Seven things to know about China to understand the trade war

By Wendong Zhang, extension economist, 515-294-2536, wdzhang@iastate.edu

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Farmer Mac Webinar
May 8th, 2019
A Quick Introduction: Dr. Wendong Zhang

– Grown up in a rural county in NE China
– Attended college in Shanghai and Hong Kong
– Ph.D. in Ag Econ in 2015 from Ohio State
– 2012 summer intern at USDA-ERS on farm economy and farmland values
– Research and extension interests:
  - land value/ownership  [www.card.iastate.edu/farmland/]
  - agriculture and the environment

China Ag center  [www.card.iastate.edu/china]
Mainland China vs. US
#1: Ag is comparative advantage for US, not for China

Navigating the Chinese agricultural economy through the lens of Iowa

By Wendong Zhang, extension economist, 515-294-2536, wdzhang@iastate.edu; Minghao Li, postdoctoral researcher, Center for Agricultural and Rural Development, Iowa State University
Chinese land is owned by collectives  
*(Contract Right Certificate)*

<table>
<thead>
<tr>
<th>Total land size</th>
<th>Number of parcels</th>
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**Family Rep.**

**30-year term**

With at least one 30-year renewal

**All family members**

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**China’s New Rural Land Transfer Reform**

2016: 77 million acres (35% of cropland) transferred; 2007: 5%

Among them: 30% to co-ops or corps; 80% non-grain production

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**Landesa. Rural Development Institute**

**IOWA STATE UNIVERSITY**  
Extension and Outreach
China Corn Yield

2015 Soybean Yield
US: 48 Bu/acre
Iowa: 56 Bu/acre
China: 26 Bu/acre

China Soybean Yield
CRUNCH TIME FOR U.S.-CHINA TRADE TALKS: Mnuchin and U.S. Trade Representative Robert Lighthizer resume trade negotiations today in Beijing with a Chinese team led by Vice Premier Liu He, as both sides look to finalize a deal in the coming weeks.

“We hope within the next two rounds, in China and in D.C., to be at the point where we can either recommend to the president we have a deal or make a recommendation that we don’t,” Mnuchin said in an interview Monday with Fox Business.

Liu and Chinese negotiators are scheduled to be in Washington for the final round of talks beginning on May 8.

Are we there yet? U.S. officials have said both sides have made progress in many areas, including agreement on a strong enforcement mechanism seen how a deal will address President Donald Trump’s tariffs worth of Chinese goods and Beijing’s retaliatory duties on $110 billion of U.S. goods.

Mnuchin noted that “there’s still some important issues, so we work to do.” More [here](#).
The United States has been losing, for many years, 600 to 800 Billion Dollars a year on Trade. With China we lose 500 Billion Dollars. Sorry, we’re not going to be doing that anymore!

For 10 months, China has been paying Tariffs to the USA of 25% on 50 Billion Dollars of High Tech, and 10% on 200 Billion Dollars of other goods. These payments are partially responsible for our great economic results. The 10% will go up to 25% on Friday. 325 Billions Dollars....

....of additional goods sent to us by China remain untaxed, but will be shortly, at a rate of 25%. The Tariffs paid to the USA have had little impact on product cost, mostly borne by China. The Trade Deal with China continues, but too slowly, as they attempt to renegotiate. No!

The Dow Jones Industrial Average DJIA, -0.74% slid 226 points, or 0.9%, to 26,278, with the benchmark hitting an intraday low at 26,033.95. The S&P 500 index SPX, -0.81% declined 28 points, or 1%, to 2,917, while the Nasdaq

China stocks drop 5.5%
#2: Why China decided to talk?

China suffers greater economic Loss overall, but also for US ag states like Iowa.

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**Figure 1.** Welfare changes in selected countries.

Scenario 2: Tariff increases in scenario 1 and additional tariff increases between the United States and China, including the $50 billion round and the $200 billion/$60 billion round of tariff increases. The scenario reflects the current tariffs (as in October 2018).

