Iowa State University
Extension and Outreach

Iowa Farm Outlook

Department of Economics
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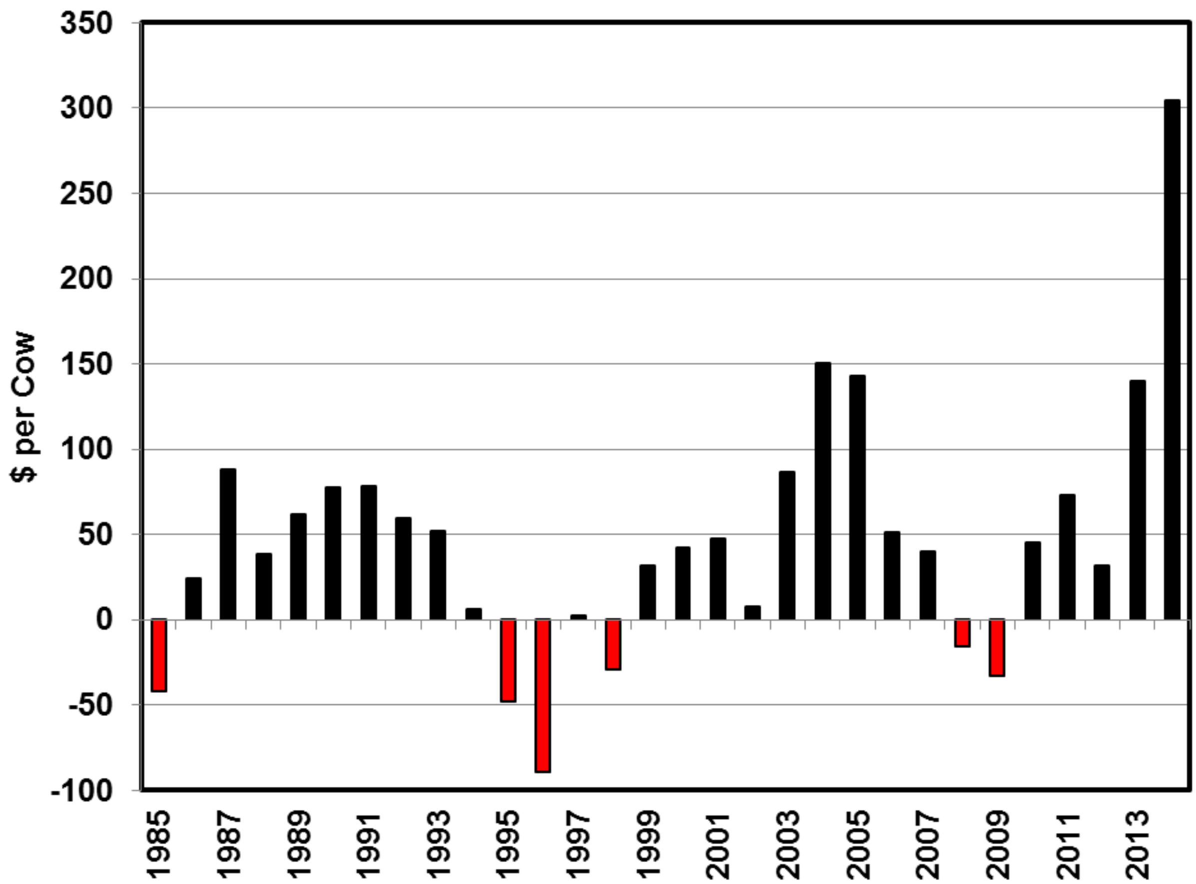
Is Beef Cattle Herd Rebuilding on the Horizon?

Cow-calf producers appear to have a growing incentive for herd expansion with strong profit prospects and improved forage conditions. Though 2013 is likely another year of herd liquidation, improving forward returns may provide the period of herd stabilization (with little or no growth) that often occurs in first year of herd expansion.

The ultimate question becomes, given the uncertainty experienced the last several years, what level of return will be required to encourage producers to begin rebuilding the cowherd? In other words, what level of annual return would motivate producers to assume risk in retaining more heifers and/or investing in additional cows? The Livestock Marketing Information Center (LMIC) estimates cow-calf returns over cash costs (including pasture rent) based on typical production and marketing practices (figure 1). The estimated numbers are designed to serve as a barometer for returns. Forecasts for 2014 suggest returns may set a new record high, exceeding $300 per cow, as the uptrend in calf and cull animal sale prices are expected to out-pace production costs.

