The Beef Enterprise: Aligning the Vision

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Introduction

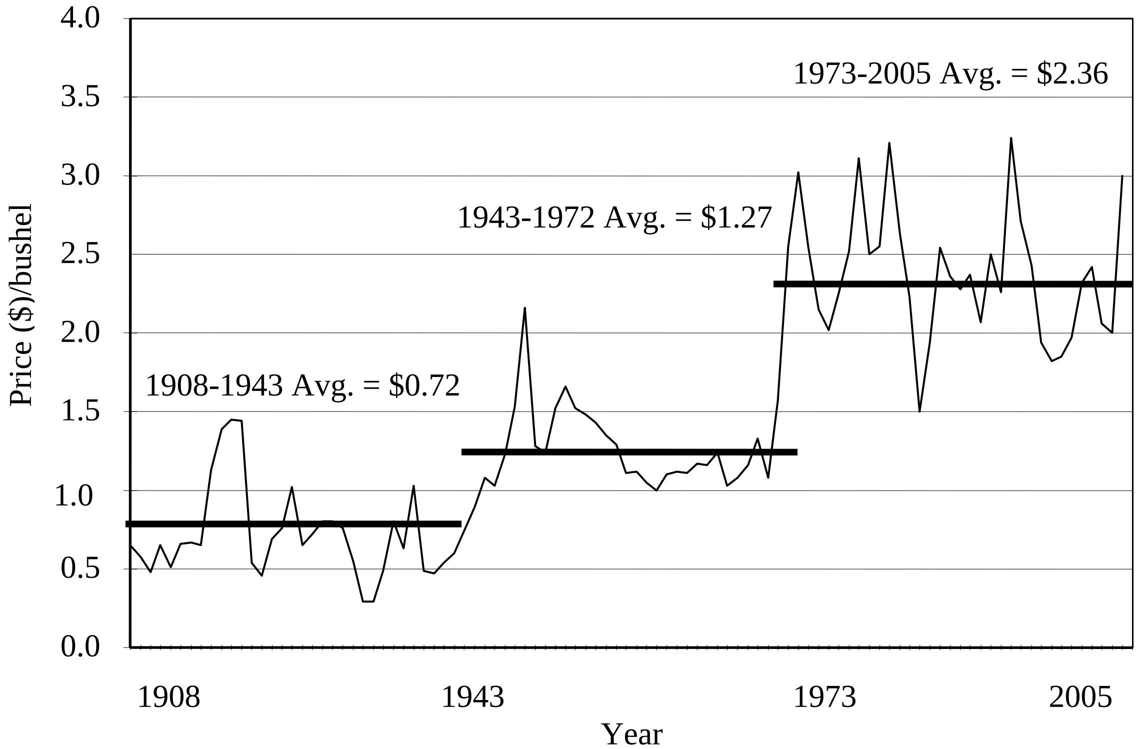
"It's not the strongest of the species that survives.
It's not the most intelligent. It's the one most responsive to change."
Charles Darwin

As the 21st Century emerges, questions abound concerning the beef enterprise. It appears that a relatively stable period in beef production has come to a screeching halt. Fed cattle prices in 2003 reached levels that were to most people involved in the industry, unimaginable. A near record corn crop in 2006 made a price rally during harvest to levels previously seen only in short crop years, but never during harvest. The twentieth century ended with consumer demand for beef reversing a twenty year decline. This added excitement and energy to an industry redefining itself with marketing and production alliances developed to increase the transparency of the marketplace. Recent increases in crude oil prices have driven transportation costs up and widened the basis for all classes of cattle. The emerging ethanol industry is redefining the price and availability of the feedstuffs that had become the backbone of the current beef production system. The effect of feeding cattle the co-products of this new giant is under debate as concerns arise over the changing profile of the carcass characteristics of fed cattle. The impact of these mega-trends at the industry level is debatable. The impact on these mega-trends on the individual business represented by thousands of various types of farms, ranches, and feedlots is unimaginable. However, in spite of uncertainty, volatility and change brings with them opportunity. The challenge for all participants in the beef industry is to have or to create a vision that successfully copes with the dynamic nature of the 21st Century beef enterprise.

