Impact of China's WTO Accession on Farmers' Welfare

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China’s WTO Accession: Blessing or Disaster to Chinese farmers?

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Carleton University
Ottawa, Canada
Two Camps of thoughts

Farmers will benefit

- Increasing exports and employment
- Forcing domestic firms to improve efficiency through competition
- Benefits are expected to accrue through improved resource allocation and greater economic efficiency resulting from trade liberalization and greater global competition

Farmers will be hurt

- Will result in the loss of income and livelihood for millions of rural farmers
- A sell-out and a way for the United States to gain control of the Chinese economy
- China's "floating population" is already estimated at more than 100 million -- and the effects of the new trade deal are likely to create hundreds of millions more
OUTLINE

- Conceptual framework of AoA (Agreement of Agriculture) under Uruguay Round
- China’s specific commitment under AoA and its impact on China’s agriculture trade
- Do farmers win or lose from WTO accession?
- Why?
- Can Chinese farmers compete with farmers from developed countries?
- What’s in WTO that benefits/hurts small farmers?
- Policy implications to Chinese government
The Agriculture Agreement of WTO

- Meant to create fairer markets for farmers

New rules set in Uruguay Round apply to:

- **market access** — various trade restrictions confronting imports
- **domestic support** — subsidies and other programs, including those that raise or guarantee farmers’ incomes
- **export subsidies** and other methods used to make exports artificially competitive.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Tariffs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>average cut for all</td>
<td>-36%</td>
<td>-24%</td>
</tr>
<tr>
<td>agricultural products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>minimum cut per product</td>
<td>-15%</td>
<td>-10%</td>
</tr>
<tr>
<td><strong>Domestic support</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>total AMS cuts for sector</td>
<td>-20%</td>
<td>-13%</td>
</tr>
<tr>
<td>(base period: 1986-88)</td>
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<tr>
<td><strong>Exports</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>value of subsidies</td>
<td>-36%</td>
<td>-24%</td>
</tr>
<tr>
<td>subsidized quantities (base period: 1986-90)</td>
<td>-21%</td>
<td>-14%</td>
</tr>
</tbody>
</table>
Market Access – “Tariff Only”

- Tarrification: convert quotas and other non-tariff barriers to a bound tariff rate
- Tariff-quotas (TRQs)
  Imports entering under the tariff-quota (up to 1,000 tons) are generally charged 10%. Imports entering outside the tariff-quota are charged 80%. Under the Uruguay Round agreement, the 1,000 tons would be based on actual imports in the base period or an agreed “minimum access” formula.
China’s commitment under WTO – tariff rate

<table>
<thead>
<tr>
<th></th>
<th>Actual tariff rates in 2001</th>
<th>Effective as of 1 January 2002</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barley</td>
<td>114 (3)$^a$</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Soybean</td>
<td>3$^b$</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Citrus</td>
<td>40</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Other fruits</td>
<td>30-40</td>
<td>13-20</td>
<td>10-13</td>
</tr>
<tr>
<td>Vegetables</td>
<td>30-50</td>
<td>13-29</td>
<td>10-15</td>
</tr>
<tr>
<td>Beef</td>
<td>45</td>
<td>23.2</td>
<td>12</td>
</tr>
<tr>
<td>Pork</td>
<td>20</td>
<td>18.4</td>
<td>12</td>
</tr>
<tr>
<td>Poultry meat</td>
<td>20</td>
<td>18.4</td>
<td>10</td>
</tr>
<tr>
<td>Dairy products</td>
<td>50</td>
<td>20-37</td>
<td>10-12</td>
</tr>
<tr>
<td>Wine</td>
<td>65</td>
<td>45</td>
<td>14</td>
</tr>
<tr>
<td>Tobacco</td>
<td>34</td>
<td>28</td>
<td>10</td>
</tr>
</tbody>
</table>
## China’s commitment under WTO – Tariff Rate Quotas

Table 6. China’s market access commitments on farm products subject to tariff rate quotas.

<table>
<thead>
<tr>
<th></th>
<th>Import volume (MMT) (State trading share, %)</th>
<th>Quota growth (%pa)</th>
<th>In-quota tariff (%)</th>
<th>Out-of-quota tariff (%) (% as of 1 January)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual 2000</td>
<td>Quota 2002</td>
<td>Quota 2004</td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td>0.24 (100)</td>
<td>3.76 (50)</td>
<td>5.32 (50)</td>
<td>19</td>
</tr>
<tr>
<td>Wheat</td>
<td>0.87 (100)</td>
<td>8.45 (90)</td>
<td>9.64 (90)</td>
<td>8</td>
</tr>
<tr>
<td>Maize</td>
<td>0.0 (100)</td>
<td>5.70 (67)</td>
<td>7.20 (60)</td>
<td>13</td>
</tr>
<tr>
<td>Cotton</td>
<td>0.05 (100)</td>
<td>0.82 (33)</td>
<td>0.89 (33)</td>
<td>5</td>
</tr>
<tr>
<td>Wool</td>
<td>0.30 (100)</td>
<td>0.34 (33)</td>
<td>0.37 (33)</td>
<td>5</td>
</tr>
<tr>
<td>Edible oils</td>
<td>1.79 (100)</td>
<td>5.69 (40)</td>
<td>6.81 (10)</td>
<td>15</td>
</tr>
<tr>
<td>Sugar</td>
<td>0.64 (100)</td>
<td>1.68 (33)</td>
<td>1.95 (33)</td>
<td>8</td>
</tr>
</tbody>
</table>
WTO Agriculture Agreement – Domestic Support

AMBER BOX (slow-down)

- All domestic support considered to distort production and trade
- Total Aggregate Measurement of Support (AMS)
  - 20% cut for developed
  - 13% cut for developing countries
Aggregate Measurement of Support

- For the purpose of Current Total AMS calculations, price support is generally measured by multiplying the gap between the applied administered price and a specified fixed external reference price (“world market price”) by the quantity of production eligible to receive the administered price.

