PolicyPennings by Dr. Daryll E. Ray

## Leading statements can cause farmers to jump to incorrect conclusions

Over the years, we have noticed that stories that make sense on their face often lead to incorrect conclusions. Certainly it is true when it comes to agricultural policy making.

In the 1979 and 1980 crop years US corn exports hit a peak of 2.4 billion bushels, growing from a half a billion bushels just a decade earlier. As a result, many in the US began to take this growth pattern as the new norm. When exports fell in the early eighties, they began to cast about for an explanation.

One of the common explanations went like this: "High non-recourse loan rates keep the price of US commodities above the world price level allowing farmers in other countries to capture export markets that would otherwise go to US farmers. The solution to declining exports, therefore, must be to lower the loan rate (floor price) so US farmers can recapture market share in corn exports."

The story sounds logical. After all, who hasn't gone from one store to another in search of a lower price on a major purchase?

But does the same logic apply in this case? What does the story say about our expectations of others?

If we lower our floor price, will farmers in other countries back off and cede the markets to the US, or do they have the same need to stay in the market as US farmers?

Betting that farmers in other countries would cut back on their production, the US adopted the 1985 Farm Bill, that among other things, lowered the loan

Did lowering the floor price work? Did US corn exports resume the upward trend of the 1970s? Did others cede the corn export market to the US?

For a while it appeared that lowering the loan rate succeeded, as US corn exports increased from 1.2 billion bushels in 1985 to 2.4 billion bushels in 1989 and the US share of world exports increased from 56 percent to 83 percent over the same period.

But after that, corn exports did not resume the upward trend of the 70s. In fact, with the exception of a supply-shortened crop in 1995 and a surge in demand in 2007, US corn exports stayed well below the peak achieved in 1979.

It turns out that pricing corn just below US prices occurs no matter the price level, since farmers in other countries have the same need to stay in the market as we do.

The result is that the neither the size of the export pie nor the size of exporters' pieces of the pie changes

much, but export receipts fall for all.

While the story sounded logical, it did not accurately account for the behavior of producers in other countries. It also failed to recognize the role of the US as the world's residual supplier and oligopoly price leader in major crop markets.

In recent years we have heard two story lines over and over again. The first one asserts that 95 percent of potential customers for US farm products live outside the US.

Using that tidbit of information, farmers are led to believe unlimited international markets await them and that those markets would come flooding to them if only "such and such" were no longer a factor. At the top of the list are agricultural tariffs and other import restrictions. As a result, trade negotiators and agricultural supporters have focused on market access as one of the pillars of World Trade Organization negotiations.

What is missed in this analysis is that while it is true that 95 percent of all consumers live outside the US, more than 99 percent of all farmers live outside the US. Just as US farmers are concerned when a shipload of imported feed wheat enters the Wilmington, NC port, farmers and politicians in other countries are sensitive to imports as well.

As we are clearly seeing, most countries see food security and local production as a matter of national security. (Granted, local is being redefined to include growing food in another country, say China and Korea growing food in Africa and transporting it back home.)

Few countries want to become dependent on others for their most vital consumer product-food. Clearly, the recent high prices have only accentuated that con-

The second recent story line builds on the fact that China's share of the world's arable land is well below its share of the world's population. At the same time the per capita income in China is increasing, the middle class is growing, and they are upgrading their diets away from carbohydrates to more protein rich foods, i.e. meats.

So, I am a corn farmer in Illinois and I hear this story from various sources; what is my take-home message?

I am likely to think that they are going to need more corn and soybeans to produce that meat. As a

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## Leading statements

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result I am expecting that they will increase their imports of corn and soybeans and the future looks bright for me.

What are the assumptions required for that takehome message to be true? First, I must assume that Chinese (or Indian) farmers lack the ability to expand domestic production through higher yields (or through "local" production in other countries). I must assume that yield technology stays localized in the US. I must assume that the Chinese people are willing to forgo a basic level of self-sufficiency and become dependent on other countries for staple foods.

Over the last thirty years, the Chinese have been able to meet their own need for major food crops while exporting surpluses to other countries.

An exception is soybeans. While the US has experienced an increase in soybean exports, Brazil and Argentina have been the main beneficiaries of increased Chinese and Asian soybean imports. The US share of world soybean exports has dropped from 82 percent in 1978 to 36 percent in 2008.

Getting back to the implicit assumptions, what do we know about the ability of the Chinese to increase yields? In 1978 the Chinese corn yield was 30 percent of the US yield. Today it is 55 percent.

Now that the technologies of the multinationals are available to complement China's substantial do-

mestic investment in research to increase yields, it is not inconceivable that the Chinese could catch the US corn yield. Doing so would mean that they could meet their domestic needs in the foreseeable future and still export corn.

With wheat, the story is more dramatic. In 1978 China's wheat yield was 87 percent of the US wheat yield. Today it is 156 percent of the US yield.

Whether it is loan rates, location of customers, or crop production in other countries, arguments about economic concepts can lead people to conclusions that require unspoken assumptions-assumptions, that often turn out not to be true.

In listening to story lines about agriculture, we should remember that, while "If it sounds too good to be true, it probably is" may convey too much caution, identifying implied assumptions behind leading statements and checking those assumptions against reality should always precede coming to conclusions.

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