IOWA STATE UNIVERSITY
Extension and Outreach

Iowa Farm Outlook

Department of Economics
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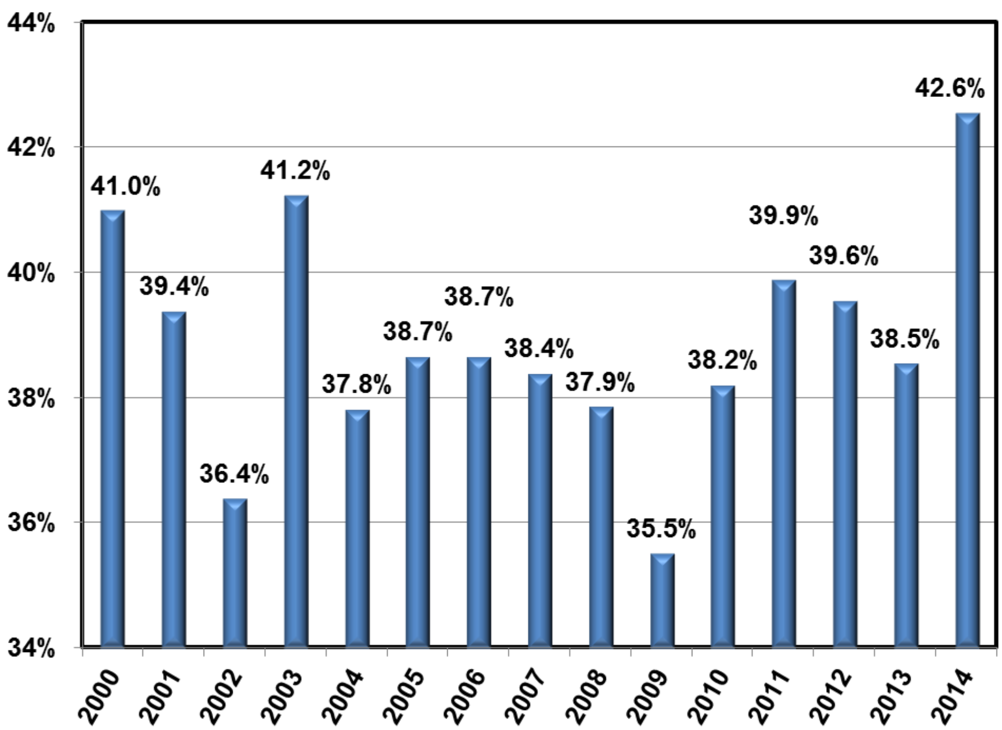
What Do Beef Sector Relative Prices Suggest for Industry Participants?

Most of the cattle and beef industry understands that supplies are tightening. In recent years the declines have been most extreme at the cow-calf and stocker levels. The 2013 calf crop was 33.9 million head, down 1.6% from 2012 and the smallest annual calf crop since 1949. Now these supply reductions are reaching the feedyard and end-user segments. Commercial beef production in 2014 decreased 5.2% compared to a year ago. Livestock Marketing Information Center forecasts suggest a 1.1% year over year decrease in beef production in 2015 and a 0.05% year over year pull-down in 2016.

The inventory reductions have created a market place that passes higher relative prices down the supply chain. The largest incentives are often passed on to the owners of calves, feeder cattle, and fed cattle to encourage additional production. This trend can be seen in the price ratios for beef and cattle among the different supply segments.

The composite cutout value as a percent of the all fresh retail price is at 42.6% in 2014 (figure 1). This is the highest value since 2000, excluding the 2003 BSE year. This shows that retailers have been more willing to bid dollars back to the packer and processing segments to secure beef. The reason why is due to the strength in beef demand. A quarterly all fresh beef demand index maintained at Iowa State University indicates year over year gains in beef demand for the last 17 quarters ending in September 2014. This continues to be a positive signal for the entire beef industry, because consumers have been willing to pay more for the reduced beef pounds than expected.

