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Progressive downward shift in prices since 1996 affects wheat

The surge in commodity prices following the USDA's release of the August 12th WASDE (World Agricultural Supply and Demand Estimates) provided hope for relief from the low prices of the last four years. Wheat, corn and soybean prices were all up on expectations of weather-shortened crops. If these reduced-production expectations are borne out by the fall combine results, the accompanying higher prices will greatly benefit those farmers who have a decent size crop to sell. However, those who were burned out by this summer's hot dry weather might get burned again if higher prices eliminate the counter-cyclical payments.

On the other hand, a lot can happen between now and the time that the combines are safely tucked away in the shed for another winter. It is possible that when all is said and done, prices may falter by late fall. In any case, since most of the bounce in price is because of short-term weather events—not long-term shifts in demand that exceed growth in the ability to produce—we are likely to rather quickly return to low price levels unless there is a sequence of years of unfavorable weather either here or in a major exporting or importing country.

With that unpleasant thought in mind, it remains important to understand why the low prices of recent years have occurred. We all can recite the litany: Export demand has not increased to the extent expected. Yields in recent years (prior to this one) have been at or above trend. There are no effective price supports or annual land diversions now. Etc. Etc. All of these things no doubt have been instrumental in causing prices to decline. But prices have declined so sharply. Have these events been enough to cause prices to drop by such a great extent? Or is there something else also going on? Could it be that changes in the balance between supply and demand affect prices differently now compared to several years ago?

In our attempt to investigate that possibility, we reported in recent columns that soybeans, for a given year ending stocks-to-use ratio, experienced a progressive downward price shift of 48.6¢ per year for each of the four crop years from 1998 to 2001. Corn prices, when measured against U.S. commercial stocks-to-use ratio, showed an average downward price shift of 32¢ for a given level of stocks beginning in 1998 compared to the 1991 to 1997 period.

This week we focus on wheat. The question is: Have wheat prices been lower than would be justified by the historical relationship between wheat price and wheat supply-demand balances? Which supply-demand balance should we be considering in the case of wheat, U.S.

or world? Using the U.S. commercial ending year stocksto-use ratio as a predictor of the season average price received by farmer, we found that changes in U.S. stock to use ratio explained about half the observed variation in U.S. wheat price over the period 1986-1995. However when we used world commercial stocks of total grains and seeds divided by world use of total seeds and grains, that stocks-to-use ratio accounted for nearly 75 percent of the observed variation in U.S. price. By allowing for a difference between the 1985 Farm Bill and the 1990 Farm Bill, explanation of wheat price variation increased to over 80 percent. Our primary interest is in the last few years. Did the relationship estimated for the years 1991-1995 hold in the 1996-2001 period or were prices lower than those that would have been generated by a similar level of stocks in the earlier period?

The short answer to that question is, for a given level of stocks, prices began a progressive decline with the 1998 crop year and continued on that path through the 2001 crop year. As with corn and soybeans, the prices remained in the predicted range for the first two years of Freedom to Farm. But beginning with the 1998 crop year, wheat prices began a progressive decline of 41¢ per year. By the 2001 crop year, the actual price of \$2.78 was \$1.52 BELOW the predicted price, where the predicted price used the 1991-1997 relationship between wheat price and wheat supply-demand balance.

Thus, we have found that for all three crops—corn, soybeans and wheat—there has been a progressive drop in price relative to a given carryover level for the last four years of the Freedom to Farm legislation (1998-2001).

To explain this pattern, it is our suggestion that the 1996 legislation coupled with a steady crop supply without major weather disruptions, allowed for a psychological shift in the market. In some sense, the market got used to the idea that in contrast to the past, there really is no threat of government or other collective action that would bolster prices this year or in the future. Thus, there is no need to bid up prices by storing commodities or otherwise tying down future needs in advance because the expectation is that prices will be just as low or lower next year.

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