

# Corn Prices and Cattle Feeding – Where to From Here?

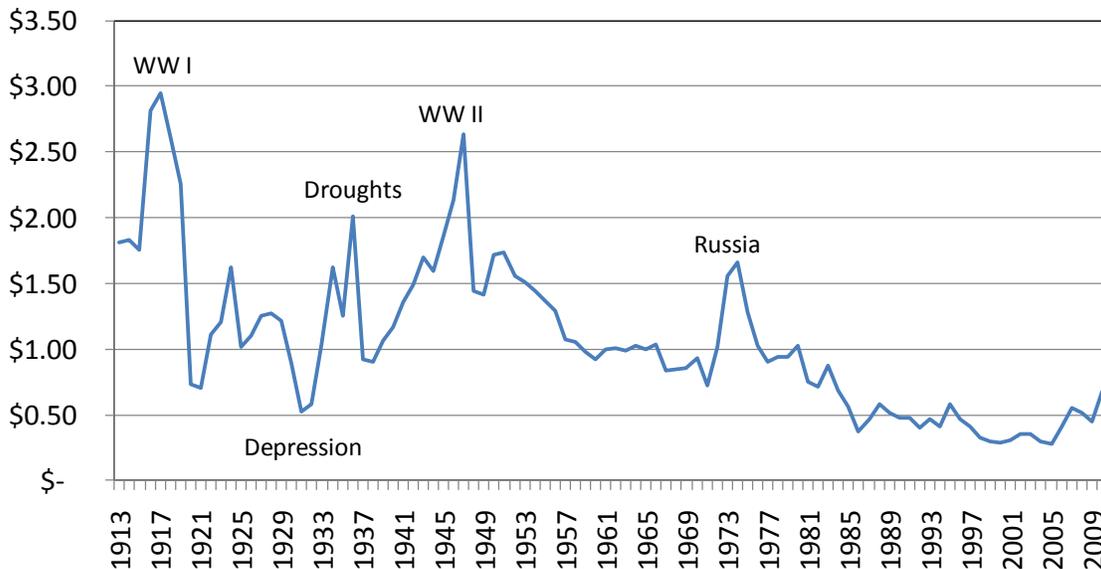
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Feeding grain to cattle is a meat production system that became mainstream only after hybrid corn boosted yields, and inflation-corrected corn prices declined. Even now, cattle feeding remains a significant production system in only a few countries with abundant grain supplies, and those countries are all significant grain exporters.

Now, in 2011, we have seen corn prices reach a new plateau that is likely going to be record-high for an annual average. Among all U.S. meat producing species, cattle feeding has the highest portion of corn (or corn by-products) in the diet. Fed cattle are also the least efficient converters of corn into meat. Cattle feeders therefore are justified to be concerned about the long term competitive position of fed cattle versus poultry and pigs.

**A Long Term Perspective:** To put current corn prices in perspective, using the Consumer Price Index, I have charted the inflation-corrected value of 6 pounds of corn (dry matter basis). The result is approximately the cost of corn for 1 pound of live gain at a 6:1 feed conversion for a high concentrate ration. The corn price used is the U.S. average farm price, so no transportation costs are included. The calculated cost is understated for cattle feeders outside the Corn Belt, but the trend is what really matters.

Inflation Corrected (2010 Dollars) Value of 6 Pounds of Corn  
Corn Crops of 1913-2010 (2010 Price is Forecast), Annual Average



