

January 2016 – Crop Market Update Public Policy Department Budget & Economic Analysis Team

Final 2015 Crop Estimates

Last week's World Agricultural Supply and Demand Estimates report incorporated final acreage and yield estimates from USDA National Agricultural Statistics Service. The result was a report that was mildly bullish for corn and soybeans, as production estimates came in on the low side of market expectations, particularly for beans.

For corn, harvested acreage was raised slightly (less than 100 thousand acres) from December despite the fact that the estimate of planted acreage was revised down by about 380 thousand acres. However, the rise in harvested acreage was more than offset by a drop in estimated yield. The national average yield was estimated at 169.3 bushels per acre in December, but was revised to 168.4 bushels per acre in the January WASDE. On net, considering the changes in harvested acreage and average yield, estimated corn production in the January report worked out to 13.601 billion bushels—about 50 million bushels less than the prior month's estimate.

Unfortunately, the decline in estimated corn production was more than matched by a drop in estimated use, with food/seed/industrial use reduced by 10 million bushels and exports reduced by 50 million bushels. The reduction in use estimates along with a 10 million bushel increase in estimated imports resulted in a 17 million bushel increase in projected ending stocks. The corn balance sheet is presented in Table 1.

				2015/16				
	2012/13	2013/14	2014/15	December	January			
	million acres							
Planted Acres	97.3	95.4	90.6	88.4	88.0			
Harvested Acres	87.4	87.5	83.1	80.7	80.7			
	bushels							
Yield (harv. ac.)	123.1	158.1	171.0	169.3	168.4			
	million bushels							
Beginning Stocks	989	821	1,232	1,731	1,731			
Production	10,755	13,829	14,216	13,654	13,601			
Imports	160	36	32	30	40			
Total Supply	11,904	14,686	15,479	15,415	15,372			
Feed & Residual	4,315	5,040	5,315	5,300	5,300			
Ethanol	4,641	5,124	5,209	5,200	5,200			
Other FSI	1,397	1,369	1,359	1,380	1,370			
Exports	730	1,920	1,864	1,750	1,700			
Total Use	11,083	13,454	13,748	13,630	13,570			
Ending Stocks	821	1,232	1,731	1,785	1,802			
Stocks:Use	7.4%	9.2%	12.6%	11.6%	13.3%			
Avg. Price	\$6.89	\$4.46	\$3.70	\$3.35 - \$3.95	\$3.30 - \$3.90			

Table 1. U.S. Corn Supply and Use: 2012/13 – 2015/16 (forecast)

Source: USDA Office of the Chief Economist, World Agricultural Outlook Board

The change in projected exports merits some comment. If the January forecast holds, corn exports will be off by 164 million bushels—or almost 9 percent—from 2014/15. There is no question that the export environment is tough this marketing year. World grain supplies are high—certainly relative to recent history—and the dollar is exceptionally strong against foreign currencies. To these negative fundamentals, we can also add the recent elimination of export tariffs on Argentine corn by that country's new president, which should be freeing up exportable stocks in that country, at least in the short run. Based on year-to-date corn exports, USDA's downward revision of the export forecast appears justified. Figure 1 below shows accumulated weekly U.S. corn exports for last year and the current marketing year to date.



Figure 1. Accumulated Weekly U.S. Corn Exports: 2014/15 v. 2015/16

Data Source: USDA Foreign Agricultural Service Weekly Export Sales Reporting.

Through the week ending January 7, year-to-date exports this year are actually around 20 percent lower than at the same point a year ago. The pace will actually need to pick up some for even this reduced export forecast to hold up.

USDA's export forecasts provide as good a reason as any to turn now to soybean projections for the current marketing year. As with corn, USDA dropped their estimate of 2015/16 soybean exports in the January WASDE. The current projection is for soybean exports to total 1.69 billion bushels for 2015/16. That is down from a forecast of 1.715 million bushels in the December WASDE and would be about a 150 million bushel decline—or about 8 percent—from the previous marketing year.

