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CORN CONSUMPTION: WHO WILL BLINK?

Consumption of U.S. corn during the current marketing year is projected by the USDA to reach 11.890 billion bushels, 624 million above the record consumption of last year. If the U.S. crop is significantly smaller than the current forecast of 10.905 billion bushels, however, consumption may have to be less than forecast.

It is rare that the U.S. crop is small enough that total supply (production plus carryover stocks) is small enough to require a reduction in consumption from the level of consumption during the previous year. That scenario unfolded only four times in the past 30 years: 1983-84, 1993-94, 1995-96, and 2002-03. Consumption was lower than the previous year on five other occasions, but supplies were large enough in each of those years to accommodate an increase in consumption. For the current marketing year, supplies are not small enough to force a year-over-year reduction in consumption, but may be small enough that consumption will have to be less than currently projected.

The USDA will release a new forecast of the size of the crop on November 9 with the final production estimate to be released on January 12, 2007. Expectations are that the November U.S. average yield forecast will be 1.5 to 2.5 bushels below the October forecast of 153.5 bushels per acre, resulting in a production forecast of 10.73 to 10.8 billion bushels. With 45 percent of the crop rated in good condition and 18 percent rated in excellent condition at the end of the season, a yield near 152 bushels would be expected. With September 1, 2006 stocks of 1.971 billion bushels, a crop of 10.765 billion bushels, imports of 10 million bushels, and consumption of 11.89 billion, stocks at the end of the current marketing year would be reduced to 856 million bushels, or 7.2 percent of projected use. The experience of 1995-96 suggests that a minimum pipeline supply at the end of the year is about 5 percent of consumption, equivalent to about 600 million bushels this year. At this juncture, potential supplies appear adequate to allow consumption at the projected level, but concerns about the 2007-08 marketing year will persist.

Historically, the adjustment to shortfalls in U.S. corn production were primarily in the domestic feed and residual category of use. In the four years in the past 30 years that supplies were small enough to force a year-over-year reduction in use, feed and residual use declined by an average of 11.3 percent, in a range of 5.1 to 15.2 percent. The largest year-over-year decline in feed and residual use in recent history was 17.9 percent in 1988-
Ironically, corn supplies were large enough that year that a reduction was not required. Prices over-reacted to the extremely small crop, forcing a larger than required reduction in use. The quarterly pattern of decline in feed and residual use was not consistent over the five years mentioned here, occurring early in 2003-03, late in 1983-84, and more uniformly in the other three years.

In the four years of forced reduction in corn consumption, U.S. exports were larger than the previous year twice (1983-84 and 1995-96) and lower twice (1993-94 and 2002-03). Exports were influenced by the size of the world feed grain crop and the strength in demand in importing countries, not just the price of U.S. corn.

There has been only one year in modern history with a year-over-year decline in domestic seed, food, and industrial use of corn. That was 1995-96, when use declined by 87 million bushels (5 percent). Most of the decline was in the fourth quarter, following historically high prices in the spring of 1996. The use of corn for fuel alcohol declined by 137 million bushels (25.7 percent) during the 1995-96 marketing year, while corn used for food and beverage products increased by 42 million bushels (3.5 percent).

In the current environment, the majority of the adjustment to a shortfall in U.S. corn production resulting in high prices, would likely occur in the domestic feed and residual category. The distribution of the adjustment over time and species of livestock would be influenced by the level of livestock prices, adjustment in livestock prices, and timing and magnitude of increase in corn prices. Likely response in the export market is less predictable and would depend on the availability of other feed grains worldwide and the strength of the world livestock markets. Domestic processing use of corn would likely be the least responsive to supply shortages and high prices. In particular, corn used for ethanol production would likely not decline as it did in 1995-96, if crude oil prices remain at or above current levels.

The USDA’s December Grain Stocks report, to be released on January 12, 2007, will provide some information about how domestic livestock producers are responding to the high price of corn. Producer decisions about crop acreage in 2007 will be the first indication of whether or not a corn supply problem can be anticipated any time soon. A report of intended corn acreage will not be released until March 30, 2007, but the January 12, 2007 Winter Wheat Seedings report will provide some important information about supply response to higher prices.

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