How Will the December 1 Corn Stocks Estimate Be Interpreted?

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It is always a challenge to anticipate the USDA’s quarterly estimate of corn stocks, but the estimate of the December 1 inventory, to be released on January 12, 2015, is a special challenge. Not only is there the usual uncertainty about the magnitude of feed and residual use of corn during the first quarter of the marketing year, there is uncertainty about the potential change in the corn production estimate that is released on the same day.

The production estimate will reflect a final yield estimate based on the December Agricultural Survey and a final harvested acreage estimate based on that same survey in combination with other administrative acreage data, primarily planted acreage reported to the Farm Service Agency (FSA). As pointed out in the November 17 issue of this newsletter, there has been a consistent relationship between planted acreage reported to FSA and the final estimate of planted acreage reported by the National Agricultural Statistical Service (NASS) in recent years. That relationship has meant that the NASS final estimate of planted acreage could be reasonably well anticipated based on acreage reported to FSA by October or November. This year, however, the difference between FSA acreage reported in November and the current NASS planted acreage estimate was about five million acres, compared to the average difference in final estimates of about 2.8 million acres for the period 2007 through 2013. FSA will release an updated acreage report on December 15. Unless acreage in that report is about two million acres more than reported in November, some reduction in the NASS acreage estimate in the January 12 report will be anticipated.

The estimate of December I stocks will reveal the magnitude of corn consumption in the first quarter of the marketing year. Along with the final production estimate, that revealed pace of consumption may allow for a more accurate forecast of the magnitude of year-ending stocks. The USDA currently projects those stocks at 2.008 billion bushels. The magnitude of both exports and domestic processing use of corn during the first quarter of the marketing year can be estimated fairly closely based on weekly and monthly estimates of use. As indicated earlier, feed and residual use of corn to be revealed in the stocks estimate is difficult to anticipate.

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Corn export inspections during the first quarter of the 2014-15 marketing year were reported at 367 million bushels. However, Census Bureau export estimates for the first two months of the quarter exceeded inspections by 31 million bushels. If that margin persisted through November, exports during the first quarter of the marketing year would have been 398 million bushels, 48 million more than during the same period last year.

Domestic processing use of corn is dominated by use for ethanol production. Based on estimates from the U.S. Energy Information Administration, ethanol production during the first quarter of the 2014-15 corn marketing exceeded that of a year ago by five percent. About half of that increase reflected an increase in net exports while the other half resulted in an increase in stocks. Last year, the USDA reported that 1.216 billion bushels of corn were used for ethanol production during the first quarter of the marketing year. Use was likely near 1.28 billion bushels this year. The USDA has projected that corn used for other domestic processing this year will total 1.385 billion bushels. If use was on that pace during the first quarter of the marketing year, about 340 million bushels of corn would have been consumed, bringing total domestic processing use to 1.62 billion bushels.

The USDA has projected feed and residual use of corn during the 2014-15 marketing year at 5.375 billion bushels, 243 million bushels (4.7 percent) more than used last year. So what should use during the first quarter have been if use is on track to reach 5.375 billion bushels for the year? This is where the analysis becomes tricky. A 4.7 percent year-over year increase would put first quarter use this year at 2.525 billion bushels. However, use during the first quarter of the marketing year was especially large the past two years, 47.0 and 47.7 percent, respectively, of the marketing year total. In the previous six years, use during the first quarter ranged from 38.8 to 42.9 percent of the marketing year total, averaging 39.7 percent. A return to that pattern, then, would point to first quarter consumption this year of only 2.085 to 2.305 billion bushels if use is on track with the USDA projection.

With export and domestic corn consumption during the first quarter of the marketing year at 2.023 billion bushels and an unchanged production estimate, the estimate of December 1 stocks as large as 11.55 billion bushels could still be consistent with marketing year feed and residual use of 5.375 billion bushels. Similarly, a stocks estimate as low as 11.15 billion bushels, with an unchanged production estimate, might also be consistent with marketing year feed and residual use of 5.375 billion bushels. Given that the quarterly distribution of feed and residual use this year is not known, an “extreme” December 1 stocks estimate (after adjusting for any change in the production estimate) may be required to change expectations about marketing year feed and residual use. It will be interesting to see how the market interprets the stocks estimate.

References

Good, D. “Corn and Soybean Acreage Questions Persist.” farmdoc daily (4):222, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, November 17, 2014.

Also available at: http://farmdoc.illinois.edu/marketing/weekly/html/120814.html