A Time for New Assumptions

Conventional wisdom assumes that everything in the future is inherently uncertain and that everything in the past is a good predictor of the future. While they are comforting, these two assumptions are not always true. Trend analysis, although extremely useful, should only be applied when basic assumptions concerning key relationships can be made with relative certainty. The price of corn over the last nearly 100 years had three relatively stable price plateaus (Figure 1). The first was from 1908 to 1942. The average nominal price for corn during this period was $0.72. The nominal price of corn from 1943-1972 was $1.27. During the 33 year period from 1973 to 2005 the price of corn averaged $2.36. While drought, policy, and global events like war created short term price variance during these respective periods, the price of corn was relatively stable and predictable. One of the main reasons the industrialized animal food industry evolved during the last half of the twentieth century was the relative price stability in its key ingredient, corn. But when basic relationships change, as they have recently in the corn market with the exploding demand in the industrial usage for corn, trends change. The result is that the past may no longer be a good predictor of the future.

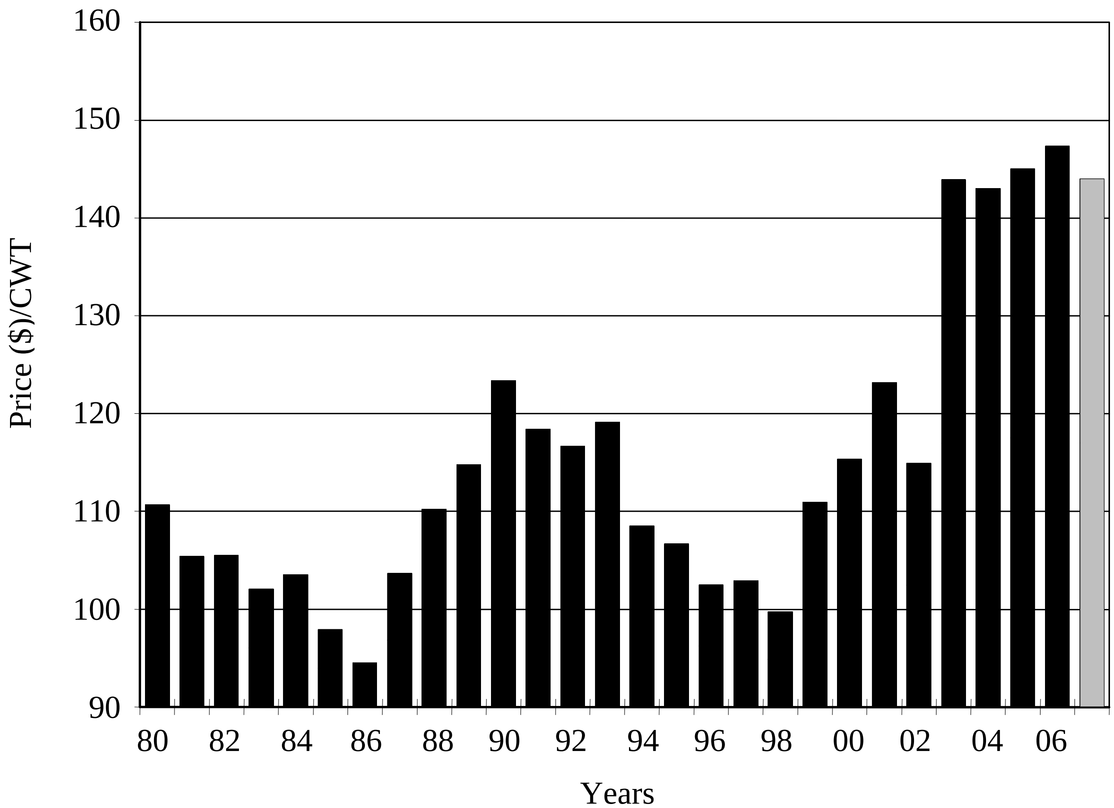
Figure 1. U.S. average annual corn price. USDA- NASS, 2006



One of the difficult challenges the cattle industry faces is that multiple and critical price relationships have changed and are in the process of re-establishing themselves, all within a relatively short period of time. These would include: consumer demand, fed cattle prices, transportation costs based on crude oil prices, interest rates, and feed grains. Is the future inherently uncertain? Or, are there certain scenarios that are predictable enough to provide insight into the future?