Scenario 3: Tariff increases in scenario 1 and 2, and additional tariff increases that are scheduled to happen at the end of 2018, i.e., the U.S. tariffs on $200 billion Chinese products will increase by another 15%, and China’s retaliatory tariffs will increase by 0~15%.
The Impact of the 2018 Trade Disruptions on the Iowa Economy

- Overall losses in Iowa’s Gross State Product are calculated to be $1 to $2 billion (off of a Gross State Product of $190 billion).
- Overall losses to Iowa’s Soybean industry of $159 to $891 million, with an average revenue loss across all models of $545 million (Iowa soybeans are a $5.2 billion industry).
- Overall losses to Iowa’s Corn industry of $90 to $579 million, with an average revenue loss across all models of $333 million (Iowa corn is an $8.5 billion industry).
- Overall losses to Iowa’s Pork/Hog industry of $558 to $955 million, with an average revenue loss across all models of $776 million (the Iowa pork/hog industry is a $7.1 billion industry).
- A 2% drop in Ethanol prices resulting in approximately $105 million in lost revenues to Iowa ethanol producers.
- Revenue losses in these industries translate into additional lost labor income across the state. Labor income declines from the impacts to the corn, soybean, and hog industries range from $366 to $484 million without federal offsets and $245 to $364 million with federal offsets.
- Iowa tax revenue losses (personal income and sales taxes) range from $111 to $146 million. Federal offsets would reduce tax losses to $75 to $110 million.
CARD researchers win three AAEA awards

Researchers from the Center for Agricultural and Rural Development at Iowa State University will be presented with three awards from the Agricultural and Applied Economics Association.

Edward Balistreri, Chad Hart, Dermot Hayes, Minghao Li, Lee Schulz, Wendong Zhang, and John Crespi, along with David Swenson of the Department of Economics at Iowa State University, will be presented with the prestigious Bruce Gardner Memorial Prize for Applied Policy Analysis Award. The AAEA presents the Bruce Gardner prize as recognition for “outstanding impact on agricultural and related policy.”

Balistreri et al. are receiving recognition for their work on the CARD Policy Brief “The Impact of the 2018 Trade Disruptions on the Iowa Economy,” which examines the effects of recent trade disruptions on Iowa’s economy and finds overall losses in Iowa’s Gross State Product from $1 to $2 billion.
#3: Trade disruptions give China strategic incentives to further diversify away from U.S., potentially benefitting our competitors

<table>
<thead>
<tr>
<th>Commodity (2016 value of China ag imports)</th>
<th>USA</th>
<th>Brazil</th>
<th>Europe</th>
<th>Australia</th>
<th>Argentina or Uruguay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soybean ($34.4 Bil.) (China increased production by 9% in 2018)</td>
<td>38%</td>
<td>47%</td>
<td></td>
<td></td>
<td>A-10%</td>
</tr>
<tr>
<td>Pork ($2.32 Bil.)</td>
<td>13%</td>
<td>50%</td>
<td></td>
<td>Canada: 11%</td>
<td></td>
</tr>
<tr>
<td>Ethanol ($0.38 Bil.)</td>
<td>70%</td>
<td>11%</td>
<td></td>
<td>Pakistan 15%</td>
<td></td>
</tr>
<tr>
<td>Beef ($2.42 Bil.)</td>
<td>0%</td>
<td>22%</td>
<td>28%</td>
<td></td>
<td>U-21%</td>
</tr>
<tr>
<td>Poultry ($1.11 Bil.)</td>
<td>79%</td>
<td></td>
<td></td>
<td>A-9%</td>
<td></td>
</tr>
<tr>
<td>Corn ($0.87 Bil.)</td>
<td>10%</td>
<td></td>
<td></td>
<td>Ukraine: 79%</td>
<td></td>
</tr>
</tbody>
</table>

China’s Ag Import Sources

China can produces 97% of its pork, but only 15% of its soybean demand domestically. China provided about US$200/acre subsidy to increase soy production (up 9% 2018).
What Have We Learned from China’s Past Trade Retaliation Strategies?

Minghao Li, Wendong Zhang, and Chad Hart

JEL Classifications: Q17, F10
Keywords: Agricultural Commodities, China, Tariff, Trade Retaliation

Proportional, Restrained Response
Currently, China has a huge overall trade surplus with the United States, and thus naturally wants to maintain the status quo and avoid dispute escalations. As the two cases above demonstrate, China has targeted U.S. commodities with trade flows comparable to U.S. targets in order to send a clear message.

Target Products That Are Substitutable
In these two cases, China chose commodities that are easily substitutable across production systems and domestically produced. Half of the U.S. broiler products were chicken feet, a replaceable item that is commonly used for feed and can be replaced by corn or other coarse grains. In terms of soybean meal, China also targeted products that are replaceable.

Inflict Economic and Political Costs
From the perspective of China’s government, the ultimate goal of retaliatory tariffs is to hit politically influential interest groups in the United States, turning them into lobbyists for the government. For retaliation measures to be effective, China’s market as an export destination for soybeans could be important for U.S. producers, as is the case for broiler products and sorghum. For example, the Chinese government has long recognized the political significance of the U.S. agricultural industry, which is why it targets U.S. agricultural exports in trade spats.

