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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Nuffield Scholars Conference, Ames, Iowa, March 14, 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]
Key Messages (on Ag Decision Maker): Understand Contemporary China!

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
#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)

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

Family Rep.
30-year term
With at least one 30-year renewal
All family members

Total land size
Number of parcels

Mainland China vs. US
2015 Soybean Yield
US: 48 Bu/acre
Iowa: 56 Bu/acre
China: 26 Bu/acre
Trump and Xi Are Close to a Deal, But the Trade War Isn't Over

By Jenny Leonard
March 4, 2019, 3:00 PM CST
Updated on March 5, 2019, 5:05 AM CST

► U.S. confirms postponement of planned increase in tariffs
► Enforcement of Chinese commitments will be key to agreement

Some advisers argue that the tariffs should only be fully removed once China lives up to all of its pledges, which could take months or even years. Even if some or most tariffs are removed at the outset they could come back as part of the enforcement mechanism, to punish China if it breaks the terms of any trade deal, Lighthizer said last week.

**Enforcement Piece**

Lighthizer has said the two countries plan to set up a system that requires regular consultations at various levels of the U.S. and Chinese governments to address irritants. If talking doesn’t yield progress, Lighthizer said the U.S. will respond with “proportional” and “unilateral” action, likely referring to tariffs.

**Soybean Solution**

While Lighthizer has emphasized that he’s seeking a deal that’s more than what he dubbed a “soybean solution,” significant amounts of purchases are on the table in the talks.

China has offered to increase purchases of U.S. goods by $1.2 trillion over six years, benefiting agriculture and energy. That would help sell the deal to the president who has pledged to reduce the chronic U.S. trade deficit with Beijing.

But Lighthizer and his team are more focused on China making structural changes to its intellectual property practices and policies that require U.S. companies to transfer their technology to Chinese entities as a condition of doing business in the country.
Donald J. Trump  
@realDonaldTrump

I am pleased to report that the U.S. has made substantial progress in our trade talks with China on important structural issues including intellectual property protection, technology transfer, agriculture, services, currency, and many other issues. As a result of these very......

Donald J. Trump  
@realDonaldTrump

....productive talks, I will be delaying the U.S. increase in tariffs now scheduled for March 1. Assuming both sides make additional progress, we will be planning a Summit for President Xi and myself, at Mar-a-Lago, to conclude an agreement. A very good weekend for U.S. & China!

U.S., China launch high-level trade talks amid deep differences
Farmers' Loss
China's agricultural imports from the U.S. slump due to the trade spat

Sources: China Customs Administration, Bloomberg

Donald J. Trump
@realDonaldTrump - Mar 1, 2019
I have asked China to immediately remove all Tariffs on our agricultural products (including beef, pork, etc.) based on the fact that we are moving along nicely with Trade discussions....

Donald J. Trump
@realDonaldTrump
....and I did not increase their second tranch of Tariffs to 25% on March 1st. This is very important for our great farmers - and me!

Donald J. Trump
@realDonaldTrump - Feb 25, 2019
China Trade Deal (and more) in advanced stages. Relationship between our two Countries is very strong. I have therefore agreed to delay U.S. tariff hikes. Let's see what happens!

Donald J. Trump
@realDonaldTrump - Mar 1, 2019
If a deal is made with China, our great American Farmers will be treated better than they have ever been treated before!
#2: Why China decided to talk? China suffers greater economic Loss overall, but also for US ag states like Iowa.

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.
#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></td>
<td>50%</td>
<td></td>
<td>Canada: 11%</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></td>
<td>79%</td>
<td></td>
<td></td>
<td>A-9%</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, Wending 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 would not want to deviate from 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 producers in domestic production. Half of the U.S. broiler products were chicken feet, a replaceable component commonly used for feed and can be replaced by corn or other coarse grains. In terms of soybean meal, China has abundant domestic production.

Inflict Economic and Political Costs
From the perspective of China’s government, the ultimate goal of retaliatory tariffs is to harm politically influential interest groups in the United States, turning them into lobbyists for the administration. For retaliation measures to be effective, China’s market as an export destination for these products must be important for U.S. producers, as is the case for broiler products and sorghum. For example, China’s 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)
US Loses Market Share as China Increases Meat Imports from the World

Source: Choices 2017 Q2 Issue
China’s 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
#5: China is a Country of Rapid Change

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

1992
GDP per capita (PPP)
$37,283
United States
$1,846
China

U.S. GDP per capita was 20.2 times that of China

2016
GDP per capita (PPP)
$53,417
United States
$14,275
China

U.S. GDP per capita was 3.7 times that of China

88 percent of the next billion entrants into the middle class will be in Asia

By 2030, Asia could represent 2/3 of the global middle class population.

350 m
in CHINA

380 m
in INDIA

210 m
in rest of ASIA

130 m
in rest of the WORLD

Meat consumption vs. GDP per capita, 2013

Average meat consumption per capita, measured in kilograms per year versus gross domestic product (GDP) per capita measured in 2011 international $. International $ corrects for price differences across countries. Figures do not include fish or seafood.

Source: UN FAO; World Bank; World Development Indicators

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

by Richard Waite - January 24, 2018
• 82% of Iowa land is debt-free
• 60% of land owned by owners 65+ years old, one-third of land owned by 75+ years old, 13% of land owned by women landowner 80+ years old
• Ownership continues to shift from sole ownership to trusts and corporations
• 53% of Iowa land rented out – mainly cash rent
• 34% of Iowa land owned by landlords with no farming experience, 23% of land owned by retired farmers who do not currently farm
• 29% of Iowa land owned primarily for family/sentimental reasons

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2018 IOWA LAND VALUE

$7,264
Nov 2018

down 0.8%
down $62

Double Downward Pressure

Land Value = income / interest rate
AVERAGE VALUES
all farmland 1941–2018

Nominal and Real Land Values ($/acre)

Nominal Iowa land values
% Change in Nominal Iowa Farmland Values 1942-2018

Annual Percentage Change (%)
Thank You!

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