US Beef and Pork Exports Grew in 2011

Beef exports and foreign markets have always been of interest to the cattle industry, but the growth of beef export volumes and over the past two years has fueled anticipation of substantial demand growth in coming years. The prospect of new customers, and growing appetites among existing customers, is sure to build an exciting outlook for any industry, but perhaps the uncertainty of unfamiliar foreign demand is what adds the element of positive suspense to the market. In the first three quarters of this year US beef exports amounted to more than 2.1 billion pounds and were 27% larger than export volumes during the same period a year ago. Over 10% of the beef produced in the US is now exported and the US is now a net exporter of beef. Year-to-date exports to Japan, South Korea and Canada so far this year have grown by 100 million pounds each. With record high export volumes now, what else should we be aware of in the arena of exports?

Japan has recently changed their rule on the age of cattle from which beef can be shipped in to their country from the US. After BSE was discovered in the United States in late 2003, beef exports to Japan came to an abrupt and essentially complete halt for the next two years. Not until mid-2006, did shipments resume under a very tightly enforced rule that only meat from US cattle under 20-months of age would be eligible for import. Based on a recent announced, this rule has been modified and the age restriction relaxed so that beef from cattle under 30-months of age may now be imported. This action will make a larger percentage of US beef eligible for that market. However, it may also reduce the premiums and incentives of age verification programs once used to qualify cattle for the Japanese market. Last year the US exported 351 million pounds of beef to Japan, and in the first three quarters of this year 348 million pounds, a 36 percent from the same period last year.

South Korea is currently the fourth largest market for US beef but was the second largest customer to the US in 2003. Exports to the country more than doubled in 2010, and an additional 48 percent increase emerging this year, with near 300 million pounds of beef entering that market in the first three quarter of this year. Adding to the positive news is the US ratification of a free trade agreement (FTA) with Korea that has been on the works for more than four years. The treaty was signed in June 2007, agreements were finalized in December 2010, the US ratified the treaty in October 2011 and South Korea followed suit on November 22. Korea’s parliament was over-whelmingly in favor of the agreement, but that did not deter one of the few members in opposition from releasing a tear gas canister in their legislative chamber to disrupt the proceedings. Remember this incident if ever US politics appear to be getting brutal. This FTA will result in an immediate or gradual phase out of tariffs on many US products including beef. The 40 percent tariff on US beef will be phased out over the next 15 years.

Beef exports to Canada have also been growing. Year to date, Canada imported 380 million pounds and has become the largest foreign market for US beef. It overtakes Mexico for the top destination after large importation during July and August. Part of the driving force behind exports to is a 10 percent reduction in Canadian beef production this year. While that seems a dramatic drop in production, the USDA has forecasted a 5 percent reduction in US beef production in 2012. Exports to Mexico remain fairly constant with only a 1 percent increase. Other smaller but perhaps emerging markets include Hong Kong up 55 percent and Russia up 83 percent from last year. What has yet to be seen is how exports and domestic markets will react to significantly reduced supply of beef in the coming year. In the tug-of-war among demanding consumers there will be some markets that will reduce the quantity of beef they utilize.
Pork exports have also grown faster than expected. Exports to Asian markets are growing and the free trade agreement with South Korea will only help to improve exports in the future. Total pork exports are up 21 percent during the first three quarters of the year. Exports to South Korea are up 129% from last year, exports to Canada and Japan are both up about 16 and 14 percent respectively, but exports to Mexico have been basically steady from last year. Figure 2 contains the annual pork exports from recent years and the coming two years. Pork supplies are not expected to change dramatically in the first half of next years, but market hog numbers in the fourth quarter are expected to incrementally increase again in the next year.
Dairy Margin Outlook

Expected domestic and global milk production increases, large heifer inventories, and economic instability provide bearish signals for 2012 milk prices. But stable global demand, decreased domestic product stocks, and favorable beef markets are bullish signals that can help stabilize milk prices. Moving into the end of the year, 2012 margins look bleak for dairy producers. Producers in Iowa and in the upper Midwest may benefit compared to other regions due to availability of feed and farm-raised feedstuffs in a time of increased commodity prices.

In Figure 1, prices for milk, corn, and hay in Iowa are compared, based on price indexes. A price index measures how a price changes over time based on a given starting point. Prices outlined below are measured using 1980 as a base year due to data availability. The all milk price, a weighted average of prices paid to producers from handlers, was used for the milk price. While market averages for Iowa were used for corn and alfalfa hay.

Figure 1. Milk, Corn, and Hay Price Indexes

In October 2011, corn and alfalfa hay have increased 1.5 times the price level in 1980 while the all-milk price has only increased 0.63 from base price (1 is the base index level). When trend lines are placed on this graph, corn and milk indexes trend closely with corn surpassing milk in the past ten years. However, alfalfa hay price index takes a much sharper increase in value over time. This can be attributed to the hay market not being influenced by commodity markets like other feedstuffs, but producers should take note of the steadily increasing forage prices compared to other feedstuffs and milk prices.

Margin Management

The growth of separation between feed and milk indexes, outlook for feed prices to hold, and milk prices to soften creates the need for producers to evaluate milk pricing strategies, feed cost per cow, and related margins. Income over feed cost (IOFC) is one measure to evaluate profitability and operating margins. This measure as outlined below measures gross income from milk sales less feed cost on a per cow basis. The result is what a producer has left to pay all other operating and fixed costs. Feed costs represent about 35 to 50 percent of all costs to produce milk and are the most variable cost of producing milk; therefore, IOFC is a good measure to track profitability.