China’s Feed Industry Association on Friday approved new standards for feed for pigs and chickens, lowering the protein levels in pig feed by 1.5 percentage points and those for chickens by one percentage point, the agriculture ministry said in a statement that day. It did not say when the new standards would take effect.

The ministry also said in the statement that China’s overall yearly consumption of soymeal would fall by 11 million tonnes. The country used 71 million tonnes of soymeal to make animal feed in the 2017-18 crop year.
Soybean Export Market Share
(2016 crop vs. 2018 crop)

Bolsonaro wins Brazilian presidency
The former military officer is the latest in a global wave of far-right nationalists to surge at the ballot box.
washingtonpost.com

Soy Stats
Worrying
US Loses Market Share as China Increases Meat Imports from the World

Source: Choices
2017 Q2 Issue
The Belt and Road Initiative creates a global infrastructure network. China uses, acquires and builds railroads, ports and pipelines.
China cannot produce enough ethanol domestically to fulfill the 2020 E10 ethanol mandate

4th largest producer – 1 Bil gal.
- After US, Brazil and EU
- Corn ethanol 64%
- Also uses cassava, sorghum, corn stover
- Imported 225 mil. gal, mainly from U.S.
- Tariff rose from 5% to 30%

China consumes 40 bil. gal gasoline; 1 bil. gal ethanol in 2016

China sets 2020 target for nationwide ethanol use to cut corn stocks
World’s Largest Pork Producer in Crisis: China’s African Swine Fever Outbreak
by Yongtong Shao, Minghao Li, Wendong Zhang, Yongjie Ji, and Dermot Hayes

TOP PORK PRODUCERS BY SHARE
In percent as share of total in 2017

- S. Korea
- Mexico
- Philippines
- Canada
- Vietnam
- Russia
- Brazil
- Rest of World
- U.S.A.
- E.U.
- China

Hog Inventory in 2016
- <5 MM
- 5 - 10 MM
- 10 - 20 MM
- 20+ MM

Quarantine Active
Quarantine Lifted

No of Cases
African Swine Fever in China: An Update

Minghao Li, Tao Xiong, Yongjie Ji, Dermot Hayes, and Wendong Zhang
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wdzhang@iastate.edu

Lean Hogs

Latest Price & Chart for Lean Hogs

End of day Commodity Futures Price Quotes for Lean Hogs

**Figure 1. Monthly changes in China’s hog inventory**
Source: Ministry of Agriculture of China

- **Chinese tariff**
- **Surging Chinese pork imports**
#4: Arguably strategic misjudgments early on by both sides, exposing lack of mutual understandings and mistrust
#5: China is a Country of Rapid Change

High Speed Rail
Chinese People Are Getting Richer, and will need more protein and better environment.
A Meatier Middle Kingdom

Charts of the Day: China’s Growing Meat Consumption

Source: Caixin Data
Original Sources: Organization for Economic Co-operation and Development, Food and Agriculture Organization of the United Nations

WORLD RESOURCES INSTITUTE

2018 Will See High Meat Consumption in the U.S., but the American Diet is Shifting

by Richard Waite - January 24, 2018
My hometown: Shennxian, Shandong Province

Greenhouse – plastic film - Shandong Province
#6: Chinese economy and U.S.-China Relations at Inflection Points

**Description this book**
How China Became Capitalist details the extraordinary, and often unanticipated, journey that China has taken over the past thirty-five years in transforming itself from a closed agrarian socialist economy to an indomitable economic force in the international arena. The authors revitalise the debate around the rise of the Chinese economy through the use of primary sources, persuasively arguing that the reforms implemented by the Chinese leaders did not represent a concerted attempt to create a capitalist economy, and that it was marginal revolutions that introduced the market and entrepreneurship back to China. Lessons from the West were guided by the traditional Chinese principle of seeking truth from facts. By turning to capitalism, China re-embraced her own cultural roots. How China Became Capitalist challenges received wisdom about the future of the Chinese economy, warning that while China has enormous potential for further growth, the future is clouded by the government's monopoly of ideas and power. Coase and Wang argue that the development of a

**Xi says China will let the market play decisive role in resource allocation**

**China vows 'decisive' role for markets, results by 2020**
U.S.-China Relations at Critical Inflection Point

"It was the rise of Athens, and the fear that this inspired in Sparta, that made war inevitable." — Thucydides

Is a War between China and America Simply Unstoppable?

Building his analysis on Thucydides’ study of the Peloponnesian War, Graham Allison and his colleagues have studied the classic international relations problem of military conflict between a rising power and an established dominant power. They identified 16 such situations over the past 500 years, and found that 12 of them ended in war — painting a gloomy picture of the future of US-China relations.

