

Policy Pennings by Dr. Daryll E. Ray

Current farm policy is based on an export-centric narrative

Every so often it is a good idea to do a reality check: is what we think to be true actually true or is it an unverified belief? After all, it is not uncommon for us mortals to have an expectation of "what should be" or "what we think to be the situation" that, when we look it up, turns out to not be true.

Of course, because of the nature of the issues, some things in life will always remain matters of belief. Religion and political philosophy come readily to mind in that regard. But there are other issues in which time can sort out substantiated from unsubstantiated beliefs. Consider exports.

In recent columns, we have been analyzing the performance of major-crop exports over the last thirty years. This thirty-year time period is of particular relevance because it coincides with a movement to, and dominance of, a farm policy direction based on an export-centric narrative.

What is this export-centric narrative? It consists of two elements. The first is that US export demand for crops can serve as a price shock absorber. In economist speak, that means that the price elasticity of US crop export demand is elastic or relatively elastic. That means that if the price of grains drop for whatever reason, the quantity exported will increase furiously compared to the degree of price decline.

With an elastic demand one would expect to see jumps in quantities exported in those years in which prices have fallen. Conversely, when prices rally, one would expect export quantities to fall off.

Here is the best part: with a strong-very strong-response in the quantity demanded when prices fall, the value of exports increases. So falling prices would cause the value of exports to increase, and rising prices would cause the value of exports to decline. This is the expected inverse relationship between price and value with an elastic demand—that is, when the price elasticity is greater, in absolute terms, than -1.0.

The other element of the narrative is this: the US will be experiencing ever-increasing, if not ever-accelerating, gains (shifts) in export demand be-

cause of increases in world population, increased per-person incomes, more folks worldwide moving into the "middle-class," and freer trade.

Based on this narrative, farm policy was first changed to one of reduced price floors followed by the elimination of price floors and supply management tools including storage programs. This last set of changes was accompanied by the use of government payments to stabilize net farm income. This was largely done "to give exports a chance."

That was the narrative and the policy change. Thirty years have passed. What do the data show? In previous columns, we have seen that, after the policy change, exports of the crops of primary concern—corn and wheat—have not experienced an ever-increasing upward shift in export demand.

US corn export demand has been variable but with a flat trend and wheat export demand has been variable with a declining trend. Soybean exports have trended upward during part of the thirty-year period, but the US share of world soybean complex exports plummeted, declining from 56 percent in 1980 to 33 percent in 2009.

Figure 1 shows the volume of combined exports of corn, wheat, and soybean complex (soybeans, soybean meal, and soybean oil) over the last 30 years, 1980-2009. What we see is that, rather than trending upward during last 30 years, for the most part aggregate exports of the three crops remained be-

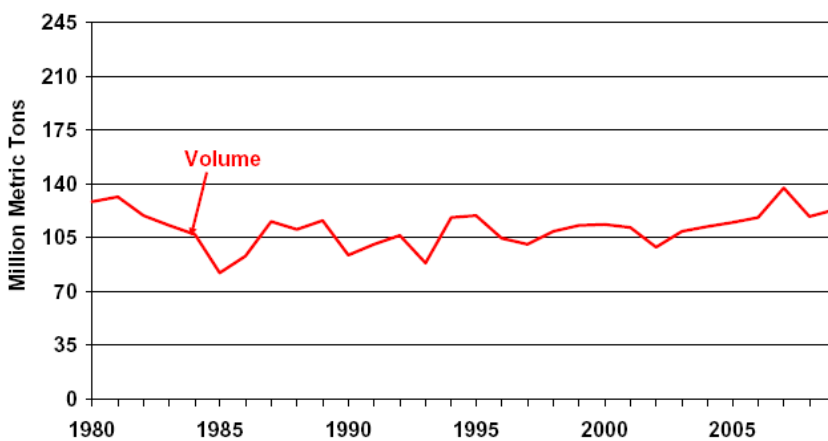


Figure 1. Volume of US exports of corn, wheat, and soybean complex (soybeans, soybean meal, and soybean oil). 1980-2009. Data source: USDA.

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low its 1980 quantity. Clearly, the second part of the export-centric narrative-ever-increasing upward shifts in crop export demand-did not occur.

Now what about the elastic demand argument? This one is analytically more complex to definitively evaluate because there are several factors that affect export demand besides its responsiveness to price. But what would we expect if we put export volume and price on the same graph? Even with other influences involved over the thirty year period, we should be able to discern a pattern of times in which prices declined and quantities increased, and vice versa.