Consumer Demand for Beef: While the cattle industry continues to concern itself with variations in weather and perhaps climate change, variations and change in consumer demand are at least as dramatic. In the last 15 years the annual carcass cutout price for beef has averaged approximately $116.00, but has ranged from approximately $95/cwt in 1998 to approximately $142.50 in 2006 (Figure 2). Another way to think of it is that in 8 short years, the average carcass cutout value has increased by approximately 50%. When put in context of increasing supplies, disease concerns, and issues of access to foreign markets, this bullish demand is even more remarkable. Will it continue? All other things being equal, and if industry participants remain consumer focused, the summation of many experts is yes, it will probably continue. Will there be changes? Yes, there will be changes in consumer demand. For example, “natural” beef is not well defined, but is no longer a fad. It is becoming an expectation of a large and growing segment of consumers. Industry participants continue to debate its merit in terms of human health and associated increased costs of production. At the same time, consumers in South Texas grocery stores willingly and regularly pay 25% more for an eye of the round roast if it has a poorly defined label containing the word “natural.” According to Rick Husted, Chief Operating Officer for NCBA, consumer expectations for convenience will continue to increase (Husted, 2006). Husted also cautions that price compared to alternative proteins continues to be a concern for consumers when considering a beef purchase.

Figure 2. Annual average carcass cutout value. USDA-NASS, 2006



Prices of Fed Cattle: In their “Outlook and Strategies, 2007,” CATTLEFAX estimates that in 2007, fed cattle will average $84.00/cwt plus or minus $10.00/cwt (CATTLEFAX, 2007). While consumer demand is a complex relationship between supply and price of beef, supplies and price of competing meats, exports, to some degree imports, eating and buying trends, and general costs of living, most of these issues are favorable to beef and look to remain so. Employment levels are very high, purchasing power is good, cost of living is stable, export markets are growing again, and the middle class around the world, especially in China, is growing. While the housing market in the United States is lower, this is a two sided coin, as it allows for easier access to first time home buyers and lower levels of investment for all buyers, and has helped to soften pressure on interest rates. Intense competition at the retail level led by Walmart, but spilling over to the auto sector, is also good for the consumer. Is it the best of times or the worst of times? For most Americans, these are very good times.

Costs of Transportation: Fifteen years ago, Brian Jorgensen of Ideal South Dakota, son of Martin Jorgenson, predicated that in the future, "agriculture in America would flourish along corridors of water and transportation" (Brain Jorgenson, 1991, Jorgensen Ranch, Ideal, South Dakota, Personal Communication). How wise were his words? While crude oil prices in 2006 did not reach the equivalent adjusted prices of the early 1980s, they certainly tested the high side of demand. Exploration has been invigorated in both oil and gas but also alternatives. This is another commodity that has probably settled into a new trading range plateau of $55.00-$65.00 per barrel, but could again test $80.00 per barrel given certain political or weather related events. Is $100.00/per barrel oil likely? No, but it is certainly possible.

As a result, the trading basis for cattle that are distant to their markets will be under continuing pressure to widen. Shifts in actual production of classes of cattle that suffer a wide negative basis due to transportation costs will also occur. In 1970, 17% of the fed cattle in the United States were in Iowa compared to 7% in 2006 (National Agricultural Statistics Service, 2006). This dramatic change occurred because of regional advantages in the costs of production and the following realignment of other production sectors. Realignment of the core production of beef has been and will always be driven by economics, not sentimentality. Cow-calf production on both coasts and the intermountain west will be at a disadvantage. The maintenance and improvement of rural roads and interstates highways will be critical to cattlemen from remote areas.

Interest Rates: Following 26 consecutive monthly upward adjustments in interest rates by the Federal Reserve, Federal Reserve average funds rates have been unchanged for the last 6 months (Federal Reserve, 2006). While the cost of borrowed money for operations of a beef enterprise or business has risen over the last two years, interest rates remain relatively stable and are expected to do so.