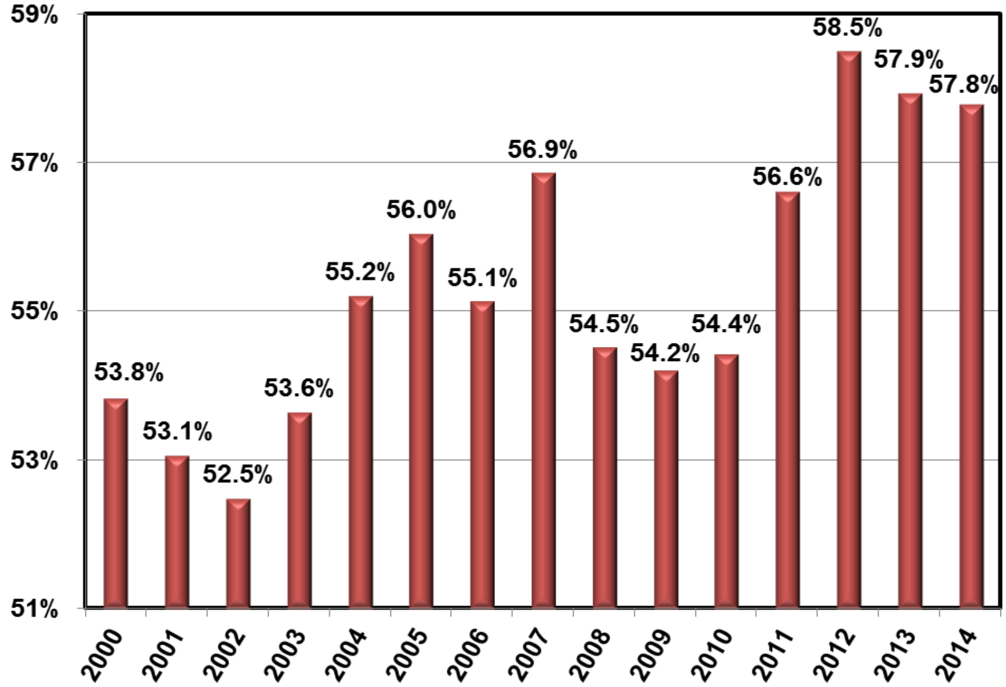
Figure 1. Composite Cutout Price as a % of All Fresh Retail Price



Data Source: USDA-AMS.

The same trend is noticeable regarding fed cattle and wholesale beef prices (figure 2). The fed cattle price minus hide and offal value as a percent of the composite cutout has remained at considerably high levels over the last several years. The 2012, 2013, and 2014 values are the largest price ratios going back to at least 2000.

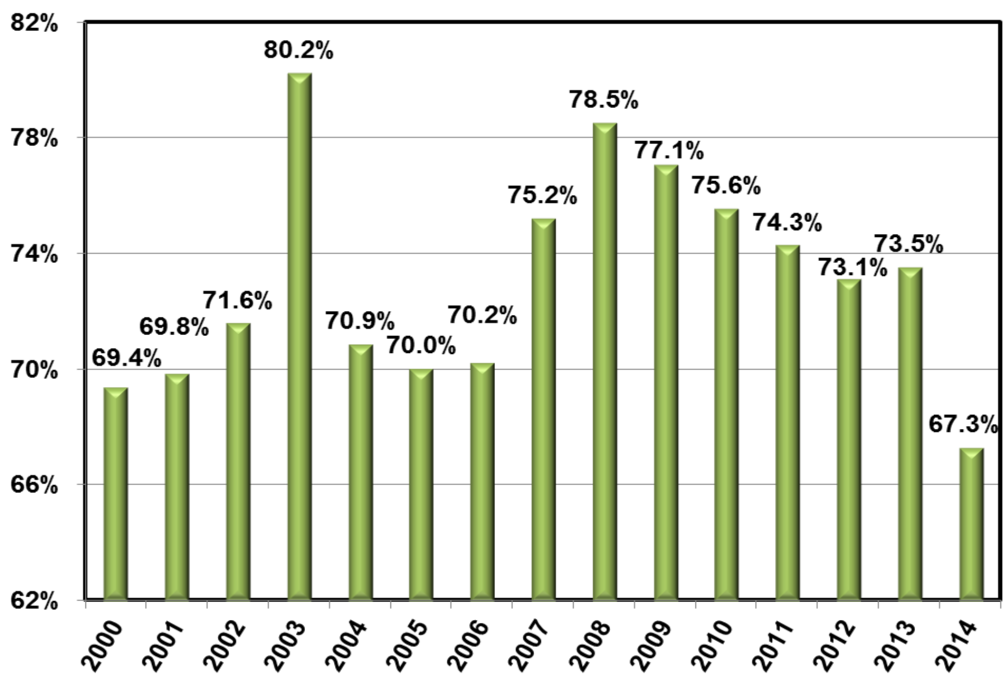
Figure 2. Fed Cattle Price Minus Hide & Offal Value as a % of the Composite Cutout Price



