2004 Estimated Returns: Hogs, Smell like Money

As pork producers reflect upon the year 2004, most will agree that the lower feed costs and higher than usual market hog prices made feeding pigs more profitable. The estimated returns to finishing feeder pigs were the best they have been since the early 90’s, with the third and forth quarters of last year averaging $29.67 and $33.45 per head profits. Feeder pig prices have also been on the rise, selling for $20-30 more per head than a year ago.

This period of improved profits is continuing into 2005 but it is unclear for how long. Some input costs such as feed and feeder pigs are increasing in price, shaving off some of the finishing profit margin. There are no substantial signs of recent expansion in hog inventories and domestic demand has been strong enough to support and even strengthen the red meat market. As for suggesting what might soften the hog market, cattle and beef prices might give some indication. The price of beef has been high enough that consumers have turned to pork. A fall in beef prices could result in consumers turning to beef and reducing demand for pork. Prices in beef are expected to soften slightly in the coming year, a change that will likely be echoed in the pork market.

Figure 1. Estimated Returns for Finishing Feeder Pigs in Iowa, 1990-2005.
Cattle on Feed Report

Cattle on feed inventories have been relatively unchanged in the past four months. Cattle on feed on February 1 was up 0.3% from January, but identical to November and December inventories at 11.3 million head. Feedlot inventories are up 2% from February 2004 and up 6% from February 2003. Cattle disappearance during January was steady from a year ago but still down 10% from two years ago. The number of cattle placed on feed during January 2005 was up 7% from that month in 2004, partially accounting for the increase in cattle on feed. Cattle disappearance for reasons other than marketing was down from a year ago and near 2003 levels at 74 thousand head.

An increased number of steers on feed accounted for the increased feedlot inventories. Heifer numbers were down by almost 7% as of the first of this year, which is not a surprise with the 4% increase in retention of replacement beef heifers.

Table 1. Cattle on Feed, 1000+ head feedlots.

<table>
<thead>
<tr>
<th>Cattle on Feed</th>
<th>Percent Change from month previous</th>
<th>Percent Change from 2004</th>
<th>Percent Change from 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 1</td>
<td>11,334</td>
<td>unchg</td>
<td>--</td>
</tr>
<tr>
<td>January 1</td>
<td>11,299</td>
<td>-0.3%</td>
<td>unchg</td>
</tr>
<tr>
<td>February 1</td>
<td>11,334</td>
<td>+0.3%</td>
<td>+2%</td>
</tr>
</tbody>
</table>

As for cattle on feed numbers closer to home, Iowa inventories have set new records in each of the past four months and passed the 450 thousand head mark last month. The graph in Figure 2 is a pretty good picture of the seasonality and growth of the cattle feeding Iowa’s larger feedlots.

Figure 2. Iowa Cattle on Feed, 1000+ head feedlots.

There may be several factors contributing to the record number of cattle being fed in Iowa. First, there is an abundance of inexpensive feed in Iowa and surrounding states. Nebraska has also had increased inventories. Second, the disappearance of cattle has slowed slightly. The third explanation has to do with the changing structure of the cattle feeding industry. Cattle on feed numbers could be an inflated view of the actual totals, because smaller feedlots (less than 1,000 head) are holding a smaller collective inventory. Table 2 shows how
the number of small feedlots and their inventories has decreased in the past couple of years. Small feedlots are becoming fewer in number and smaller in average inventory.

Table 2. Iowa 2002-04, Number of <1,000 head feedlots, inventory, and Marketing

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Lots</th>
<th>Inventory 1,000 head</th>
<th>Average Inventory per Lot</th>
<th>Marketed 1,000 head</th>
<th>Average Marketing per Lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>11000</td>
<td>695</td>
<td>63</td>
<td>1030</td>
<td>94</td>
</tr>
<tr>
<td>2003</td>
<td>10500</td>
<td>580</td>
<td>55</td>
<td>970</td>
<td>92</td>
</tr>
<tr>
<td>2004</td>
<td>9500</td>
<td>470</td>
<td>49</td>
<td>780</td>
<td>82</td>
</tr>
</tbody>
</table>

It is difficult to determine how much of the increased large feedlot inventories are offset by decreases in small feedlot inventories, but with the number of large feedlots also on the decline it ‘continues’ to be evident that feedlots are becoming both fewer in number and larger in capacity.

