PolicyPennings by Dr. Daryll E. Ray

Protecting crop farmers and corn users with a corn reserve

In the last year the US public has come to see the development and use of renewable energy sources, particularly corn-based ethanol, as a way to mitigate two problems: global warming and the nation's dependence on foreign energy sources.

To ensure their long-term reliability as a supplier of liquid fuel, ethanol producers have been looking for ways to ensure the availability of corn during periods of tight supplies and high prices. To this end, the National Farmers Union, the National Commission on Energy Policy, and the American Coalition for Ethanol sponsored a study by the Agricultural Policy Analysis Center (APAC) at the University of Tennessee examining the potential of a corn reserve to stabilize ethanol production by ensuring the availability of a reliable supply of corn.

This study shows that a corn reserve program could reduce government farm program payments by \$10.5 billion over the 10-year, 2007-2016, compared to the present programs. The government savings is net after taking the cost of grain storage into account. In addition, it would significantly reduce the variability and narrow the range of government farm program payments, making them more predictable.

The availability of a corn reserve reduces the probability that some ethanol plants would have to go off-line during periods of short corn supplies and higher prices. The release of reserve stocks of corn makes it possible for ethanol plants that might otherwise have to shut down to continue production.

Corn farmers benefit from the establishment of a corn reserve because the reserve entry price provides a floor under the corn market. At the same time the presence of a reserve reduces price spikes as reserve supplies are released into the market.

As with government payments, the variability of corn prices is reduced with a reserve. The presence of a corn reserve raises the prices of

all crops as farmers adjust production in response to changes in profitability among the crops.

Over the ten-year study period, realized net farm income under a farmer-owned corn reserve program is almost identical to the baseline, but the variability is reduced and a greater portion of farm income comes from the market.

Other users of corn, like beef, pork, and poultry producers, also benefit from the more stable corn prices that result from the implementation of a corn reserve. The presence of a reserve would also stabilize the availability of corn for export markets.

The farmer-owned corn reserve program APAC studied would hold up to 2 billion bushels of corn, an amount equal to 45-60 percent of annual ethanol use of corn over the next ten years. Farmers would be able to put corn into the reserve program at \$2.80 and under the assumptions of the study the release price would be \$4.48. In addition, farmers would be paid an annual storage fee of \$0.36 a bushel. Years which result in above-trendline yields provide an opportunity to put corn into the reserve without creating problems for the users of corn.

The February 2007 USDA projection of crop production and utilization shows corn supplies at historically low levels for the next ten years. Under those conditions, a year of significantly reduced production would send corn prices skyrocketing, creating havoc for all users of corn. The implementation of a corn reserve has the potential to moderate the impact of such a situation, providing some protection those who depend on corn in their business operations, while reducing the level of government farm payments.

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