Environmental effects of agricultural subsidies

TRADE AND ENVIRONMENTAL SUSTAINABILITY STRUCTURED DISCUSSIONS

TESSD INFORMAL WORKING GROUP MEETINGS

THURSDAY MARCH 16TH
Setting the stage
An issue of semantics... and metrics

• Repurposing?
  o Need to define old and new purposes
  
• Reforming?

• Reallocating resources?

• Support vs subsidies? All type of support are not subsidies, and all subsidies are not recorded in our metrics of support.

• Harmful subsidies?
“Reallocation” in a policy and budget space

Products (all payments are allocated)

Countries

Instruments: payments to inputs, outputs, factors
“Reallocation” in a policy and budget space

• Two main type of policies
  - Subsidies aka domestic support
  - Trade policies aka import and export taxes/subsidies

• 4 types of effects
  - How much to produce (volume)
  - What to produce (products)
  - How to produce (practices)
  - Where to produce (location)

“Composition effect”

“Scale effect”

“Technical effect”

Level and composition of global support for Food and Agriculture

![Graph showing the level and composition of global support for Food and Agriculture with data from OECD, FAO, IDB, and World Bank.](chart)

Price disincentives: -135
Price incentives: 338
Output subsidies: 10
Input subsidies: 92
Subsidies based on factors of production: 73
Other subsidies, decoupled from production: 69
General services support: 111
Subsidies to consumers: 72


Fig 18 in SOFI 2022
Various works and reports
Land use + Alternative “Green” scenarios

Hidden costs Cross border redistribution

Healthy diets focus: from producers to consumers and product biases

Food System Economics Commission
Removing subsidies or reforming them?
Subsidies

Removing policies will be costly

Steven Lord & David Laborde (2022)
## Policy removal in SOFI 2022

<table>
<thead>
<tr>
<th></th>
<th>Food security and nutrition</th>
<th>Equity</th>
<th>Climate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prevalence of undernourishment</td>
<td>Affordability of a healthy diet</td>
<td>Income gap in the affordability of a healthy diet</td>
</tr>
<tr>
<td>WORLD</td>
<td>0.08</td>
<td>-0.15</td>
<td>0.14</td>
</tr>
<tr>
<td><strong>COUNTRY INCOME GROUP</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-income countries</td>
<td>0.01</td>
<td>-0.04</td>
<td>0.00</td>
</tr>
<tr>
<td>Upper-middle-income countries</td>
<td>0.06</td>
<td>-0.08</td>
<td>0.05</td>
</tr>
<tr>
<td>Lower-middle-income countries</td>
<td>0.13</td>
<td>-0.28</td>
<td>0.31</td>
</tr>
<tr>
<td>Low-income countries</td>
<td>0.06</td>
<td>-0.08</td>
<td>0.06</td>
</tr>
<tr>
<td><strong>REGION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>0.07</td>
<td>-0.06</td>
<td>0.05</td>
</tr>
<tr>
<td>Asia</td>
<td>0.09</td>
<td>-0.20</td>
<td>0.21</td>
</tr>
<tr>
<td>Americas*</td>
<td>0.07</td>
<td>-0.16</td>
<td>0.06</td>
</tr>
<tr>
<td>Latin America and the Caribbean**</td>
<td>0.11</td>
<td>-0.23</td>
<td>0.23</td>
</tr>
<tr>
<td>Europe</td>
<td>0.01</td>
<td>-0.04</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Important remarks

• Avoid simplifications

• Time horizon matters

• Trade distorting policies and environmental harmful policies are not synonymous

• Input subsidies hide a very complex set of policies

• The same policy could have different effects in various locations
Trade-offs
## Scenario matrix for SOFI 2022

<table>
<thead>
<tr>
<th>Targeting producers or consumers or both</th>
<th>Degree of Targeting toward Product</th>
<th>Supporting Nutritious Products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fiscal Subsidies to Producers</strong></td>
<td>Removing biased incentives</td>
<td>Nutritious products are subsidized at ten times the average rate, and products of high energy density and minimal nutritional value at half the average rate.</td>
</tr>
<tr>
<td></td>
<td>Homogenous subsidy on farm gross income (same rate of subsidy across all farm commodities) Scenario 1a</td>
<td>Scenario 1b</td>
</tr>
<tr>
<td>Mixed approach: the role of border support and market price controls</td>
<td></td>
<td>Border support is removed on nutritious products and not changed for products of high energy density and minimal nutritional value.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scenario 1c</td>
</tr>
<tr>
<td><strong>Fiscal Subsidies to Consumers:</strong></td>
<td>Consumer subsidies are provided at the same rate of subsidy across all food items Scenario 2a</td>
<td>Nutritious products are subsidized at ten times the average rate, and products of high energy density and minimal nutritional value at half the average rate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scenario 2b</td>
</tr>
</tbody>
</table>

Glauber and Laborde, 2022
Healthy diets affordability and GHG

Trade-offs: Healthy Diets affordability & GHG emissions
Changes compared to baseline: percentage changes by default, or changes in points if indicated in the variable description.

- World
- High income countries
- Low and Middle income countries

- Upper Middle income countries
- Lower Middle income countries
- Low income countries

Scenario category:
- Remove Fiscal Support
- Producer Support
- Market Price D.
- Consumer subsidies

Scenario name:
- Removal of Fiscal Support
- PS. Homogenous
- PS. strong bias
- MP. Elimination Group 1
- CS. Homogenous
- CS. strong bias

Glauber and Laborde, 2022
Glauber and Laborde, 2022
Lessons Learned:
Limited Opportunities and careful planning is needed

**Removing existing policies will**
- Hurt farmers overall (with some benefits for some countries)
- Will slightly help the poor and the hungry if border protection is removed
- Ambiguous effects on global emissions, mainly through a contraction of production and land abandonment

**So, Repurposing is required**
- Investment in Sustainable Intensification is required. Investing in “traditional” productivity gains will not deliver
- Border Polices and Domestic Support have, in most of the cases, opposite effects on diets
- Input subsidies are a tricky issue

**Focusing on healthy/environmental friendly products**
- Could contribute to reduce the cost of healthy diets but has limited impact when using producer subsidies
- Risk for governments to pick the wrong “good” products
- Phasing out resources from staples could have a small impact on undernourishment
### Conclusion and Guidance for trade rules

#### Current WTO rules are not an obstacle for repurposing, but they provide weak incentives or guidelines.

- Blue box policies, especially for livestock, are a significant potential to curb GHG emissions.
- Repurposing could involve significant box shifting towards Green Box, and abuse of existing flexibilities.
- Assessing price support through historic reference price is not consistent with a transformation agenda.

#### In the future, soul searching for the WTO members: should the rules focus on “do no harm” or “do good”

- Disciplining Overall Trade Distorting Support is not synonymous to improve Social and Environmental impacts of farm policies.
- Increase Transparency and Monitoring (Notifications) will be essential to promote trust and coordination in the global repurposing process.

#### Tariffs remain an awkward instrument to guide repurposing

- Border Tax Adjustments are a second-best option.
- Discriminatory use will be a source of dispute and also inefficiencies.