Hog prices respond to additional supplies

A record number of hogs going to slaughter in the past three months has also led to a sharp decline in hog prices. Nationally, the average hog price in mid November was down nearly 20% from the first week of September. A fourth quarter decrease in hog prices is a regular seasonal cycle. In the past two years, hog prices declined 12% over the same period. The traditional relationship between supply and price may be a little different this year from what it has been in the past. Figure 1 is a graph comparing the year over year change in weekly swine slaughter and the national average hog price. Weekly slaughter numbers have been over 5% higher in the past six weeks and are poised to exceed a 10% increase. Compared to a year ago, hog prices are down nearly 15% in response to the additional supply.

Figure 1. Percent Change in Weekly Slaughter and Price From Year Previous

The relationship between supply and price is very evident in Figure 1. Prices generally responded negatively to increased supplies, with the exception of a three week mid summer period. The inverse relationship between price and supply does change throughout the year, but is the recent decline in price excessive compared to previous years? In the past five years, fourth quarter prices have fallen an average of 4% for each 1% increase in slaughter volume. So far, from the first of October to mid November, prices have fallen 1.3% for each 1% of additional slaughter. From this perspective, the recent price decline doesn’t appear to be as severe as it “could
have been”. Nevertheless, this does not take the sting out of selling live hogs for $40/cwt when corn is $3.25-$3.50/bu.

**Slaughter volumes higher**

The September Hog and Pig report indicated that market hog inventories were up 3% and a corresponding increase in total slaughter was expected. Since that time, hog slaughter volumes have been more than 3% above those of a year ago. Why have slaughter volumes been higher than what might have expected? Figure 2 tracks weekly slaughter volumes during this year and last. The graph also includes the “expected” trend in Sept-Dec slaughter if volumes had been 3% greater than last year.

**Figure 2. Weekly US Hog Slaughter, 2006-07**

Increased weekly slaughter was a common occurrence in 2007, but the record number of kills in the fourth quarter has been significantly greater than a year ago. There are several factors leading to such a dramatic difference. First, the increased hog inventories as previously discussed. Second, the distribution of market hogs within the weight classes indicated that the number of market hogs weighing more than 180 lbs was up nearly 3.5% from a year ago, meaning that inventories were loaded a little heavier on the front end. A third, but small contributor, was the 7% increase in swine imports from Canada since the start of September. From a combination of these factors and a push to market hogs “before the price gets any worse,” the record slaughter volumes have been realized. Slaughter volumes to will likely see their peak before Thanksgiving, and then track closer to the levels previously expected for the fourth quarter.

*Shane Ellis*

**Key Market Drivers for Winter & Spring Grain Prices**

Corn prices are at levels seen briefly last winter and only rarely before that. Soybean prices are the highest in many years. Elevator and processor forward contract prices still offer farmers with on-farm storage a profitable opportunity to sell and hold corn for summer delivery. The highest bids are generally at processing plants, feed mills, and river terminals. It would not be surprising to see the actual basis at times next spring and summer being stronger than currently indicated in forward contract prices.
Corn storage returns being offered by forward contracts have declined moderately in the last few weeks and further declines appear likely in the weeks ahead. Lagging export shipments, reports of recently increased 2007-crop corn estimates in Europe, recent less positive technical market indicators, sizeable projected carryover stocks, and some slowdown in the rate of ethanol expansion are cautions that there is modest downside risk in corn prices.

In contrast to corn, earlier favorable forward contracting returns being offered for storage into summer have disappeared. Soybean prices remain in an uptrend but market signals tell farmers to store at their own risk. The market is no longer willing to pay farmers for soybean storage.

As with corn last winter, the key question for the soybean market is “How high to prices have to be to generate a 5.5 to 6.5 percent in U.S. plantings next spring and at least a 6 to 8 percent increase in South American acreage for harvest from February through early April?” No one knows the answer to that question, but current indicators suggest it may be in the $11 range on the futures market. Bean prices could be very volatile this winter, depending on South American weather and growing conditions.

November Crop Estimates
USDA’s November 9 crop report lowered U.S. corn production 150 million bushels from a month earlier, slightly more than anticipated by grain traders. The crop is now estimated at 13.17 billion bushels, up 25% from last year. The reduction from last month reflected 3 bushels per acre lower yields than the previous report in the Dakotas and 5 to 6 bushel per acre lower yields in Nebraska, Iowa, Minnesota, and Wisconsin. Yields in other eastern Corn Belt states were unchanged from last month. The reduced production slightly tightens the indicated corn supply for the year ahead, although supplies appear to be fully adequate for domestic and export demand. The grain sorghum crop is estimated to be 237 million bushels larger than last year. Larger grain sorghum production will temper the increase in domestic corn feeding.

The sharp increase in this year’s corn crop is the result of a 16% decline in soybean acreage, a 28% decline in planted cotton acreage, and an 8% decline in non-durum spring wheat planted acreage, along with declines in some minor crops.

The nation’s soybean crop is now estimated to be 2.59 billion bushels, down by a very minor 4 million bushels from last month but down 19% from a year earlier. Yields were reduced one bushel per acre from last month in the Dakotas, and 2 bushels per acre in Wisconsin. The Michigan yield was raised 3 bushels per acre, along with a one bushel increase in North Carolina and small adjustments in some other southern states. Our latest balance sheets, as well as those from USDA are available on our web site, http://www.econ.iastate.edu/faculty/wisner/ They are in the right-hand column. Click on “2006-07 to 2008-09 balance sheets with ethanol expansion” for our early and very tentative projections which go out three years or on “USDA Balance Sheets” for the latest USDA projections for 2007-08.

