Corn prices over the years

As we look forward to Congress making progress on writing a new farm bill, it would be reasonable for farmers to wonder if farm bills make any difference in the price that they receive for their crops.

To help answer that question, we want to share the results of a study of the relationship between the season average price received by farmers and the commercial year-ending stocks-to-use ratio for corn over the 53-year period from 1965 through 2017. We focus on corn because corn is the dominant crop in the US and most of the other row crops compete with corn for acreage.

The relationship between the price of each of the other crops and the price of corn has been relatively stable over a long period of time. When there is a need for additional acres of another crop, the ratio of the price of that crop to corn rises above the long-term average. The pattern for periods of time when there is the need for fewer acres of the competing crop is the ratio drops below the long-term average. The result of this behavior is that what happens to corn is a big deal for all row crop farmers.

The first big shift in corn prices began in the latter part of the 1972 crop-year and continued through the 1997 crop year. This shift came in response to the decision of the Soviet Union to begin importing grain from non-Soviet Union countries and other exacerbating factors.

Corn farmers in the 1973-1997 period received $1.08 per bushel more than they did in the 1965-1972 crop-marketing-year period. While this shift was not triggered by a change in the farm bill, it was stabilized above the $2.00 level when the announced loan rate was raised from $1.10 in 1975 to $1.50 in 1977 to $2.00 and above between 1977 and 1985 as a part of the 1977 and 1981 Farm Bills.

During the 1985 and 1990 Farm Bills, the loan rate was lowered below $2.00 while excess stocks continued to be held through the Commodity Credit Corporation (CCC) and the Farmer-Owned Reserve FOR) program. During the full 1965-1995 period the government implemented acreage diversion programs that reduced plantings by as many as 33 million acres in a given year. Higher loan rates and acreage diversion programs worked together to support higher prices during the 1972-1997 period.

During this period there were four years in which severe problems with corn production provided a boost to corn prices (1974, 1980, 1983, and 1995). These crop production problems boosted prices by an average of $0.63 per bushel relative to the price based on the stocks-to-use ratio with half that amount continuing into the 1984 and 1996 crop years.

With the passage of the 1996 Farm Bill, acreage reduction programs and the FOR were eliminated. The CCC storage program was made ineffective with the institution of the Loan Deficiency Payment (LDP) program. With the LDP program surplus stocks were not segregated from commercial stocks, placing a downward pressure on prices. The 1996 crop-year price of corn received a price boost from the previous year’s production problems. In 1997 the price declined further to the baseline price for the full 1973-1997 period.

By 1998, the full effect of the policy changes made in the 1996 Farm Bill became apparent. During the 1998-2003 crop years, corn prices were $0.32 lower that they were for the same stocks-to-use levels in the prior 25 years.

Between the 2004 and 2006 crop years, the effect of state level lobbying for ethanol to be used as a fuel additive was felt as prices returned to the 1973-1997 period. With the adoption of the Renewal Fuels Standard (RFS) program in 2005 and its expansion in 2007, the demand for corn for ethanol production increased dramatically. The result was a boost in corn prices of $1.52 per bushel over the base 1973-1997 period.

The widespread drought in the Midwest in 2012 affected corn prices beginning with the 2011 crop-marketing year, which was in effect through September 2102, and continuing through the 2013 crop-marketing year. This severe weather event provided an additional boost of $2.24 to crop prices in those crop-marketing years, providing farmers with record high incomes, against which subsequent years would be measured.

During the 2007-2013 period, any farm program or no farm program at all would have worked.

With the end of dramatic increases in the amount of corn needed for ethanol production, corn prices, beginning with the 2014 crop year, the corn price dropped by $0.22 per bushel below the $1.52 boost provided by the RFS. Over this recent period, it appears that the corn price has been drifting downward relative to the stocks-to-use ratio and, in any case, the price has been significantly below the full cost of production.

We see nothing coming out of the current farm bill discussions that stop prices from continuing their downward trend.

One of the battle cries during the run-up to the adoption of the 1996 Farm Bill was, “We’d rather receive our income from the marketplace instead of the mailbox.” If all Congress does is “enhance” the Agricultural Risk Coverage and Price Loss Coverage programs, the mailbox will have won out over the marketplace.

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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.