Swine Industry Scales Back, Breeding Herd Down 3%

The much anticipated USDA September Hog and Pig report, released on September 26th, indicated that the swine industry has accelerated its reduction in production potential. The national herd is now at 68.7 million head, up 2 percent, the national breeding herd is down 2.6 percent, and the supply of market hogs in up 2.5 percent. The supply of market hogs in the fourth quarter will be up about 3 percent. Although slaughter volumes will be high, the packing sector has demonstrated that it has adequate capacity. Table 1 contains a summary of the report with the percentage change in inventories from a year ago.

Table 1. September Hog and Pig Report

<table>
<thead>
<tr>
<th>All Hogs</th>
<th>US Million Hd.</th>
<th>% chg.</th>
<th>Iowa Million Hd.</th>
<th>% chg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breeding Herd</td>
<td>6.0</td>
<td>-2.6%</td>
<td>1.07</td>
<td>0.0%</td>
</tr>
<tr>
<td>Market Hogs</td>
<td>62.6</td>
<td>2.5%</td>
<td>18.73</td>
<td>5.0%</td>
</tr>
<tr>
<td>Under 60</td>
<td>22.6</td>
<td>-0.3%</td>
<td>5.55</td>
<td>-4.1%</td>
</tr>
<tr>
<td>60 - 119</td>
<td>15.4</td>
<td>1.1%</td>
<td>5.14</td>
<td>4.7%</td>
</tr>
<tr>
<td>120 - 179</td>
<td>13.3</td>
<td>6.1%</td>
<td>4.55</td>
<td>12.9%</td>
</tr>
<tr>
<td>180 &amp; over</td>
<td>11.3</td>
<td>6.4%</td>
<td>3.49</td>
<td>12.6%</td>
</tr>
<tr>
<td>Sows farrowing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep – Nov</td>
<td>3.0</td>
<td>-5.5%</td>
<td>0.51</td>
<td>-5.6%</td>
</tr>
<tr>
<td>Dec – Feb</td>
<td>2.9</td>
<td>-2.9%</td>
<td>0.49</td>
<td>-3.9%</td>
</tr>
<tr>
<td>Pig Crop</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar - May</td>
<td>29.0</td>
<td>4.0%</td>
<td>4.96</td>
<td>12.2%</td>
</tr>
<tr>
<td>Jun - Aug</td>
<td>29.3</td>
<td>0.5%</td>
<td>4.79</td>
<td>7.4%</td>
</tr>
<tr>
<td>Pigs per Litter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun - Aug</td>
<td>9.51</td>
<td>2.4%</td>
<td>9.4</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

Producers have been cutting back inventories and adjusting their farrowing plans in an attempt to improve market prices and potentially preferable market timing. As evidenced by the difference between the reduction of sows and farrowing intentions in the coming months, there may be some discrepancies in the report created by adjustments in breeding and farrowing management plans. For example, Iowa’s breeding herd was unchanged from a year ago, but Jun-Aug pig crop was up 7.4 percent and Sep-Nov farrowing intentions are down 5.6 percent.

Although average production in the fourth quarter will be higher than last year, there will be a tapering down of hog supplies until December when slaughter levels will be very near those of last year. Production in 2009 will start out at levels similar to those of last year but will continue to decline throughout the year. There is a potential for pork production to decline by more than 5 percent in the summer months of next year. Table 2 contains a summary of forecasted prices from ISU, changes in pork production, and the Iowa average hog price based on the futures marker prices and previous year Iowa basis. Although there were some short periods of phenomenal hog prices in 2008, such as the record high prices seen in August, market prices are expected to be a little more stable in the coming year.
Table 2. Production and Price Forecasts

<table>
<thead>
<tr>
<th>Period</th>
<th>% Change in Production</th>
<th>ISU Forecast, Live $/cwt</th>
<th>Sept. 26 Futures, Live $/cwt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct-Dec 08'</td>
<td>3%</td>
<td>46-49</td>
<td>47.36</td>
</tr>
<tr>
<td>Jan-Mar 09'</td>
<td>-2%</td>
<td>48-51</td>
<td>51.55</td>
</tr>
<tr>
<td>Apr-Jun 09'</td>
<td>-4%</td>
<td>62-65</td>
<td>61.84</td>
</tr>
<tr>
<td>Jul-Sep 09'</td>
<td>-5%</td>
<td>62-65</td>
<td>57.62</td>
</tr>
</tbody>
</table>

The past year has been difficult for pork producers. Higher feed and energy prices have caused cost of production to increase 27% from August 2007 to August 2008. During that time selling prices ranged from their lowest level since 2003 in November to a record high price in August followed by the largest one week drop in prices since the early 1970s. Producers have operated at a loss in 9 of the past 11 months and losses are forecast to continue until April or May of 2009.

