Big Year for Ethanol

Darrel Good

Department of Agricultural and Consumer Economics
University of Illinois

October 6, 2014

farmdoc daily (4):192

Ethanol production, consumption, and stocks data are typically reviewed on a calendar year basis since Renewable Fuel Standards (RFS) are established for calendar years. However, since corn is the major feedstock for domestic ethanol production, ethanol data on a corn marketing year basis (September-August) are important for monitoring and anticipating marketing year corn consumption.

For the 2013-14 corn marketing year, monthly estimates of domestic ethanol production and stocks are available from the U.S. Energy Information Administration (EIA) through July 2014. Weekly estimates are available for August. Census Bureau estimates of ethanol imports and exports are available for the entire marketing year. Based on these estimates, domestic ethanol production for the year totaled a record 14.15 billion gallons, 1.3 billion gallons more than produced during the 2012-13 marketing year and 354 million gallons more than the previous record production during the 2011-12 marketing year.

Ethanol imports during the 2013-14 marketing year are estimated at 275 million gallons, 509 million gallons less than imported during the previous year when domestic ethanol production was limited by a short supply and high price of corn. The vast majority of imports are from Brazil. Exports of U.S. ethanol during the 2013-14 marketing year are estimated at 788 million gallons, 227 million gallons more than exported last year, but nearly 300 million gallons less than exports during the 2011-12 marketing year. Exports were exceptionally large in 2011-12 resulting from a sharp decline in Brazilian ethanol production due to a small supply and high price of sugar. Ethanol is exported to a large number of countries, with Canada being the largest customer by a wide margin. The exception was the unusually large exports to Brazil in 2011-12.

Domestic stocks of ethanol during the 2013-14 corn marketing year increased by an estimated 35 million gallons, following a decline of 94 million gallons during the previous marketing year. The estimates of production, imports, exports, and stocks imply that domestic consumption of ethanol during the 2013-14 marketing year totaled 13.6 billion gallons, 443 million gallons more than the previous record consumption in 2012-13. The three percent increase in consumption was supported by a modest increase in motor fuel consumption and a modest increase in consumption of higher ethanol blends, primarily E85.
The USDA has forecast that a record 5.125 billion bushels of corn were used to produce ethanol during the 2013-14 corn marketing year that ended on August 31. That forecast will be revised as EIA ethanol production and stocks estimates are finalized. Based on current estimates for August, corn consumption may have been slightly larger than the current forecast.

On a side note, a large quantity of corn used for ethanol production results in a large quantity of the co-product of distillers’ grains. Those distillers’ grains are mostly fed to livestock, domestically or in importing countries, and substitute for other feed ingredients, mostly whole corn and soybean meal. During the 2013-14 marketing year, a larger portion of those distillers grains were exported than was the case in the previous two years. The Census Bureau estimates that 13.2 million tons of distillers’ grains were exported during the 2013-14 marketing year, about 50 percent more than in each of the previous two years. China was the largest importer of distillers’ grains, followed by Mexico. Chinese restrictions on import of some GMO products have raised concerns about future U.S. exports of distiller’s grains to China. A slowdown in those exports, however, might have a minimal impact for the current year. Smaller Chinese imports could alter the mix of feed ingredients consumed, but it would not likely alter the global demand for total feed ingredients. That is, China would presumably replace U.S. distillers’ grains with some other feed ingredient that in turn would make room for more U.S. corn or distillers’ grains in other markets.

With a record large U.S. corn crop this year, the magnitude of ethanol production will be important in determining the extent of the build-up in domestic corn inventories by the end of the current marketing year. With only limited potential for growth in domestic ethanol consumption, expansion in production will be dependent on continued small or declining imports and growth in exports of ethanol. Export potential is enhanced by the current low price of ethanol relative to gasoline, but increases are not yet evident in monthly Census Bureau export estimates.

Weekly estimates from EIA indicate that ethanol production in September 2014 was about 6.5 percent larger than in September 2013. The large increase, however, reflects the relatively low level of production in September 2013 so that rate of expansion will not likely be maintained. Growth in ethanol production alone will not be sufficient to prevent a substantial build-up in corn inventories, but may be helpful in limiting the magnitude of the build-up.

Also available at:
http://farmdoc.illinois.edu/marketing/weekly/html/100614.html