Data Source: USDA-AMS.

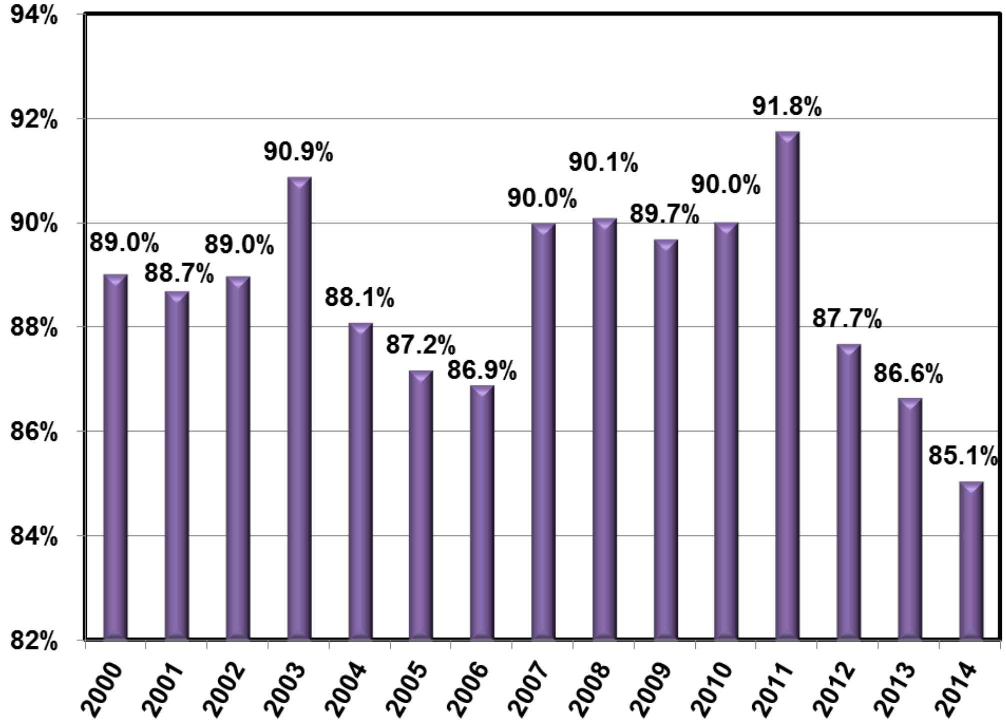
As you work down the supply chain back to the cow-calf sector the same trend holds with each segment capturing more value from the level above it (figures 3 and 4). But, why has the percentage decreased over the last several years for the cow-calf sector? The answer, it takes time to pass higher relative prices down the supply chain. Tight supply situations do historically provide for the benefit of the cow-calf sector of the industry. But, it takes time for calf and feeder cattle prices to be affected by prices paid for slaughter cattle, which in turn, are affected by consumer demand for beef as reflected in retail beef prices.

Figure 3. Feeder Cattle Price as a % of the Fed Cattle Price Minus Hide & Offal Value



Data Source: USDA-AMS.

Figure 4. Calf Price as a % of the Feeder Cattle Price



Data Source: USDA-AMS.

This will likely be reflected in the 2015 profit outlooks for each of the segments of the industry. Cow-calf producers will command the most comfortable margins with each sector above it capturing relatively smaller returns on production.

