September 1 Corn Stocks Estimate - Does It Matter?

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Corn prices continue to be dominated by expectations of a very large U.S. harvest. The USDA will release a new forecast of the size of the crop on September 11. The market expectation is that the new forecast will be about 250 million bushels larger than the August forecast and that the forecast is likely to be larger again in October, reflecting an U.S. average yield well above trend value. With such a large harvest, the estimate of September 1 stocks of old crop corn will have less importance than was the case in the previous three years when stocks were generally small and the U.S. average corn yield was below trend value.

Still, there will be some information in the September 1 stocks estimate as it will reveal the magnitude of consumption during the final quarter of the 2013-14 marketing year and perhaps provide some insight into the accuracy of the 2013 corn production estimate. The price implications of the estimate, if any, will depend on the magnitude of stocks relative to the expected level of stocks. The magnitude of exports during the final quarter of the marketing year is mostly known. The Census Bureau estimated exports during June and July at 368 million bushels, so that exports during the first 11 months of the marketing year exceeded USDA export inspection estimates by 55.5 million bushels. For August, USDA export inspection estimates totaled 171 million bushels, suggesting that the Census Bureau estimate when released on October 3 will be near 176 million bushels. Exports during the fourth quarter of the marketing year, then, may be near 544 million bushels, the most in five years. Exports for the entire marketing year would be near 1.924 billion bushels, close to the current USDA forecast.

An estimate of the amount of corn used for ethanol production during the final quarter of the marketing year is based on the estimates of ethanol production released by the U.S. Energy Information Administration (EIA). A monthly ethanol production estimate is available for June and weekly estimates are available through August 29. With two days remaining in the quarter, it appears that summer quarter ethanol production will total 3.668 billion gallons. Most, but not all ethanol is made from corn and the yield of ethanol from each bushel of feedstock varies somewhat. During the last half of the 2013-14 marketing year, the amount of sorghum used to make ethanol has declined. As a result, a slightly higher percentage of ethanol was made from corn. To forecast the amount of corn used for ethanol production
during the last quarter of the year we simply use the ratio of total ethanol production to corn consumption estimated by USDA for the third quarter of the marketing year. That ratio of 2.74 implies that 1.338 billion bushels of corn were used during the final quarter of the year and that 5.132 billion bushels were used during the entire marketing year. That is 12 million bushels more than the most recent USDA forecast. The USDA’s WASDE report to be released on September 11 will contain an updated estimate of marketing year corn use for ethanol production.

The USDA has forecast corn consumption for domestic processing other than ethanol during the 2013-14 marketing year at 1.385 billion bushels, 20 million less than used during the previous year. Use during the first three quarters of the marketing year was estimated to be 13 million bushels less than use of a year earlier so that the USDA projection for the year appears reasonable. If correct, use during the final quarter would have totaled 348 million bushels, resulting in total processing use (including ethanol) of 1.686 billion bushels.

For the entire 2013-14 marketing year, the USDA has projected feed and residual use of corn at 5.175 billion bushels. Use during the first three quarters of the year was estimated at 4.71 billion bushels. To reach the projection for the year, use during the fourth quarter needed to total 465 million bushels. Estimated use during the final quarter of the marketing year was extremely small the previous two years, averaging only 288 million bushels. Estimated use in the final quarter of the 2009-10 and 2010-11 marketing years averaged 474 million bushels. Estimated use during the final quarter in the three years preceding 2009-10 averaged 704 million bushels. The pattern of estimated feed and residual use of corn during the final quarter of the marketing year over the past seven years makes it difficult to anticipate use this year. Use should be larger than in the previous two years, supported by low corn prices relative to other feed ingredients and very modest expansion in broiler and dairy cow numbers. In addition the availability of new crop corn in August, which can replace old crop corn consumption, was not unusually large this year. However, since estimates of feed use are entirely residual calculations, estimated use can differ substantially from expectations.

June 1 stocks of corn were estimated at 3.854 billion bushels. With imports of about 6 million bushels during the last quarter, supplies totaled 3.86 billion bushels. Based on our estimates of exports and domestic processing use of corn and assuming that feed and residual use equaled the USDA projection, corn consumption during the final quarter of the year totaled 2.695 billion bushels. Under that scenario, September 1 stocks of old crop corn would have stood at 1.165 billion bushels. The actual estimate will have to deviate from that forecast by a large amount to have a price impact.

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