The Changing Structure of Domestic Support and its Implications for Trade

David Orden

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Today’s Farm Support Issues

- In an era of strong demand, should we be concerned with support to agricultural production?
- With high prices and farm incomes since 2008, significant farm support programs remain in place in developed countries (e.g. the EU and US). What is forthcoming for these policies?
- The WTO provides a legal framework of disciplines on domestic support but renegotiation (strengthening) of these disciplines has faltered since 2008. Does this matter?
- Are policies changing in developing countries to provide more support for agriculture?
Plan of the Presentation

- Review the existing WTO disciplines on domestic support and those proposed but not locked in during the Doha negotiations
- Examine EU and US support under the WTO disciplines
- Discuss current proposals for continuation of EU and US support
- Examine agriculture and agricultural support in the BRIC countries (Brazil, Russia, India and China)
- Concluding Remarks
References


*WTO Disciplines on Agricultural Support* chapter updates: www.gii.ncr.vt.edu/WTO.html
Schematic of Domestic Support Rules

Measures in favor of agricultural producers

- Nongreen measures
- Green box measures
- Development program measures
- Blue box measures
- Nonexempt measures

Calculate AMSs

- NPS AMS
- Product 1 PS AMS
- Product 2 PS AMS

Current Total AMS

- de minimis AMSs

Bound Total AMS

must not exceed

Source: Brink, 2011
Components of the AMS Support

- Non-exempt Direct Payments to Farmers
- Other Support Expenditures
- Market Price Support (MPS) measured a particular way

WTO MPS =

\[
[\text{Administered Price} - \text{1986-88 External Reference Price}] \times [\text{Eligible Quantity}]
\]

Economic MPS =

\[
[\text{Domestic Price} - \text{Current External Reference Price}] \times [\text{Domestic Production}]
\]
## Existing and Proposed Doha Commitments

<table>
<thead>
<tr>
<th>Member</th>
<th>Currency of Notification</th>
<th>Agreement → Doha Commitments</th>
<th>Additional Proposed Constraints</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Ceiling</td>
<td>De minimis % of Production Value</td>
</tr>
<tr>
<td>United States</td>
<td>US$ billion</td>
<td>19.1 → 7.6</td>
<td>5 → 2.5%</td>
</tr>
<tr>
<td>European Union</td>
<td>€ billion</td>
<td>72.2 → 21.7</td>
<td>5 → 2.5%</td>
</tr>
<tr>
<td>Japan</td>
<td>¥ billion</td>
<td>3,973 → 1,192</td>
<td>5 → 2.5%</td>
</tr>
<tr>
<td>Norway</td>
<td>NOK billion</td>
<td>11.4 → 5.4</td>
<td>5 → 2.5%</td>
</tr>
<tr>
<td>Brazil</td>
<td>US$ billion</td>
<td>0.9 → 0.6</td>
<td>10 → 6.7%</td>
</tr>
<tr>
<td>China</td>
<td>RMB billion</td>
<td>—</td>
<td>8.5%</td>
</tr>
<tr>
<td>India</td>
<td>US$ billion</td>
<td>—</td>
<td>10%</td>
</tr>
<tr>
<td>Philippines</td>
<td>PHP billion</td>
<td>—</td>
<td>10%</td>
</tr>
</tbody>
</table>
WTO Notifications of Agricultural Support
(OTDS Categories)

Note: Agreement Bound Total AMS and Doha Proposed FBTAMS are constraints on CTAMS.
WTO Notifications of Agricultural Support (OTDS Categories)

Note: Agreement Bound Total AMS and Doha Proposed FBTAMS are constraints on CTAMS.
Future EU Policy (Post-2013 CAP)

- EU to continue decoupled direct payments near Euro 40 billion per year
  - “Decoupled direct payments provide today’s basic income support and support for basic public goods desired by European society” European Commission, 2010
  - Some redistribution, redesign and targeting of support “to add value and quality in spending”