Here again, year-to-date soybean export figures are so far consistent with the reduced projections. Through the week ending January 7, accumulated weekly U.S. soybean exports are down about 9 percent from a year ago. Of course, with soybeans, it is instructive to consider trade with China separately since that is by far the largest destination or U.S. soybeans. Year-to-

date soybean exports to China are off by about 11 percent from last year. Exports to the rest of the world are closer to steady. This is clear in Figure 2, which shows weekly accumulated soybean exports to China and the rest of the world for the current and last marketing year.

Figure 2. Accumulated Weekly U.S. Soybean Exports to China and Rest of the World (ROW): 2014/15 v. 2015/16



Data Source: USDA Foreign Agricultural Service Weekly Export Sales Reporting

Soybean exports from the U.S. are facing the same challenges as noted earlier for corn—with the notable exception that the Argentine export tax on soybeans has not been completely eliminated but only reduced. On the other hand, the slowing of the Chinese economy has almost certainly been a bigger factor for soybean exports than for corn. The slowing of the Chinese economy has been widely discussed so far this year since spillover effects seem to be playing a significant role in the abysmal performance of the U.S. stock market so far this year. Over the last several years, it has seemed that for each marketing year, soybean use numbers have tended to be revised up (and ending stock numbers down by a commensurate amount) largely due to consistently growing demand from China. It will be interesting to see if that pattern holds this year in the face of what seems to be a legitimate slowdown in the Chinese economy. Current projections for the U.S. soybean supply/use balance sheet are shown in Table 2.

				2015/16			
	2012/13	2013/14	2014/15	December	January		
	million acres						
Planted Acres	77.2	76.8	83.3	83.2	82.7		
Harvested Acres	76.1	76.3	82.6	82.4	81.8		
	bushels						
Yield (harv.ac.)	40.0	44.0	47.5	48.3	48.0		
	million bushels						
Beginning Stocks	169	141	92	191	191		
Production	3,042	3,358	3,927	3,981	3,930		
Imports	41	72	33	30	30		
Total Supply	3,252	3,570	4,052	4,203	4,150		
Crush	1,689	1,734	1,873	1,890	1,890		
Exports	1,317	1,638	1,843	1,715	1,690		
Seed	89	97	96	92	92		
Residual	16	10	49	41	39		
Total Use	3,111	3,478	3,862	3,738	3,711		
Ending Stocks	141	92	191	465	440		
Stocks:Use	4.5%	2.6%	4.9%	12.4%	11.9%		
Avg. Price	\$14.40	\$13.00	\$10.10	\$8.15 - \$9.65	\$8.05 - \$9.55		

Table 2. U.S. Soybean Supply and Use: 2012/13 – 2015/16 (forecast)

Source: USDA Office of the Chief Economist, World Agricultural Outlook Board

The January adjustments on the supply side of the balance sheet were a bit larger—in a bullish direction—than the market was anticipating. Specifically, trade estimates didn't seem to be anticipating much of a change in harvested acres, but USDA dropped that number by about 600 thousand acres. The net effect of the balance sheet changes was to pull projected ending stocks down from 465 million bushels last month to 440 million bushels this month. While obviously an improvement over the December estimates, that's still a burdensome level of ending stocks.

Winter Wheat Seedings

Last week, USDA also released the results of their annual survey of winter wheat seedings. Average trade expectations were for a slight decline in winter wheat seedings from last year's 39.5 million acres. That actual figure reported by USDA was actually well below those expectations, coming in at 36.6 million acres. If that estimate holds (and history suggests that it won't change much), this will be the lowest winter wheat acreage since 2010. That, in turn, was the lowest winter wheat acreage *since 1913*.

Of course, total wheat acreage won't be determined until the spring crop is in the ground. Still, the winter wheat acreage gives a strong indication that total wheat plantings will be historically low this year. Over the past twenty years, winter wheat seedings have accounted for about 72 percent of total wheat seedings. That percentage has actually been fairly stable, ranging from just over 68 percent in 1997 to almost 77 percent in 2013.

