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## **Balance Sheet Projections for the 2015-16 Corn Marketing Year**

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It is the season for developing corn balance sheet projections for the upcoming marketing year. The 2014-15 marketing year is approaching the halfway point, the spring crop insurance price is being determined, and planting and new crop marketing decisions are being made. The USDA will update their previous <u>early release</u> of projections for the 2015-16 marketing year as part of their *USDA Agricultural Projections to 2024* report scheduled for release on February 11. Others, such as the Congressional Budget Office (CBO), have also released <u>long term projections</u>.

There is a general consensus that U.S. producers will plant fewer acres of corn in 2015 than were planted in 2014 and increase acreage of higher valued and/or lower cost crops. The reduction in acreage may be muted to some extent by the 6.7 million acre reduction in corn acreage that occurred over the previous two years and by the 1.9 million acre reduction in winter wheat seedings revealed in the USDA's December 2014 Agricultural Survey . A modest 1.25 million acre reduction, to about 89.3 million, is used in this analysis. The CBO projection is for 89 million acres while the USDA's early release of baseline projections used planted acreage of 88 million. Planted acreage of 89.3 million would point to about 81.8 million acres harvested for grain.

Yield expectations at this time of year are typically generated from trend yield analysis or from yield expectations based on average growing season weather conditions. Those two approaches yield slightly different results. We find the best fitting trend of actual U.S. average yields to be a linear trend of annual yields from 1960 forward. That trend explains 89 percent of the variation in annual yields from 1960 through 2014 and indicates that yields are increasing at a rate of 1.81 bushels per acre per year. The trend yield calculation for 2015 is 162 bushels. Yields, however, are disproportionally impacted by weather conditions. Poor weather tends to reduce yield by more than good weather increases yield so that a trend calculation would slightly understate yield expectations under average weather conditions. With average weather conditions, a U.S. yield near 164 bushels would be expected, seven bushels below the record yield of 2014. At that level, the 2015 crop would be expected to total about 13.4 billion bushels, 800 million bushels smaller than the record crop of 2014. With corn stocks at the beginning of next year at the current projection of about 1.9 billion bushels, 2015-16 marketing year supplies of corn would be near 15.3 billion bushels, about 170 million bushels less than the supply for the current marketing year. The CBO has used a yield

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projection of 165.8 bushels and a production forecast of 13.5 billion bushels. The early USDA projections are for an average yield of 167.2 bushels and a crop of 13.445 billion bushels.

Expectations are for consumption of U.S. corn during the 2015-16 marketing year to exceed production, leading to a decline in stocks by the end of the marketing year. The magnitude of the decline has important price implications. Corn consumption occurs in four major categories—ethanol, other domestic processing, exports, and feed and residual. Ethanol use of corn will be influenced by the EPA's final rulemaking in regards to implementing the RFS mandates as well as the level of crude oil and gasoline prices. The EPA rulemaking is expected to establish renewable fuel (ethanol) requirements at higher levels than in the preliminary rule making. Such an increase, along with low gasoline prices that might increase domestic motor fuel consumption, and with a net ethanol export trade balance would be supportive of ethanol production. Ethanol use of corn could increase modestly from the projected level of 5.175 billion bushel this year to 5.225 billion bushels next year. Other domestic processing uses of corn are fairly consistent from year to year, with a small trend increase, and would be expected to be near 1.41 billion bushels.

The magnitude of U.S corn exports vary considerably from year to year and are difficult to forecast. Demand for U.S. corn will be influenced by the magnitude of grain production in the rest of the world, by the rate of world economic growth, and by currency exchange rates. Exports during the current year are projected at 1.75 billion bushels and exports in the previous 10 years (excluding the drought year of 2012) ranged from 1.541 billion to 2.437 billion bushels. Early expectations for 2015-16 center on about 1.85 billion bushels. Feed use of corn next year should be supported by increasing livestock production and positive livestock feeding margins. Residual (or unexplained) use of corn, however, might be reduced from this year's level if the 2015 crop is smaller than the 2014 crop. If those factors offset, use next year might be near the projection of 5.275 billion bushels for the current year.

Early expectations, then, are for 2015-16 marketing year corn consumption to be near 13.76 billion bushels. (CBO and USDA projections are at 13.61 and 13.745 billion bushels, respectively). Ending stocks would total only 1.54 billion bushels and would point to a marketing year average price in the low \$4.00 range. The price expectation is \$0.50 to \$0.70 higher than most other projections, and slightly higher than the price currently reflected by new crop futures.

## References

Congressional Budget Office. "CBO's January 2015 Baseline for Farm Programs." Released January 26, 2015, and accessed February 9, 2015.

http://www.cbo.gov/sites/default/files/cbofiles/attachments/44202-2015-01-USDA.pdf

USDA. "USDA Agricultural Projections to 2023." Released February 2014, and accessed February 9, 2015. http://www.usda.gov/oce/commodity/projections/index.htm

Also available at:

http://farmdoc.illinois.edu/marketing/weekly/html/020915.html