Part of the financial losses can be attributed to larger pork supplies. Pork production for the 12 months September – August was 8.7% higher than the same period the year before. Producers had some relief from red ink in August. However, the higher costs of production kept returns relatively small in spite of the record prices.

The bright spot to date in the hog market has been pork trade. The weaker US dollar through early 2008 limited imports and helped exports. January through July pork exports are up 71% from the year before. Imports of pork into the US have been lower this year. Thus, in spite of the higher production, the amount of pork on retail shelves has been about the same as a year ago. Domestic availability in June was 27% less than it was in January. As a result domestic prices have been stable to higher and export demand has fueled hog demand.

China has been the fastest growing market this year. It experienced disease problems in 2007 that limited its supply of domestic pork. The economic activity of hosting the Olympics bolstered demand encouraging more purchases from the US. Japan, Mexico and Canada continue to be major markets for US pork.

The supply of hogs and pigs from Canada has slowed its pace. In particular, the number of hogs entering for slaughter is lower than the year before and pig imports have slowed. Herd liquidation in Canada has led to fewer total pigs and concern about how Country of Origin Labeling (COOL) will be implemented has also reduced imports.

In summary, hog prices are expected to stay below cost of production through the fall, winter and early spring. Prices should rally in April or May to return producers to profitable conditions. Producers should develop a survival strategy and plan to weather the next 6-8 months. Look for opportunities to lock in a margin in grain and hog prices. Also, to remain flexible, consider financing part of their line of credit as a term loan at favorable rates to spread recent losses over more time to maintain a favorable working capital position.

Competing Meats

Poultry production is also scaling back, as feed costs continue to impact profitability. Chick placements have been declining from 2007 levels since April, and total poultry production is also nearing the point of decline. Figure 1 tracks the percentage change in the three week rolling average of poultry production indicators. Poultry production will likely be down 3 percent in the fourth quarter, however adjustments in demand may offset some of the potential price improvement a drop in supply might bring. Russia has announced a reduction in US poultry imports, which will push more poultry back onto the domestic market.

Figure 1. Poultry Industry, Percentage Change in 3 Week Average
Beef supplies are well on their way to reduction. Cattle on feed inventories are down 3 percent from last year, suggesting that finished beef supplies will be down in the first quarter of 2009. This will add support to both the beef and pork markets, especially if exports continue to grow. In the long run beef supplies will continue to decline for the next several years, as the supply of domestic beef cattle continues to decline.

John Lawrence
Shane Ellis

Fall Crop Outlook

Earlier this month, the U.S. Department of Agriculture released projections for the 2008 corn and soybean crops. These estimates were eagerly anticipated as they provided an updated snapshot of agricultural production. Given the late planting, the flooding earlier this summer, and the relatively cool summer, there has been a great deal of concern about this year’s crop production. The September estimates show that the U.S. is still on pace to produce the 2nd largest corn and 4th largest soybean crops in the country’s history. But there are signs of weakness in these estimates. The projected corn and soybean yields were lowered from August estimates. Both crops are still behind normal in progressing to maturity. And while recent weather has been favorable for crop development, there are concerns that it’s “too little, too late.” Frost is also a concern given the crops’ late development, but given that harvest has begun in isolated spots around the state, that concern is fading.

The USDA projections include demand estimates, which show demand for both crops easing a bit over the next marketing year. For corn, ethanol usage will continue to increase, while corn exports fall slightly and feed demand is projected to back off by over 10%. Overall, corn demand is expected to fall by 175 million bushels. For soybeans, domestic crushing demand is expected to be 30 million bushels less, while exports are projected to fall by 155 million bushels. However, the end result for both crops is a tighter stock situation. Coming out of the 2008 marketing year, we are projected to have just over 1 billion bushels of corn and 135 million bushels of soybeans. These levels are well below historical averages. With the projected low stocks, USDA estimates higher season-average prices for both corn and soybeans. For the 2007 marketing year, corn averaged $4.20 per bushel, while soybeans averaged $10.15. For the 2008 marketing year, those prices increase to $5.50 for corn and $12.35 for soybeans.
Worldwide, the stock situation is not nearly as tight. In the rest of the world, corn production has increased 1.25 billion bushels since 2006, while corn usage has only increased 1.12 billion bushels. USDA has projected total foreign corn stocks at the end of the 2008 marketing year of 3.3 billion bushels, 400 million bushels more than there was at the end of the 2006 marketing year. Corn production is projected to increase by at least 100 million bushels in the European Union, the former Soviet republics, and China. For soybeans, the rest of the world’s production has kept pace with usage and stocks are roughly in line with 2006 levels, 1.7 billion bushels. Argentina, Brazil, and China are all expected to increase production by at least 50 million bushels each.

