Actual and Perceived Impacts of US-China Trade War on US Agriculture

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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
#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%.
#TradeWar Was, and Is, More Than Soybeans

Total Agricultural Exports to China Down

$10 Billion in 2018

Year-Over-Year Change in U.S. Agriculture Exports to China
2018 Compared to 2017

- Sugar: -3%
- Poultry: 24%
- Seeds: 22%
- Horticulture: 12%
- Tobacco: 7%
- Cotton: -6%
- Dairy: -13%
- Livestock: -13%
- Grains: -22%
- Soybeans: -36%
- -74%

American Farm Bureau Federation

Center for Agricultural and Rural Development

Iowa State University Extension and Outreach
The Impact of the 2018 Trade Disruptions on the Iowa Economy

Edward J. Balistreri, Chad E. Hart, Dermot J. Hayes, Minghao Li, Lee Schulz, David A. Swenson, Wendong Zhang, John M. Crespi

- 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. & take advantage of new Chinese import demands, potentially benefitting US ag 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>A-10%</td>
<td></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>U-21%</td>
<td></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 2016**
China’s increasing diversification away from U.S. meat imports

China Meat Imports from U.S.
1996-2019

China Meat Imports from ROW
1996-2019

Metric tons

Pork and Pork production
Beef and Beef production
Poultry and Poultry production (ex. eggs)
US didn’t get the lion’s share from China’s demand due to ASF

China's Pork & Hog Imports from the World (Metric Ton)

USA  Germany  Spain  Canada  Denmark  France  UK  Chile  Others

IOWA STATE UNIVERSITY
Extension and Outreach

Xiong and Zhang
2019 Ag DM
China’s Belt and Road Initiative Started in 2013/4
More than half of IA, IL, MN farmers support tariffs on China

Collaborators:
Shuyang Qu
Minghao Li
Lulu Rodriguez
Guang Han
26. President Trump announced a Market Facilitation Program to help farmers affected by the trade disruptions in 2018. To the best of your knowledge, what was the payment rate for soybean producers?
   a. 1 cent per bushel
   b. 14 cents per bushel
   c. 86 cents per bushel
   d. $1 per bushel
   e. $1.65 per bushel

27. Before receiving trade assistance from the USDA, to what extent do you think your farm’s net income in 2018 was affected by the trade disruptions?
   a. Down > 20%
   b. Down 10%–20%
   c. Down 5%–10%
   d. Down < 5%
   e. No change
   f. Up < 5%
   g. Up 5%–10%
   h. Up 10%–20%
   i. Up > 20%

28. How helpful do you think President Trump’s $12 billion trade relief plan will be to your farm?
   a. Not at all helpful
   b. Somewhat helpful
   c. Quite helpful
   d. Very helpful
   e. Not sure

41% somewhat helpful, 18% quite helpful, 25% very helpful
Virtually no change in marketing & planting decisions.
### Perceived impacts on US Agriculture & “My Farm”

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nothing good will come out of this trade disruption.</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>2. I hope this trade disruption is resolved soon.</td>
<td>34</td>
<td>47</td>
</tr>
<tr>
<td>3. The trade disruption will make US agriculture lose markets to our competitors.</td>
<td>27</td>
<td>23</td>
</tr>
<tr>
<td>4. The US economy will suffer more than China’s economy due to this trade disruption.</td>
<td>32</td>
<td>20</td>
</tr>
<tr>
<td>5. American farmers will bear the brunt of the tariffs imposed by the Chinese government.</td>
<td>29</td>
<td>22</td>
</tr>
<tr>
<td>6. A year from now, my farm operation will be better off financially because of this trade disruption.</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>7. A year from now, US agriculture will be better off compared to now because of this trade disruption.</td>
<td>26</td>
<td>5</td>
</tr>
<tr>
<td>8. Three years from now, the US economy in general will be better off because of the trade disruption.</td>
<td>29</td>
<td>14</td>
</tr>
<tr>
<td>9. The tariffs imposed by the US and China on each other’s products will have long-term negative effects on US agriculture.</td>
<td>32</td>
<td>14</td>
</tr>
<tr>
<td>10. This trade disruption will enhance the economic relationship between the US and China in the long run.</td>
<td>29</td>
<td>5</td>
</tr>
</tbody>
</table>
# Farmers’ Views about US-China Trade & Economy Issues

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The amount of <strong>US debt held by China</strong> is a serious problem for the US.</td>
<td>53</td>
<td>25</td>
</tr>
<tr>
<td>2. The <strong>trade deficit with China</strong> is harmful to the US economy.</td>
<td>54</td>
<td>18</td>
</tr>
<tr>
<td>3. China engages in <strong>cyber economic espionage</strong> against the US.</td>
<td>43</td>
<td>27</td>
</tr>
<tr>
<td>4. The number of <strong>jobs Americans lose</strong> to China is problematic.</td>
<td>49</td>
<td>15</td>
</tr>
<tr>
<td>5. Economically, China is an ally of the US.</td>
<td>28</td>
<td>3</td>
</tr>
<tr>
<td>6. <strong>It is important for the US to maintain a healthy economic relationship with China.</strong></td>
<td>67</td>
<td>25</td>
</tr>
<tr>
<td>7. The US will be better off using a multilateral approach, rather than a unilateral one, in dealing with trade disputes.</td>
<td>36</td>
<td>14</td>
</tr>
<tr>
<td>8. The US is better off leaving the TPP (Trans-Pacific Partnership).</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>China’s <strong>intellectual property protection</strong> record is poor</td>
<td>45</td>
<td>31</td>
</tr>
</tbody>
</table>
Thank You!

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ISU China Ag Center
(Currently hiring a two-year postdoc)
www.card.iastate.edu/china
China Needs International Market: 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
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 tends to target agricultural commodities with trade flows comparable to U.S. targets in order to send a clear message. At the same time, China

Target Products That Are Substitutable
In these two cases, China chose commodities that are easily substitutable across products, across sources, or via domestic production. Half of the U.S. broiler products were chicken feet, a replaceable snack food, and sorghum is commonly used for feed and can be replaced by corn or other coarse grains. In terms of substitutability across

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