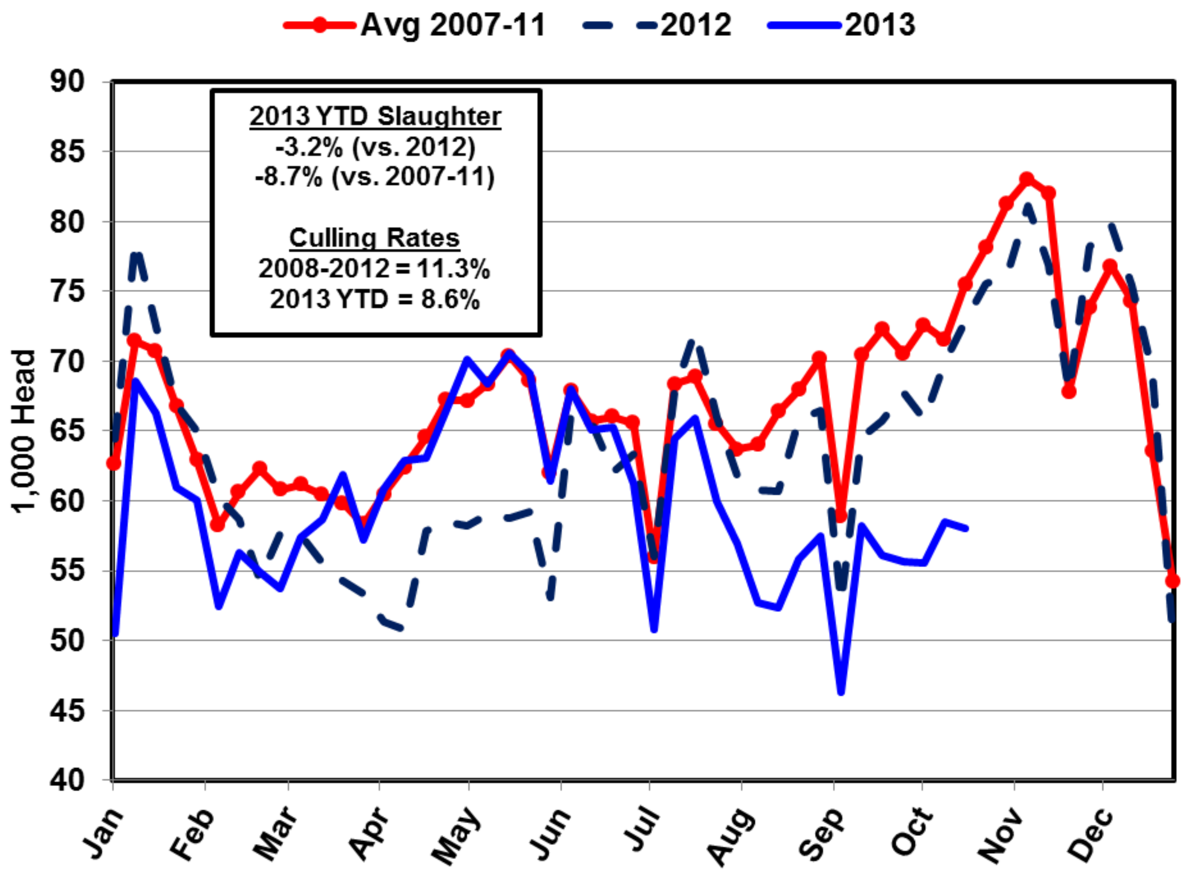
Figure 1. Estimated Cow-Calf Returns, Returns over Cash Costs (Includes Pasture Rent), Annual



Livestock Marketing Information Center, October 29, 2013
Data Source: USDA-AMS & USDA-NASS, Compiled & Analysis by LMIC

Year-to-date beef cow slaughter has been 3.2% below 2012 and 8.7% below the 2007-11 average (figure 2). Beef cow slaughter has basically held steady since September, a time of year in which beef cow slaughter is typically trending upward. Since September beef cow slaughter has been 15.4% below 2012 and 21.0% below the 2007-11 average suggesting that the beef industry is back on track of decreasing cow slaughter, a necessary component of herd expansion. The 2012 beef cow slaughter was 11.0% of the January 1, 2012 beef cow inventory. That made 2012 the fifth consecutive year of double digit beef culling rates. The average annual beef cow culling rate, from 2008 to 2012, was 11.3%. Beef cow culling rates usually drop to under 9% for two to four years during herd expansions. Year-to date the beef cow culling rate has been 8.6% suggesting the industry could be on the verge of beginning herd expansion.