So what do the data show? Figure 2 displays the three crop volume of exports represented with a dashed blue line and the trade-weighted price graphed with a solid red line. One thing that is evident is that the variation in the volume of exports is small compared to the variation in price.

It is also evident that there is no hint of an inverse relationship between price and export volume. Conventional theory would suggest that the two lines should be a mirror image of each other, so that when the price goes down the volume of exports goes up and vice-versa, and that pattern should be discernable even at this level of analysis.

Much of the US agricultural policy that has been adopted since 1985 has been based on the assertion that the US was losing crop exports because the non-recourse loan rate held prices above world price levels and that reducing or eliminating those support prices would enable the US to increase its volume of exports. Figure 2 shows no evidence of that.

In figure 3 we see a comparison of the value of the exports of corn,

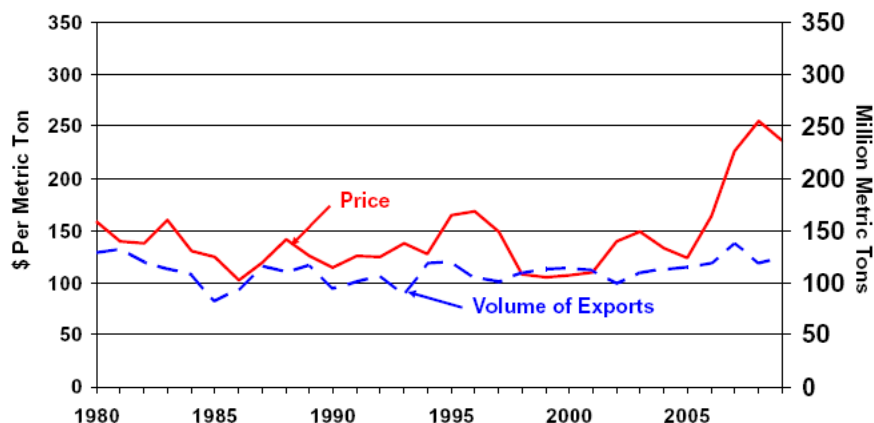


Figure 2. Trade-weighted price and volume of US exports of corn, wheat, and soybean complex (soybeans, soybean meal, and soybean oil). 1980-2009. Data source: USDA.

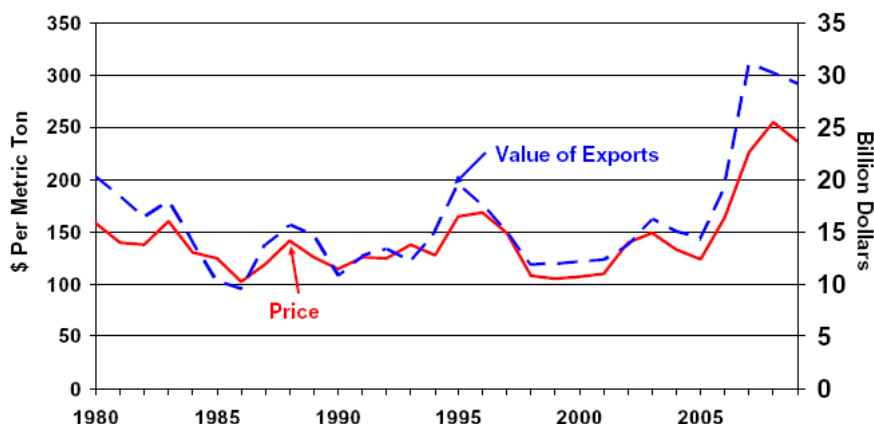


Figure 3. Trade-weighted price and value of US exports of corn, wheat, and soybean complex (soybeans, soybean meal, and soybean oil). 1980-2009. Data source: USDA.

wheat, and soybean complex (dashed blue line) with the trade-weighted price of those exports (solid red line). Having just considered that figure 2 shows the lack of a discernable inverse relationship between price and quantity exported, it is not surprising that we do not see the promised shock-absorber effect in figure 3.

That is, price declines do not appear to be associated with increases in the value of exports as the export-centric narrative postulated. In fact, the graph shows the exact opposite. Prices and the value of exports move together-prices increase and so does the value of exports.

Neither of the two elements of the export-centric narrative of the last thirty years (ever-increasing upward shifts in exports and price-elastic export demand) is supported by the actual experience of the last thirty years. Had these two export characteristics been an accurate reflection of reality, moving to a market-oriented farm policy and using payments to help in the rare dips in income would make eminent sense. The "farm problem" would be no more.

The overhanging question then becomes: What then is implied about probability of success of the "changed policy" if the export-centric narrative is false?

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