Comment: Renewable Fuel Standard Assessment White Paper on Agricultural Sector Impacts

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We are writing in response to the House Committee on Energy and Commerce request for stakeholder comment on the Renewable Fuel Standard (RFS) Assessment White Paper on Agricultural Sector Impacts [1].

With respect to Question 1:

"What has been the impact of the RFS on corn prices in recent years? What has been the impact on soybean prices? Have other agricultural commodity prices also been affected?"

Dramatic price increases in grain costs coincided with the implementation of the RFS mandate. Our research has directly analyzed the contribution of other factors raised as possible drivers of grain price increases and shown that none of them can be responsible [2]. These factors include rising meat consumption, drought in Australia, rising energy prices, and dollar-euro exchange rates. The growing requirements of the RFS, in conjunction with commodity futures speculation, suffice to accurately explain the increase in food prices. Our analysis shows that the price of basic foods has risen by a factor of two (100%) as a direct result of the increasing rate of corn to ethanol conversion and no other factor can explain this price increase (see 1). This price increase reflects both the increase in corn price and the effects of that increase on other grains and basic foods, including milk and meat as reflected in the FAO Food Price Index.

We also wish to bring to your attention a number of inaccuracies and misleading statements in the body of the White Paper:

A. White Paper: "...only a portion of the 40 percent of corn used to produce ethanol is lost for other purposes, as the byproducts of the ethanol distillation process are used as
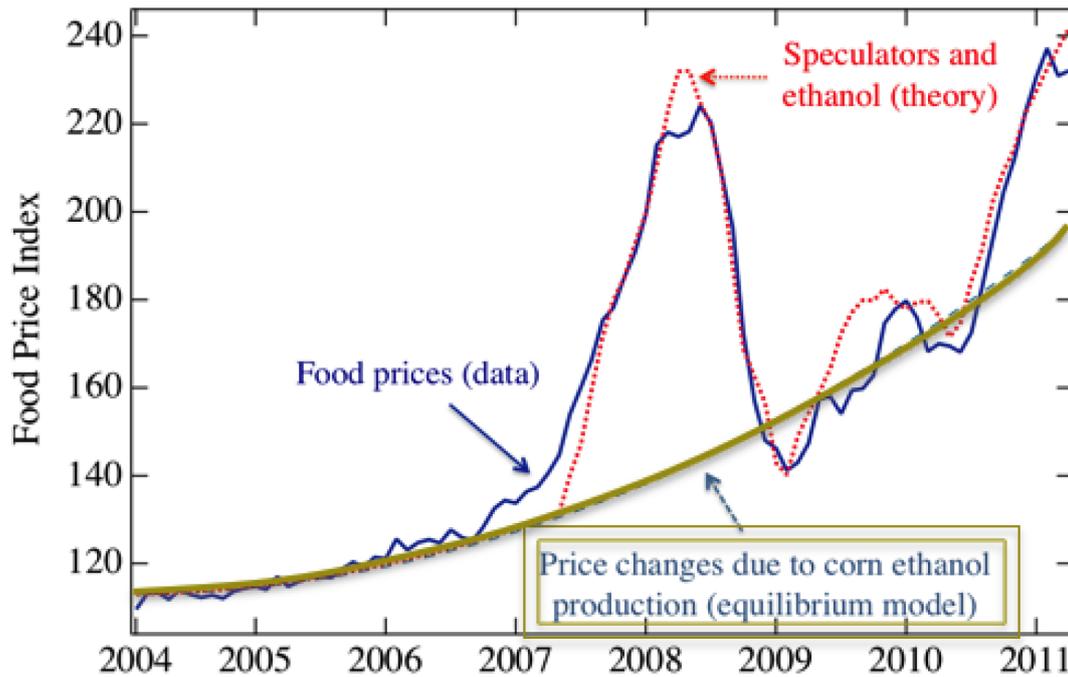
FIG. 1: **Food prices and model simulations** - Plots of food prices and models that quantitatively account for recent price increases: The FAO Food Price Index (blue solid line) since 2004. The impact of mandated corn to ethanol conversion (yellow line) from a supply and demand quantitative model. The ethanol demand shock causes food prices to increase proportional to the amount of corn to ethanol conversion. The full quantitative model further incorporates the role of commodity speculators (red dotted line). See Ref. [2] for details on the analysis.

animal feed."

The residual from corn to ethanol conversion used in feed (DDGS) accounts for a maximum of 31% of the total corn used [3]. Limitations of actual processing make the amount even lower. In 2011, DDGS reached only 23% of corn converted to ethanol [4]. This means that 77% of the corn used for ethanol is lost for use in feed.

B. White Paper: "Based on the agency's analysis, EPA Administrator Jackson concluded that 'it is very likely that the RFS volume requirements will have no impact on ethanol production volumes in the relevant time frame, and therefore no impact on corn, food, or fuel prices.'"

While we do not concur with many of the specifics of the analysis, the short-run time frame applied to the analysis used by EPA is not representative of the more extended time

frame of the RFS. A one-year time frame is insufficient to see production shifts due to the long-term nature of the capital investments, especially if the requirement resumes in the following year at an even higher level. A reduction in the mandate for multiple years would have drastically different results, as the EPA analysis stated. Administrator Jackson's statement, as given, is taken out of context and may be considered to suggest that the RFS has not had a major impact, or that reducing the RFS would not have an impact. Neither conclusion is correct.

C. White Paper: "To the extent that the RFS has driven up feedstock prices and reduced supplies of agricultural products available for export, one would expect to see land use changes in other countries, with greater incentives to clear new land for agricultural production. The scale of this effect, however, is subject to debate."

Expanding demand for grain based biofuels by its nature diverts basic grain from those who can least afford it [5]. While agricultural output may increase in some countries, that production will also be diverted to meeting biofuels demand in the United States and Europe. Indeed, in countries where large-scale land acquisitions are substantial, approximately 40% of the land acquired by foreign investors is being directed toward producing biofuel feedstocks [6]. Worsening hunger has been reported even with increasing agricultural production [7].

D. White Paper: "There is no question that the RFS has provided benefits for America's corn farmers ... The impact of the RFS on the farm economy extends beyond its benefits to feedstock growers ... Nonetheless, the RFS has engendered opposition within the agricultural sector, especially among those who use corn as feed."

The RFS was originally intended to address national energy security and environmental concerns, for which it has proven ineffective. The energy independence and environmental aims of the RFS were to be achieved by reducing petroleum consumption. In practice, the total ethanol production is less than 1% of US energy consumption, an irrelevant amount from the point of view of security [8]. Moreover, the production of ethanol consumes roughly as much energy from fossil fuels as the ethanol itself contains. Under optimal conditions,

ethanol energy content may exceed energy inputs by about 20%, but under typical real world conditions there is little or no energy surplus [9].

The remaining rationale of supporting farm incomes is inconsistent with the principle that self-regulation of markets provides the most equity and efficiency. Absent a compelling national security and environmental policy interest, providing welfare for farmers through the RFS is counter to a policy of enabling free market systems to serve their function. By introducing ethanol based farm support, the RFS has caused a large-scale indirect effects— such as those on the livestock sector and on consumers nationally and internationally—which are difficult if not impossible to mitigate.

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References

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