Figure 2. Beef Cow Slaughter, Federally Inspected, Weekly

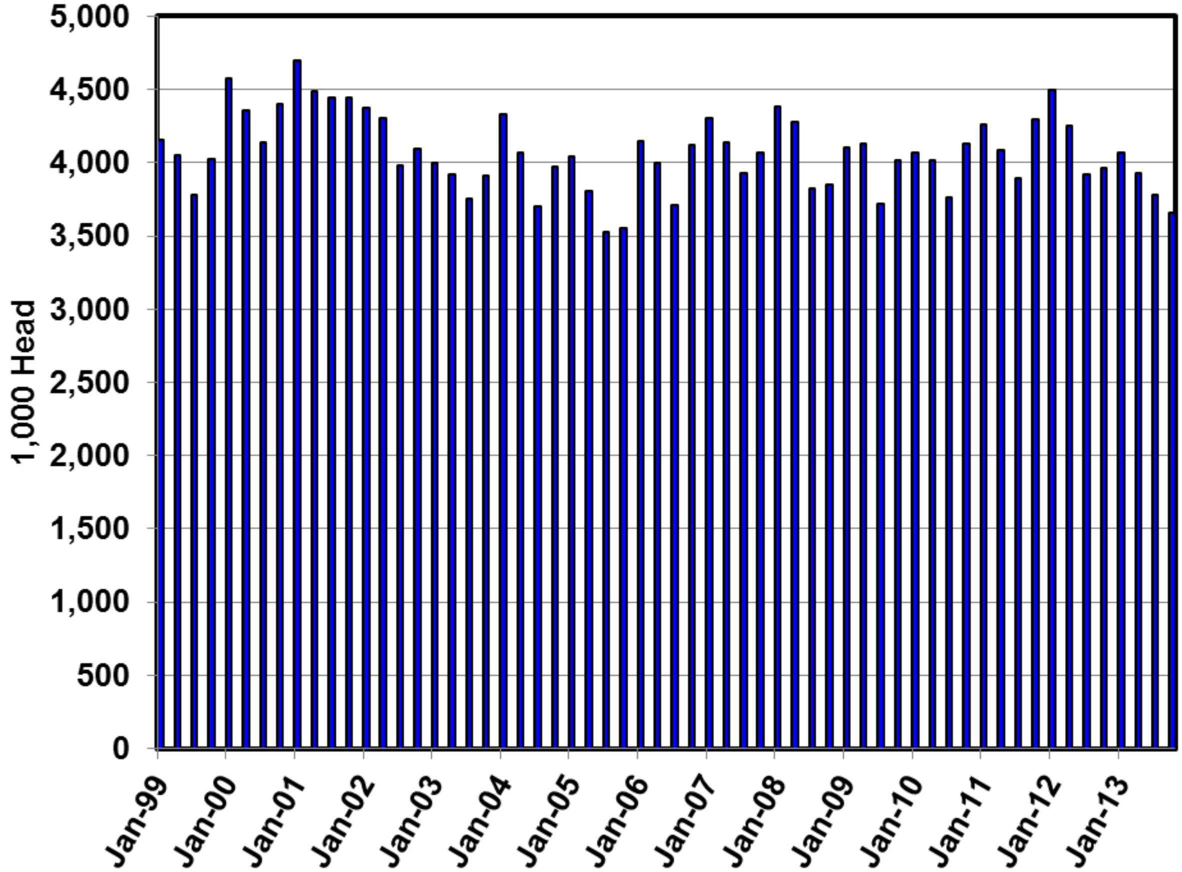


Data Source: USDA-AMS & USDA-NASS

There are indications that heifer retention is accelerating this fall with cow-calf producers holding more heifers and heifer calves for breeding. The October Cattle on Feed report, released October 31, showed a deeper decrease in heifers and heifer calves on feed (figure 3). Heifers on feed dropped sharply in the last half of 2012 then increased relatively in the first half of 2013, part of the residual effects of drought, reduced hay supplies. and extended winter impacts. This is further indicated by the fact that heifer slaughter has been higher by 2.7 percent since July after being down 3.7 percent, year-over-year, in the first half of the year. This bulge in heifer slaughter should be nearly finished and decreasing heifer slaughter is expected for the remainder of the year. Heifers and Heifer calves on feed remain lower than any quarter since the 4th quarter of 2004. Coincidentally, the last phase of herd expansion, albeit aborted that time.