Lee Schulz

The Light at the End of the Tunnel

This has been a rough year in the crop markets. With corn prices running at roughly half of what they were two years and soybean prices also down significantly, market prospects are what they used to be. This year's higher yields will offset some of that drop for most producers, but crop incomes are definitely less than they have been. But the seeds of growth back to profitability can already be seen in the markets today. Crop demand has reached record levels. As demand grows (and supplies ease), balance will return to the marketplace. It will just take a little time to get there.

Last month, we reviewed the export markets for corn and soybeans. That is still the area of demand I'm watching if we want to see significant unexpected growth in demand. Soybean exports continue to sail along at a record pace. China continues to provide significant support to the soybean market. But other markets have stepped up as well. Europe, Mexico, and Taiwan have all increased soybean purchases by over 15%. Corn exports have now fallen below last year's pace by nearly 10%. The trade dispute with China has hurt sales, but several other markets have increased corn purchases. We have seen sizable increases in corn and soybean sales to Egypt, Colombia, and Peru. The free trade agreements with Colombia and Peru have paid dividends to U.S. crop agriculture.

But the base for continuing growth in crop demand is from the livestock industry. The strong livestock prices and holding consumer demand for meats have led to strong expansion in two of the three major meat sectors. Figures 1 and 2 show feed and residual use for corn and soybean meal over the past decade. The general trend has been lowering feed demand. But over the past couple of years, feed usage has been on the upswing. For corn, the surge in feed demand has occurred in the fall (the 1st quarter of the marketing year). In fact, the swings in quarterly corn feed usage have also grown larger over the past few years. The reversal in soybean meal feed demand also started in 2012. The pork and poultry sectors have been expanding recently, explaining the turnaround. Based on the projections for meat production in 2015, the crop markets will continue to see growth in feed demand as these two sectors expand even more. With 3% growth projected for poultry and over 4% growth expected for pork, feed demand for both corn and soybean meal should remain on the rise. The weak spot in feed demand remains the cattle sector. Beef production is not projected to expand over the coming year. And while some heifers are being retained to grow the cattle herd, the growth will take some time to develop.

Figure 1. Corn feed and residual use. Source: USDA-ERS.

