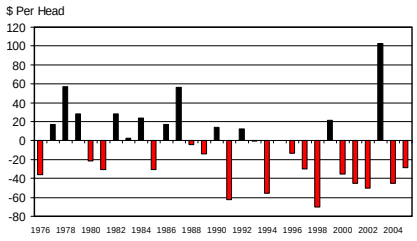
AVERAGE RETURNS TO CATTLE FEEDERS

Feeding 725 Lb. Steers, S. Plains, Annual



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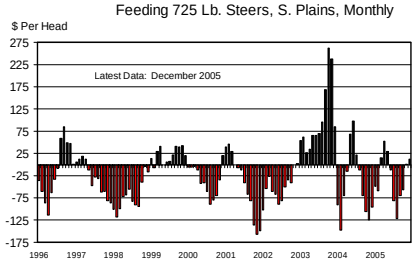
AVERAGE RETURNS TO CATTLE FEEDERS

Feeding 725 Lb. Steers, S. Plains, Monthly



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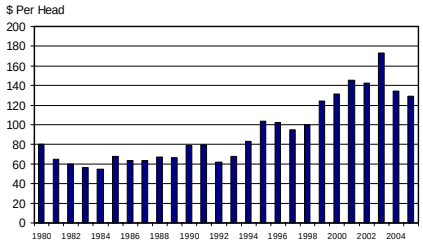
LIVE TO CUTOUT BEEF PRICE SPREAD

Annual



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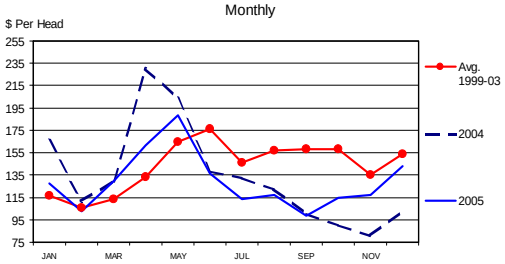
LIVE TO CUTOUT BEEF PRICE SPREAD

Monthly



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C-P-02
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