The Political Economy of Food Pricing Policy in China: Responses to Global Food Crisis in 2006-2008

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International Prices for Some Selected Commodities
(price of January 2005=100, measured by US$)

The global food crisis in 2006–2008 raised concerns everywhere, including in China.

Sources: International Monetary Fund (2011)
After 2002, the prices of most of China’s commodities were nearly equal to the prices on world markets … this means that China is VERY OPEN.
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
China’s concerns: Shares of food expenditure still high in rural and urban, particularly the poor.
Interestingly, not all food prices in international market were transmitted into China in 2007-2008.
Rest of the presentation

- Unique of China’s economic and political system
- Government’s response to the global food crisis
- Effectiveness of policy responses
- Concluding Remarks
Unique of China’s economic and political system

• China has always considered agriculture a fundamental sector in its economy (e.g., in the past ten years the No 1 Policy Document focused only on agriculture and rural development)

• Improving food security is a primary goal of China’s agricultural policy

• China has developed an effective market system, with its agricultural markets integrated not only domestically, but also with international markets.

• China has a unique political regime
Political Regime in China: Deal with short run shock or crisis

• Communist Party of China (CPC) is the country’s sole political party in power. Most powerful policy-making entity is the Politburo, particular Politburo Standing Committee.

• The State Council, governed by the powerful CPC, is able to respond rapidly and strongly to any short-term crisis (e.g., Asian financial crisis in the late 1990s and recent global financial crisis).
A well known saying China, “Jihan qidaoxin.” (When peasants are hungry, they rebel) “Two major things can lead to hunger: the loss of employment and high food prices.” (Huang et al., 2011)
Government’s response to the global food crisis

• A rapid decision: When global food price increased significantly after summer 2007, realizing likely the threaten, an overall decision to stabilize food prices was made by the CPC and the State Council in the fall of 2007.

• Major players:
  – The National Development and Reform Commission
  – The Leading Group on Finance and Economy of the CPC
  – Key government think tanks and media reports
Short-Term Policy Responses: increasing supply

• Step 1: Release the grain reserve (late 2007) - NDRC + SGA

• Step 2: Relevant ministries
  – NDRC + MOC and MOA: Authorized COFCO sign forward contracts with foreign traders in late 2007
  – Increase production and input subsidies in late 2007
Short-Term Policy Responses: increasing supply

• **Step 3: Disincentive to cereal export (Jan, 2008). [NDRC, MOC and MOA]**
  – Stopped transport subsidy for maize export
  – Cancelled export valued added tax (VAT) rebates
  – 5% export levy on all export shipments

• **Step 4: Exports of food and feed commodities were not to be allowed**

• **Step 5: Restriction on export of fertilizer (Feb, and May 2008) [NDRC and MOA]**
  – 30-35% export levy started in Feb. 2008
  – 100 % export levy after the mid-May.
Short-term Responses: Consumers’ and Social Protection Policies

• **Subsidies: urban low-income residents**
  – Food price subsidy + raise income transfer

• **Food price support programs for college students**
  – Subsidizes the canteen to lower food prices or all students
  – Additional compensation to students from low-income families
Long-Term Responses: Biofuel Development Policies

China’s biofuel program

- Target in 2020:
  - 10 mmt of bioethanol
  - 2 mmt of biodiesel
- Bioethanol production in 2007 reached 1.4 mmt.

However, the policy changed dramatically after 2007.

- No competition...
  - with grain over land
  - with human for food
  - with livestock over feeds
- Biofuel expansion uses alternative feedstock
  - Sweet sorghum,
  - Sweet potatoes
  - cassava
  - Other non-grain feedstock...
Long-Term Responses: Agricultural Development Policies

Rising concern of food security contributes to China’s continuously assigned the Number 1 Policy Document of 2007-2012. Two documents are worthwhile to mention...

