WHAT WILL WE THINK OF CURRENT CROP PRICES SIX MONTHS FROM NOW?

The recent rally in soybean, wheat, and corn prices has been a bit of surprise, both in the timing and the magnitude of the rally, particularly for soybeans. Will this rally turn out to be a “bubble” or just the beginning of a period of high prices?

Some perspective on supply and demand relationships might be helpful in assessing the current rally. Beginning with the 1998-99 marketing year and persisting through the 2003-04 marketing year, there appeared to be a shift in the underlying supply/demand relationship for both corn and soybeans, compared to the 1989-90 through 1997-98 marketing years. That shift was expressed as a lower average marketing year farm price for a given level of year ending stocks relative to marketing year use. For example, during the period 1989-90 through 1997-98 a year ending stocks-to-use ratio of corn of 20 percent would have been associated with a marketing year average price of $2.25. In the latter period, a similar stocks-to-use ratio was associated with an average price of about $1.85. For soybeans, a stocks-to-use ratio of 10 percent in the early period was associated with a price of about $6.10. In the latter period, a similar ratio was associated with a price of about $4.75.

The shift described above has been clearly recognized, but not fully explained. Part of the shift may have been associated with the change of farm programs beginning with the 1996 crop. With the elimination of acreage reduction programs, the market may have experienced a downward shift in the demand for inventories. Generally low rates of inflation, and even some concerns about deflation, may have also reduced the speculative demand for agricultural commodities. Some suggest that the shift may have been associated with the rapid increase in South American production. Whatever the reasons, the inability to fully explain the shift resulted in the inability to judge if the shift was permanent, to predict if the supply/demand relationship might revert to that of the earlier period, or to predict if the relationship might change in some other way.

The evidence of the 2004-05 marketing year for corn and soybeans suggests that the relationship may have indeed shifted back toward that of the earlier period. Perhaps the uncertainty about future supplies, the inflation in other commodity prices, or the lower valued dollar has increased the speculative demand for crops and futures contracts. Based on the USDA’s current projections, the year ending stocks to use ratio for the 2004-095 marketing year for corn will be 19.2 percent. Using the relationship in the earlier time period, that level of stocks would suggest a marketing year
average price of $2.26. The relationship in the latter period would suggest a price of $1.88. The weighted average price received from September 2004 through February 2005 was likely near $2.11. Based on closing futures prices on March 11, the market is offering an average price of about $2.18 for the rest of the year. So, if prices don’t change from now through August, the weighted average for the year will be about $2.14. That average would be much closer to $2.26 than $1.88.

The case of soybeans is even more dramatic. Current USDA projections are for a year ending stocks to use ratio of 14.4 percent. Using the relationships identified from 1989-90 through 1997-98, that ratio would suggest a marketing year average price of $5.67 per bushel. The relationship in the more recent time period would suggest a marketing year average price of $4.14. The weighted average during the first six months of the year was about $5.54. Closing futures prices on March 11, reflected an average cash price for the last six months of the year of about $6.45. If prices remained unchanged for the rest of the marketing year, the weighted average price would be $5.78. Even based on the relationship of the earlier time period, market fundamentals suggest that current soybean prices are about $.40 too high.

For the 2005-06 crop year, a modest increase in corn acreage and trend yield would likely result in a year ending stocks to use ratio of 15.2 percent, suggesting an average price of $2.35 using the relationship of 1989-90 through 1997-98 and a price of about $2.00 based on the latter time period. Closing futures prices on March 11 pointed to a 2005-06 marketing year average farm price of $2.34. Unless consumption grows more rapidly than expected or the 2005 yield drops below trend, new crop corn prices appear to be high enough, if not a little too high.

For soybeans, a trend yield and a modest decline in acreage would trim the 2005-06 year ending stocks- to-use ratio to about 13.4 percent. That ratio would suggest a 2005-06 average farm price of $5.75 if supply/demand relationships have shifted back to that of the earlier period and a price of only about $4.25 based on the relationship of price and ending stocks during the period 1990-99 through 2003-04. Closing futures price on March 11 reflected an average cash price of $6.12. Unless the prospective supply and demand balance tightens significantly, current new crop futures prices appear to be at least $.35 to $.40 too high.

The recent sharp rally in crop prices appeared to be triggered by a late season drought in southern Brazil, but has reportedly been fueled by a large flow of speculative funds buying crop futures. A continuation of that pattern could push prices even higher. However, the rally already appears to be overdone unless the U.S. growing season results in yields several bushels below trend value.

Issued by Darrel Good
Extension Economist
University of Illinois