



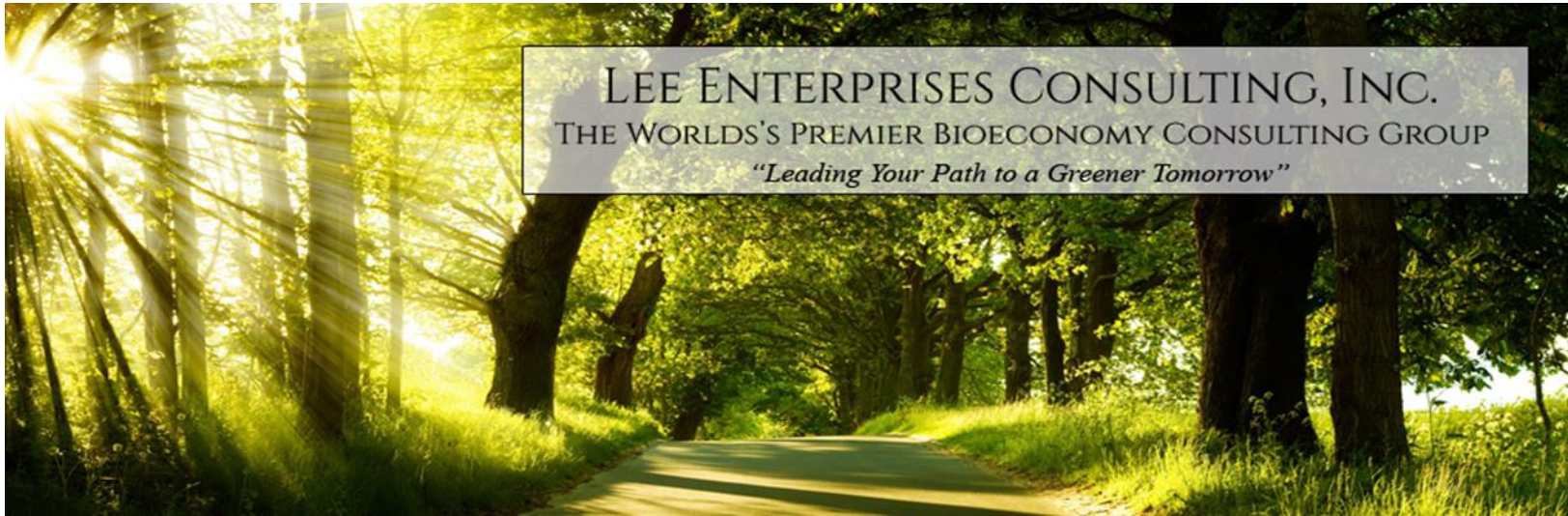
LEE ENTERPRISES
CONSULTING, INC.

FEDERAL APPRAISAL LLC



**Appraisers
to the
Biofuels Industry**

**US-China Trade
War Impacts
Cash Flows &
Values in
Biofuels Industry**



LEE ENTERPRISES CONSULTING, INC.
THE WORLD'S PREMIER BIOECONOMY CONSULTING GROUP
"Leading Your Path to a Greener Tomorrow"

Expertise: World's largest bioeconomy consulting group - over 100 subject matter experts (SME's)- all areas of the bioeconomy.

Approach: Project interdisciplinary teams to meet exact needs of specific projects.

POC: Handle projects with one agreement and single point of contact.

Cost Advantage: Single POC = lower administrative costs = lower project cost.



Specializing in Appraisals to the Biofuels Industry

► Biofuel Asset Types

- ▶ Refineries and businesses
- ▶ Corn ethanol assets and plants
- ▶ Biodiesel assets and plants
- ▶ Fermentation, distillation, fractionation assets and plants
- ▶ Scaled-up and experimental assets and plants

- ▶ Cellulosic



► Broader Expertise Renewable and Conventional Energy and Infrastructure

- ▶ Petroleum Refineries
- ▶ Power Plants
 - ▶ All Types: Nuclear, Coal, Gas, Solar, Wind
- ▶ Pipelines
- ▶ Water
- ▶ Rail
- ▶ Telecom





