Impact of supply management programs on crop exports

We have heard over and over again from people who do not like crop supply management programs. They tell us that these programs put a cap on exports, particularly corn exports and especially if loan rates are near the full cost of production.

They argue that when the US implements a reduction in acreage to keep reserve stocks from getting too large, foreign export competitors take that as a signal and increase their acreage, capturing exports that should have accrued to the US.

Let's look at the numbers and see what they tell us. In 1979 and 1980 US corn exports exceeded 2 billion bushels for the first time. The 1985 Farm Bill was designed to bolster US exports by reducing the loan rate. The 1996 Farm Bill eliminated the last vestige of supply management.

And still, in the 36 intervening years, US corn exports reached the 2-billion-bushel level only 8 times. Non-US corn exports exceeded 3 billion bushels in each of the last 6 crop years.

Total corn exports from non-US countries have equaled US corn exports over the last 20 years, while in 1979 non-US corn exports were 16 percent of those of the US.

About this time in the argument someone says to us, "Yes, but you are not taking into account the corn that is exported in the form of beef, pork, and poultry." And that is true. The corn embodied in net meat exports is important, but even with increasing net meat exports total feed demand remained flat at an average of 5.4 billion bushels per year over the last 20 years. Increased corn exports embodied in meat has not been sufficient to keep year-ending corn stocks from increasing since the end of the ethanol boom.

Talking about ethanol, the US shifted from a net importer of ethanol to a net exporter in 2010. Net exports of ethanol have averaged 15.5 million barrels for the last seven years.

As important as they are, net meat, and ethanol exports have not been sufficient to keep year-ending corn stocks from increasing in recent years.

The principal signal that brings extra acreage into production is not a policy that sets the loan rate near the full cost of production, but rather one that allows the price to get well above the full cost of production. That catches the attention of farmers worldwide and the extra acreage that comes into production is slow to be taken out of production, even with an extended period of low prices; we are talking about decades not years.

Whether the US uses a program that depends on crop price supports (supply management in the pre-1996 era) or one that uses programs that support total farm revenue (1997 to the present), the impact of changing US agricultural policy on corn exports is negligible.

So, what is going on?

First, farmers elsewhere in the world are no different from farmers in the US; they want to feed their own people. The result is that world corn exports have declined as a percent of world production.

Second, even when the world percentage of production that is exported has increased as is the case for barley, soybeans, rice, and wheat, the US share of world exports has declined. The US has a mature agricultural economy while many other countries are playing catch-up, both in terms of technology and acreage.

Because of the strength of the US agricultural sector, with its ability to produce crops in excess of domestic demand, and the dominant role the US has played in the world since WWII, the US has become both the oligopoly price leader and the residual supplier.

Basic agricultural commodities around the world, with a few exceptions, are priced off US markets taking into consideration shipping costs to any given location. To make an export sale, all other countries need to do is offer a delivered price that is slightly lower that the US price, taking into account any variation in quality. If the price in the US declines, the price elsewhere declines as well.

For many crops and their substitutes, the US price is the de facto world price. The policy by which the 1985 Farm Bill allowed the loan rate to be lowered in attempt to allow the US to get its price down to the world price was an exercise in futility.

Because of its dominance in the market and its ability to produce and store agricultural crops, the US is the world's residual supplier. Most countries only purchase from the US when their local production is inadequate and the US's export competitors have little or nothing to sell.

Whether the US farm program utilizes a price support mechanism—with either high or low loan rates—or a farm revenue support mechanism makes little difference on US crop exports. Either way, the US remains the oligopoly price leader and residual supplier for basic storable farm commodities.

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