Market indicators to Watch
Soybean prices for 2007 and 2008 crops have trended upward for the last several weeks in response to prospects for much tighter U.S. supplies next summer than in recent years and the sharp increase in petroleum prices, which speculative traders view as increasing the attractiveness of biodiesel. At this writing, some futures contracts have reached the highest level in 19 years. Weather-related soybean planting delays in parts of South America along with tight U.S. supplies have helped to strengthen prices. The higher prices are the market’s way of (1) rationing use and (2) encouraging increased plantings for the 2008 crop to insure that adequate world supplies will be available in the 2008-09 marketing year.

Key indicators of soybean usage are the weekly export inspections (shipments), the weekly export sales reports that are usually released on Thursday mornings, and the monthly Census Bureau domestic crush reports. Weekly export sales started out strong in August and September, but have slowed in recent weeks with the higher prices. The season-to-date sales as of November 1 are 5.8% below a year earlier. Cumulative sales to China are up 3.9% from last year, along with increases of 6.4% and 12.1% from a year earlier respectively in sales to Africa and the Western Hemisphere. Sales so far to Japan, Taiwan, EU, Turkey, and other Asia plus
Oceania are below a year earlier. The decline in sales to these latter five areas indicates some rationing of demand may be starting to occur at current prices. Because the Chinese currency is linked in a narrow band with the U.S. dollar, weakness in our currency has not been reflected back to consumers in that country. However, in Europe and other overseas markets, the weak dollar has offset part of the strength in bean prices. The latest Census Bureau domestic crush report indicates domestic processor demand has been holding up well despite historically high soybean prices. September crushing were 3.6% above a year earlier. However, the National Oilseed Processors Association (NOPA) crush report for October was about equal to a year earlier. Soybean oil use has slowed with various biodiesel plants ceasing production because of high soybean oil prices. For the current marketing year, USDA projects domestic soybean crushing to be one percent larger than last season, with exports down 12.8% from last year.

It would not be surprising to see soybean prices move high enough this winter to encourage a larger increase in 2008 plantings than currently anticipated by the grain trade and enough to provide adequate 2008-09 supplies if weather is favorable in 2008. If so, farmers and soybean users should expect the soybean market to follow a pattern similar to that of corn last winter and spring. Prices rose sharply into January and then drifted lower as private surveys showed sharply higher plantings were likely.

Key Market Indicators for Corn
For corn, in addition to South American weather in the next five months, crude oil prices will be an important market driver. The increase in crude oil prices from the upper $60 and low $70 per barrel level in the summer and earlier this fall to recent highs in the mid-to-upper $90s has helped to support ethanol prices, despite infrastructure limitations. Iowa rack (wholesale) ethanol prices have risen about $0.20 to $0.25 per gallon since late October. That has increased the margin for processing corn into ethanol by about $0.30 to $0.35 per bushel after adjusting for the higher corn prices. In addition, prices for dry distillers grain have increased $15 to $25 per ton. That increases the processing margin by another $0.17 per bushel.

As Midwest ethanol production has increased (at double digit annual percentage rates), the infrastructure capacity growth for moving it to the east and west coasts and the South has lagged behind production. Also, the high-value environmentally sensitive oxygenated fuels portion of the ethanol demand has been filled. This combination caused a downward trend in ethanol prices from last winter into early fall. Infrastructure includes specialized rail tank cars for moving ethanol, locomotives and crews, rail sidings for unloading 100 to 110 car trains in congested urban areas, ethanol storage tanks, blending facilities, and retail facilities for E-85. The recent 40 to 50 cent price differential of wholesale ethanol prices to gasoline prices and the $0.51 blending credit are substantial incentives for expanding ethanol infrastructure. If Congress increases the mandated level of renewable fuels production, that too could be a significant incentive for expanding infrastructure. Even so, infrastructure limitations appear likely to strongly temper ethanol processing margins for at least the next 10 to 15 months.

Corn Exports -- Cumulative corn export shipments so far this marketing year and outstanding unshipped sales are up 35% from a year earlier and are 3% larger than at this time in 1995. Strong export sales in the fall and winter of 1995-96, along with reduced U.S. supplies, set the stage for $5 per bushel corn in Iowa for about six months in 1996. The strong export sales reflect a shift from feed wheat to corn in international markets because of very high wheat prices. They may also be due in part to foreign buyers lining up supplies earlier than normal to protect against higher prices as the season progresses. Normally, 4.0 to 4.4 billion bushels (corn equivalent) of wheat are fed annually in foreign markets. Major users of feed wheat are the EU, former Soviet republics, Canada, and Australia.

Despite the very strong corn export sales, there is one caution in this season’s corn export demand. Cumulative weekly export inspections or shipments through November 8 were up only 5.7% from a year earlier and have lagged severely behind sales. Weekly export inspections will need to move sharply above a year earlier in the months ahead to translate the large sales into actual demand for corn. Season to date U.S. wheat exports since last June 1 are up by a huge 71% from a year earlier. Large wheat shipments may have been a factor in holding down corn shipments but the heavy demand they have placed on transportation
equipment and port facilities.  *Weekly corn export inspections as well as sales will be key indicators for corn prices this winter and next spring.*

*Robert Wisner*