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\text{IOFC (\$/cow/day)} = \frac{\text{Milk price/cwt.} \times \text{Lbs. of milk/cow/day}}{100} - \text{Feed cost/cow/day}
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Milk margin (MM) calculates IOFC on a per hundredweight basis as outlined below.
The CME group calculated IOFC at $9.97 for October 2011 and estimated November 2011 IOFC at $8.89 with the 10-year average IOFC at $9.09. Benchmarking is an important part of financial and margin analysis; however, one must compare apples to apples. It is recommended that producers calculate IOFC for their farm and track it over time to determine where their operation stands.

Penn State offers an online tool that calculates IOFC and it can be accessed at [http://www.das.psu.edu/dairy-alliance/resources/income-over-feed-cost-tool](http://www.das.psu.edu/dairy-alliance/resources/income-over-feed-cost-tool). ISU specialists can help you calculate IOFC as a part of DairyTRANS when completing year-end financial analysis. Contact Larry Tranel, 563-583-6496, Jenn Bentley, 563-382-2949, or Kristen Schulte, 563-547-3001, for more details.

**Looking Forward to 2012**

With the Iowa harvest season wrapped, the numbers look fairly decent for Iowa. Currently, the state corn yield is estimated at 171 bushels per acre, up 6 bushels from last year. Soybean yields averaged 50.5 bushels per acre, down 0.5 bushels from last year. Those figures would point to corn production of 2.33 billion bushels of corn and 468 million bushels of soybeans. So the 2011 crops would be the 3rd largest corn crop Iowa has ever had and the 11th largest soybean crop. But with current futures prices projecting 2011/12 season-average prices of $5.81 per bushel for corn and $11.20 per bushel for soybeans, the crop values rank much higher. Given these prices, the 2011 Iowa corn crop is the most valuable we have ever produced at $13.6 billion. The 2011 Iowa soybean crop is the 2nd most valuable soybean crop we have had at $5.24 billion, trailing only the 2010 crop. These record or near-record values aren’t just occurring here in Iowa.

The Economic Research Service (ERS) of USDA projects national net farm income will exceed $100 billion for the 1st time in 2011. National crop sales are expected to top $200 billion and livestock sales are up nearly 20 percent. So while the 2011 agricultural production year has been a rough one, with the assortments of floods, droughts, and freezes, financially, it is stacking up to be the best we have ever had. However, we do see some “storm clouds” on the horizon. Production costs are on the rise and they also reached record levels in 2011. Feed costs increased 23%, livestock purchases cost 18% more, fertilizer and lime went up 28%, and fuel costs increased 27%. Thus, agricultural margins look to be tighter as we enter 2012.

One major issue on the crops side is the general reduction in demand for U.S. corn and soybeans. USDA’s projections for demand over the next year show lower feed, ethanol, export, and crush demand. The ethanol and soybean crush reductions are small and represent relatively steady demand from those sectors. But the feed and export sectors have definitely shrunk over the past year. Feed demand has backed off due to a combination of smaller animal numbers and feed substitution. Corn has shifted from being the low cost feed source to being a higher cost input. Domestic and international livestock feeders have reduced corn amounts in feed rations, replacing it other feed ingredients, including wheat. The shift in international feed demand shows up in export data. Figure 1 shows the change in export pace compared to last year. Both corn and soybeans started off their marketing years with initial export orders well below the previous year’s levels. As prices fell in September and early October, corn gathered some additional export demand and reached positive territory by mid-October. But that export surge dissipated as prices have somewhat stabilized throughout late October and November. Soybeans, on the other hand, did not see an increase in exports with the price decline and has not found a pricing point to shift importing countries back into the market.
That weakness in demand, coupled with concerns about the European and global economies, has sent expected prices for the 2012 corn and soybean crops downward. At the beginning of September, futures prices indicated 2012/13 season-average cash prices of $6.60 per bushel for corn and $13.50 per bushel for soybeans. By the end of November, those price projections had fallen to $5.40 for corn and $11.20 for soybeans. That price drop, in combination with higher costs, means tighter margins for 2012.

Figure 2. Projected 2012/13 Season-average Prices, Based on Futures
Figure 3 shows projected crop margins for the 2012 crops, based on preliminary production cost estimates of $4.60 per bushel for corn and $11 per bushel for soybeans. While corn prices are still offering sizable returns ($100-150 per acre), soybean returns are hovering around breakeven. The September price drops knocked nearly $150 out of soybean returns and the market has not been able to gain traction since. Corn returns lost roughly $250, but still had some room over costs. Given corn’s stronger return picture, we will likely see increased corn plantings in 2012. As like last year, the return outlook will create incentive to look at continuous corn. And early crop estimates point to corn acreage being above 94 million acres this coming spring.

That acreage could come from a variety of places. Figure 4 shows the difference in principal crop area from 2008 to 2011. States in green planted less area in 2011 than they did in 2008. States in red planted more. The number in each state shows the difference in thousands of acres. As you can see several states have significant tracts of land that could be readily available for additional crop production in 2012. But looking back at the 2011 crop year, there may be several reasons why we may not see all of this land come back into row-crop production. Areas like the Dakotas and Iowa suffered through wet springs, delaying and preventing planting. Texas, Oklahoma, Arkansas, and Missouri are still dealing with drought conditions (which actually have now spread into Iowa). Prices last year were high enough to stimulate increased crop plantings, but Mother Nature limited the increase. We could see the same this coming year.
Figure 4. Difference in Planting Area, 2008 to 2011 (in 1,000 acres)

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