Policies and Trade - Part IV: Export Controls

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International Commerce and the World Economy

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Spikes in World Food Prices

- Post-2007 – world prices of key staple foods volatile around relatively high levels
- Different to pattern over past century where real food prices have trended downwards
- Historically, while price spikes are often intense, they have typically been infrequent
Real agricultural prices have fallen since 1900, even as world population growth accelerated.
Political Impact of Higher Prices

- Higher food prices found to increase poverty sharply in short-run (World Bank, 2012)
- Research suggests food riots are correlated with high food prices (Bellemare, 2015)
- Intervention a matter of political survival in countries with large poor populations
- Indian Prime Minister and Indonesian President both re-elected in 2009 after campaigns emphasizing ability to limit impact of food crisis in respective countries
Response to Food Price Spikes

Many developing countries responded to food price spikes by directly intervening to stabilize domestic markets.

2008: 68 countries used trade policies (e.g., China, India).

Trade policies typically consisted of: (i) export controls for net exporters, and (ii) import subsidies for net importers.

In contrast, developed countries typically did not implement such policies.
Beggaring Thy Neighbor...

- If enough countries adopt trade policies, end result is increased world food price instability.

- “...export restrictions play a direct role in aggravating food crises...” (Pascal Lamy, Director General of WTO, 2011)

- 40%, 19% and 10% of 2007-08 spike in rice, wheat and maize prices respectively due to trade policies (Anderson and Nelgen, 2012)

- Unless countries cooperate over not using trade policies, each has unilateral incentive to intervene, but collectively no better off.
World Rice Market

Rice Price

Supply with Export Controls
Supply
Demand with Import Subsidies
Demand

\[ P_3 = W_1 = P_1 \]
\[ P_2 \]
\[ W_2 \]
\[ W_3 \]

\[ Q_2 \]
\[ Q_1 = Q_3 \]
Welfare Effect of Export Taxes

\[ W_1 = P_1 \]

\[ P_2 \]

\[ Q_2 \]

\[ Q_1 = Q_3 \]
Welfare Effect of Export Taxes

- If several countries use export tax, shifts up world supply curve, world price increasing to $W_2$, domestic price in exporting countries falling to $P_2$

- Global effects of export tax:
  - importers loss of consumer surplus $= -(a+b)$
  - exporters loss of producer surplus $= -(c+d)$
  - exporting government tax revenue $= +(a+c)$
  - deadweight loss $= -(b+d)$

- Exporters gain only if $a > d$, but importers clearly lose as they transfer income to exporter
Disciplines on Trade Policy

- Trade policies appeared successful in stabilizing domestic prices, but ended up exacerbating world price spikes.

- Solution to prisoner’s dilemma is cooperation via a self-enforcing agreement, i.e., the WTO.

- Doha Round of WTO pushing for reductions in agricultural tariffs and disciplines on export subsidies.

- Developed countries have also pushed for tighter WTO disciplines on export restrictions – rejected by many exporting developing countries.