Trade War and Missed Trade Opportunities

Minghao Li
Postdoctoral Research Associate
minghao@iastate.edu, 515-294-6175

Farmland Owner Workshop
Altoona, Iowa, February 15, 2019
A Quick Introduction: Dr. Minghao Li

– Grown up in NE China
– Ph.D. in Ag Econ in 2017 from Penn State
– Currently a postdoc research associate working with Dr. Dermot Hayes and Dr. Wendong Zhang
– Research and extension interests: Chinese agricultural economy, international ag trade

China Ag center [www.card.iastate.edu/china](http://www.card.iastate.edu/china)
Today I will talk about:

• The trade war

• African Swine Fever in China

• China’s E10 ethanol mandate
Trade war review:

**US**
- January 2018, solar panels and washing machines
- March 2018, steel (25%) and aluminum (10%)

**China**
- Sorghum
- 128 products, including pork (25%)
Trade war review:

**US**
- June and August, 25% tariffs on 50 $B Chinese exports
- September, 10% tariffs on 200 $B Chinese exports

**China**
- 25% tariff on 50 $B US exports, including pork and soybean
- 5%-10% tariffs on 60 $B Chinese exports
Currently:

- The 10% tariffs on 200 $B products is scheduled to increase to 25% at the end of February if negotiation fails.
China’s strategy:

• Proportional and restrained response

• Target products that substitutable

• Target products that cause economic and political harm to the US

Minghao Li, Wendong Zhang, and Chad E. Hart. 2018. "What Can We Learn about U.S.-China Trade Disputes from China’s Past Trade Retaliations?"
Impacts on the US economy

• Impact on US welfare (think GDP): -0.14%~ -0.23%

• Sectors that suffer most: soybeans (-15% in output value), cotton (-13%)

• Sectors that benefit most: electronics, steel and iron

• Export to China: -43.0% ~ -54.4%
The Iowa economy

Figure 1. Sectors of Iowa’s Gross State Product, 2017
Source: BEA
Impacts on the Iowa economy

- Impact on Gross State Product: -1 to -2 $Billion
- Percentage change: -1%~2%
- Trade subsidy (Market Facilitation Program) will give Iowa farmers 0.55 $Billion, no enough!


Missed export opportunity: African Swine Fever in China
Pork production in China vs. US and Iowa

US: 25 Bil. lbs
Iowa: 9 Bil. lbs
China: 117 Bil. lbs

Pork production (Iowa=100%)
- < 30%
- 31% - 60%
- 61% - 80%
- 81% - 100%
- > 100%
What is African Swine Fever?

- Hog disease, does not affect humans
- Highly contagious, mostly through contacts
- Highly lethal, mostly die within 10 days
ASF in China:

• First case in August 2018 in NE China

• More than 90 cases by the end of 2018

• More than 120 thousand pigs directly affected.
Cases so far:
Cases so far:
Government response:

• Setting up quarantine areas and culling pigs (200,000 pigs?)

• Banning feeding hog with food waste

• Restricting hog and pork transportation across provinces
Transportation restrictions cause regional hog imbalance and price divergence:
Missed export opportunity:

• If high prices in certain regions continue, there may be a need to import pork.

• However, tariffs on certain hog products have increased by 50% due to trade war.

• It is unlikely that China will import from the US.
Missed export opportunity: E10 ethanol mandate
China’s Ethanol Mandate

• In 2017, China announced that it will impose nationwide E10 (gasoline containing 10% ethanol) mandate by 2020.

• That means, all vehicles have to use gas with 10% ethanol, no options!

• In China fuel ethanol is mostly made from corn. The mandate will increase corn demand by 8.3%.
China does not want to import corn (graph below: self-sufficiency rate for crops)
China wants to limit corn production (graph below: corn area planted)
There won’t be enough corn to meet the E10 mandate:
If China continues down this path, corn price will become very high:

Corn price (Yuan/ton)

Our projection
If China decides to open up corn trade, the potential trade value will exceed half of the soybean trade value:

![Graph showing the import value of soybean and corn from 2010 to 2025. Our projection shows a significant increase in the corn trade value, surpassing the soybean trade value by 2020.](image-url)
Missed export opportunity:

• Our analysis shows that China will not be able to meet the E10 mandate with domestic production.

• Other than importing corn, another option is to directly import ethanol.

• China won’t import corn or ethanol if trade dispute continues.
Thank You!

Minghao Li
Postdoctoral Research Associate
568F Heady Hall, Iowa State University
515-294-6175

minghao@iastate.edu

www.card.iastate.edu/china