A Review of the USDA’s 2013-14 Projections for Corn and Soybeans

The USDA’s Interagency Commodity Estimates Committees prepared projections for the 2013-14 U.S. marketing year for corn and soybeans (as well as other crops) presented at the USDA’s 2013 Agricultural Outlook Forum on February 22.

Under the assumption of normal spring and summer weather conditions, the projections for both crops reflect expectations of much larger U.S. production, increased consumption, larger year-ending stocks, and lower prices than experienced during the current marketing year. The projections are consistent with our expectations, with some minor exceptions.

For corn, the USDA expects planted acreage at 96.5 million, only 700,000 less than the large acreage of a year ago. Acreage last year was bolstered in part by record early planting and less than the normal amount of prevented plantings. A more normal spring this year might result in fewer corn acres in favor of soybean acres. The acreage projection is lower than most private projections as it assumes some decline in total crop acreage, but captures the general expectation of large corn acreage. Almost regardless of planted acreage, acreage harvested for grain is expected to be larger than harvested in 2012. The difference between planted and harvested acreage (acreage harvested for silage or abandoned) was an abnormally large 9.8 million acres in 2012. With more normal weather, that difference would likely be in the range of 7.2 to 7.8 million acres in 2013. The USDA projects a difference of 7.7 million.

Based on a model estimated over the period 1988 through 2012, the USDA projects the 2013 U.S. average corn yield at 163.6 bushels per acre. The model incorporates trend, planting progress, and summer weather variables to explain average yield. The 2013 projection assumes normal planting progress, no extreme June dryness, and average summer weather. The forecast is higher than most other forecasts, including ours. Using a longer time period, and the application of a different weather model, our analysis points to a 2013 yield near 160 bushels.

A record large corn crop, near the USDA projection of 14.5 billion bushels, is consistent with our expectation. The projection of a very modest increase in corn used for ethanol and a return to more normal (larger) exports is also consistent with our expectations. The USDA projects a sharp increase in feed and residual use of corn, to a 6-year high of 5.4 billion bushels. The projection assumes an increase in livestock production, a more favorable wheat-to-corn price ratio and an increase in residual (unexplained) use of corn due to the large crop size. The forecast exceeds our expectation. Even with that large forecast, year-ending stocks as a percentage of consumption are projected at 7-year high of 16.7 percent. The marketing year average farm price is projected at $4.80, down from the $7.20 average expected for the current year. The projection of $4.80 includes the expectation of substantial pre-harvest sales at much higher prices.
For soybeans, the USDA projects planted and harvested acreage to increase by a very modest 300,000 and 500,000 acres, respectively. Based on a model similar to the one used for corn, the U.S. average yield is projected at 44.5 bushels per acre, resulting in a crop of 3.405 billion bushels. That would be 390 million bushels larger than the 2012 crop and 46 million larger than the record crop of 2009. Using a longer time period and a different weather model, our expectation would be for an average yield of 43.8 bushels and a crop near 3.355 billion bushels.

Like corn, consumption of U.S. soybeans is expected to increase during the 2013-14 marketing year, even with increased competition in the world market from the much larger South American crop currently being harvested. Larger consumption would stem from lower prices and continued strong soybean demand from China. The weakest demand segment is expected to be soybean oil exports, resulting from continued high prices and from increased competition from South American soybean oil and from palm oil. That weakness is expected to be partially offset by an increase in domestic soybean oil consumption for biodiesel production. The 300 million pound (six percent) increase projected for that category, however, seems modest in light of the advanced biofuels mandate and the re-instatement of the biodiesel tax credit.

Year-ending stocks of U.S. soybeans are projected to increase from 125 million bushels this year to 250 million bushels next year. The average farm price is expected to decline from $14.30 per bushel to $10.50.

The early USDA projections for the 2013-14 marketing year are well-reasoned and represent a useful starting point. Our projections differ only slightly. Larger year-ending stocks and a marketing year average price near $4.50 for corn may result from a crop of 14.5 billion bushels. Producers appear to have been reluctant to take advantage of the high pre-harvest prices available early in the year. In contrast, our expectations would be for a slightly smaller soybean crop, stronger domestic soybean oil demand, and a marketing year average farm price of soybeans near $11.00.

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