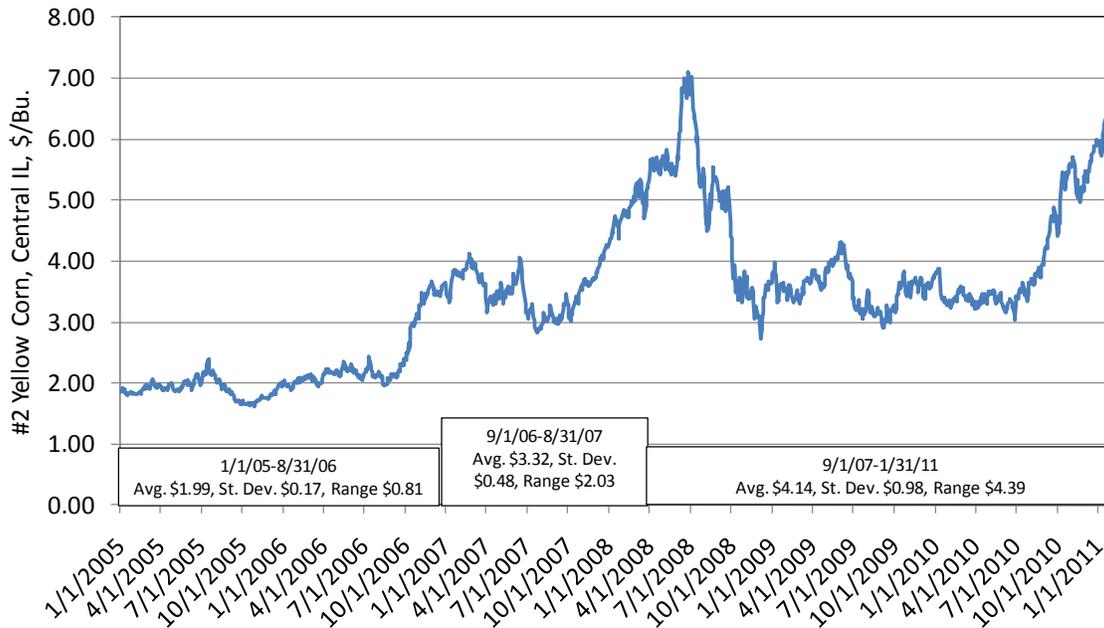
The chart shows that wars, the Great Depression, and the Russian entry into the U.S. grain market all caused large swings in inflation-corrected corn prices that were much more significant than we have seen in 2010-2011.

In fact, the U.S. cattle feeding business was built in the 1950's and 60's on inflation-corrected feed costs that were even higher than today's. When you look at current corn costs in this long term perspective, well things don't look **quite** so bad. My conclusion is that U.S. cattle feeding will survive at these higher feed costs, even if corn prices don't come down significantly from current levels. After all, broiler, hog and turkey producers are also experiencing higher feed costs, and are under significant cost/price pressures too.

But, it's not just higher feed costs, those costs have also become much more volatile. Over the past 3 years grain price volatility (as measured by both standard deviation and range) has been about 5 times higher than from 2000 to 2006 (see chart). Higher volatility makes hedging both more desirable, but also riskier. A long hedge, or cash contract, placed on corn just as the bottom drops out of the market could put you out of business.

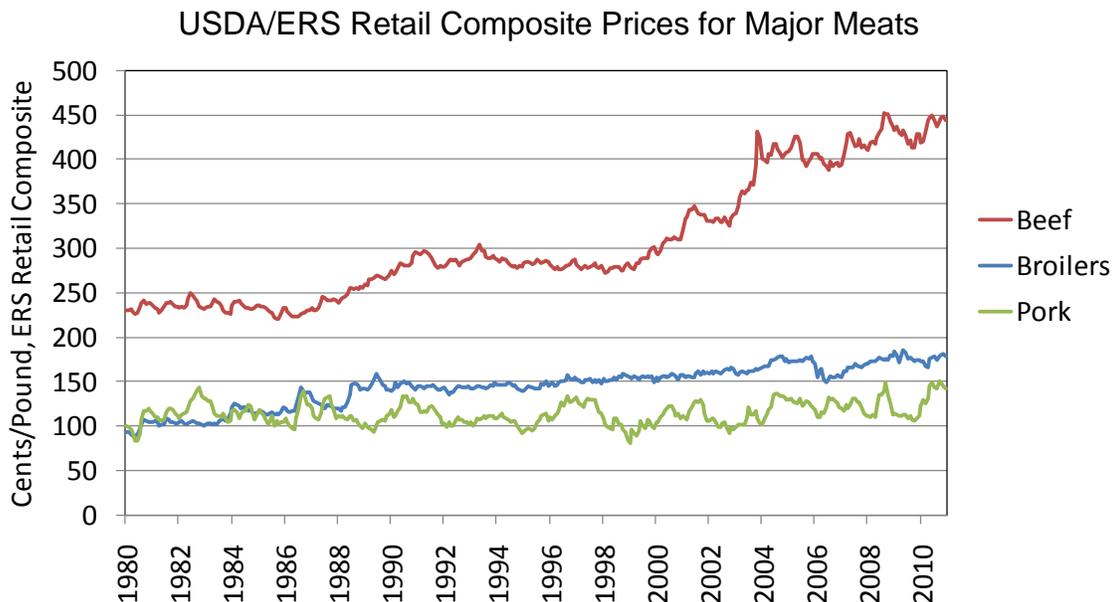
Feed cost volatility is likely to be a continuing theme. Increased corn use for ethanol and growing global food demand will continue to keep our grain stocks tight for at least the next two years, and likely longer. Tight stocks make grain prices very sensitive to weather and market developments.