- EU considering some safety net programs as seen in the US

<table>
<thead>
<tr>
<th>Component</th>
<th>% of National Ceiling</th>
<th>Optional or Compulsory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greening</td>
<td>30%</td>
<td>Compulsory</td>
</tr>
<tr>
<td>Natural Constraints</td>
<td>5% maximum</td>
<td>Optional</td>
</tr>
<tr>
<td>Young Farmers</td>
<td>2% maximum</td>
<td>Compulsory</td>
</tr>
<tr>
<td>Small Farmers</td>
<td>10% maximum</td>
<td>Compulsory</td>
</tr>
<tr>
<td>Coupled Support</td>
<td>Up to 10%</td>
<td>Optional</td>
</tr>
<tr>
<td>Basic Payment</td>
<td>Remainder</td>
<td>Compulsory</td>
</tr>
</tbody>
</table>

Source: Swinbank, 2012
Future US Policy (Pending Farm Bill)

- **Pending Farm Bills:**
  - Eliminate Direct Payments and replace Countercyclical Payments and ACRE with strengthened within-year and multiple-year guarantees against “shallow losses” not covered by existing insurance programs

CBO Estimates of Effects of US Farm Bill Proposals on FY2013-22 Expenditures

<table>
<thead>
<tr>
<th>Farm Bill Title</th>
<th>Billions Dollars (10-year totals)</th>
<th>Estimated Spending under 2008 Farm Bill</th>
<th>Range of Anticipated Increase or Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm support programs</td>
<td></td>
<td>152.8</td>
<td>-14.1 to -14.4</td>
</tr>
<tr>
<td>Commodity programs</td>
<td></td>
<td>62.9</td>
<td>-19.4 to -23.6</td>
</tr>
<tr>
<td>Crop insurance</td>
<td></td>
<td>90.9</td>
<td>5.0 to 9.5</td>
</tr>
<tr>
<td>Conservation</td>
<td></td>
<td>64.1</td>
<td>-6.1 to -6.4</td>
</tr>
<tr>
<td>Nutrition</td>
<td></td>
<td>772.1</td>
<td>-4.0 to -16.1</td>
</tr>
<tr>
<td>All other titles</td>
<td></td>
<td>3.8</td>
<td>1.0 to 1.7</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>992.8</td>
<td>-23.1 to -35.1</td>
</tr>
</tbody>
</table>
Future US Policy (Pending Farm Bill)

- **Within-year new programs for “shallow losses”**
  - Two approaches: 1) cover at no cost a fixed range of farm-level or county-level loses based on moving average revenue guarantee (ARC, RLC) or 2) county-based coverage linked to insurance coverage of individual farms based on within-year prices/revenue and with farmer paying part of the premium (SCO, STAX)

- **Multiple-year new revenue guarantee program (ARC, RLC) with moving-average target (Senate Bill) versus new countercyclical payment program (PLC) with higher fixed target prices and more closely coupled to current production (House Agriculture Committee)**
## Schematic of the Proposed US Programs

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Shallow Losses</th>
<th>Multi-Year Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Countercyclical Payments</td>
<td>----</td>
<td>PLC</td>
</tr>
<tr>
<td>Crop Insurance, SURE</td>
<td>SCO, STAX</td>
<td>STAX (with minimum price)</td>
</tr>
<tr>
<td>ACRE</td>
<td>ARC, RLC</td>
<td>ARC, RLC</td>
</tr>
</tbody>
</table>

These US farm bill proposals are a casualty of failure of the Doha Round and will make it harder for the US to negotiate tighter constraints in the future.
## Estimated Payments from Proposed Programs

### Average Expected ARC and STAX Payments per Acre

<table>
<thead>
<tr>
<th></th>
<th>CBO Baseline Prices</th>
<th>Lower Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>13.83  15.25  16.22  16.35  13.96  15.12</td>
<td>21.82  34.76  40.51  40.76  29.84  33.54</td>
</tr>
<tr>
<td>Rice</td>
<td>24.74  22.71  16.65  16.64  16.30  19.41</td>
<td>37.49  50.78  53.23  44.88  35.86  44.45</td>
</tr>
<tr>
<td>Wheat</td>
<td>8.09   7.20   4.92   4.81   4.85   5.97</td>
<td>9.38   11.27  10.63  10.51  8.38   10.03</td>
</tr>
<tr>
<td>Cotton (STAX)</td>
<td>25.87  27.60  29.51  31.34  33.03  29.47</td>
<td>Min price 31.01  48.34  65.11  67.17  69.17  56.16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No min price 23.51  25.07  26.79  28.44  29.94  26.75</td>
</tr>
</tbody>
</table>