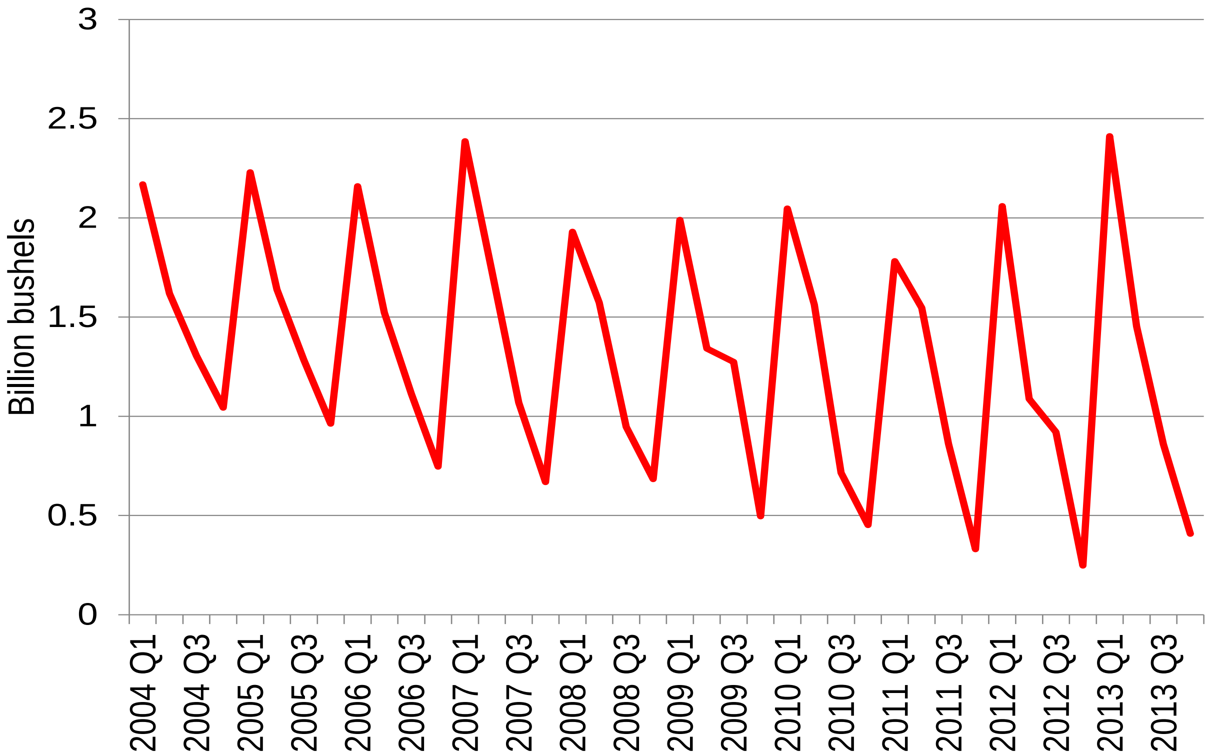
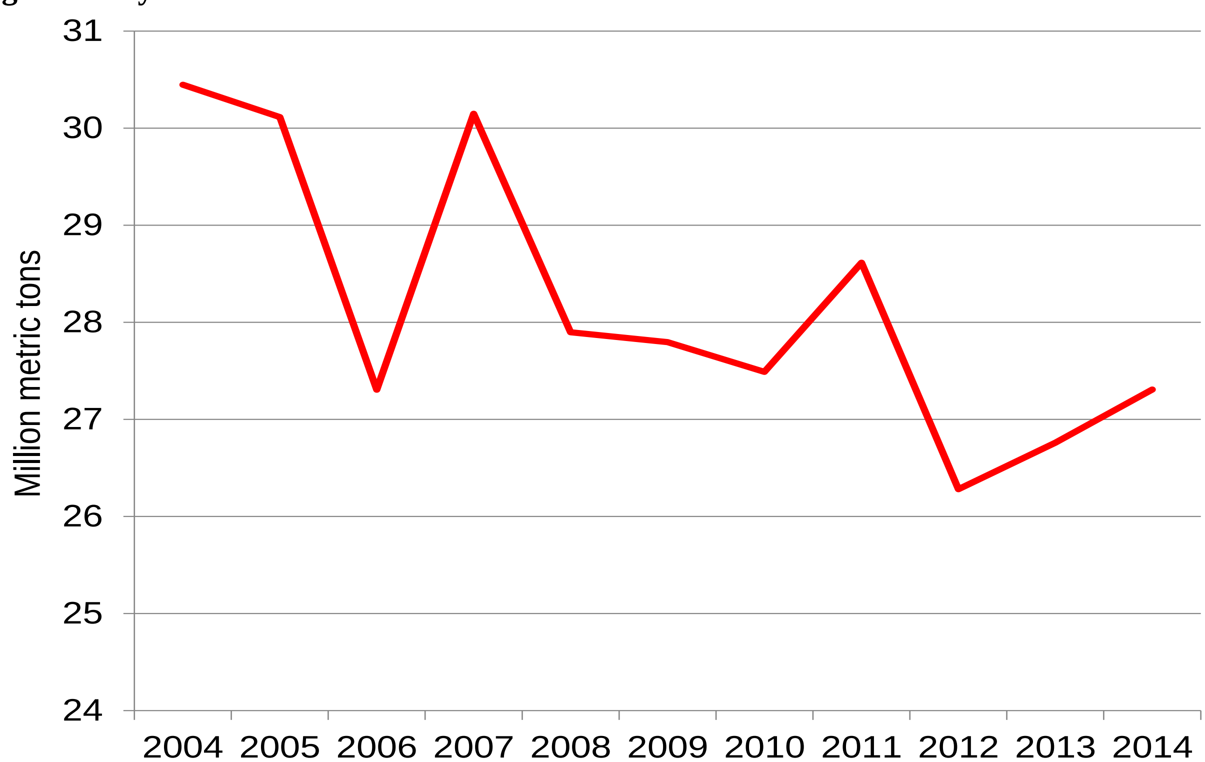
