2020 USDA “Prospective Plantings” show typical pattern: Total cropland planted is relatively constant; the crop mix is what changes

Two of the concepts that undergird our analysis of agricultural policy are the low price elasticity of production—the idea that farmers will plant all of their crop acres all of the time—and the idea that they adjust their crop planting based on the relative profitability of each crop relative to corn. The March 31, 2020 release of “Prospective Plantings” (https://tinyurl.com/subm4q5) by the USDA National Agricultural Statistics Service provides a clear illustration of those principles at work.

“Prospective Plantings” provides a snapshot of the number of acres US farmers intend to plant for the coming crop year based “primarily on surveys conducted during the first two weeks of March. The March Agricultural Survey is a probability survey that includes a sample of approximately 80,000 farm operators selected from a list of producers that ensures all operations in the United States have a chance to be selected. Data from operators was collected by mail, internet, telephone, or personal interview to obtain information on crop acreage intentions for the 2020 crop year.”

The 2020 prospective plantings indicate that 319.1 million acres will be planted to 21 principal crops. This is 16.5 million acres greater than actual acres planted in 2019 but is nearly identical to principal-crop acres planted in 2018, 319.3 million acres. The lower number of acres planted in 2019 show the impact of widespread flooding in parts of the Midwest while the numbers for 2020 reflect the expectation of more normal planting conditions this spring.

The comparison between actual plantings in 2018 and the 2020 prospective plantings validate the concept that farmers plant all of their crop acres all of the time unless there is an intervening weather event.

Farmers responding to the plantings survey indicate that they will plant 97.0 million acres to corn compared to the 88.9 million acres that were planted in the spring of 2018. This reflects an 8.1 million acre increase.

While soybean prospective plantings show a 7.1 million acre increase compared to the flood impacted acres in 2019, they are expected to show a 5.7 million acre decrease when compared to 2018.

Wheat plantings are expected to show a 3.1 million acre decline this spring compared to two years earlier.

The reduced acreage between 2018 and the 2020 prospective plantings for both soybeans and wheat are consistent with the idea that farmers make adjustments to their crop acreage allocations based on the relative expected price compared to corn.

The projected corn price for the 2019/2020 crop marketing year which ends August 31, 2020 is $3.80 a bushel.

For soybeans the projected price for the current 2019/2020 crop marketing year is $8.70 a bushel. The results in soybean-to-corn price ratio of 2.3:1 which is below the long-term soybean-to-corn price ratio of 2.5:1. When this happens, farmers generally plant a portion of their soybean

acres to corn or another more profitable crop—which in the present crop price climate means a crop that loses less money.

We see a similar pattern for wheat. With the 2019/2010 wheat prices projected to be $4.55, the wheat-to-corn price ratio is 1.2:1 compared to a long-term price ratio of 1.45:1. As a result wheat loses 3.1 million acres to other crops.

While the current price ratios influence prospective plantings, actual plantings are also influenced by weather and price changes between now and the day the seed goes into the ground.

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Dr. Harwood D. Schaffer: Adjunct Research Assistant Professor, Sociology Department, University of Tennessee and Director, Agricultural Policy Analysis Center. Dr. Daryll E. Ray: Emeritus Professor, Institute of Agriculture, University of Tennessee and Retired Director, Agricultural Policy Analysis Center.
Email: hdschaffer@utk.edu and dray@utk.edu; http://www.agpolicy.org.