

## CORN-SOYBEAN PRICE SENSITIVITY TO WEATHER SLIGHTLY INCREASED WITH NEW USDA CROP ESTIMATES

USDA's January 12 Crop Production, December 1 Grain Stocks, and World Supply-Demand reports were modestly positive for corn and soybean price prospects, although the changes probably were less significant than suggested by the initial market reaction. Through a combination of slightly reduced acreage and slightly lower yields, the U.S. corn production estimate was lowered 100 million bushels or $1 \%$ from the last estimate in November. The soybean crop estimate was lowered 30 million bushels or $1 \%$, also reflecting lower acreage and yields. Traders had expected USDA to raise the corn estimate, but a lower soybean production number should not have been a surprise.

## Stocks Report \& Grain Feeding

The stocks report allows us to analyze grain feeding in the previous quarter. That's our largest source of demand for corn. Indicated U.S. corn feeding was $1.7 \%$ above a year earlier, reflecting large livestock numbers. Indicated feeding of grain sorghum and barley was up sharply from last year, when a small sorghum crop reduced the availability for feed. With increased wheat feeding, total grain feeding (excluding oats) in the September-November quarter apparently was up about $11 \%$ from a year earlier. Part of that increase likely was a statistical error term in wheat rather than actual negative wheat feeding a year earlier.

USDA projected a slightly accelerated rate of increase in U.S. corn feeding for the rest of the marketing year- a $3 \%$ increase over last year. That may be slightly optimistic, considering that USDA farrowing intentions and calf crop data strongly indicate that livestock numbers will turn downward later in the marketing year. Lack of wheat pastures and large placements of calves in feedlots also is a factor in the feed use projection.

With a 50 million bushel increase in export projections, the net effect of these changes was to reduce projected August 31, 2000 U.S. corn carryover stocks 280 million bushels from last month's report. While that is positive by itself, it is not enough to shift corn into a major bull market. The projected carryover would be only a little below the 8/31/99 level. Excess "free" (outside government programs) corn stocks would total about 1.0 to 1.1 billion bushels. Barring major weather problems, most or all of those stocks will have to be financed and stored privately for another year. Agricultural lenders are likely to be reluctant to finance longer-term farmer storage due to risk-exposure without price protection.

With average or better U.S. yields, conditions needed for the grain industry to store the excess carryover would be a large carry (premium of July, September, and December 2001 futures over the December 2000 futures prices) plus a depressed basis (differential of local cash prices to futures). Those conditions were present in late summer and fall the last two years. They almost always are accompanied by low cash prices. For soybeans, the projected carryover is slightly larger than last August 31, but lower than indicated in December.

## Price Implications

Slight to modest additional strength in cash corn and soybean prices is a good possibility into mid-February as the market reacts to uneasiness about South American weather. In the past week, much of Brazil's Soybean Belt received 0.6 to 2.5 inches of rain, although some areas remain dry. One of those is in northwest Rio Gran Dul Sul, an important soybean producing area and the southernmost Brazilian state. Commercial 10- and 30-day forecasts show normal to above-normal rain for most of the Brazil soybean area (optimum is slightly below normal). However, these same forecasts show a dry area developing over Paraguay, soybean areas in Bolivia, and a sizable area in the northeastern part of
The Iowa Farm Outlook can be viewed on WWW at: http://www.econ.iastate.edu/outreach/agriculture/periodicals/ifo/ and on "Local Pages" of DTN and "Iowa News" on FarmDayta.

Argentina's Corn-Soybean Belt. In recent years, South America has exported more combined soybeans and soy products than the U.S. Its crop is smaller, but its domestic use is much less than in the U.S. Thus, the soybean market can respond substantially to weather problems there. Argentina is a significant corn exporter, but with a much smaller export volume than the U.S. Its weather can affect the corn market somewhat, but not nearly as much as would occur from a major U.S. drought.