Specializing in Appraisals to the Biofuels Industry

▶ Client Types

- ▶ Business and Plant Owners
- ▶ Investors
- ▶ Accountants
- ▶ Attorneys
- ▶ Governments

▶ Asset Classes

- ▶ Businesses
- ▶ Intangibles
- ▶ Real Property
- ▶ Personal Property (machinery & equipment)

▶ Purposes & Uses

- ▶ Financing
- ▶ Due Diligence
- ▶ Development, Feasibility
- ▶ Investor & SEC Reporting
- ▶ Legal, Litigation
- ▶ Accounting
 - ▶ Tax – Federal & SALT
 - ▶ Cost Segregation, Purchase Price Allocation
 - ▶ Property Tax Assessment





US-China Trade War causes Major change in Exports/Imports affecting Biofuels Inputs and Outputs

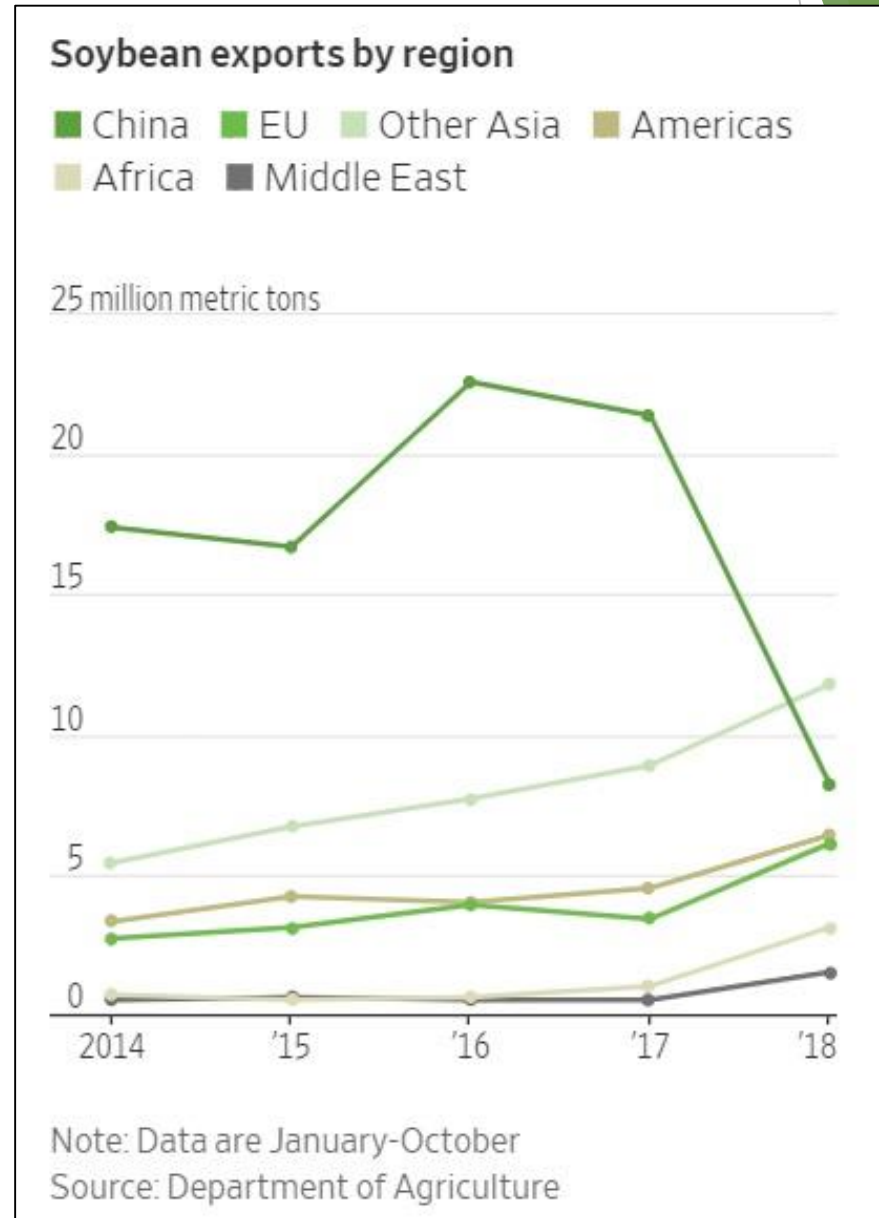
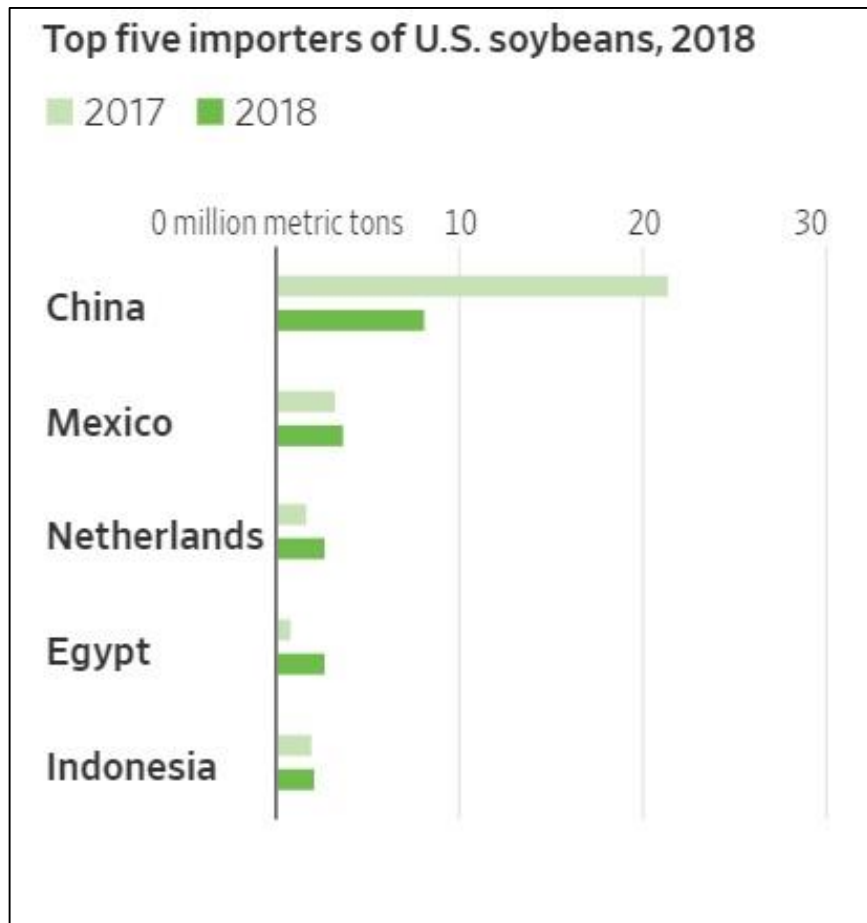
- ▶ How will US-China Trade War impact Business Values?
- ▶ Soy and corn exports to China are down dramatically, which drive prices/costs down for US consumers.
 - ▶ Ostensibly, good for US Biofuels Industry
- ▶ However Ethanol and Biodiesel exports to China are also down.
 - ▶ Again driving prices for ethanol and biodiesel down. But this drives down revenue to the biofuels industry.
- ▶ The net effect is a loss in cash flow to the industry.
 - ▶ Crush spreads have decreased!



