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Could the Corn Carryout Really Reach Two Billion Bushels?

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The last time the U.S. ended a marketing year with more than 2 billion bushels of corn was 2004-05. At that point in time the "old era" marketing year average corn price was \$2.06 per bushel. While "new era" corn prices have experienced record highs, those high prices have been reduced on the back of record corn production in 2014 (*farmdoc daily* December 31, 2014). Now, followed by weaker than anticipated first-half implied feed and residual use of corn, some expect for the 2014-15 marketing year ending stocks of corn to be within reach of 2 billion bushels. Recent trade guesses for 2014-15 marketing year corn ending stocks averaged 1,854 million bushels, and ranged from 1,750 to 1,999 million bushels.

On the bright side, with respect to both old- and new-crop grain prices, the consumption levels needed to reach a 2 billion bushel carryout result in a stocks-to-use ratio of only 14.8 percent. Based on a recent price and stocks-to-use analysis, the implied corn price associated with a 2 billion bushel carryout may be consistent with the current marketing year projection of \$3.70 per bushel (*farmdoc daily* April 9, 2015 and April 9 USDA *World Agricultural Supply and Demand Estimates*).

The cause for concern, then, is the price implications associated with a potentially big crop in 2015 given anticipations for a large carryout in 2014-15. March intentions revealed expectations for 89.2 million acres of corn planted in 2015. If stocks come in above current projections, a larger than projected corn yield with marginally lower corn consumption would combine to push corn prices in 2015-16 to prices below those currently experienced. The purpose of today's article is to review the ongoing pace of corn consumption by category as it pertains to potential beginning stocks for 2015-16.

Based on the March 1 *Grain Stocks* report implied feed and residual use for the first half of the marketing year was 3,648 million bushels. This total represents 69 percent of the USDA's marketing year projection of 5,250 million bushels. (Note: April 13 USDA *Feed Outlook* will provide revised estimates of feed and residual use.) In previous years the percent of first half feed and residual use has varied from 64 percent during 1996-97 to 2005-06 to as high as 74 percent during the most recent 2010-11 to 2013-14 marketing

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years. Applying these historical percentages to the implied first half feed and residual use suggests a wide range for the 2014-15 marketing year between 4,900 and 5,700 million bushels.

It is no coincidence then that following the March 1 stocks report the average trade guess for corn ending stocks fell within a 250 million bushel range. A similar situation emerged last year following the March 1 stocks report. At the time, the WASDE projection for 2013-14 feed and residual use was 5,300 million bushels and first half feed use was 3,765 million bushels, approximately 71 percent of the WASDE projection. Ultimately, feed and residual use declined to 5,036 million bushels, with first half use representing 75 percent of the marketing year total. It is possible a similar situation is emerging and feed and residual use could be revised downward as the marketing year continues. However, at this point there is no evidence to suggest an overly bearish or bullish perspective on feed and residual use. Recent expansion in livestock supports higher feed use than last year, and the USDA projection of 5,250 represents a midpoint of possible outcomes.

With respect to exports, the April 9 USDA *World Agricultural Supply and Demand Estimates* (WASDE) projections have 2014-15 corn exports at 1,800 million bushels. USDA's April 6 Federal Grain Inspection Service (FGIS) report indicated that as of the week of April 2, cumulative corn exports for the 2014/15 marketing year totaled 917 million bushels. USDA Foreign Agricultural Service's Global Agricultural Trade System census data through February 2015 indicate that corn exports totaled 810 million bushels and were 65 million bushels higher than the FGIS inspection numbers through February. Assuming this pace continues, corn exports through February may be as high as 982 million bushels, representing approximately 55 percent of the projected WASDE total.

In addition to corn already exported, the April 9 USDA Foreign Agricultural Service's Export Sales Report (FAS) revealed 566 million bushels of outstanding corn export sales. Combining the outstanding sales with the implied export volume, sales remain 252 million bushels short of the WASDE projection. With nearly 60 percent of the marketing year in the books, corn exports need to accelerate in order to reach the 1,800 million bushel WASDE projection. The current slow pace suggests that corn exports could in fact fall marginally short of the WASDE goal.

Finally, combining first quarter *Feed Outlook* estimates of corn use for ethanol with the USDA April 1 *Grain Crushings and Co-Products Production* report suggests first half corn use for ethanol at 2,582 million bushels. This total represents approximately 50% of the WASDE projection for the 2014-15 marketing year. Additionally, Energy Information Administration (EIA) ethanol plant production data shows marketing year total ethanol production of 8.6 billion gallons through the week ending April 3, 2015. This total is 5 percent above prior year ethanol production levels. While some may point to a slowdown in corn use for ethanol in recent months based on *Grain Crushings and Co-Products Production* data, this slowdown could be attributable to seasonal ethanol yield variations.

Collectively, the pace of corn consumption for ethanol, exports, and feed and residual use is supportive of current WASDE projections. A two billion bushel carryout seems like a distant, and unlikely, outcome given current consumption indicators. USDA's June 30 stocks report should provide additional clarity on the ongoing pace of corn consumption.

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Also available at:

http://farmdoc.illinois.edu/marketing/weekly/html/041315.html