Recovering US share of world crop exports is ag policy's Zombie idea

In a recent farmdocsdaily article, "The US Safety Net, Crop Profitability, and a Floor on Cost of Production" by Carl Zulauf, Gary Schnitkey and Michael Langmeier, (https://tinyurl.com/yx9trxmp), the authors pose the following question:

"Is the plunge since 1996 in US share of world corn, soybean, and wheat exports from 72% to 35%, 70% to 37%, and 33% to 14%, respectively (Zulauf, et al. [https://tinyurl.com/y67wvphq]), "a canary in the coal mine?"

Reading that analysis, we decided to examine the data in order to estimate the number of additional acres US farmers would have had to put into production to currently maintain the same export market share they had in 1996. The data we used came from the USDA, Foreign Agricultural Service, Production, Supply, and Distribution (PS&D) website (https://tinyurl.com/zwdoyyu).

To reduce the impact of the normal annual variability in production and exports we used three-year averages for our calculations: 1996-1998 for the earlier period and 2016-2018 for the latest years. We did not use 2019 forecast data because the final data are not available.

In addition, we used soybean complex (soybeans, soybean meal, and soybean oil) instead of soybeans because Brazil and Argentina export more soybeans in the form of meal and oil than the US does. We believe that using soybean complex gives a more complete picture of the market situation than using soybeans alone.

We found that US corn accounted for 68.6 percent of world exports in the 1996-1998 period, declining to 35.3 percent in the 2016-2018 period. These results differ little from the numbers presented by Zulauf, et. al. It is important to note that twenty years before the 1996-1998 period, US corn exports accounted for 81.6 percent of (1976-1978) world exports.

Looking at soybean complex, the US accounted for 37.1 percent of world exports in the 1996-1998 period and 26.2 percent in the 2016-2018 period. By the 1996-1998 period, the US had already lost its dominance in world soybean complex markets. In the 1976-1978 period, the US accounted for 64.6 percent of world soybean complex exports.

For wheat, the US accounted for 26.9 percent of world exports in the 1996-1998 period and 14.6 percent in the 2016-2018 period. In the 1976-1978 period, the US accounted for 43.8 percent of world exports.

The data for US World Share of production and exports of corn, soybeans (complex), and wheat for the three comparison periods are shown in Table 1.

US World Share

		76-78 3-yr Av	96-98 3-yr Av	16-18 3-yr Av
Production	Corn	45.8%	39.0%	33.6%
Production	Soybeans	68.7%	47.6%	34.0%
Production	Wheat	13.2%	10.9%	7.2%
Exports	Corn	81.6%	68.6%	35.3%
Exports	Soybean Complex	64.4%	37.1%	26.2%
Exports	Wheat	43.8%	26.9%	14.6%

Table 1, US production and export share of world markets, comparison of three time periods, 3-year average percentage. Source: Calculated from USDA, PS&D data (https://tinyurl.com/zwdoyyu).

If the goal of US agricultural policy is for the country to maintain the share of world exports of corn, soybean complex, and wheat it had in the 1996-1998 period, US farmers would have needed 46.0 million acres more of cropland during each year of the 2016-2018 period to produce the additional exports needed.

Where would that extra cropland come from? Even if we eliminated the Conservation Reserve Program (CRP), we would still be some 14 million acres short; that does not take into account the likelihood that crops produced on CRP acres would not come up to the 2016-2018 US national average yields we used in making the calculation of additional acres needed.

If we wanted to maintain the share of the three crop exports, we had in the 1976-1978 period we would have needed 114 million dedicated to those crops in the 2016-2018 period, a near impossibility.

We have been seeking to maintain the US share of world crop exports for a long time and under various policy instruments and yet the US share has inexorably declined.

Changing a few words from the computer keyboard of Paul Krugman, we are arguing that maintaining market share in world corn, soybean, and wheat exports is a Zombie idea.

Krugman describes a Zombie Idea as an idea that persists no matter how many times evidence should have killed it; it just keeps shambling along, leading some economists and politicians to policy solutions with no connection to reality.

In ag policy the Zombie idea is that lowering the US price will increase or at least maintain export market share. We saw this with the 1985 Farm Bill where we lowered the loan rate in order to "recapture 'our' export markets." The lower rates were continued in the 1990 Farm Bill with some tweaks on providing extra income to farmers.

These changes did not work so we doubled down and adopted the 1996 Farm Bill with farmers only receiving declining AMTA payments. We all saw how well that worked.

The only thing that made any difference was the adoption of the Renewable Fuels Standard, and that had an upper limit of price-effectiveness. For the past 5 years farmers have been producing crops at prices well below the full cost of production and still our share of world major crop markets continues to decline.

Even with these results, many ag economists and politicians continue to repeat the Zombie idea that lower crop prices will allow US farmers to increase (or at least maintain) their share of US corn, soybean complex, and wheat markets.

The question is: How much contrary evidence will be required to finally vaporize this Zombie fantasy?

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