### Average Expected PLC Payments per Acre

<table>
<thead>
<tr>
<th></th>
<th>CBO Baseline Prices</th>
<th>Lower Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>5.60   4.35   3.96   3.82   3.58   4.26</td>
<td>22.33  56.30  100.49 100.49  100.49  76.02</td>
</tr>
<tr>
<td>Rice</td>
<td>73.55  61.29  62.10  60.88  58.30  63.22</td>
<td>161.52 248.21 322.35 322.35 322.35 275.36</td>
</tr>
<tr>
<td>Soybeans</td>
<td>1.48   1.10   0.93   0.89   0.81   1.04</td>
<td>10.08  32.40  63.56  63.56  63.56  46.63</td>
</tr>
<tr>
<td>Wheat</td>
<td>8.56   7.87   6.82   6.06   5.37   6.94</td>
<td>23.27  41.83  59.31  59.31  59.31  48.61</td>
</tr>
</tbody>
</table>

Effects of EU and US Policies on Production, Prices and Trade

- Evaluating effects always complicated: effects on importers/exporters; net producers/consumers within each country; under different market conditions
- No convergence of policies; no definitive answers on policy effects
  - EU policies less distorting than former price support but level of transfers high relative to farm income
  - US moving toward measures subject to WTO commitment limits, but expenditures will be relatively low if world prices remain high
- US policies become more distorting if world prices fall—exactly the circumstances in which producers abroad face increased stress
- Some recent estimates:
  - Elimination of its green box policies reduces EU production of various products by 0.3% (sugar) to 3.1% (oilseeds). Producer prices increase from 0.5% (sugar) to 5.9% (milk). Percentage effects on EU trade are larger (from small base values) (Mittenzwei, Britz and Wieck, 2012)
  - Under proposed US farm bill programs, US planted acreage increases by -0.29% (soybeans) to 4.4% (cotton) at CBO baseline prices and from -2.26% (soybeans) to 12.9% (cotton) under a lower price scenario (Babcock and Paulson, 2012)
Agriculture in the BRIC Economies

1a: Real GDP

1b: Agricultural Value Added as a Share of GDP

1c: Agricultural and Food Exports as a Share of Merchandise Total

1d: Agricultural and Food Imports as a Share of Merchandise Total
Domestic Support of Brazil, India and China

Panel a

Panel b

Panel c

Panel d
## Recent Support in India
(Billion US dollars)

<table>
<thead>
<tr>
<th>Input Subsidy</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fertilizer</td>
<td>3.53</td>
<td>4.17</td>
<td>5.79</td>
<td>8.07</td>
<td>16.68</td>
<td>11.17</td>
</tr>
<tr>
<td>Electricity</td>
<td>4.00</td>
<td>4.39</td>
<td>4.36</td>
<td>5.13</td>
<td>5.99</td>
<td>NA</td>
</tr>
<tr>
<td>Irrigation</td>
<td>2.74</td>
<td>3.23</td>
<td>3.75</td>
<td>4.84</td>
<td>5.15</td>
<td>NA</td>
</tr>
<tr>
<td>Other</td>
<td>0.81</td>
<td>1.28</td>
<td>1.05</td>
<td>3.75</td>
<td>7.22</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11.08</td>
<td>13.06</td>
<td>14.95</td>
<td>21.80</td>
<td>35.04</td>
<td>11.17</td>
</tr>
<tr>
<td><strong>Value of Production</strong></td>
<td>124.7</td>
<td>144.6</td>
<td>157.7</td>
<td>202.6</td>
<td>195.6</td>
<td>211.9</td>
</tr>
<tr>
<td><strong>Subsidy as a Share of Value of Production (%)</strong></td>
<td>8.9</td>
<td>9.0</td>
<td>9.5</td>
<td>10.8</td>
<td>17.9</td>
<td>NA</td>
</tr>
</tbody>
</table>

Source: Gopinath, 2012
# Russia’s Base Years Support

(Thousand US dollars)