Feed Grains: A poignant pictorial analogy for the dramatic entrance of the ethanol industry into the Unites States grain market might be of a freight train barreling down the tracks at full speed. As the train approaches, a crew is furiously building track a few feet in front of the locomotive. What is also of concern to the cattle industry in this mental picture is the crew in back of the train furiously pulling up the track as soon as the train passes. The point of the story is that ethanol is entering the grain market at a furious pace and the impact of that entry on many segments of agriculture and the economy are not at all clear. One thing to keep in mind is that the short-term and long-term affects could be dramatically different.

What is known?

- The ethanol industry's demand for feed grain will grow almost exponentially over the next 5 years, increasing from less than 5% of supplies a few short years ago to perhaps 75-80% in 2009 if the United States produces an 11-12 billion bushel crop. Corn industry production goals are 15 billion bushels by 2015. The achievement of the goals would require almost a perfect alignment of weather variables, land availability, increases in yield potential, the availability of other limiting inputs like fertilizer, water, and a substantial investment in new and improved infrastructure.
- Acreages planted for corn production will increase dramatically as the marketplace re-prices relationships with other grains and conservation. The market prices of soybeans and wheat and the rental rates for conservation acres can be expected to rise in response.
- Corn yield per acre will continue to rise from the 2006 record levels of just over 150 bushels per acre. Increases in yield will be coupled with increases in demand for fertilizer and other inputs.
- Building new and improving existing infrastructure in terms of grain storage, transportation, and handling, but also in areas like planting, harvesting and irrigation will be necessary to meet the demands of increasing supply and changing demand.
- Co-products will be widely available for the short-term but will change in content as the ethanol industry removes the oil for bio-diesel and ultimately also digests the cellulosic fractions of the distiller's grain byproducts for ethanol.
- Ethanol from cellulosic digestion and distillation will also dramatically alter pasture and forage price and availability.
- Demand for corn from the food animal industry will not go away. The swine and poultry industry will be impacted differently than the cattle industry. To be competitive, feeding periods will be shortened and pasture use extended.
- The $0.51/gallon tax credit for ethanol equates to $1.275/bushel of corn. The politics behind the subsidy are powerful and include agricultural as well as environmental organizations.

The cumulative impact of these scenarios on the price of corn is unknown. CATTLEFAX is suggesting $3.50 per bushel in 2007 with the possibility of wide variations (CATTLEFAX, 2006). Over the next few years, is $4.00, $5.00 or even $7.00 per bushel corn out of the question? They are certainly not (Smith, 2006). The old stand by rule is that a 1% increase in the demand for or the supply of a commodity results in a 5- 8% increase in price. If that holds true, the price of feed grains could be higher than most anticipate.

Connecting the Dots

"When one tugs at a single thing in nature, he finds it attached to the rest of the world."

John Muir

Ultimately, the changes in consumer demand, fed cattle prices, transportation costs, interest rates, and feed grains will collectively determine the retail price of beef. The new price equilibrium achieved amongst and between these variables is difficult if not impossible to predict. It will ultimately impact the inventory of cattle and the profitability of all segments of the industry. It is important to acknowledge that the impact of these changes, especially the ethanol industry, is not benign. At a macroeconomic or industry level, changes can appear cold and indifferent but ultimately efficient. However, while carbon budgets and energy independence have been discussed and debated concerning ethanol production, few speak to possible long-term impacts on soil erosion, food prices, water quality, the acceleration of the increase in large scale highly efficient grain farms, or the ethics of using food for fuel. At the firm or microeconomic level, people and their businesses related to beef production will be permanently impacted. All that is left is the discovery of how.

Aligning the Vision

"Why if people didn't try something new, there'd be hardly no progress at all!"
Cat Ballou, 1965

For ranchers and cattlemen to successfully maneuver the changing landscape of agriculture in America in the 21st century, it will take creativity, hard work, and gumption. Creating an aligned vision for a segmented industry will too. With that said, and considering the scenarios mentioned above, a cohesive aligned vision for the beef enterprise could be:

"*…a consumer focused beef production chain whose goal is to produce tender, flavorful, safe, nutritious beef of known origin that is affordable to the consumer and profitable for all segments of the beef industry. During the production phases, time on grass and forages will be optimized, and time fed grain concentrates will be limited to that necessary to meet consumer expectations of flavor. Cost control will be a key leverage point for producers in obtaining reasonable profits.*"

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