International Meat Trade

The final numbers on meat imports and exports in 2004 are being reported. Last year, as everyone is well aware, the beef industry did not do much exporting. Total beef exports were down nearly 75%, while total imports were up almost 22%, creating a “beef quantity trade deficit” of about 875 thousand metric tons. Pork on the other hand ended 2004 with a 33% increase in pork exportation and 7% decrease of importation. Nearly 950 thousand metric tons of pork was exported. The beginning of 2005 has been a continuation of the same. The impact of the Canadian border reopening will not dramatically change import quantities, because the current importation of Canadian beef to the United States are nearly at pre-border-closing levels.

Shane Ellis

Soybean Prices React Strongly to Southern Brazil Dry Weather
Corn Prices Rise Modestly

From the market low on February 4 to the close on February 28, May soybean futures rose $1.21 per bushel. November futures were up about $0.95 during the same time period. The rapid rise in prices was triggered as large fund traders (who were heavily short) began buying back positions after USDA lowered its Brazilian crop estimate on February 9. In the last two and one-half weeks, southern Brazil has remained dry and has led to expectations of a further reduction in Brazil’s crop estimate. At this writing, the market has been within ½ cent of filling a gap at $6.245 on the May futures that was formed last September 3. Possible up-side price objectives on May futures are $6.37 (a gap from 9/2/04) and $6.58, the secondary peak in the market last September 1. However, technical indicators have been showing a sell signal for several days, and trade sources indicate fund traders have now liquidated their short positions and are net long. That may temper up-side potential. Another possible chart objective is $7.10. The market could attempt to reach this level if southern Brazil does not receive significant rain in the next week. However, a $7.10 futures price looks out of line with current market fundamentals, based on the analysis below.

Farmers should be cautioned that even additional Brazilian crop losses five and one-third times as large as USDA’s February reduction would produce a world soybean crop 16.2 % above last year. Since 1980, larger percentage increases in production than that have occurred only two other times. The world crop was up 16.9 % from the previous year in 1994-95 and 19.6 % in 1997-98. In other words, Brazil’s current problems are not threatening to bring a repeat of last year’s tight world soybean supplies.

On our February 12-19 trip to southern and west central Brazil, we found much of the crop to be at a growth stage similar to Midwest soybeans in early to mid-August. With Brazil’s nearly continuous growing season, soybeans ranged from having been planted six weeks ago to beans that have already been harvested. Less than
10 percent of the Brazil crop had been harvested or was ready for harvest. Most of the crop needs at least another three to four weeks to reach full maturity. In southern Brazil, most beans looked quite good. Dry weather was a much bigger concern for farmers than Asian rust. The soils there have good moisture-holding capacity, but the area had not received general rains for three to four weeks. Since then, parts of the South have had light, scattered rains. Further north in Mato Grosso, soil moisture was generally adequate and light rains came almost every afternoon. Farmers were spraying for Asian rust with both ground and aerial spraying equipment. Effectiveness of rust control varied somewhat, depending on the timing of spraying and chemical used. Farmers indicated control was much better than last year, when continuous rain interfered with timely spraying.

Most weather forecasts at this writing show only minor relief from the dry weather in southern Brazil. If that is the case, it would not be surprising to see Brazil’s soybean crop estimate reduced by another 1.5 to 2.5 million tons from USDA’s February 9 estimate. Most private estimates are now showing about that much crop loss. In contrast to southern Brazil, most reports indicate Argentina’s soil moisture has been adequate. Current conditions suggest Argentina’s soybean crop estimate should hold about steady at USDA’s February 9 projection.

**Declining Brazilian Crop Estimate & World Supplies**

In its January world report, USDA projected the current marketing year world soybean production would be 21% above last season. In February, the report showed a 20% increase. Figure 1 shows potential increases in world production and comparisons with the last 25 years, with reductions in Brazil’s soybean crop of 1.5, 3.0, 6.0, and 8.0 million metric tons from the 2/09/05 projection. **With an 8 million ton drop from USDA’s 2/9/05 Brazilian production and leaving the rest of South America unchanged, world production would still be 16.2% above last year. That would be the third largest percent increase in world production since 1980.**

Figure 2 shows similar projections for the world soybean stocks/use ratio—assuming world use does not decline as the production estimate is reduced. **Even with an 8 million ton reduction in Brazil’s crop, world stocks are indicated to be 26 percent of world use, the second highest since 1980 and down only slightly from the previous high of 28.5 in the mid-1980s.** These comparisons indicate the current soybean price rally has been greatly amplified by short covering of large fund traders and their recent shift to modest net long positions. **Fundamental analysis suggests the rally is likely to be temporary unless damage to the Brazilian crop is much more serious than currently estimated by most analysts.** Barring serious Asian rust problems in the U.S., down-side risk in soybean prices could be substantial by late summer.

