Weekly Outlook: Storing Corn and Soybeans in 2017

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The current price structure of corn and soybean futures markets indicate positive carry in both markets and raises the question of whether producers should make decisions about grain sales. The decision by producers to store corn or soybeans should be determined by the returns to storage.

The current projection for 2017-18 marketing year corn supply is 16.573 billion bushels, 367 million bushels smaller than last year's supply. The soybean supply is projected at 4.777 billion bushels, 249 million bushels larger than last year’s supply. Total supplies (production, beginning stocks, and imports) of wheat, feed grains, and soybeans are currently estimated or forecast by the USDA to be 21.780 billion bushels, 16 percent smaller than supplies of a year ago. The USDA estimates on-farm and off-farm grain storage capacity as of December 1 each year. Total storage capacity on December 1, 2016 was estimated at 24.317 billion bushels. While storage capacity is not consistent over different areas or by type of crop, storage capacity appears capable of handling 2017 crops.

Harvest bids for corn and soybeans possess a weak basis, although conditions vary over different regions. At interior elevators in south central Illinois, current harvest time corn bids reflect an average basis of about -$0.32 per bushel. This basis is around $0.07 weaker than the basis at this time last year and about $0.03 weaker than two years ago. The carry from December 2016 to July 2017 in the corn futures market is about $0.26 per bushel, around $0.0371 per month. For soybeans, current harvest time bids in south central Illinois reflect an average basis of approximately -$0.325 per bushel. The basis is about $0.10 weaker than at this time last year and about $0.02 weaker than that of two years ago. The carry in the soybean futures market from November 2016 to July 2017 is approximately $0.34 per bushel, about $0.043 per month.

A producer’s storage decision is based on their storage capacity and the expected returns from storage. Returns to storage can be captured by selling the crop for later delivery at a price that exceeds the spot cash price by more than the cost of owning and storing the crop. This can be accomplished through a forward cash contract or by selling deferred futures contracts. Using a forward cash contract eliminates all uncertainty about the return to storage. By selling futures to price a stored crop, uncertainty about future basis levels can impact the actual returns to storage. Returns to storage can also be captured by storing the crop unpriced in anticipation of higher cash prices. Forward pricing eliminates downside price risk but also eliminates a return from higher price levels. Storing a crop unpriced allows the producer to capture higher prices, but provides no protection from lower prices.

For corn, average harvest bids on September 1 in south central Illinois are near $3.24 per bushel, slightly below the $3.30 mid-point of the range of the U.S. average farm price projected by USDA. The relatively
low price, weak basis, and carry futures market encourages storage of the 2017 crop. In south central Illinois, the average basis for corn typically strengthens to around -$0.10 by spring, as it did in 2015 and 2016. In 2017, the average basis remained weak throughout the spring with the strongest basis occurring in late April at -$0.14 relative to the July 2017 futures price. Given the current production and demand scenarios, an expectation of the typical basis pattern for corn over this marketing year is reasonable.

As of September 1, average harvest time bids for soybeans in south central Illinois are near $9.17 per bushel, below the mid-point projection of $9.30 for the U.S. average farm price projected by USDA for the 2017-18 marketing year. The average basis in south central Illinois usually strengthens in the spring but there has been no discernable pattern in recent years. In 2017, soybean basis remained weak with the strongest basis occurring in early June at -$0.28 relative to the July 2017 futures price. Basis risk could be substantial this marketing year depending on South American crop production and U.S. export market competitiveness.

The uncertainty surrounding corn and soybean yield projections for 2017 may encourage a patient approach to pricing crops. By storing corn and soybeans unpriced, one holds an expectation of prices increasing by more than the cost of owning and storing these crops. Over the short term, significantly higher prices require a large reduction in the production forecasts by the USDA on September 12 or October 12. Over a longer horizon, higher prices may occur if demand is stronger than currently forecast. Southern hemisphere crop problems could also materialize to provide a price increase.