WTO and China’s Agricultural Policies

Jikun Huang
Center for Chinese Agricultural Policy
Chinese Academy of Sciences
There had been great debate on China’s WTO accession before China joined WTO in 2001. Who wins? Who loses?

**WINNERS:**

- Off farm workers (in most industries)
- Consumers—both rural and urban
- Users of liberalized inputs and technologies

**LOSERS:**

- Farmers?

[Which is important to understand, since there are more than 200 million farming households]
More concerns when China made big commitments to WTO accession in 2001

- Market accession
- Domestic support
- Export subsidy
- ...


### WTO commitments:

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Wheat</td>
<td>8.45</td>
<td>9.30</td>
<td>65</td>
</tr>
<tr>
<td>Maize</td>
<td>5.70</td>
<td>7.20</td>
<td>65</td>
</tr>
<tr>
<td>Rice</td>
<td>3.76</td>
<td>5.30</td>
<td>65</td>
</tr>
<tr>
<td>Sugar</td>
<td>1.76</td>
<td>1.94</td>
<td>38</td>
</tr>
<tr>
<td>Cotton</td>
<td>0.82</td>
<td>0.89</td>
<td>50</td>
</tr>
<tr>
<td>Wool</td>
<td>0.26</td>
<td>0.29</td>
<td>38</td>
</tr>
</tbody>
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### China’s agriculture:

- Wheat: 10 mmt
- Maize: 0.5 mmt
- Rice: 0.5 mmt
- Sugar: 1.5 mmt
- Cotton: 0.7 mmt
- Wool: 0.25 mmt
Import tariff rates on major agricultural products subject to tariff-only protection.

<table>
<thead>
<tr>
<th></th>
<th>Tariff rates in 2001</th>
<th>Effective as of 1 January</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>2002</td>
</tr>
<tr>
<td>Soybean</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Fruits</td>
<td>30</td>
<td>13-20</td>
</tr>
<tr>
<td>Beef</td>
<td>45</td>
<td>23</td>
</tr>
<tr>
<td>Pork</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Poultry meat</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Dairy products</td>
<td>50</td>
<td>20-37</td>
</tr>
<tr>
<td>Tobacco</td>
<td>34</td>
<td>28</td>
</tr>
</tbody>
</table>
Domestic supports:
-- Ample box: AMS < 8.5%
    (instead of 10% for other developing countries)

Export subsidy:
-- Completely phased out export subsidy

Others:
-- “Non-market economy”; special anti-dumping provisions will remain for 15 years after China’s WTO accession.
So, there was great fear of likely and substantial negative impacts of China’s WTO accession on its agriculture and farmer’s income after 2001.

Has this happened since 2001?
After 10 years of China’s joined WTO, the impacts on agricultural net imports have not been huge, but moderate.
China’s agricultural **import** and **export** (million US$): overall food self-sufficiency was **98%** in 2010

Source: Calculated based on UNCOMTRADE
Agricultural export and import (billion US$)
Agricultural growth has been accelerated since 2001.
Impacts of China’s WTO accession on its agriculture in 2005 (compared with baseline, %)

Positive: labor intensive products
Negative: land intensive products
Facilitated the diversification of China’s agriculture

<table>
<thead>
<tr>
<th>Product</th>
<th>2005 Impact</th>
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<tbody>
<tr>
<td>Rice</td>
<td>-8%</td>
</tr>
<tr>
<td>Wheat</td>
<td>-6%</td>
</tr>
<tr>
<td>Maize</td>
<td>-4%</td>
</tr>
<tr>
<td>Cotton</td>
<td>-2%</td>
</tr>
<tr>
<td>Edible oils</td>
<td>0%</td>
</tr>
<tr>
<td>Sugar</td>
<td>2%</td>
</tr>
<tr>
<td>Vegetable</td>
<td>4%</td>
</tr>
<tr>
<td>Fruits</td>
<td>6%</td>
</tr>
<tr>
<td>Pork</td>
<td>8%</td>
</tr>
<tr>
<td>Poultry</td>
<td>10%</td>
</tr>
<tr>
<td>Milk</td>
<td>12%</td>
</tr>
<tr>
<td>Fish</td>
<td>14%</td>
</tr>
</tbody>
</table>

Huang et al. (2007), CRE
Impacts (%) on agri. output for average farm by province in 2005: differ largely among regions

Regional agri production structure in 2001: Importable output %
Why the impact has been moderate?

