Professor Ian Sheldon: Trade Seminar
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**Topic 5: The WTO, Development and Trade**

**Articles:**


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))

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

Source: WTO World Trade Report (2007)
# Tariff Bindings by Developing Countries

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

<table>
<thead>
<tr>
<th></th>
<th>Agricultural products</th>
<th>Non Agricultural products</th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Percentage of tariffs lines bound</td>
<td>Percentage of imports under bound rates</td>
<td>Percentage of tariffs lines bound</td>
<td>Percentage of imports under bound rates</td>
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<tr>
<td></td>
<td>Pre UR</td>
<td>Post UR</td>
<td>Pre UR</td>
<td>Post UR</td>
<td>Pre UR</td>
<td>Post UR</td>
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<tr>
<td>Developing economies</td>
<td>17</td>
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<td>22</td>
<td>100</td>
<td>21</td>
<td>73</td>
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<td>Transition economies</td>
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<td>100</td>
<td>59</td>
<td>100</td>
<td>73</td>
<td>98</td>
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<td>Latin America</td>
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<td>100</td>
<td>74</td>
<td>100</td>
<td>38</td>
<td>100</td>
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<td>Central Europe</td>
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<td>100</td>
<td>54</td>
<td>100</td>
<td>63</td>
<td>98</td>
</tr>
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<td>Africa</td>
<td>12</td>
<td>100</td>
<td>8</td>
<td>100</td>
<td>13</td>
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<td>Asia</td>
<td>15</td>
<td>100</td>
<td>36</td>
<td>100</td>
<td>16</td>
<td>68</td>
</tr>
</tbody>
</table>

*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 $p^{*i} = p_{x}^{*i} / p_{y}^{*i}$, $i=1,2$

- World price for trade between home country and foreign country $i$ is, $p^{wi} = p_{x}^{*i} / p_{y}$, 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 $p^{w1} = p^{w2} \equiv p^{w}$, 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 $p^* = \left(1/\tau^*ight)p^w$, and noting that home country terms of trade are $1/ p^w$

- Once local and world prices are determined, production, consumption, tariff revenue, imports and 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 $p^*(\tau^*, \tilde{p}^w) = \left(1/\tau^*ight)\tilde{p}^w$

- 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:

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

- Trade balance requirements also met:
  \[ p^w M(p, p^w) = E(p, p^w) \]
  \[ M^i(p^i, p^w) = p^w E^i(p^i, p^w) \text{ for } i = 1, 2 \]  \( (2) \)
  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:
  \[ \frac{\partial \tilde{p}^w}{\partial \tau} < 0 < \frac{\partial \tilde{p}^w}{\partial \tau^*_i} \]  \( (3) \)
  and local prices also change with imposition of tariff:
  \[ \frac{dp(\tau, \tilde{p}^w)}{d\tau} > 0 > \frac{dp^i(\tau^*_i, \tilde{p}^w)}{d\tau^*_i} \]  \( (4) \)
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, \((\tau_A, \tau_A^*)\) and \((\tau_B, \tau_B^*)\), the tariff of country 2 staying fixed at initial level \(\tau_A^2\); also initial and new world prices are \(\tilde{p}_A^w \equiv \tilde{p}^w(\tau_A, \tau_A^*, \tau_A^*)\) and \(\tilde{p}_B^w \equiv \tilde{p}^w(\tau_B, \tau_B^*, \tau_B^*)\).

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