Demand Factors

Beyond the weather concerns for the 2008 crops, there are several other factors influencing the crop outlook for 2009. One of the largest is the continued expansion of biofuels. Crude oil prices have come down over the past couple of months, but are still historically high. Higher energy prices have spurred biofuel expansion. Also, 2009 will mark the second year under the enhanced Renewable Fuels Standard (RFS), passed in the 2007 Energy Act. The RFS outlines the availability of renewable fuels in the U.S. from now until 2022. For 2009, 10.5 billion gallons of renewable fuels are required. And that number increases to over 12 billion gallons in 2010. For corn-based ethanol to fill its part of the RFS, it will take approximately 3.6 billion bushels of corn from the 2008 crop and 4.1 billion bushels from the 2009 crop. Figure 1 shows estimated gross margins for ethanol production. As the graph shows, ethanol margins have been somewhat steady over the last few months, given the larger swings in ethanol and corn prices. But the lower level of ethanol margins we are seeing today is projected to remain throughout 2009. There have been few plant construction start-ups recently, as the ethanol industry’s growth has been based on the finishing of plants started during in late 2006 and early 2007.

Figure 1. Historical Ethanol Gross Margins

Biodiesel requirements will support soybean oil demand, as the RFS calls for 500 million gallons of biodiesel. Figure 2 displays ratios of Iowa prices for biodiesel and soybean oil, the main feedstock for Iowa biodiesel. Biodiesel margins have been quite tight for some time, but relative prices have improved for the industry, especially over the past two months. Soybean oil prices are now below where they were in Jan. 2007, while
biodiesel prices are holding at a slight premium. The export market for biodiesel has been vital to the industry. Through July, exports of biodiesel and related products were up over 100% from last year.

**Figure 2. Iowa Soybean Oil and Biodiesel Price Ratios (Jan. 4, 2008 = 1)**

Another major factor looking forward is the relative strength or weakness of the U.S. dollar versus foreign currencies. Over the past couple of years, the dollar has weakened versus several of the world’s major currencies. And that weakness has helped promote U.S. exports, especially agricultural exports. For the 2007 crops, export demand was very strong even with very high commodity prices. USDA is projecting slightly lower exports for corn and soybeans over the next year, and the dollar has attempted to rally this summer. Currency futures currently show the dollar holding its own to slightly rising against many other currencies. Figure 3 shows the futures outlook for the dollar versus several currencies.

Livestock feed demand is projected to weaken and the adjustments in the livestock industry to higher feed costs continue. Hog farrowing is projected to be down from 3 to 5% over the next six months. Broiler eggs and chick placements are down 4 to 8%. Cattle feedlot placements in August were down 3% from last year. USDA projects corn feeding will fall by 14% for the 2008/09 marketing year.

Agricultural input costs will also influence producer decisions for 2009. Since the beginning of 2007, fertilizer and fuel costs have more than doubled. And these cost increases are likely to hold for the 2009 crops. Crop margins will be tighter as farm costs start to catch up with crop prices. With the continuing surge in input costs, producers will need to protect against falling crop prices. Forward contracting, the use of futures and options, and crop insurance are among several approaches producers can use to protect themselves. Also, the competition of acreage this spring should lead to some pricing opportunities.
Many of the storylines from the past few years will continue for corn and soybeans. Both crops face tight stock situations and will have a strong competition for acreage in 2009. Biofuels continue to grow in importance and the livestock industry is in a period of adjustment to the higher crop prices. Higher energy prices have supported the biofuel development and higher crop prices, but there are concerns about the general economy both here in the U.S. and worldwide, which may weigh down on the market. Market volatility will remain high, as the link to the energy markets continues to develop and more market players (hedgers, speculators, fund traders, etc.) participate in trades. Given current factors, my outlook is for 2009 crop prices to be the neighborhood of 2008 prices, around $5.50 for corn and $12.25 for soybeans.

*Chad Hart*

**What is a Recession and is Iowa in One?**

There are currently compounding worries that the U.S. economy is in a recession. There is the financial sector debt crisis, the overall housing bubble, several regional recessions, and eight straight months of declining nonfarm employment. Iowa on the other hand seems to have evaded many of the symptoms of our national economic illness. Although there are stories of home builder bankruptcies and some general softness to the overall economy, the state appears to be adding jobs, its metropolitan trade centers are continuing to expand, its farm sectors are looking to have a profitable year, and state government receipts are meeting expectations.