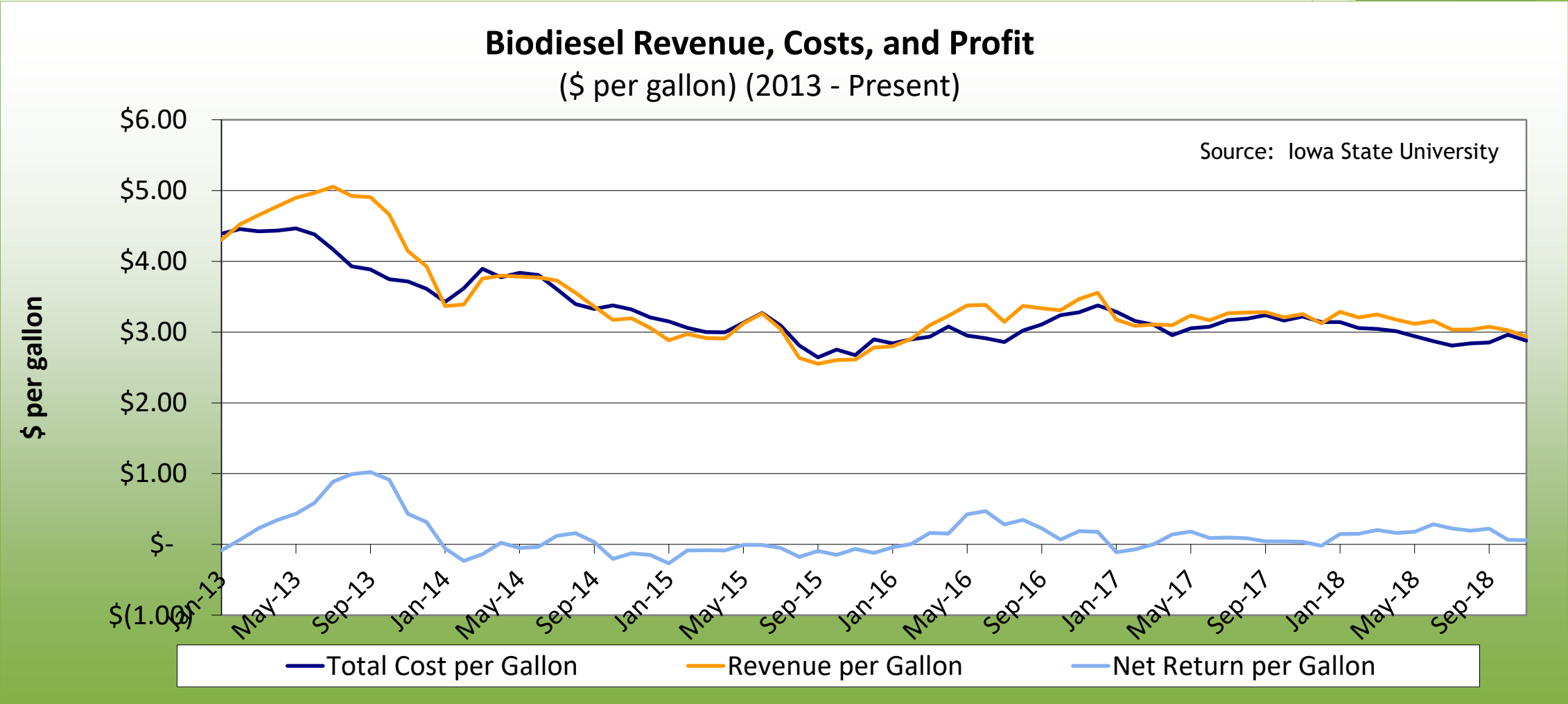
Crush spreads, already low, have decreased!

- ▶ How long will the effects last?
- ▶ Will there be a permanent loss of some exports?
- ▶ Will US farming acreage dedicated to soybean and corn decrease?
- ▶ Will there be an export recovery period? Plantings recovery?
- ▶ How will business risk assumptions change,
 - ▶ If industry develops a new, long term volatility?
 - ▶ If feedstocks and products become political bargaining chips?