Taking the view of a technical analyst that all relevant and available data are embodied by a given market price one could look at the spot market price for replacement and feeder cattle to see if the market is indeed reflecting growing demand for replacement heifers. A check of Iowa auction reports for October indicates multiple auction markets where replacement heifers are noted in the market report. Heifers denoted as replacements are bringing significantly higher prices than uncommented feeder heifers of the same weight and class. The replacement heifers are priced with small discounts to comparable steers or even higher prices in a few instances.

Figure 3. Heifers and Heifer Calves on Feed, 1,000+ Head Capacity, Quarterly



Data Source: USDA-NASS

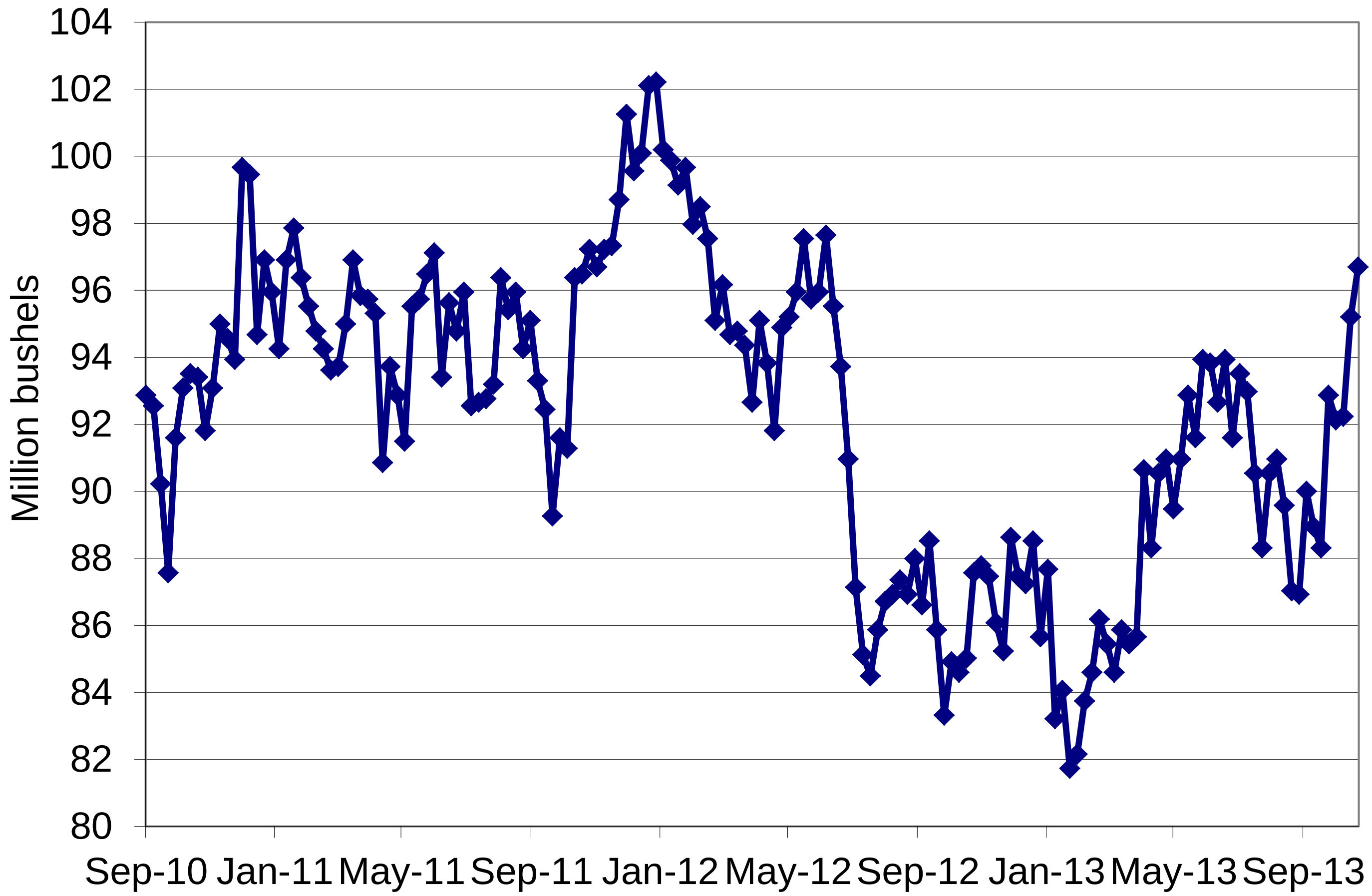
Lee Schulz

And the Markets Just Plugged Along

With the government shutdown in October, there were a lot of questions about how the agricultural markets would react. Would the lack of data from USDA have a significant impact on the day-to-day variation in the markets? Would market volume diminish given the lack of information? Well, the general answer turned out to be that the crop markets continued on as normal. Farmers and traders fell back onto private source data and continued to market and move crop. Combines rolled and the harvest proceeded as usual. And for the second straight year, the most common refrain, at least in central Iowa, was that the crops were "better than expected."