Daily Central Illinois Corn Prices and Volatility  
January, 2005 Through January, 2011



**So, What Else Do I Need to Worry About?** As shown in the retail price chart, beef is by far our most expensive meat at the retail level. Higher feed costs will likely drive even more of a price wedge between retail beef and competing meats. Fed beef will likely lose some market share as a result of higher feed costs, but perhaps not much volume.

Share loss is more likely to come from increasing broiler and/or pork volume than declining fed beef production. USDA's latest long range forecast from 2012 out to 2020 shows total poultry consumption passing total red meat in 2018, but beef production actually growing for most of that period.



**So, What's a Cattle Feeder's Response to This Business Environment?** First and foremost, fed beef can justify its relatively high retail price **ONLY** because of its taste and eating quality. Cattle feeders should not do anything to compromise that unique market differential. To do so would damage beef's basic value proposition that is a source of significant product differentiation over chicken and pork.

Part of the response has to lie in the long term efforts of the industry to increase feed efficiency. We have made great strides in getting more beef out of every pound of feed. Breeding, feed formulation, feed additives, implants, parasite control, feedlot management, placement weights and health programs have all played key roles. There is still major progress to be made on that front.

Higher feed costs have increased the value of every improvement in feed conversion. Compared to 2005, a 1 point improvement in conversion is currently worth about 3 times as much on the bottom line. According to Iowa State's yearling steer feeding budget, in 2005 feed cost was about \$135 per head for 500 pounds of gain. A 1 point improvement in feed efficiency was worth \$1.35 at

that time. Using current ingredient prices for Iowa State's assumed ration, feed costs today are about \$425 per head. A 1 point improvement in feed efficiency is currently worth about \$4.25 per head, 3.15 times as much as 2005!

Also, in 2005 every pound of extra live gain that you could get from your feed was worth about \$0.87. Today, the value of live gain is about \$1.12 per pound, 29% more.

**Bottom Line:** Whatever you can do to fine tune your feeds, animal health programs, implants, management or any other short term adjustment that increases feed efficiency and gain has a much higher value to you than just a few years ago.

Also, more closely than ever before, cattle feeders need to monitor market conditions for both cattle and feed ingredients. For example, the Choice-Select spread tells you how much real value the market is placing on Choice grade quality. A narrow spread may make it unprofitable to feed for a high Choice percentage.

Cattle can convert an incredible range of feedstuffs into high quality beef. This is a unique differential advantage of fed beef over pigs and poultry. The market is telling you to use less corn, and more of other feed ingredients. Distillers' Grains, wet and dry, are abundant, and generally priced under corn. We exported over 9 million tons of DDG's in 2010. Could U.S. cattle feeders have used some of those exports? If you are not using these by-product feeds to their full potential, you need to look at their pricing, and how they can fit into your feeding program. Other alternatives to corn also need to be evaluated, and used if they work in your operation.

Hedging and contracting programs for feeder cattle, feed ingredients, and finished cattle also need to be continuously evaluated. Locking in a positive margin easier said than done, but an opportunity to lock in a profit is worth more in today's high risk environment than it was a few years ago.

**Summary:** Cattle feeders can adjust to higher and more volatile feed costs. We survived in this environment in the 1970's and 80's, and we can do it again. But, changes that would compromise beef quality would be self-defeating.

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