Lesson 4: Domestic performance is decisive.

Lesson 5: Hope is not a strategy.
### What is the Thucydides Trap?

- **It was the rise of Athens, and the fear that this inspired in Sparta, that made war inevitable.**

- **We all need to work together to avoid the Thucydides trap - destructive tensions between an emerging power and established powers.**

  - Thucydides
  - Xi Jinping
  - President of China

<table>
<thead>
<tr>
<th>Period</th>
<th>Ruling Power</th>
<th>Rising Power</th>
<th>Result</th>
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</thead>
<tbody>
<tr>
<td>1 First half of 16th century</td>
<td>France</td>
<td>Hapsburgs</td>
<td>War</td>
</tr>
<tr>
<td>2 16th–17th centuries</td>
<td>Hapsburgs</td>
<td>Ottoman Empire</td>
<td>War</td>
</tr>
<tr>
<td>3 17th century</td>
<td>Hapsburgs</td>
<td>Sweden</td>
<td>War</td>
</tr>
<tr>
<td>4 17th century</td>
<td>Dutch Republic</td>
<td>England</td>
<td>War</td>
</tr>
<tr>
<td>5 Late 17th–early 18th centuries</td>
<td>France</td>
<td>Great Britain</td>
<td>War</td>
</tr>
<tr>
<td>6 Late 18th–early 19th centuries</td>
<td>United Kingdom</td>
<td>France</td>
<td>War</td>
</tr>
<tr>
<td>7 Mid-19th century</td>
<td>United Kingdom, France</td>
<td>Russia</td>
<td>War</td>
</tr>
<tr>
<td>8 19th century</td>
<td>France</td>
<td>Germany</td>
<td>War</td>
</tr>
<tr>
<td>9 Late 19th–early 20th centuries</td>
<td>Russia, China</td>
<td>Japan</td>
<td>War</td>
</tr>
<tr>
<td>10 Early 20th century</td>
<td>United Kingdom</td>
<td>United States</td>
<td>War</td>
</tr>
<tr>
<td>11 Early 20th century</td>
<td>Russia, U.K., France</td>
<td>Germany</td>
<td>War</td>
</tr>
<tr>
<td>12 Mid-20th century</td>
<td>Soviet Union, U.K. France</td>
<td>Germany</td>
<td>War</td>
</tr>
<tr>
<td>13 Mid-20th century</td>
<td>United States</td>
<td>Japan</td>
<td>No war</td>
</tr>
<tr>
<td>14 1970s–1980s</td>
<td>Soviet Union</td>
<td>Japan</td>
<td>No war</td>
</tr>
<tr>
<td>15 1940s–1980s</td>
<td>United States</td>
<td>Soviet Union</td>
<td>No war</td>
</tr>
<tr>
<td>16 1990s–present</td>
<td>United Kingdom, France</td>
<td>Germany</td>
<td>No war</td>
</tr>
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**Center for Agricultural and Rural Development**

**Iowa State University**

Extension and Outreach
#7: Chinese consumers, producers, and gov’t increasingly like U.S.

Urban Chinese prefer to travel, stay connected, buy protein rich food, durable goods & recreation

Corruption, Pollution, Inequality Are Top Concerns in China

Many Worry about Threats to Traditions and Culture

Source: Spring 2015 Global Attitudes survey. Q60a, bGHI, d-f, h-q.

Pew Research Center

SEPTEMBER 24, 2015
What’s WeChat?
WeChat is a smartphone application that consists of...

Movie Ticket + Bill payment + Free calling + Investment + Social network

Mobile payment + User Review + Group buying + Taxi order + Free messaging

A staff member jumps for a photo to celebrate after Alibaba’s “Double 11” shopping festival, also known as Singles' Day, set a new record of 213.5 billion yuan ($30.7 billion) in Shanghai on Monday. Online shoppers in China on Sunday shattered last year’s record of $24 billion in sales during the country’s annual buying frenzy. This year’s extravaganza was the 10th one to be held. | AP

China's Alibaba nets record $30 billion in Singles' Day sales extravaganza, but growth rate plunges

REUTERS

NOV 12, 2018
1. Ag is not China’s comparative advantage
2. China suffers more economically, but retaliate on ag states like Iowa
3. Trade war makes China further diversify away from US
4. Trade war exposes early strategic misjudgments and growing mistrust
5. China is a country of rapid change
6. Chinese economy and relations with US at inflection points
7. Chinese producers and consumers increasingly think and act like Americans

https://www.extension.iastate.edu/agdm/articles/zhang/ZhaFeb19.html
Thank You!

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www.card.iastate.edu/china
www.card.iastate.edu/farmland