APAC Agricultural Policy Analysis Center
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PolicyPennings by Dr. Daryll E. Ray

Corn markets and living on the edge

Last week we talked about the recently released "USDA Agricultural Projections to 2016" (http://www.ers.usda.gov/publications/oce071/oce20071.pdf) which shows $3.30 to $3.75 season average corn prices for the next ten years. These prices are based, in part, on a continuation of present agricultural and ethanol policies. The key to the $3.30-$3.75 price range is a set of stocks-to-use levels that hover in the 4.5 percent to 5.7 percent range.

Compared to historic stocks-to-use levels those projected for the next ten years are unusually low. In the last 45 years we have seen stock levels this low in only a few years (1974 (7.4%), 1983 (5.4%), 1995 (4.6%), see Figure 1) and then only for a year or two. Never before have stock levels remained in the 5 percent range for ten years in a row. Each time the stocks level has plummeted, prices have risen dramatically.

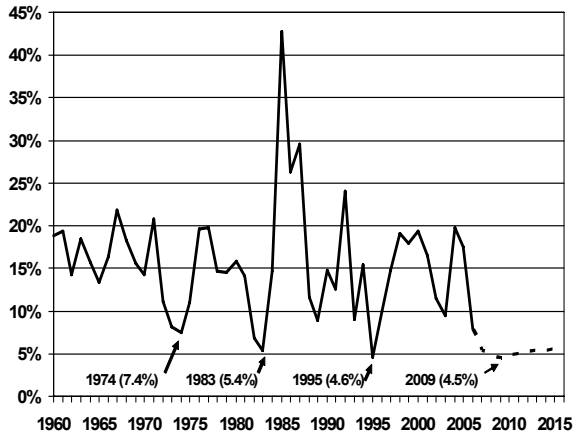

Figure 1. Year ending commercial stocks-to-use ratio for US corn, 1960-2005 (USDA actual), 2006-2016 (2007 USDA Baseline)

As long as there are no weather-related production problems, stocks-to-use levels in that range will sustain profitable corn prices for corn producers in the US and around the world. Another possibility is that the projected stocks-to-use ratios are too low. Farmers may well plant more corn than the USDA has assumed in the baseline. This would raise stock levels, perhaps by a percentage point or more each year. Also beginning this year, other countries may expand corn acreage by more than the USDA is anticipating which would make world corn supplies more flush.

But let's assume the projected stock-to-use levels—unprecedented as they are for a multiyear stretch—reflect the baseline situation. What would happen then if production in just one of the years fell short of expectations? What would happen if the US corn belt were hit with a La Nina weather pattern this summer and, despite additional acreage, crop production remained level? Corn prices would explode, that's what.

Are we likely to see a string of ten years in which yields do not fall below trend? In a word: No, almost by definition. During the past decade corn production levels have fallen by at least 300 million bushels in half of the years.

Given the low stock levels in the USDA corn projections, one would only need a year in which crop production remained the same as the year before to send stock levels plummeting and prices skyrocketing upward to the $5.00 or $6.00 range. While $6.00 corn would provide a nice one-year bottom line for US farmers, it would also greatly accelerate the draw of additional resources into corn production, stock levels would increase, and prices would plummet in following years.

With additional production in the US and internationally, we could see the return of $2.00 corn in subsequent years. It is important not to forget that, without a $6 spike in corn prices, long-term corn prices could also return to $2 per bushel, but it would take longer since additional acreage would be drawn into production more slowly.

A relatively rapid whiplash between $6 and $2 per bushel corn would cause incredible economic dislocations. For one thing, on the upside, our "reliable supplier" quotient would again be called into question by our export customers. While conventional wisdom is that the US would never embargo grain exports as it did the 70s and 80s, it is difficult to believe that in the most extreme of situations, when push comes to shove, export customers will be given precedence over domestic—especially large domestic—users of grain.

On the downside, we know what would happen, because the scenario is so unfailingly consistent. The low-price valley stays with us for years with all the associated problems that result from these low prices.

To us, the precariousness of the grain situation represented by the USDA baseline serves as an object lesson on why a meaningful grain reserve in needed. A grain reserve not unlike the former Farmer-Owned Grain Reserve, but sensibly managed this time.

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