- Example Wheat:
  > Intervention price for wheat = $255 per tonne
  > Fixed external reference price (world market price) = $110 per tonne
  > Domestic production of wheat = 2,000,000 tonnes
  > Value of wheat production = $510,000,000
  > Wheat AMS (AMS 1) ($255–$110) x 2,000,000 tonnes = $290,000,000 (de minimis level = $25,500,000)
WTO Agriculture Agreement – Domestic Support

Blue Box

- Certain direct payments to farmers where farmers are required to limit production
- Certain government assistance programs (de minis)
  - 5% for developed countries
  - 10% for developing countries
  - China – 8.5%
WTO Agriculture Agreement – Domestic Support

Green Box

- Support with no or minimal distortive effect
  - Government service program
  - Decoupled income support: direct payments to producers that does not influence agricultural production
Factor Specific Model

Fruit (labor-intensive exports): 
\[ MPL_F P_F \]
Specific factor: fruit land

Wheat (land-intensive imports): 
\[ MPL_w P_w \]
Specific factor: Wheat land

WTO
China’s agricultural situation

- Largest grain producer since 1996
- Grain production is the main source of income of 330 million farmers
- Cost of grain production keeps increasing as limited land and scarce water irrigation
- Contrast of large population and shortage of agricultural natural resources is sharpened
Effect of WTO Accession on China’s Net Agricultural Imports

- Import of bulk commodities will increase
  - Drop in tariff rate and relatively higher prices
  - Phase out of TRQs
  - Less competitiveness grain production

- Export future is ambiguous
  - Export subsidies phased out
  - Special measures

China’s net agricultural imports of most grains will increase with WTO accession.
Short-run impact on farmers’ welfare

- Increase in imports of bulk commodities, wheat, coarse grain and oil seeds
- Some livestock and aquatic products will benefit from low-cost imported feed grain
- Export is uncertain
  - Phase out of export subsidies
  - Special measures

⇒ Current pressure on Chinese farmers: the changing demand-supply in the domestic market
⇒ Additional imports may add more pressure
⇒ Difficulties: find markets for their products, restructure their production, additional 5% as a whole
⇒ It’s not easy for farmers to make adjustment
Special Measures

- SPS (Sanitary and Phytosanitary measures)
- SSG (12 years, Special Safeguard measures)
- Dumping (15 years): Non-market-economy methodology
Long run impact on farmers’ welfare

- Squeezed between
  - Increasing imports of bulk commodities
    - Reduced protection of TRQs of imports
    - Lack of economy of scale due to land scarcity
  - Increasing non-tariff barriers to reduce its exports of labor-intensive products (long commitment to the special measures and short phase out of protection measures)

⇒ Farmers may become more mobile
⇒ Farmers derive income from non-farm activities
⇒ Agriculture re-structure is improved
⇒ Farmers welfare may get improved, but inequality between farm/nonfarm will increase
Farmers will get worse off

- Farmers are protected under China’s irrational policy in the reform age to ensure food security
- China’s small-scale farming system hinders farmers to compete with large-scale farming
- Increasing production cost and difficulties of restructuring put farmers in a more disadvantageous position
- More vulnerability with gradual phase-out of TRQs and state-trading monopolies
- AMS tends to support agriculture products of comparative advantage after joining WTO
Increasing imports put small farmers more vulnerable

- Share of agriculture to total GDP declines from 40% to only 16%
- The rural population in China still accounts for about 70% of the national total, and the agriculture labor force accounts for 50% of the total

<table>
<thead>
<tr>
<th>Table 2. Changes in structure (%) of China’s economy, 1970-2000.</th>
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</thead>
<tbody>
<tr>
<td>Share in GDP</td>
</tr>
<tr>
<td>Agriculture:</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>Industry:</td>
</tr>
<tr>
<td>46</td>
</tr>
<tr>
<td>Services:</td>
</tr>
<tr>
<td>13</td>
</tr>
<tr>
<td>Share in employment</td>
</tr>
<tr>
<td>Agriculture:</td>
</tr>
<tr>
<td>81</td>
</tr>
<tr>
<td>Industry:</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>Services:</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
</table>
Increase of income inequality between farm/non-farm residents

World Bank Working Paper 3052 May 2003 shows that

- The lower cost structure in unskilled labor intensive manufacturing activities by 2007 causes the quantity of unskilled non-farm labor demanded to be greater (by 0.8 per cent); but lower farm product prices mean the quantity of unskilled farm labor demanded is less (by 1.7 per cent)

- Farmers are also made worse off by the lower demand for farm land, the return from which is 5.5 per cent lower in 2007 following WTO accession reforms. Meanwhile, the real wages of skilled labor increase by 0.8 per cent, and the rewards to non-farm capital are 1.3 per cent higher.

- With only 1.7 per cent of (or about 6 million) unskilled farm workers leaving agriculture for non-farm work (because of the assumed impediments to out-migration), and with land returns depressed by 5.5 per cent in addition to farm labor returns being 0.7 per cent lower, the gap between farm and non-farm incomes even within rural areas, and certainly between rural and urban areas, looks set to rise slightly

- The core empirical results suggest increases in farm-nonfarm income inequality (Huang 2003)
Policy Implications

1. Land tenure policy constraints productivity
2. Industrial, financial and tax policies
3. Employment restrictions prevent farmers from off-farm income sources (urban unemployment is expected to increase as well)
4. Lack of farming organization among small farmers constrain their competitiveness
5. Market reform and infrastructure development
6. Increase government support
Thank you for your attention!

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