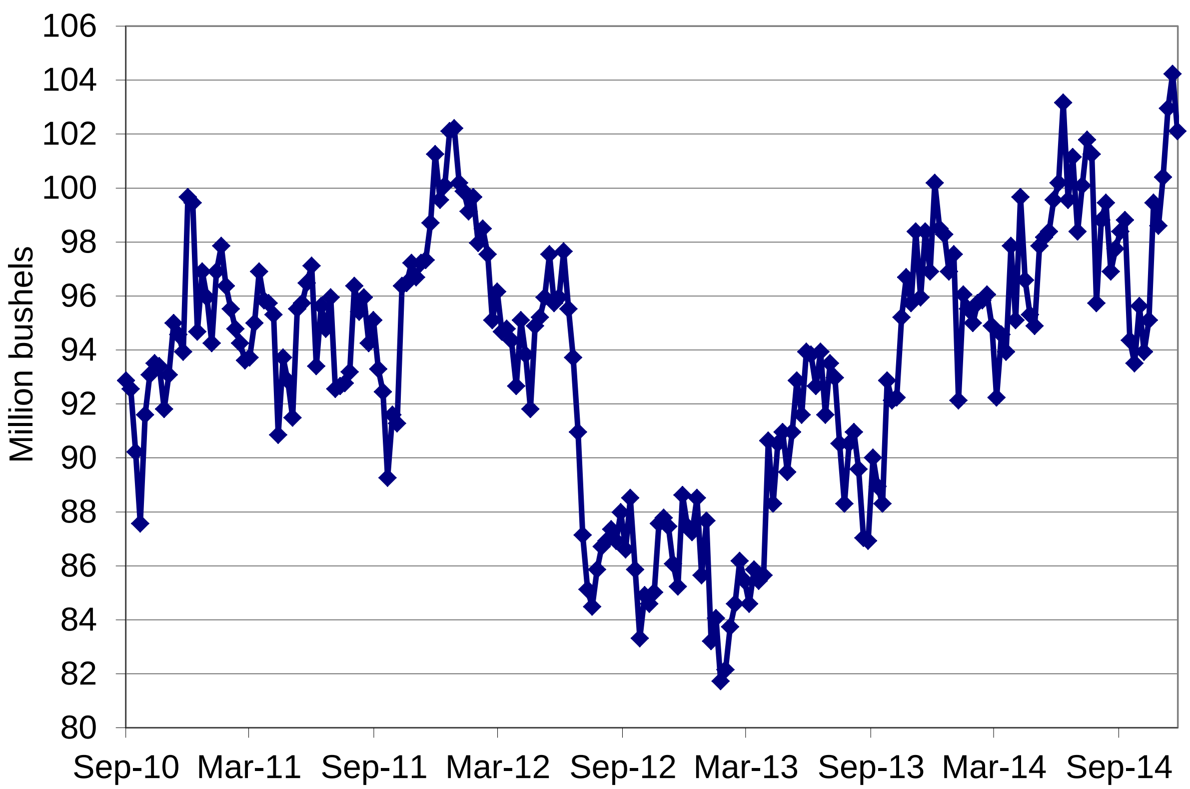