## U.S. SOYBEAN BAL. SHEET (MIL.BU.) 1/12/00

|  |  |  | Proj. | Proj. | Proj. 2000-01 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $1995-96$ | $1997-98$ | $1998-99$ | $1999-00$ | A | B | C |
| Supplies: | 61.6 | 69.1 | 70.8 | 72.5 | 72.8 | 73.0 | 73.3 |
| Harv. A.,Mil. | 35.3 | 38.9 | 38.7 | 36.5 | 35.5 | 39.5 | 41.0 |
| Bu./A. | 2,174 | 2,689 | 2,741 | 2,643 | 2,439 | 2,884 | 3,005 |
| $\quad$ Production | 4 | 5 | 4 | 3 | 8 | 4 | 4 |
| Imports | 335 | 132 | 200 | 348 | 365 | 365 | 365 |
| Carryover | 2,514 | 2,826 | 2,945 | 2,994 | 2,812 | 3,252 | 3,374 |
| $\quad$ Total |  |  |  |  |  |  |  |
| Utilization: | 1,370 | 1597 | 1590 | 1,605 | 1,615 | 1,625 | 1,640 |
| Crush | 851 | 870 | 801 | 865 | 865 | 885 | 895 |
| Exports | 109 | 158 | 205 | 159 | 185 | 160 | 160 |
| Other Domestic | 2,330 | 2,626 | 2,596 | 2,629 | 2,665 | 2,670 | 2,695 |
| $\quad$ Total | 183 | 200 | 348 | 365 | 147 | 582 | 679 |
| Carryover | 6.72 | 6.47 | 5.00 | 4.75 | 5.85 | 4.35 | 4.00 |
| U.S. Avg. Price, (\$) | 6.67 | 6.37 | 4.90 | 4.65 | 5.75 | 4.25 | 3.90 |
| Ia. Avg. Price (\$) | 6.75 | 6.05 | 4.80 | 4.35 | 5.70 | 3.80 | 3.55 |
| N.C.Ia.Harv.Pri. (\$) | 236 | 185 | 137 | 160 | 194 | 139 | 128 |
| Meal Dectr/T 48\% (\$) | 222 | 174 | 130 | 152 | 183 | 131 | 121 |
| Meal, 44\% (\$) | 24.7 | 25.8 | 20.3 | 15.6 | 19.0 | 16.5 | 15.6 |
| Soy Oil, Decatur | 7.15 | 6.50 | 5.30 | 4.95 | 6.25 | 4.40 | 4.15 |
| Nov. Fut. @Hrv. (\$) |  |  |  |  | 20 | 60 | 20 |
| Long-term prob. (\%) |  |  |  |  |  |  |  |

CORN BAL. SHEET (MIL.BU.) 1/12/00

|  |  |  | Proj. | Proj. | Proj. 2000-01 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $1995-96$ | $1997-98$ | $1998-99$ | $1999-00$ | A | B | C |
| Plant. A(Mil.) | 71.2 | 79.5 | 79.9 | 77.6 | 77.0 | 77.2 | 77.5 |
| Harv.A.(Mil) | 65.0 | 72.7 | 72.3 | 70.9 | 70.3 | 70.7 | 71.0 |
| Bu./A. | 113.5 | 126.7 | 134.4 | 134.5 | 115.0 | 134.0 | 136.5 |
| Production | 7,374 | 9,207 | 9,759 | 9,437 | 8,085 | 9,474 | 9,692 |
| Imports | 16 | 9 | 19 | 15 | 14 | 10 | 10 |
| Carryover | 1,558 | 883 | 1,308 | 1,787 | 1,734 | 1,734 | 1,734 |
| $\quad$ Total | 8,948 | 10,099 | 11,086 | 11,239 | 9,833 | 11,218 | 11,436 |
| Utilization: |  |  |  |  |  |  |  |
| $\quad$ Feed \& Resid. | 4,711 | 5,505 | 5,496 | 5,590 | 5,275 | 5,500 | 5,550 |
| Food, Ind. \& Seed | 1,583 | 1,782 | 1,822 | 1,900 | 1,990 | 1,935 | 1,945 |
| $\quad$ Exports | 2,228 | 1,504 | 1,981 | 2,015 | 1,925 | 2,000 | 2,030 |
| $\quad$ Total | 8,522 | 8,791 | 9,299 | 9,505 | 9,190 | 9,435 | 9,525 |
| Carryover | 426 | 1,308 | 1,787 | 1,734 | 643 | 1,783 | 1,911 |
| U.S. Farm Price (\$) | 3.95 | 2.43 | 1.95 | 1.85 | 2.65 | 1.85 | 1.75 |
| Iowa Avg. Price (\$) | 3.85 | 2.33 | 1.85 | 1.75 | 2.55 | 1.75 | 1.65 |
| Harv. Price, C.Ia (\$) | 2.90 | 2.40 | 1.75 | 1.40 | 2.50 | 1.40 | 1.35 |
| Dec. Fut. @ Harv. (\$) | 3.35 | 2.80 | 2.10 | 1.95 | 3.00 | 1.95 | 1.90 |
| Long-Term Prob. (\%) |  |  |  |  | 20 | 60 | 20 |

