Professor Ian Sheldon: Trade Seminar
CUCEA, Universidad de Guadalajara
Mexico, August 18-22, 2014

Topic 5: The WTO, Development and Trade

Articles:

Kyle Bagwell and Robert W. Staiger, "An Economic Theory of the GATT", *American Economic Review*, 1999: 215-248

Kyle Bagwell and Robert W. Staiger (2012), "Can the Doha Round Be a Development Round", NBER Working Paper, 2012

THE OHIO STATE UNIVERSITY

Motivation (Bagwell and Staiger, 2012)

- Key objective of Doha Round of WTO is to improve trading prospects of developing countries
- Empirical evidence suggests developing countries have actually gained very little from GATT-sponsored trade rounds as compared to developed countries (Subramanian and Wei, 2007)
- Developed countries have committed to deep cuts in their MFN tariffs over 8 trade rounds (see table)
- In contrast, there was little in the way of tariff commitments by developing countries prior to the Uruguay Round of GATT
- Due to exception to reciprocity norm for developing countries codified under "special and differential treatment" (SDT) clauses of GATT

Tariff Cuts by Developed Countries

GATT/WTO – 60 years of tariff reductions

(MFN tariff reduction of industrial countries for industrial products (excl. petroleum))

Implementation Period	Round covered	Weighted tariff reduction
1948	Geneva (1947)	-26
1950	Annecy (1949)	-3
1952	Torquay (1950-51)	-4
1956-58	Geneva (1955-56)	-3
1962-64	Dillon Round (1961-62)	-4
1968-72	Kennedy Round (1964-67)	-38
1980-87	Tokyo Round (1973-79)	-33
1995-99	Uruguay Round (1986-94)	-38

Source: WTO World Trade Report (2007)

Tariff Bindings by Developing Countries

Pre- and post-Uruguay Round binding coverage for agricultural and non-agricultural products

	Agricultural products				Non Agricultural products			
	Percentage of tariffs lines bound		Percentage of imports under bound rates		Percentage of tariffs lines bound		Percentage of imports under bound rates	
	Pre UR	Post UR	Pre UR	Post UR	Pre UR	Post UR	Pre UR	Post UR
Developing economies	17	100	22	100	21	73	13	61
Transition economies	57	100	59	100	73	98	74	96
Latin America	36	100	74	100	38	100	57	100
Central Europe	49	100	54	100	63	98	68	97
Africa	12	100	8	100	13	69	26	90
Asia	15	100	36	100	16	68	32	70

Source: GATT (1994).

Motivation

- **Idea behind SDT – by getting a "free pass" on MFN tariff cuts: developing country exporters would share in the benefits of greater access to developed countries**
- **Why has SDT apparently not worked? There is clear empirical evidence that developed countries have not found a way around the MFN principle (Bown, 2004)**
- **Bagwell and Staiger (2012) argue that problem lies with the non-reciprocal approach embedded in SDT**
- **Given that SDT approach lies at heart of Doha Round, they conclude that current negotiations will not generate any appreciable impact on developing country members of WTO**

