Food Aid and Surplus Disposal

The Effects of Export Competition Disciplines on the Disposition of Food Aid

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US Support Programs and Surplus Disposal

- Surplus Acquisition - Commodity Credit Corporation
  1) nonrecourse loans
  2) dairy intervention

- Disposition of Surplus - “additional” consumption

“We are primarily interested in getting rid of these surpluses...we... want the commodities sold for dollars first and then for foreign currencies or then donate them.” -Harold Cooly, 1959

1) export under credit guarantees or subsidies

2) donation for “additional” consumption

3) hold as stocks
## 2. WTO and Food Aid

<table>
<thead>
<tr>
<th></th>
<th>Uruguay Round</th>
<th>Doha Round</th>
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<tbody>
<tr>
<td><strong>Food Aid</strong></td>
<td>• untied</td>
<td>• grant/concessional</td>
</tr>
<tr>
<td></td>
<td>• comply with CSSD - UMRs, notification</td>
<td>• definitions</td>
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<td></td>
<td>• grant/concessional</td>
<td>• “safe box”</td>
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<tr>
<td><strong>Export Competition</strong></td>
<td>• export subsidies - bound and reduced - “water” in limits</td>
<td>• export subsidies - eliminated</td>
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<td></td>
<td>• export credits - no disciplines</td>
<td>• export credits - disciplined</td>
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<tr>
<td><strong>Domestic Support</strong></td>
<td>• reduction commitments</td>
<td>• further reductions</td>
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</tbody>
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### Percent of Food Aid Notified to CSSD, FAO

<table>
<thead>
<tr>
<th>Year</th>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
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<tbody>
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<td>1991</td>
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<td>1993</td>
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<td>2001</td>
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<td>2003</td>
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</table>
3. Model

How might a change in WTO disciplines affect the disposition of commodities as export subsidies/credits or as food aid?

WTO Agreements

Domestic Support

Export Competition

Market Access

Domestic Production

Commercial Trade

Surplus

Export Subsidies/Credits

Food Aid

Carry-over Stocks

ODA Spending

Empirical Model
3. Model

Structural-Form VAR

\[
B x_t = \Gamma_0 + \Gamma_1 x_{t-1} + \Gamma_2 z_t + \varepsilon_t
\]

Standard Form

\[
x_t = A + C x_{t-1} + D z_t + e_t
\]

Data

- export programs, USDA commodity yearbooks
  - CCC credit programs and EEP

- aid shipments, USDA commodity yearbooks
  - PL480, Food for Progress, Section 416, USAID shipments

- CCC end stocks, commodity yearbooks

- ODA budget, OECD
Question: How might a change in export subsidies or credit sales affect the disposition of commodities as food aid and/or carry-over stocks?

- identification of contemporaneous coefficients
- structural decomposition

\[ B x_t = \Gamma_0 + \Gamma_1 x_{t-1} + \Gamma_2 z_t + \varepsilon_t \]

\[ B = \begin{bmatrix} 1 & 0 & 0 \\ \beta_{21} & 1 & 0 \\ \beta_{31} & \beta_{32} & 1 \end{bmatrix} \]

- how does a change in disposition of surplus as subsidy/credit affect aid shipments?
  - impulse responses to a subsidy/credit shock
4. Empirical Results

Impulse Responses - Wheat

Variance Decomposition (%) - 1 S.D. shock to Subsidy/Credit

Responding Variable: Food Aid

<table>
<thead>
<tr>
<th>Lead (years)</th>
<th>Subsidy/Credit</th>
<th>C-O Stocks</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>2.1</td>
<td>4.2</td>
</tr>
<tr>
<td>5</td>
<td>13.2</td>
<td>23.1</td>
</tr>
<tr>
<td>9</td>
<td>16.9</td>
<td>24.9</td>
</tr>
</tbody>
</table>

Responding Variable: C-O Stocks

<table>
<thead>
<tr>
<th>Lead (years)</th>
<th>Subsidy/Credit</th>
<th>Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>1.2</td>
</tr>
<tr>
<td>5</td>
<td>9.6</td>
<td>6.6</td>
</tr>
<tr>
<td>9</td>
<td>10.8</td>
<td>8.2</td>
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</tbody>
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5. Discussion

● Endogenous relationship between alternative vents for surplus disposal.

● How large is the effect?
  ● 4.5m tonne subsidy/credit shock
    → 50 000 tonne contemporaneous food aid response
    → 600 000 tonne carry-over stock response
  ● mean of aid shipments over past 10 years = 2.6m tonnes
  ● persistent and decaying responses

● Is this a bad thing?
  ● WTO/competing exporters - contrary to spirit of the agreements
  ● recipient country - depends on commodity/situation
    - unlikely to arrive in one place

● Future of food aid and trade rules
  ● Whither Doha?
  ● Alternative venues (Food Aid Convention)
5. Discussion
6. Appendix

Impulse Responses - Wheat

One S.D.* Shock to Subsidy/Credit Sales ('000 tonnes)

- Aid (L)
- C-O Stocks (R)