**Asian Rust & U.S. Soybeans**

Soybean price action later in the year will be sensitive to possible reports of Asian rust in the U.S. Soybean Belt. Reports from the extreme southern U.S. indicate Asian rust has been found this week on kudzu in west central Florida. It has been found despite killing frosts as far south as central Florida and the southern edge of the Gulf states. Modestly reduced prospects for Brazil’s crop will make soybean prices potentially more sensitive to any serious threat of Asian rust in the southern and/or Midwest soybean crops later in the year. The map below shows USDA-North Carolina State University estimates of the risk or Asian soybean rust in the U.S. Risk is greatest in the southeast, where only about 2.7 million acres of soybeans were raised last year. In the
mid-South, from Arkansas, Kentucky and Tennessee southward to the Gulf, last year’s plantings totaled 7.7 million acres. Thus, the South last year accounted for about 14% of total U.S. soybean acres. Southern U.S. soybean production last year accounted for 13.6% of the national crop. A 25% loss of production in that region would cut the U.S. crop only 3.4%. If Asian rust problems were confined mainly to the South (with a 25% production loss there) and Midwest production was about normal, the reduced production in the South would be expected to raise the U.S. marketing year average soybean price by around 45 to 50 cents per bushel.

In the Midwest, the greatest risk of Asian rust is believed to be in extreme east central Iowa and the eastern Corn Belt. Higher risk there is believed to be due to more frequent rains, higher humidity, and wind patterns carrying spores up the Mississippi and Ohio river valleys. The risk of rust is estimated to be much lower west of the Missouri river, based on wind patterns, lower rainfall, higher temperatures and lower humidity.

**New-crop Soybean vs. Corn Prices**

November soybean futures prices have rallied by almost $1 per bushel in February. At the same time, December corn futures have gained only about $0.15 per bushel. That means gross returns being offered to central Iowa grain farmers for 2005-crop soybeans in the last month have gained about $20 per acre vs. first year corn, and about $22 to $24 vs. corn following corn. Strength in new-crop beans may encourage a few more soybean acres to be planted this spring than previously anticipated. The rally is occurring just as USDA is taking its planting intentions survey, and may influence results of the March 31 planting intentions report.

**Recent Corn Price Strength**

May corn futures and north central Iowa cash prices rose by about 21 cents per bushel in February. Strength has been due to a combination of (1) speculative short covering, (2) concern about lack of rain for Brazilian corn, (3) market action in sympathy with soybeans, and (4) limited farmer marketings at prices below the loan rate. No major change in corn market fundamentals appears to be in sight at this time. Cumulative export sales from last September 1 through February 17 were 12% below a year earlier. To reach recently lowered USDA export projections, sales from February 24 through August 31 will need to average about 12% above a year earlier. Export sales from now through August 31 just equal to a year earlier would have the potential to push August 31 U.S. corn carryover stocks up to 2.2 to 2.3 billion bushels. That would be an 11 weeks supply. Corn processing for ethanol is continuing at a record pace that looks to be in line with current USDA projections. About 76% of the 2004 corn crop has had the LDP taken and is no longer eligible for marketing loan price protection. Thus, the loan rate is not a solid floor for corn prices.

Quite a bit of Brazil’s corn is planted as a second crop after the soybean harvest, during the cooler and drier part of the year. It is too early to project yields for that part of the crop. In the South, some yield loss is occurring on early season corn due to dry weather, but it may be offset by better yields in Argentina. Brazil normally is the world’s No. 3 corn producer, after the U.S. and China. In the last few years, it has become a small exporter of corn.
The strongest connection between corn and soybean prices is competition for cropland in the U.S. The sharply higher soybean prices, if they persist, will point to a slight tightening of next season’s corn supply-demand balance. A million fewer acres of corn than we are currently projecting would drop potential 8/31/06 U.S. corn carryover stocks down to around a 9 weeks supply. With stocks in the 9 to 10 weeks range in 1998-99, 1999-02, and 2000-01, north central Iowa cash corn prices at harvest ranged from $1.40 to $1.75 per bushel.

**Balance Sheets**

Our latest balance sheets include supply, demand, and price projections for the 2005-06 marketing year with varying yields, as well as projections for the current marketing year. They are in the upper right-hand column of our web site ([http://www.econ.iastate.edu/faculty/wisner/](http://www.econ.iastate.edu/faculty/wisner/)), under the heading “Balance Sheets”.

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