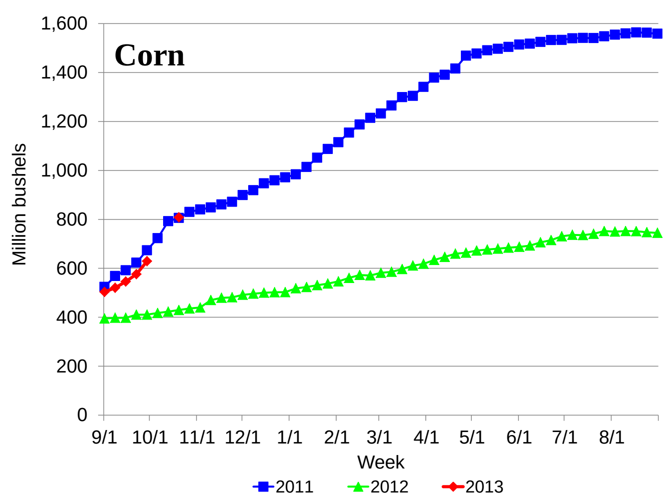
The markets have been preparing for large crops for several months now. And crop users have been waiting for the new crops to arrive. With their arrival, crop demands have rebounded quite quickly. Figure 1 shows the response of the ethanol industry. When the drought of 2012 hit the Midwest and crop prices moved higher in the early summer of 2012, the ethanol industry went through a quick, but substantial, pullback. The industry shrank by over 10% during the course of a month and remained at those reduced production levels until this past spring. Ethanol plants did increase production this summer, but the industry as a whole remained below usual production. As the summer dragged on, ethanol plants once again reduced production, waiting for the new crops and lower feedstock prices. And as the graph shows, within the last 4 weeks, the ethanol industry has raced back up to levels we haven't seen since before the drought. With gasoline prices in the $3 range and corn in the $4 range, ethanol margins are good and the industry is producing a lot of fuel.

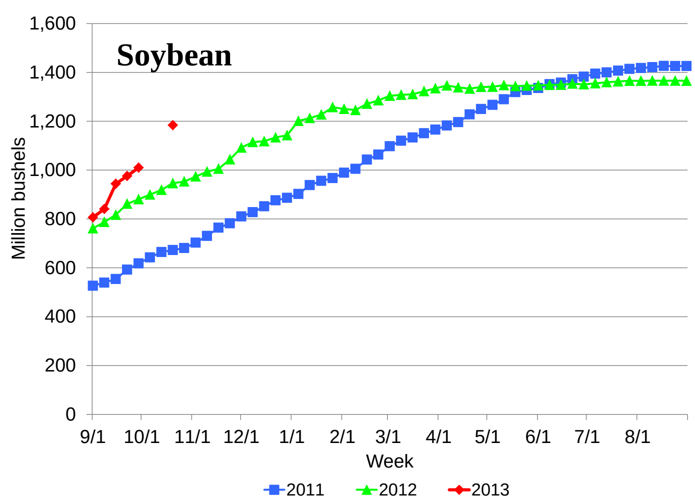
Figure 1. Corn Grind to Ethanol (Source: DOE-EIA, converted to bushels).