Model

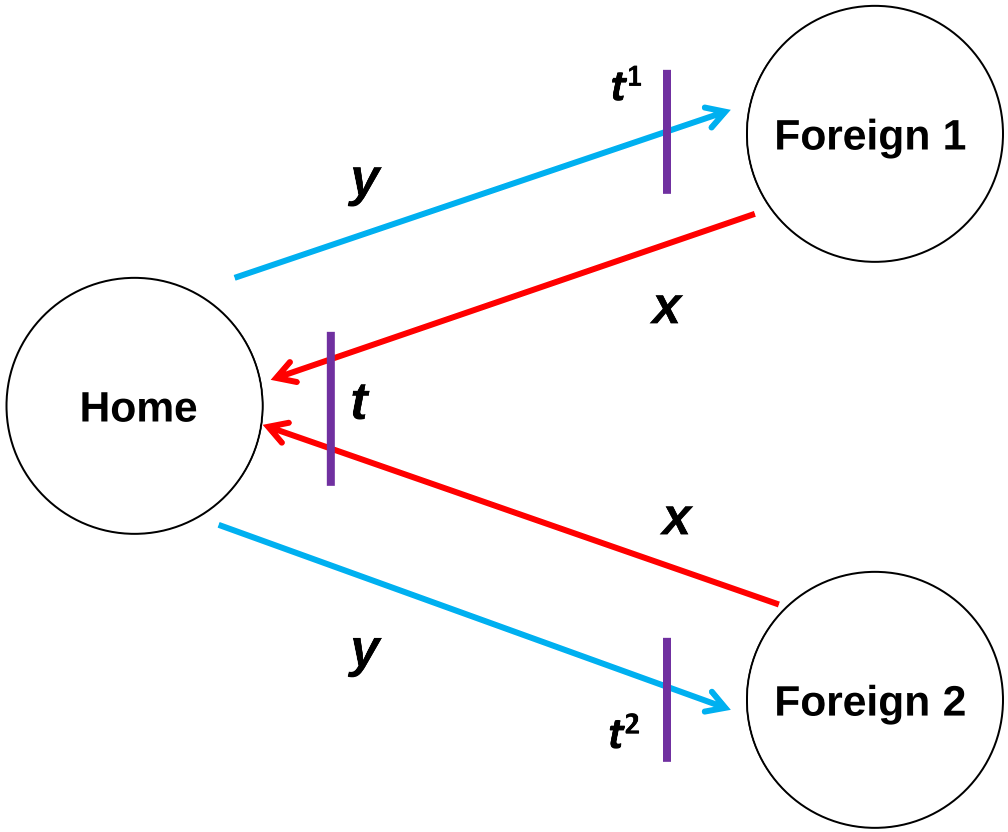
- **Trade in 2 goods between 3 countries: home country imports good *x* from foreign countries 1 and 2, and home exports good *y* to foreign countries 1 and 2; 1 and 2 do not trade with each other (see figure)**

- **Local relative prices are $p \equiv p_x / p_y$, and $p^{*i} \equiv p_x^{*i} / p_y^{*i}$, i=1,2**

- **World price for trade between home country and foreign country *i* is, $p^{wi} \equiv p_x^{*i} / p_y$, where p^{wi} is country *i*'s terms of trade**

- **Given tariff structure of $\tau = 1 + t$, and $\tau^{*i} = 1 + t^{*i}$, domestic relative prices are $p = \tau p^{wi}$ and $p^{*i} = (1/\tau^{*i}) p^{wi}$, but as home country applies MFN tariff, then $p^{w1} \equiv p^{w2} \equiv p^{w}$, i.e., countries 1 and 2 face same terms of trade**

Structure of Trade and Policies



Model

- Re-writing domestic prices $p = \tau p^w$ and $p^{*i} = (1/\tau^{*i})p^w$, and noting that home country terms of trade are $1/p^w$
- Once local and world prices are determined, production, consumption, tariff revenue, imports an exports are also determined
- In turn for a set of tariffs $(\tau, \tau^{*1}, \tau^{*2})$ once world price is determined, $\tilde{p}^w(\tau, \tau^{*1}, \tau^{*2})$, all local prices are determined, $p(\tau, p^w) = \tau p^w$, and $p^{*i}(\tau^{*i}, \tilde{p}^w) = (1/\tau^{*i})\tilde{p}^w$
- Market-clearing world price is that which ensures home country imports of *x* equal sum of exports by countries 1 and 2, i.e., $\tilde{p}^w(\tau, \tau^{*1}, \tau^{*2})$ solves for:

$$M(p(\tau, p^w), p^w) = E^{*1}(p^{*1}(\tau^{*1}, p^w), p^w) + E^{*2}(p^{*2}(\tau^{*2}, p^w), p^w) \quad (1)$$