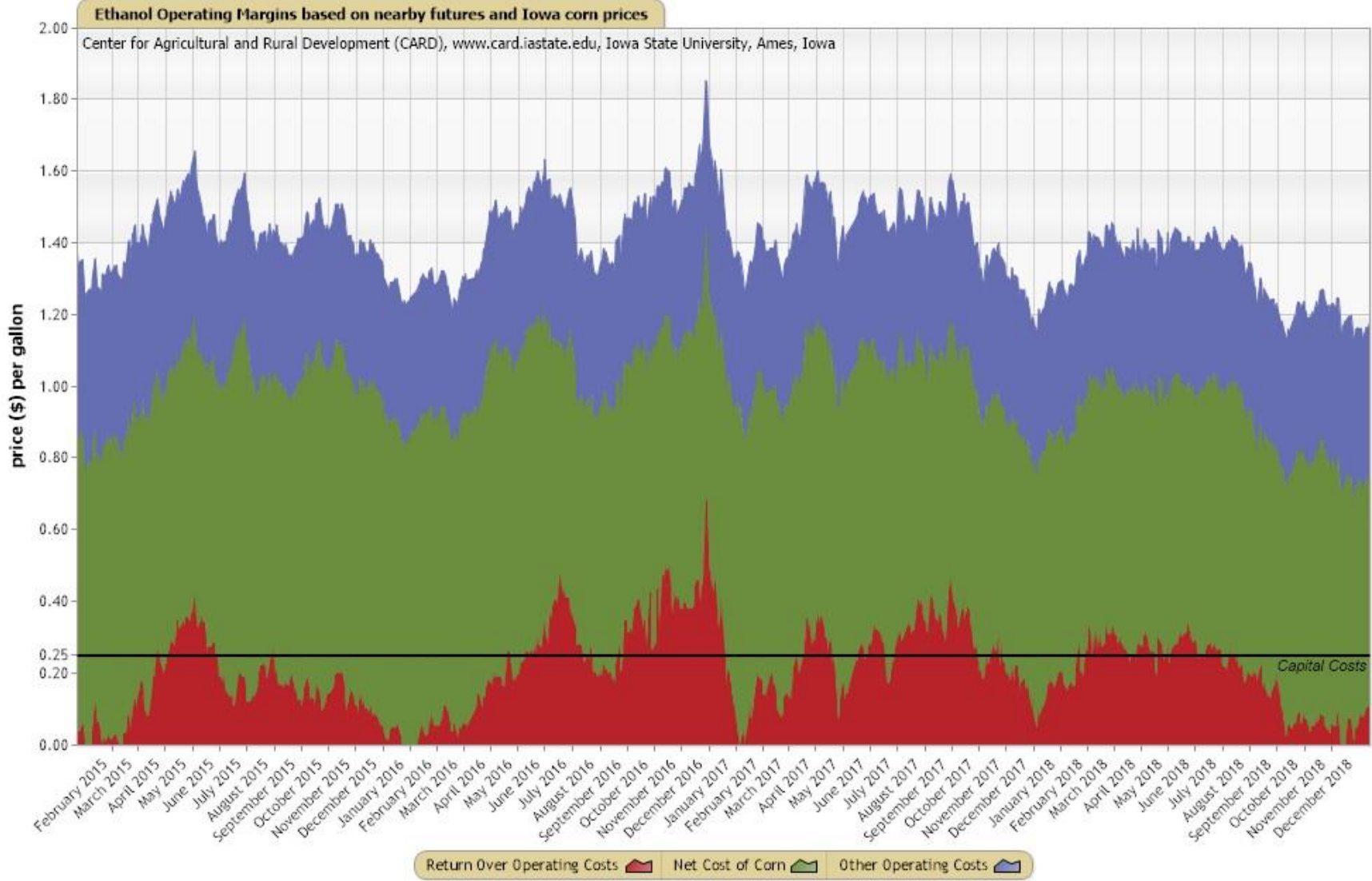
Substantial Drop In Chinese Soybean Exports



Biodiesel Margins Continue to Be Pressured



Ethanol Margins Have Weakened As Well





Indications for the Biofuels Industry

- ▶ Even if the trade war ends soon, the effects will last for years.
- ▶ There will likely be some long term loss of some exports, as consumer make other permanent supplier relationships.
 - ▶ Some exports of soy and corn, and ethanol and biodiesel may be lost forever.
- ▶ US farming acreage dedicated to soybean and corn will decrease.
 - ▶ This will drive up prices, costs, in next several years, to the biofuels industry.



Indications for the Biofuels Industry

- ▶ **Cash flows will decline in short & intermediate term, several years**
 - ▶ Thus values will decline.
- ▶ **Biofuel investors & lenders will add a new business risk to biofuels industry.**
 - ▶ A new, long term volatility, political risk.

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