The official declaration of a recession is made by the National Bureau of Economic Research (NBER), which defines a recession as a significant decline in economic activity that is spread across the economy and lasts more than a few months. Official declarations of recessions are usually made well after they have actually begun, often long after the effects of a downturn are commonly and widely felt. The most recent official recessions were in

- July 1981 through November 1982,
- July 1990 through March 1991, and
- March 2001 through November 2001
When measuring the magnitude and duration of declines across the economy, economists use indicators such as real Gross Domestic Product, real income, employment, industrial production, and wholesale-retail sales. We can compare the recent performance of these and other key economic indicators to their performance before and during past recessions. Any patterns that emerge may give us clues about current stress in the state’s economy and the likelihood of recession. There are lags in the collection of these data, however, and they are not all available at the state level in a timely fashion. Consequently, we look at surrogate indicators to help us understand where we are and how we are doing. This short report introduces four such measures. They include measures of the:

National Outlook. This indicator is based on the Weekly Leading Index (WLI) published by the Economic Cycle Research Institute. The WLI has a respected track record for signaling upturns and downturns in the national economy. ECRI's index includes seven components that measure home purchases, money supply, stock prices, initial jobless claims, corporate yield spreads (inverted), and corporate bond quality spreads. A decrease in the index value in any given week signals expected contraction in the national economy. As presented here, the national growth indicator measures the percentage increase or decrease in the value of the ECRI-WLI index in a given week, compared to the same week one year ago.

Finding: This indicator when measured against the same period a year ago is at its lowest value in modern history. The current reading is 10 percent lower than last year, a score worse than the lowest score of the most recent recession using this measure.

Industrial Activity. The national indicator is based on the Purchasing Managers Index (PMI) published by the Institute for Supply Management. The PMI is a monthly survey of purchasing managers to gauge their firms’ production levels, new orders from customers, pace of supplier deliveries, inventory levels, and employment levels. The PMI is viewed as a leading indicator for the manufacturing sector and the economy as a whole. The expected value of the PMI in a given month is 50. A value below 50 in a given month signals expected contraction in the manufacturing sector. The Iowa-specific indicator is based on the Mid-American Purchasing Managers Index published by Creighton University. This indicator is similar to the national PMI, but is specific to a group of states in the Midwest that includes Iowa.

Finding: The U.S. through August using this measure indicates an economy that is on the bubble with a score of 50 – a score of 50 means that as many respondents believe that their firms will expand as those that believe theirs will contract. The value for Iowa was, however, sharply lower than the national amount, scoring at 40.8. That means that nearly 60 percent of the respondents were expecting their firms’ production to contract.

Home Sales. This indicator measures the number of single-family homes sold by quarter in the United States and in Iowa. The data come from the Iowa Department of Workforce Development. One of the more important elements of our recent economic expansion and our economic stress is home sales. Home sales in the U.S. grew rapidly during this decade, and as demand for homes was very high, home prices increased rapidly. As a result, the construction sector boomed adding new homes. This added supply, however, did not quell the rapid run-up in price, and the housing expansion became a housing contraction whose consequences are being felt throughout the national economy. The pace and pattern of home sales is therefore an indication of the extent to which an economy in the Midwest, or Iowa in particular, tracks with the national patterns of change. By indexing our data to a logical beginning point, in this case the first quarter of 1998, we show the ratio of growth over time relative to that beginning.

Findings: Iowa and the Midwest have followed the national rates of growth in home sales. From quarter one 1998 through the second quarter of 2004, U.S. home sales grew by 44 percent, Midwest sales by 29 percent, and Iowa sales by a third. Sales, however, have fallen sharply for all levels. For the second quarter of 2008, U.S. sales were actually nine percent less than when the index began, and Iowa and the Midwest sales were six percent less.

Employment. This indicator measures the monthly number of non-farm jobs in the United States and in Iowa. The data come from the Bureau of Labor Statistics. When an economy is assessed the first category of scrutiny
is its job growth. Depending on the state and depending on the mix of industries in a state, there are cycles or seasons to growth. When an economy expands, however, the overall pattern of job growth is upward, and the reverse in a recession. One very useful way to compare like cases with like cases is to compare any given month’s growth against its same performance a year ago. When you do that you control for imbedded seasons or cycles and standardize the data so that you can compare your state with other regions or the nation.

Findings: This indicator tracks expansions and contractions in the national and the Iowa economy. It clearly outlines the 2001 through 2002 slowdown and recovery. Both the national and the Iowa year over year employment changes have trended downward persistently since 2006 and give every indication that the state is heading into a prolonged slump.

There is significant objective evidence that the state’s economy is in a period of decline. Home sales, nonfarm employment, and the outlook for the state’s manufacturing sector all indicate that the Iowa economy is slowing down.

![Figure 1. National Outlook](image-url)
Figure 2. Industrial Activity

Purchasing Managers' Index

Figure 3. Home Sales

Sales of Existing Single Family Homes
Figure 4. Nonfarm Employment

Iowa and U.S. Nonfarm Employment Change, Year-Over-Year Change

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