– **Number 1 Document in 2011.** It planned to invest about **630 billion** US$ in water conservancy in next 10 years

– **Number 1 Document in 2012.** Annual growth rate of public agri. R&D expenditure in real term increased from an average of **16%** in 2000-2009 to more than **20%** in 2010-2011, and is expected higher in the coming years.
Effectiveness of policy responses?
China succeeded well in keeping domestic prices from rising as much as international prices.
However, the trends of soybean prices in domestic and international markets show a different story: Soybean has been completed liberalized, there is no appropriate measures to isolate it from international market.

**Soybean net import (1000 tons)**

**Soybean price on the International and China's Domestic markets (Yuan/ton)**
### Simulations: Decomposition analysis of the actual change in the prices of key agricultural commodities during 2005-2008

#### Price change (%) between 2005 and 2008

<table>
<thead>
<tr>
<th></th>
<th>Rice</th>
<th>Wheat</th>
<th>Maize</th>
<th>Soybean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price change</td>
<td>19.5</td>
<td>11.2</td>
<td>26.5</td>
<td>77.7</td>
</tr>
<tr>
<td>Impacts of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oil</td>
<td>16.6</td>
<td>21.3</td>
<td>27.9</td>
<td>30.4</td>
</tr>
<tr>
<td>Biofuel</td>
<td>16.7</td>
<td>16.1</td>
<td>20.6</td>
<td>24.5</td>
</tr>
<tr>
<td>Interaction of oil &amp; biofuel</td>
<td>2.8</td>
<td>3.4</td>
<td>5.7</td>
<td>7.4</td>
</tr>
<tr>
<td>Policy responses</td>
<td>-16.6</td>
<td>-29.6</td>
<td>-27.7</td>
<td>15.4</td>
</tr>
</tbody>
</table>

- Had it not been for these other factors, the price of rice, wheat and maize **would have increased by 35.1%, 40.8% and 54.2%**.
- For commodities like soybean that have been completely liberalized, domestic policy does not matter.
Transmission of international prices to China’s domestic market prices during the global food price crisis, January 2007 to December 2008

<table>
<thead>
<tr>
<th></th>
<th>Unit root in domestic and international price (ADF test)</th>
<th>Long-Run Relationship</th>
<th>Error Correction Model if long-run relationship is confirmed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Exist (Yes or no)</td>
<td>Speed of adjustment</td>
</tr>
<tr>
<td>Rice</td>
<td>Yes</td>
<td>No</td>
<td>-0.10</td>
</tr>
<tr>
<td>Wheat</td>
<td>Yes</td>
<td>No</td>
<td>-0.10</td>
</tr>
<tr>
<td>Maize</td>
<td>Yes</td>
<td>Yes</td>
<td>0.18**</td>
</tr>
<tr>
<td>Soybeans</td>
<td>Yes</td>
<td>Yes</td>
<td>0.99**</td>
</tr>
</tbody>
</table>
Conclusion Remark (1)

• Facing the recent global food crisis, China’s responses were rapid and decisive

• Counter measures started in very beginning of the crisis were comprehensive, which covered a wide ranges of domestic and border policies in short run and long run
Conclusion Remark (2)

• Decision-making process reflects China’s unique characteristics
  With the overall policy direction from the CPC and the State Council, each relevant ministry had to find their ways to contribute to the policy goals immediately

• Both decision-making and implementation did not encounter any significant resistance from the relevant stakeholders
  – No meaningful farmers’ organization; chemical industry gained from the rising of domestic fertilizer prices
  – All stakeholders related to agriculture will gain from China’s new commitment to invest in food and agriculture
Conclusion Remark (3)

• Policy responses were very effective (except for soybean that has been fully liberated)

• While China’s food price stabilization policies helped the country meet its food security goals, they might exacerbate the world food price increase

   Of course, China did not act alone. According to the World Bank, 29 countries levied export assessments or prohibited exports during the global food price crisis

• 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.