Figure 2. Soybean meal feed demand. Source: USDA-ERS.



While feed demand is providing the growth in crop markets, biofuel demand is settling in as a stable demand source. The 2014 calendar year will be a record year for ethanol production. The industry is on pace to exceed 14 billion gallons of production. The issue of growth though is linked to the number of ethanol plants. The ethanol industry reached a steady state in terms of plants a couple of years ago. No new plants have come online over the past two years. With no new plants, it's hard for corn usage in ethanol to increase beyond today's levels. Thus, as USDA looks forward, they are holding corn usage for ethanol steady. But at 5 billion bushels of demand, that is a significant source of steady demand. Looking forward, the weak spot for ethanol demand will not from corn prices, but from oil and energy prices. As crude oil prices have fallen, ethanol's cost advantage over gasoline has diminished. A further fall in crude oil prices could reverse the cost advantage and slow ethanol production. If that occurs, corn usage in ethanol would fall.

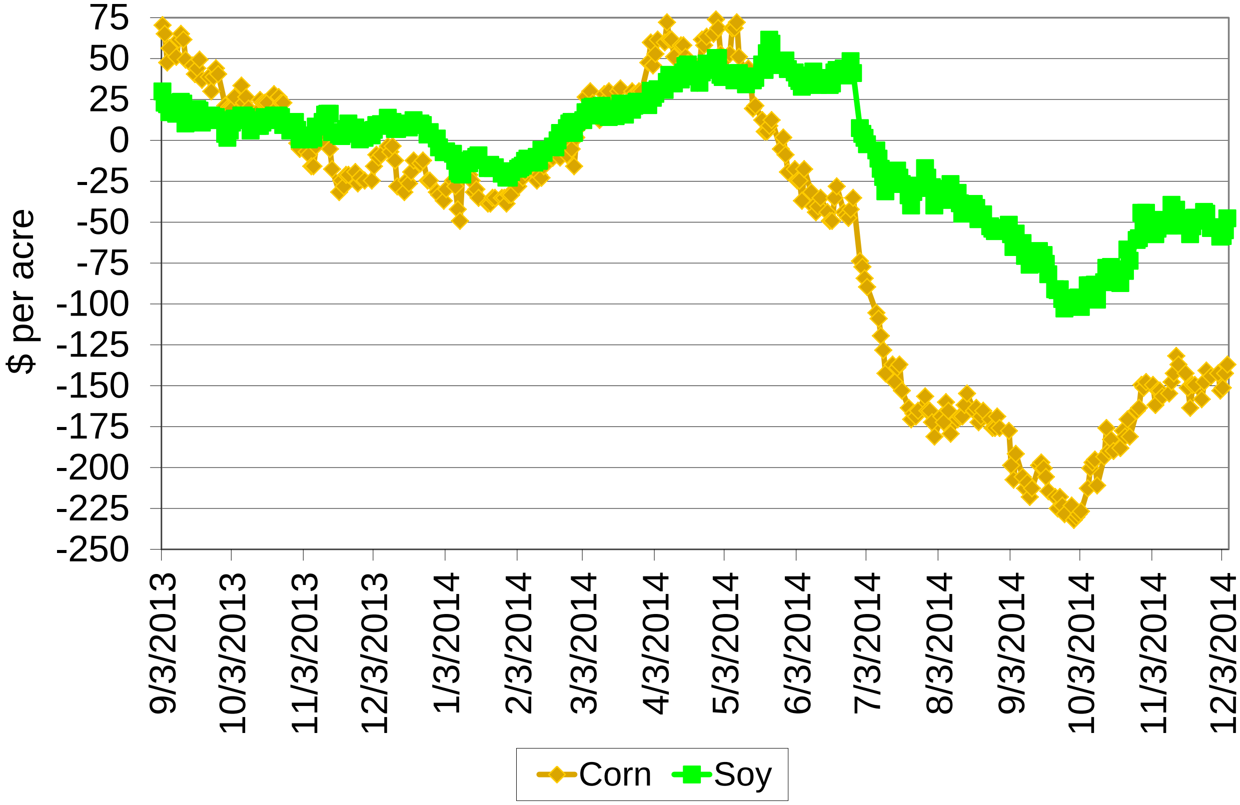
Figure 3. Corn usage for ethanol production (Graph derived from EIA data).



Totaling the various sections of crop demand, we arrive at a record for both crops. Early in the fall, the markets were locked on the massive record supplies for both crops. Now, the markets seem to be alternating between concerns about additional future supplies and hopes for continuing growth in this record demand. It's in those hopes that the source of the next upward price shift lies. The stage is set for feed demand to lead the charge as the calendar shifts to 2015. Export demand will assist in the soybean market over the coming year and in the corn market likely during the year after that.

This growth in demand will not be as dramatic as the ethanol boom the corn market experienced between 2006 and 2011, but it is growth just the same. So the markets will eventually churn through the massive supplies and return prices to near breakeven levels. Given trendline yields next year, my expectation would be that the approach back to breakeven will take a couple of years. However, if a short crop develops either in South America this winter or for us this coming summer, prices could rebound more quickly.

Figure 4. 2014/15 projected crop margins.



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