In 2010, winter wheat seedings ultimately amounted to about 70 percent of total wheat seedings, with all spring plantings coming in at a little over 16 million acres. If that pattern repeats this year, combined wheat acreage will amount to about 52.7 million acres, which would, in historic context, be the lowest modern wheat acreage with the exception of 2010. Figure 3 shows winter and spring wheat acreage back to 1980.



Figure 3. U.S. Winter and Spring Wheat Acreage: 1980 – 2016 (forecast)

Based on the current estimate of winter wheat seedings, a combined wheat acreage of under 53 million acres is a strong possibility; a combined acreage of under 54 million acres is almost certain. The question is what will happen to this acreage (roughly 1.5 million acres compared to last year's wheat seedings)? Much of the shift out of winter wheat was in the southern Plains: Texas, down 700 thousand acres; Oklahoma, down 400 thousand acres; Kansas, down 700 thousand acres. This is typically hard red winter wheat country and, in fact, HRW acreage was down quite a bit more in percentage terms than the other classes of winter wheat (soft red and white). Those acres would most likely go to cotton (in Texas and southwestern Oklahoma), grain sorghum or corn (on irrigated ground, anyway). Of course, none of those markets are exactly screaming for more ground right now either. There really are no easy decisions to make this year.

Outside Markets Add to Uncertainty

So far this year, the stock market has been on a pretty wild ride—one that has mostly headed down. It has been interesting over the last couple of weeks to listen to commentary about the market. One common refrain lately has been that low energy prices are hurting the market. This sounds pretty confusing to people whose memory is long enough to recall this past summer, when low energy prices were touted as the best thing to happen to the economy in years. So which is it: are low energy prices a drain on the market or a valuable windfall? I'm tempted here to give the economist's stock answer of "it depends". That's actually not a bad answer to this question, but it helps to go into a little more detail.

Data Source: USDA National Agricultural Statistics Service Note: For 2016, winter wheat acreage is USDA's January estimate and all spring wheat acreage is the author's forecast.

With energy prices, the source of a price change can be important. If energy prices are falling due to a positive shock to the supply side of the market (e.g., increasing supplies from non-traditional sources or a boost to OPEC production), the lower price is an unmitigated good from the consumer's point of view. Low prices for energy (both utilities and gasoline) free up funds that can be spent on other things. Even if consumers spend the same total number of dollars, they are typically happier with the more diverse basket of goods. This is clearly the situation that the market was in this past summer: unexpectedly large supplies were leading to lower price for consumers and pretty much everyone saw it as a good thing.

On the other hand, if energy prices are falling because demand is weak, that might be a sign of other problems—for example, a slowing general economy. Note that in this situation, lower energy prices are not so much a problem as a symptom of a problem (i.e., a general economic slowdown). This seems to be a bit closer to the market's assessment of the current low energy prices. To some extent, low energy prices now are due to slowing world demand for energy as economic growth slows. Lower energy prices still help consumers, but the lower prices are, at least partially, reflective of a deteriorating global economic picture.

Lower energy prices can also have a more direct negative impact on the stock market. With energy prices declining rapidly in recent weeks, equity prices for companies directly operating in the sector have taken a hit. This can pull down market averages and help feed bearish sentiment, but it's important not to confuse bad news for a specific set of companies with bad news for everyone. If Exxon/Mobile (for example) takes a hit from low oil prices, that's bad for them and probably bad for market averages in the short run. But if everyone who spends money on energy has greater discretionary income as a result, that will be good for other companies (Yum Brands or Darden Restaurant Group, for example). Eventually, the stock market will rebalance to reflect these changes. In the meantime, I, for one, will not be complaining about lower gas prices.

Contact: John Anderson, 202-406-3623, johna@fb.org