Model

- **Trade balance requirements also met:**

$$p^w M(p, p^w) = E(p, p^w)$$

$$M^{*i}(p^{*i}, p^w) = p^w E^{*i}(p^{*i}, p^w) \text{ for } i = 1,2 \qquad (2)$$

Market-clearing for *y* being determined by (1) and (2)

- **Each country is large such that change in its tariff changes market-clearing world price:**

$$\frac{\partial \tilde{p}^w}{\partial \tau} < 0 < \frac{\partial \tilde{p}^w}{\partial \tau^{*i}} \qquad (3)$$

and local prices also change with imposition of tariff:

$$\frac{dp(\tau, \tilde{p}^w)}{d\tau} > 0 > \frac{dp^{*i}(\tau^{*i}, \tilde{p}^w)}{d\tau^{*i}} \qquad (4)$$

Model

- Now suppose home country and country 1 negotiate reciprocal reduction in tariffs, but country 2 takes a "free pass", leaving its tariff unchanged

- Also assume that home country offers MFN tariff reduction to country 2 as well

- Assume initial and new tariff pairs for home and country 1 are, (τ_A, τ_A^{*1}) and (τ_B, τ_B^{*1}), the tariff of country 2 staying fixed at initial level τ_A^{*2}; also initial and new world prices are $\tilde{p}_A^w \equiv \tilde{p}^w(\tau_A, \tau_A^{*1}, \tau_A^{*2})$ and $\tilde{p}_B^w \equiv \tilde{p}^w(\tau_B, \tau_B^{*1}, \tau_B^{*2})$

- Initial and new local prices in country 1 are, $p_A^{*1} \equiv p^{*1}(\tau_A^{*1}, \tilde{p}_A^w)$ and $p_B^{*1} \equiv p^{*1}(\tau_B^{*1}, \tilde{p}_B^w)$

Impact of SDT

- **Country 2 experiences no change in its trade volume when home and country 1 follow principles of non-discrimination and reciprocity**
- **Country 2's terms of trade, $\tilde{p}^w$ do not change, i.e., it enjoys by non-discrimination, same terms of trade as country 1, the terms of trade being unchanged due to reciprocity**
- **Country 2's domestic local price, $p^{*2} = (\tau^{*2}, \tilde{p}^w)$ is also unchanged, due to the fact that its terms of trade do not change, plus it does not cut its own tariff**
- **With no change in domestic and local prices, country 2 experiences no change in production, consumption, tariff revenue, imports or exports**

Impact of SDT

- Home country cuts tariff on *x*, local price of *x* decreases and world price of *x* increases - consumers in home country import more *x* from country 1
- Country 1 cuts its tariff on *y*, local price of *y* decreases and world price of *y* increases - consumers in 1 import more *y* from home country
- Both home country and 1 gain increased market access for their exports, but terms of trade remain unchanged
- Country 2's hope for a "free pass" to increasing exports of *y* to home country thwarted by fact that it must compete with "high-export-performing" country 1
- Maxim: what you get is what you give in trade talks

Implications for Doha Round

- **Non-reciprocal approach will not deliver meaningful gains for developing countries**
- **Bagwell and Staiger (1999) have shown GATT-think is about resolving terms-of-trade externalities of unilateral tariff setting**
- **Empirical evidence provides support for key features of economic theory of GATT, e.g., Broda, Limao and Weinstein (2008), and Bagwell and Staiger (2011)**
- **Implies developing countries that can inflict “pain” on foreign exporters, stand to gain from reciprocal trade liberalization**

Implications for Doha Round

- In markets that have never been covered by GATT, i.e., textiles and apparel, agriculture and footwear, SDT should be rejected
- May allow similar gains from reciprocity between developed and developing countries
- Key problem: reciprocal bargaining has gone on for 50 years between developed countries, i.e., tariffs already low in many products
- Consequently, developing countries are "latecomers", and concern is how to "make room at the table" when there may be "globalization fatigue" among developed countries