Looking ahead into the summer, U.S. and world feed and food grain stocks are quite modest by past standards when measured as percent of utilization, as shown. A slight tightening of U.S. stocks (and a small decrease from last month in world stocks) mean that weather problems in the U.S. similar to the 1988 drought or the 1993 floods would dramatically strengthen corn and soybean prices. At times, such weather conditions could push fall-delivery corn and soybean futures prices into the low $\$ 3$ and low $\$ 6$ area, as the market attempted to ration utilization. The tables show my projections of

2000-2001 price, supply and utilization with these yields, as well as with normal and slightly above normal yields. Historically, the low-yield scenarios shown in columns A and B occur only about 20\% of the time. Dr. Elwynn Taylor, ISU climatologist, recently indicated that the continued La Niña weather formation boosts the drought risk for 2000 to around $35 \%$, and that an updated weather outlook will be available next month. With average or better yields across the

## U.S. Corn Yield, Percent

Deviation From Trend, 1866-1999.


Corn Belt, next year's supply-demand balance would be expected to be similar to that of this year.

## LDP Update

As of January 13, USDA reports show $73 \%$ of the 1999 U.S. soybean crop and $64 \%$ of the corn crop had already received LDP payments. Some reporting backlog still exists, so the actual percent no longer having access to price support loans likely is somewhat higher. As we have noted before, this is a caution for late February and early March grain prices, especially for soybeans. As farmers line up financing for 2000 crops, lenders are likely to be reluctant to also finance continued storage of a large amount of 1999 crops. Hence, farmer marketings may increase at that time.


U.S. Corn Carryover/Use \%


## Robert Wisner

## LIVESTOCK UPDATE

## Cattle Update

Live Cattle prices continue to trade near $\$ 70$, despite the continued large cattle on feed numbers and record high slaughter weights. Cattle slaughter weights have climbed from 1219 lbs for the week ending Dec. 4, 1999 to 1229 lbs for the week ending Jan. 8th. This increase occurs when seasonal weights show little growth. Figure 1 shows the weekly cattle slaughter weights. The December USDA Cattle on Feed report estimated cattle on feed in 1000+ capacity feedlots in the U.S. on Dec. 1st at 11.746 million head, up $6.5 \%$ from year earlier levels. Marketings during November were up $5.2 \%$, placements were up $5.1 \%$. Feedlot profitability during recent months has caused feedlots to place lighter cattle in an effort to keep lots full. November placements continued the trend of previous months in placing lighter cattle.

Average Cattle Slaughter Weights


Figure 1

Current demand for beef has kept feedlots profitable even with larger on feed numbers and heavier weights. Eventually on feed numbers will decline with the lighter placements. Weights may climb into the Feb-Mar period, but should decline then into the summer months. Reduced supplies later in 2000 should allow feedlots to remain above breakevens even if demand weakens.

## Hog Update

Federally Inspected slaughter for the month of December totaled 8.711 million head, compared with 9.231 million in December 1998. This 5.6\% decrease in slaughter for December is comparable to that of the December USDA Hogs and Pigs report that estimated the $180-\mathrm{lb}$ and over market pig inventory $4.7 \%$ lower on Dec. 1, 1999. As expected, the market had little reaction to the report. Futures prices are currently $\$ 1-2$ higher than the day of the report and offer some attractive hedging opportunities for the summer months. Live prices are expected to trade in a sideways pattern to slightly higher in the next few weeks.

Alan Vontalge