• Impacts depends on several sets of factors:

  ONE:  Protection at border?

  TWO: How closely into the economy are households integrated?

  THREE: Policy responses...
The rest of presentation

- Market liberalization:
  - Domestic market reform and integration
  - Trade liberalization and falling distortion at border

- Policy responses

- Concluding remarks
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<tbody>
<tr>
<td>Corn</td>
<td>46</td>
<td>93</td>
<td>100</td>
</tr>
<tr>
<td>Soybean</td>
<td>56</td>
<td>95</td>
<td>98</td>
</tr>
</tbody>
</table>

When using statistical tests (on more than 800 pairs of markets), almost all markets move together in an integrated way, up from only about ½ in the early 1990s (when markets were NOT integrated).
External economy: liberalization at the border

Trade policies

1980s
- No real system of tariffs
- All trades of major commodities were arranged by the State Trading Companies

1990s
- Develop system of tariffs
- Allowed trading by non-state traders, starting from horticulture, animal and other minor products, and then moved to soybeans, some of rice, maize and wheat … …
Late reform period things changed
-- Promotion of Trading Companies
-- Tariffication and reduction of tariff

Agricultural tariff rate (%):

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<tbody>
<tr>
<td>Rate</td>
<td>40%</td>
<td>25%</td>
<td>20%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Diagram showing changes in agricultural tariff rates from 1992 to 2005.
… by the 2000s, the prices of most of China’s commodities were nearly equal to the prices of the same commodities on world markets … this means that China is VERY OPEN …
Policy Responses

• Initial responses right after 2001
  - Meeting the overall commitments
  - Legal and legislation changes
  - Enhancing market reform

• Responses since early 2000s
  - Land use policy, rental market development
  - Farm associations
  - Investing in agriculture to improve productivity
    ✓ Overall investment
    ✓ Investing in R&D and irrigation
  - Subsidies and pricing policy
  - ...
Policy responses: 
Rental market and farmers’ cooperatives

Huang et al., 2011
Huang et al., 2010
Investment into agricultural sector
Government budget support
(billion yuan in 2008 prices)
Since 2000, the rise in research investment has been keeping high
Recent National Policy: “Promoting Agriculture by Applying Scientific and Technological Advances”

• **Annual growth rate in agri. R&D (public):**
  – 2000-2010: 16% in real term

• **China’s #1 policy document in 2012:**
  - New political commitment to invest in R&D and reforming public R&D system
Eliminated agri. tax in 2006.
Total subsidy in 2012 was about 3.13% of agricultural GDP.
Except for machinery, all subsidies are decoupled (Huang et al., 2011 and 2013).
Minimum Price Policy: Protection prices ($P^*$) have been lower than market price ($P\text{-mkt}$)

**Rice**

- Prices $P^*$ and $P\text{-mkt}$ are shown over the years 2004 to 2012.
- $P^*$ generally remains below $P\text{-mkt}$.

**Wheat**

- Prices $P^*$ and $P\text{-mkt}$ are shown over the years 2004 to 2012.
- $P^*$ remains below $P\text{-mkt}$.
Price changes in international market could be easily transmitted into domestic market

Trends of prices in China and International Market (at China’s boarder) in 2000-2006

Rice Price

Wheat Price

Maize Price

Soybean Price
Avoiding transmission of completely liberalized products (e.g., soybean) from international to domestic markets is not possible during global food crisis in 2007-2008.

Rice Price

Wheat Price

Maize Price

Soybean Price
Concluding Remarks

• China’s agriculture has changed from the planned to much less distorted economy. By the time China joined WTO, domestic prices of most products approached to the world prices.

• Despite its’ significant WTO commitments, the over impacts of China’s WTO accession have been very moderate.

• However, income disparity among regions has been enlarged with trade liberalization.

• Market reform and trade liberalization before China’s WTO accession and policy responses have facilitated its adapting to the global economy.
Concluding Remarks

• China has also significantly increased its investment in agricultural infrastructure, technologies, and subsidies.

• While most of subsidies are decoupled, China may consider to alter these fiscal budget for other policies (e.g., income transfer and productivity enhanced investment).

• To deal with future food price spikes, a new global governance system is needed to coordinate actions among major food importers and exporters in the world market.