And the ethanol industry wasn't the only demand sector that was ramping up while the government was in its shutdown. The export markets were also reacting strongly to the availability of the new crops and the lower prices that came with them. As Figure 2 shows, the export market for corn leaped right back to where it was for the 2011 crop. The drought of 2012 had cut this market in half. The lower prices this fall brought the market back. The big surges in the corn market have come from Mexico and China as both countries made significant purchases during the government shutdown.

Figure 2. Exports (Source: USDA-FAS).

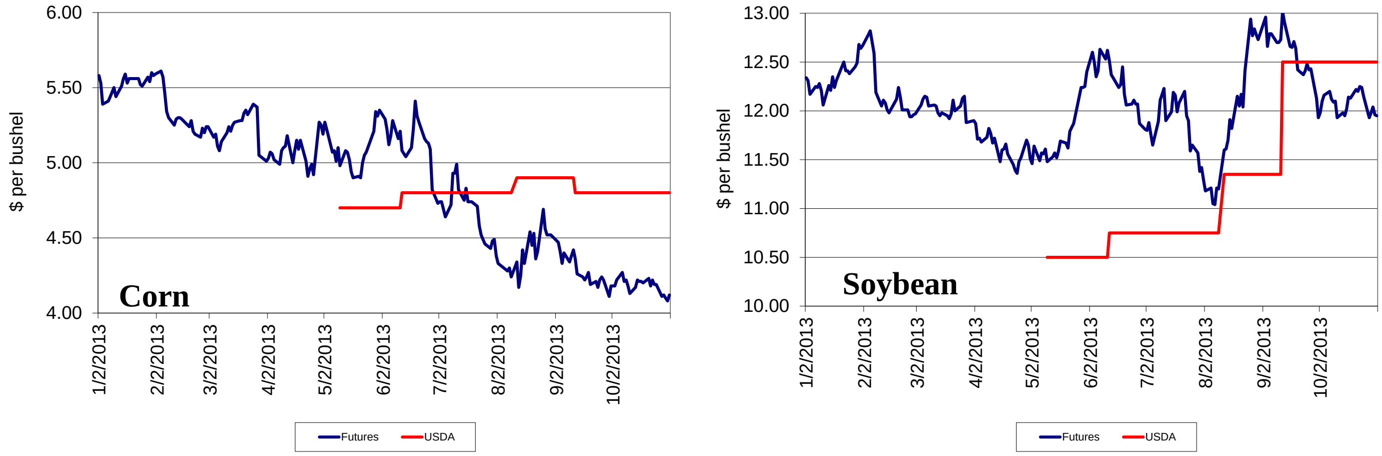




The export market for soybeans has also taken a healthy leap. While the drought and higher prices from last year did not cause a significant pullback (in fact, soybean export pace was very strong in the first half of the last marketing year), lower prices this year have enticed additional export sales. Based on the latest numbers from

USDA, nearly 1.2 billion bushels of the 2013 soybean crop had already been booked for export before November started. China leads the way again, but we are also seeing growth from the European Union, Mexico, Indonesia, and Taiwan. Overall, the soybean export market is up 25% from last year.

Figure 3. Projected Season-average Prices.



Thus, demand is rebounding and helping stabilize prices as we move through harvest. The corn market had dropped into the $4.10-4.30 range before the government shutdown started. And basically, it has remained in that range ever since. For each bit of information indicating the corn crop is bigger than expected, there's another bit of information showing corn demand is improving as well. And while the soybean market has displayed a little variability, it has found a comfortable range over the past month, settling in around $12 per bushel.

One of the questions I had going into harvest was how quickly could crop demand recover. The answer thus far has been fairly quickly. Given a record corn crop and a very strong soybean crop this year, the recovery in demand is crucially to maintaining prices around the level of production costs. As the markets currently stand, corn prices are running slightly below production costs, but the futures market is offering some carry into the winter and spring. That should provide producers opportunities to catch prices that cover costs. The soybean market is still maintaining prices above production costs. Based on the ISU extension production costs, there is roughly a buck per bushel margin currently. But with the inversion in the futures market, the margin is expected to disappear as the marketing year progresses. So the outlook for this marketing year is around breakeven for corn and a little better than that for soybeans. With margins tightening, marketing plans become even more important, risk management is crucial, and cost savings suddenly matter again. Remember what crop marketing was like before 2007 because the next few years may be very similar to that.

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