<table>
<thead>
<tr>
<th>Product-specific AMSs</th>
<th>2006</th>
<th>% of VOP</th>
<th>2007</th>
<th>% of VOP</th>
<th>2008</th>
<th>% of VOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemp and flax</td>
<td>5.5</td>
<td>45.3%</td>
<td>7.3</td>
<td>41.3%</td>
<td>14.5</td>
<td>60.8%</td>
</tr>
<tr>
<td>Sheep</td>
<td>8.8</td>
<td>5.1%</td>
<td>15.1</td>
<td>2.5% dm</td>
<td>27.0</td>
<td>3.4% dm</td>
</tr>
<tr>
<td>Reindeer</td>
<td>17.0</td>
<td>70.0%</td>
<td>30.0</td>
<td>117.4%</td>
<td>35.0</td>
<td>65.7%</td>
</tr>
<tr>
<td>Horse</td>
<td>-</td>
<td>-</td>
<td>1.2</td>
<td>0.7% dm</td>
<td>8.3</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-product-specific AMS</th>
<th>3,744.9</th>
<th>6.3%</th>
<th>3,827.2</th>
<th>5.1%</th>
<th>5,596.1</th>
<th>5.6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsidies for operating inputs</td>
<td>1,455.5</td>
<td></td>
<td>756.6</td>
<td></td>
<td>1,969.3</td>
<td></td>
</tr>
<tr>
<td>Subsidies for capital inputs</td>
<td>482.3</td>
<td></td>
<td>560.3</td>
<td></td>
<td>647.8</td>
<td></td>
</tr>
<tr>
<td>Credit concessions</td>
<td>1,318.9</td>
<td></td>
<td>1,618.8</td>
<td></td>
<td>1,858.6</td>
<td></td>
</tr>
<tr>
<td>Subsidies for crop insurance</td>
<td>245.4</td>
<td></td>
<td>143.1</td>
<td></td>
<td>174.7</td>
<td></td>
</tr>
<tr>
<td>Rail freight rates</td>
<td>94.2</td>
<td></td>
<td>101.5</td>
<td></td>
<td>63.0</td>
<td></td>
</tr>
<tr>
<td>Production subsidies</td>
<td>148.7</td>
<td></td>
<td>196.0</td>
<td></td>
<td>338.6</td>
<td></td>
</tr>
<tr>
<td>Other subsidies</td>
<td>-</td>
<td></td>
<td>450.8</td>
<td></td>
<td>544.2</td>
<td></td>
</tr>
</tbody>
</table>

| Current Total AMS           | 3,776.2 |          | 3,864.4 |          | 5,653.9 |          |

Source: Compiled by Brink, 2012
Russia’s WTO Commitments

Accession Commitments

- Bound Total AMS of US$ 9 billion in 2012 and 2013 declining to US$ 4.4 billion in 2018
- Product-specific support cannot exceed 30% of non-product-specific support through 2017
- As a developed country, de minimis allowances are 5% of value of production and Russia is not eligible for Article 6.2 (development box)
- Final Bound Total AMS is 4.5% of 2010 value of production compared to 1.1% for Brazil, 6.7% for the US and 21% for the EU
- Shifting below de minimis for non-product-specific support would open latitude for substantial product-specific support for certain commodities

Possible Doha Commitments

- Depend on whether Russia is treated as a RAM or VRAM. If RAM:
  - Base OTDS of US$ 10.2 billion declines to Final Bound OTDS of US$ 6.5 billion
  - Bound Total AMS declines from US$ 4.4 to US$ 3.1 billion
  - De minimis allowances decline from 5% to 4.2%
Summing Up

- We started with a set of questions about today’s farm support issues
  - I reiterated the importance of disciplines on domestic support even in an era of high prices
- Reviewed the existing and proposed Doha disciplines on domestic support and examined notifications of support by the EU and US
- Highlighted the shift to decoupled transfers to farmer in the EU versus emergence of new safety net programs in the US, with adverse direct and indirect effects
  - Reviewed some estimates of the direct effects of these policies
- Concluded the breakdown of the Doha negotiations matters
- Examined the domestic support of the BRIC countries
  - Accession of China and Russia to the WTO brings their support under some disciplines
  - Developing-country subsidies need further monitoring
  - Subsidies may have increased since 2008, but each country also has a unique policy history affecting its measures and shift at the margin may not be too large so far
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