March 1 Soybean Stocks Estimate to Be Overshadowed by Planting Intentions?

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The USDA's estimate of December 1, 2014 stocks of U.S. soybeans was surprisingly small. Based on the estimated size of the 2014 crop and estimates of exports and domestic crush during the previous quarter, the stocks estimate implied a record large residual use of soybeans during the first quarter (September-November) of the 2014-15 marketing year.

The USDA provides an estimate of seed and residual use of soybeans for the marketing year, but does not estimate seed and residual use on a quarterly basis. Historically, those quarterly estimates were provided based on estimates of total domestic disappearance of soybeans and the Census Bureau estimates of the size of the domestic crush during the quarter. Monthly Census Bureau crush estimates were discontinued in July 2011. Quarterly estimates of seed and residual use can now be derived based on the monthly estimates of the domestic crush provided by the National Oilseed Processors Association (NOPA).

Using NOPA estimates of crush, adjusted to reflect that the NOPA estimate is thought to be for about 95 percent of the industry, seed and residual use of soybeans during the first quarter of the 2014-15 marketing year is estimated at 281 million bushels. That estimate is 51 million bushels larger than the previous record use a year earlier and 100 million bushels larger than use during the first quarter of the 2012-13 marketing year. Some explained part of the large residual use with the observation that more soybeans were in transport on December 1, 2014 than in previous years. Export inspections, for example, were about 20 million bushels larger during the first week of December 2014 than in the same week the previous year. That is the explanation that was apparently favored by the market, as March 2015 soybean futures closed $0.36 lower on the day the estimate was released.

Another possible explanation for the large residual use of soybeans during the first quarter of the marketing year is that the 2014 crop was overestimated. This argument might be supported by higher than expected soybean prices this year given the estimated size of the surplus projected to be generated by the large 2014 crop. In addition, basis levels have been generally strong for most of the year.

The USDA's estimate of March 1, 2015 soybean stocks, to be released on March 31, may provide some insight into the debate. Expectations for the magnitude of March 1 stocks are based on the estimate of
December 1 stocks, imports during the quarter, and estimates of soybean consumption during the quarter. With December 1 stocks at 2.524 billion bushels and quarterly imports of 10 million bushels, supplies for the quarter would have totaled 2.534 billion bushels. Based on monthly NOPA estimates, the domestic crush during the second quarter of the 2014-15 marketing year was 2.4 percent larger than the crush during the same quarter in the previous year. The total domestic crush, then, should have been near 498 million bushels. Census Bureau estimates of soybean exports are available for December 2014 and January 2015, but have not yet been released for February 2015. The Census estimate of exports for the two months was 8 million bushels less than the USDA estimate of export inspections during December 2014 and January 2015. If that margin persisted through February, quarterly exports should have totaled about 715 million bushels.

If the size of the 2014 soybean crop has been accurately estimated, the March 1 stocks estimate should imply a large negative seed and residual use during the second quarter of the 2014-15 marketing year. That was the case in previous years of very large implied residual use during the first quarter of the marketing year. Seed and residual use during the second quarter of the marketing year, for example, was estimated at -38 million bushels last year, -22 million bushels in 2012-13 and -42 million bushels in 2009-10. A reasonable expectation this year might be near -90 million bushels. A March 1 stocks estimate near 1.41 billion bushels, then, would be consistent with the estimated size of the 2014 crop and known use of soybeans through February.

If the USDA March 1 stocks estimate deviates substantially from the calculated value, the debate about the size of the 2014 crop may be renewed. Such a debate, however, would not be resolved for another six months. The USDA’s estimate of the crop size is frequently revised, but not until the release of the September 1 stocks estimate, which will be on September 30 this year. Historically, implied seed and residual use of soybeans during the first half of the marketing year has not been a good predictor of the size or direction of any subsequent change in the estimated size of the crop.

Trade expectations for the USDA March 1 estimate of soybean stocks will be reported this week. If history is any indicator, expectations will be in a wide range. In addition, the experience following the release of the December 1 stocks estimate suggests that the price reaction to the USDA estimate is difficult to anticipate. As concluded for corn last week, unless the March 1 soybean stocks estimate deviates substantially from the range of possibilities, expectations about the magnitude of year-ending stocks will not likely be altered. The market will likely focus instead on the estimate of soybean planting intentions.

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