



Renewable Fuels Association

*“The Voice of the Ethanol Industry
for More Than a Quarter Century”*

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Oil Price, Weak Dollar Drive Rise in Corn Price Says New Purdue University Study

RFA Review: “What’s Driving Food Prices?”

Analysis by Phillip Abbot, Chris Hurt and Wallace Tyner as prepared for the Farm Foundation

The persistence of oil prices well in excess of \$120 per barrel is having a far greater impact on corn prices than is the growing production and use of biofuels like ethanol. According to professors at Purdue University, as oil prices have soared from \$40 per barrel to \$120 per barrel, it has led to a \$3 increase in the price of corn over that time period. Conversely, the growth in ethanol production and use in the US specifically has accounted for just \$1 in the rise in corn prices.

The analysis done by Professors Abbott, Hurt and Tyner for the Farm Foundation clearly demonstrates that the factors behind rising commodity and food prices are many and complex. The analysis also demonstrates that soaring oil prices are far more influential in determining grain and food prices than the production and use of biofuels. In fact, by their own admission, removing the incentives and mandates for ethanol use will not return corn prices to the depressed level seen over the past decade, contrary to the claims of those in the food versus fuel camp.

Addressing the havoc caused by record oil prices will require a multitude of solutions. Ethanol and other biofuels offer an immediate step forward without forcing a tradeoff between food or fuel. As the analysis points out, agriculture across the world has the capability to better feed and help sustainably fuel the planet.

Analysis:

A new analysis by professors at Purdue University confirms that record crude oil price is the single largest factor in higher corn and consumer food prices. The study, conducted for the Farm Foundation, found that a number of factors are contributing to higher agricultural commodity and food prices, but that increases in oil prices are having three times the impact on corn prices as other factors.

The authors found, “...when crude oil went from \$40 to \$120, corn went from \$2 to \$6 per bushel, a tripling of both prices.” They determined that \$3 of the increase is attributable to crude oil prices, with biofuels demand and policies accounting for the remaining \$1 of the increase. **“Most of the corn price increase is due to the higher oil price—not the [ethanol blender’s tax credit],”** the authors concluded.

Among the other food price drivers cited by the authors are growing global food demand and dietary transitions, underinvestment in agriculture research, depreciation of the U.S. dollar, increased crop production costs, speculation in commodity markets, weather effects and crop disease, and biofuels growth and policies in the U.S. and EU. “There is no doubt that the causes of the current agricultural commodity price increases are

complex,” the authors write, adding that higher food prices have resulted from “...a combination of diverse and complex factors.”

While the authors identify and discuss these many factors in detail, they also state, “We make no attempt to derive percentages attributable to the many disparate causes (of higher food prices), and, indeed, think it impossible to do so.”

The study’s authors suggest that crude oil prices and the value of the dollar are inextricably linked to corn and other agriculture commodity prices. “The fall in the value of the U.S. \$ has meant corn exports are cheaper in foreign currency,” they say. The interrelationship of corn and oil prices also means ethanol policies are having little impact on corn prices at current oil price levels. **“Removing the [ethanol blender’s tax credit] would not return us to corn prices seen over the past decade unless crude oil prices fell as well,”** the study says.

Further, the impact of the Renewable Fuels Standard on current corn price has been negligible because ethanol production has historically exceeded ethanol use levels required by the RFS. “Since its beginning the RFS has never been binding, meaning production has always exceeded the RFS. **The impact of removing a non-binding mandate is null,**” the paper found.

The study’s authors (Wallace Tyner, Christopher Hurt and Phillip Abbott) also put context around current commodity and food prices by restating some basic economic principles. “Prices rise and prices fall,” they say. “That is the cyclical history of commodity prices. It is impossible to identify where the peak is or how long it will last. However, we do know markets adjust. Supply response occurs, demand changes.”